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**METHODS FOR MONITORING THE INTEGRITY OF  
REVERSE OSMOSIS AND NANOFILTRATION  
MEMBRANE SYSTEMS**

**Desalting and Water Purification Research Report No. 55**

**By**

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## ACKNOWLEDGMENTS

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### NOTE

Report 55 contains summaries of the data collected for this study and represents portions of the detailed data in graphs. The Report 55A version contains appendices of the complete data set.

## VISION STATEMENTS

### *U.S. Department **of** Interior Mission Statement*

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to tribes.

### *Bureau of Reclamation Mission and Vision Statement*

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Through leadership, use of technical expertise, efficient operations, responsive customer service and the creativity of people, Reclamation will seek to protect local economies and preserve natural resources and ecosystems through the effective use of water.

## LIST OF ABBREVIATIONS

%SP	Percent Salt Passage
ASTM	American Society for Testing and Materials
$C_f$	Feed Stream Concentration
$C_{fc}$	Average of Feed and Concentrate Concentrations
cfu	Colony Forming Units
$C_i$	Concentration at Time i
CO <sub>2</sub>	Carbon Dioxide
$C_p$	Permeate Concentration
DBP	Disinfection By-Product
°C	Degrees Centigrade
dP	Pressure Differential
F&DC	Food and Drug Commission
$F_p$	Permeate Flow
GPM	Gallons per Minute
i	Number of Ions per Molecule
IC	Inorganic Carbon
kPa	kilo Pascal
L/min	Liters per Minute
MF	Microfiltration
mol/m <sup>3</sup>	Moles per Cubic Meter
mS/cm	Micro Siemen per Centimeter
NDP	Net Driving Pressure
NDP <sub>i</sub>	Net Driving Pressure at Time i
NDP <sub>o</sub>	Initial Net Driving Pressure
NF	Nanofiltration
NPF	Normalized Permeate Flow
NPF <sub>i</sub>	Normalized Permeate Flow at Time i
NPF <sub>o</sub>	Initial Normalized Permeate Flow
NTU	Nephelometric Turbidity Unit
$P_{ave}$	Average Applied Pressure
<i>P. aeruginosa</i>	<b><i>Pseudomonas aeruginosa</i></b>
PLC	Programmable Logic Controller
$P_{pb}$	Permeate Back Pressure
PVC	PolyVinylchloride
RI	Reduction Index
RO	Reverse Osmosis
TC	Total Carbon
TOC	Total Organic Carbon
UF	Ultrafiltration
USBR	United States Bureau of Reclamation
u v	Ultra-Violet
VFD	Variable Frequency Drive

## METRIC CONVERSIONS

<b>From</b>	<b>TO</b>	<b>Multiply by</b>
ft	m	0.3048
in	m	0.0254
ft <sup>2</sup>	m <sup>2</sup>	<b>0.09290304</b>
gal (US.)	L	3.785412
Acre-ft	m <sup>3</sup>	1,233.489
lb/in <sup>2</sup>	kPa	6.894
°F	°C	$^{\circ}\text{C}=(^{\circ}\text{F}-32)/1.8$

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## EXECUTIVE SUMMARY

An extensive evaluation of potential integrity monitoring methods was carried out in cooperation with the City of McAllen Indirect Potable Reuse Pilot Study. Results of the study were submitted to the ASTM D19.08.02 Committee investigating integrity monitoring methods for Reverse Osmosis (RO) Nanofiltration (NF) and Ultrafiltration membrane systems. The characteristics of the method, or methods, sought after by the committee are as follows:

- Meaningful to membrane experts and regulators,
- Representative of Separations Phenomena and
- User Friendly

Methods evaluated in this study were:

- Performance parameters: pressure differentials across the two stages, normalized permeate flow and salt passage and individual vessel product flow and conductivity;
- Particle counts in six size ranges: 2 – 3, 3 – 5, 5 – 7, 7 – 10, 10 – 15 and >15  $\mu\text{m}$ ;
- Particle index (O-9999);
- Two different types of on-line TOC (total organic carbon) analyzers;
- Periodic UV analysis at 254 and 455 nm;
- Periodic dye challenges with FD&C Food-grade Dye #40;
- Periodic pressure hold tests; and
- Biweekly feed and product sample for *Pseudomonas aeruginosa* counts.

The following presents a summary of our assessment of the methods and how they met the ASTM characteristics criteria.

### Meaningful to Membrane Experts and Regulators

For an integrity test to be meaningful to a membrane expert, the method has to have some basis in separation theory. For the regulator, the method must correlate with some regulated microorganism or other contaminant. Regulators have primarily focused on log reduction as the measurement of treatment effectiveness. Because log reduction is a function of the challenge level, this evaluation method has led to stories of plants where a substance must be added to their water to prove that they have filtered it out. We ran into the same problem in this study, Our ground truth organism, *P. aeruginosa*, did not always have a high challenge level as the feed concentration of this organism varied. Salt passage and recovery are discussed as percentages of the feed flow and average feed-concentrate concentration. It seems logical to extend this to log reductions, as was done in this report with the “reduction index”. The index is merely the fraction of log reduction. It is a useful substitute when challenge levels fluctuate.

The “sensitivity of response” criteria focused on whether a test method could identify small changes in the membrane system which are opportunities for pathogens, such as *cryptosporidia* and *giardia*, to leak into potable water supplies. Regardless of the feed concentrations, our membrane system consistently provided a superior removal rate. If there is a breach in integrity, the log removal may appear fantastic, but dangerous levels of organisms may still be allowed through the membrane barrier. Regulators will, therefore, be pushed to change their evaluation method of tight membrane systems to ensure the barrier is intact, not just to show reduction in feed concentration. We evaluated the sensitivity of response with these thoughts in mind.

### **Representative of Separations Phenomena**

RO, NF and tight UF membranes effect separation through the different rates of dissolution of the various components of the feed into the membrane polymer. Flow, pressure and concentration differentials are the driving forces controlling these phenomena. When they are operating as intended, with integrity, they are complete barriers to suspended solids. They can not handle much in the way of a particulate challenge though because the tight flow-path becomes fouled. If they are constructed with more open flow path, particles are less of a problem, but the consequent reduction in surface area is usually unacceptable. We evaluated the methods to monitor integrity on whether they were representative of these phenomena and examined the meaning of a positive result in each method using the “sensitivity of response” as our criteria.

### **User Friendly**

Both “ease of interpretation”, and “operator labor and maintenance” indicate user friendliness. Normalizing data has prevented many operators from evaluating the operational efficiency of their membrane systems in real time. In categorizing a technique as user friendly we considered these attributes:

- how much training will be required,
- how quickly can the results be interpreted due to the need for calculations, computer graphing, or need for someone other than the person doing the testing to take time to manipulate the test results and,
- how physically demanding and time consuming will the work be.

We assumed that most operators take pride in learning something new and will embrace the knowledge as long as it is well presented and useful to them in making their job easier and more enjoyable. Many are capable sophisticated work, but if it is of long duration and/or high frequency, other tasks will often be given a higher priority. Finally, if the operator understands that the data he or she is collecting is useful, makes their job easier, and ensures the water they produce is the proper quality without a lot of guess work, the test will more likely be a priority task. A user friendly test, as we define it, would require a limited amount of special training, entail work that is not physically demanding

or time-consuming, and allow for full involvement of the operator in all phases of data analysis. Better ranking tests provided the operator the ability to identify integrity breaches immediately and identify the location of the problem.

### **Recommendations**

Recommendations are detailed more completely at the end of the report. Here is a brief summary to wet your appetite.

- Tracking vessel (or individual stage) flows and conductivity is instructive for monitoring fouling and scaling, but requires too much interpretation to allow quick response.
- On-line TOC monitors were the most responsive and reliable on-line method.
- UV analysis is the least expensive, and one of the most sensitive methods as long as the feed stream has a sufficient challenge. This method has the advantages of not adding anything to the treatment stream, and was found to demonstrate few artifacts.
- UV analysis using the dye challenge is also inexpensive, simple, and sensitive enough to identify possible passage of pathogens quickly. It is less labor intensive than the pressure hold test, which is just as sensitive, and does not require going off-line and draining the system. This test was the easiest and most satisfying test for the operators to use. Damage, especially for the individual housing tests, was at times visible with the naked eye allowing the operator to make immediate conclusions about the integrity of the enclosed membrane system. The dye provided a known challenge concentration, but could be messy. The concentrate stream may need to be diverted while color is high depending on the duration of the tests and discharge issues.
- An on-line method is preferable, but requires a trained and observant operator to track the response levels to establish normal variability and set response levels. These methods may also provide an opportunity for an alarm if the response is out of specification.
- The pressure decay test, while sensitive, is not desirable because it requires draining the system and some computer skills to plot the slope of the pressure decay or more complex data acquisition, processing and display.
- Particle counters and particle monitors were not responsive enough for RO integrity testing.



## INTRODUCTION

As membrane separation systems become more prevalent in the water treatment industry, a sound monitoring method will be needed to insure the integrity of the membrane barrier. In this study integrity is defined as "in perfect condition" or operating as intended by the manufacturer. Reverse osmosis (RO) and nanofiltration (NF) membranes are intended to have a low rate of salt passage. One would expect that a barrier that excludes dissolved salts would also perform well as a microbiological barrier. However, the effluent from RO and NF membrane systems is so pure that it is difficult to measure anything in real-time that would indicate a small breach in integrity.

The Environmental Protection Agency has tightened several water quality requirements. The Surface Water Treatment Rule requires disinfection or filtration sufficient to ensure a 3-log inactivation of *Giardia* and 4-log inactivation of viruses. Turbidity must be monitored every four hours and residual disinfectant concentration must be monitored continuously. Disinfection by-products (DBP) are also a health concern however. Membrane filtration can be an effective barrier to bacteria and virus as well as DBP precursors. However, if the effluent is over disinfectant, DBPs can still form as it is blended down the line. The best treatment scenario would be to have an on-line monitoring method for the membrane system that would detect a failure that may result in less than expected microbiological removal while minimizing disinfection chemicals.

A good integrity monitoring method should be user friendly for municipal water treatment system operators. If it is labor intensive, difficult to operate due to a complex user interface, or difficult to interpret the method will most likely be neglected. The method must be acceptable to membrane specialists and regulators. It must reflect some real separation phenomena that can be correlated with a cause of microbiological breakthrough. For instance, a membrane may lose its salt rejecting properties but still retain virus and bacteria. Conversely, a small leak in an o-ring may not be reflected in salt passage or permeate flow but allow bacteria and virus through.

Microfiltration (MF) and ultrafiltration (UF) systems are monitored with particle counters, pressure hold and vacuum tests. These may be modified for use with RO and NF systems. Also on-line total organic carbon (TOC) analysis, UV monitoring, particle monitoring and dye challenges may be useful for the tighter membrane systems. In this study these methods are compared to performance monitoring and *Pseudomonas aeruginosa* (*P. aeruginosa*) counts to determine whether any of the methods would be suitable for integrity monitoring. Specifically, we need to determine the method's:

- (1) Practicality (i.e. equipment, labor and maintenance cost)
- (2) Parameter level and variation under normal operating conditions
- (3) Parameter level under normal changes in operating conditions
- (4) Parameter level during purposeful damage to the system.

## BACKGROUND

Several organizations are working to find an integrity monitoring method that will have the qualities listed above. The American Society for Testing and Materials (ASTM) is working on a consensus standard for RO, NF and UF membranes. Their committee is composed of membrane manufacturers, prominent membrane system engineering firms and government agencies. The methods being considered are particle counting, particle monitoring, pressure hold and vacuum tests, dye challenge and ultrasonic monitoring. TOC monitoring is being tested for integrity monitoring in wastewater recovery membrane systems at Aqua 2000 in California (Adam, et. al., 1998). The American Water Works Research Foundation has funded an investigation of florescent dye challenge techniques. The work presented in this report represents part of the ASTM effort to gather data and experience in these integrity test methods.

This work was accomplished through a partnership formed between the authors, funded by the Bureau of Reclamation Desalting and Water Purification Research and Program (DWPR) and the Water Quality Improvement Center (WQIC) in Yuma Arizona, and members of an established project partially funded by the DWPR. Other partners were the City of McAllen, Texas, CH2M Hill as the city engineering firm, Electric Power Research Institute (EPRI), Central Power and Light and the Texas Water Development Board. They were entering the second year of a two-year project testing a MF/bioreactor system followed by RO to treat screened - degrittied municipal sewage. During the first year of the project two different MF systems with various stages of pretreatment were evaluated. The best system for the application was the Zenogem® bioreactor treating screened-degrittied raw sewage (Lozier, 1998). During the second phase of the project a RO system was to be added to remove dissolved organic contaminants and salt. In exchange for a RO system, the project coordinators agreed to test the integrity monitoring methods of interest here at the same time. The resulting successful alliance provided this integrity testing project with a contaminated source of feed water and their project with data on RO performance. More information on the rest of the project can be obtained from the Bureau of Reclamation.

## MATERIALS AND METHODS

Equipment for integrity monitoring and testing was set up in a trailer near the bioreactor at the City of McAllen, TX South Municipal Wastewater Treatment Plant. Figures 1, 2a, and 2b show the site and set up of equipment. The RO system, cleaning skid, computer equipment and instruments were brought from the USBR Water Treatment Engineering and Research Lab in Denver, CO and set up in the trailer provided by the City of McAllen. The city also provided two talented and dependable operators, Javier Hinojosa and Henry Perez, who maintained the system, collected samples and data throughout the six-month pilot study. The following methods were used to monitor the reverse osmosis system integrity.

- Performance parameters: pressure differentials across the two stages, normalized permeate flow and salt passage and individual vessel product flow and conductivity.
- Particle counts in six size ranges: 2 - 3, 3 - 5, 5 - 7, 7 - 10, 10 - 15 and >15  $\mu\text{m}$
- Particle index (O-9999)
- Two different types of on-line TOC (total organic carbon) analyzers
- Periodic UV analysis at 254 and 455 nm
- Periodic dye challenges with FD&C Food-grade Dye #40
- Periodic pressure hold tests
- Biweekly feed and product sample for *P. aeruginosa* counts.

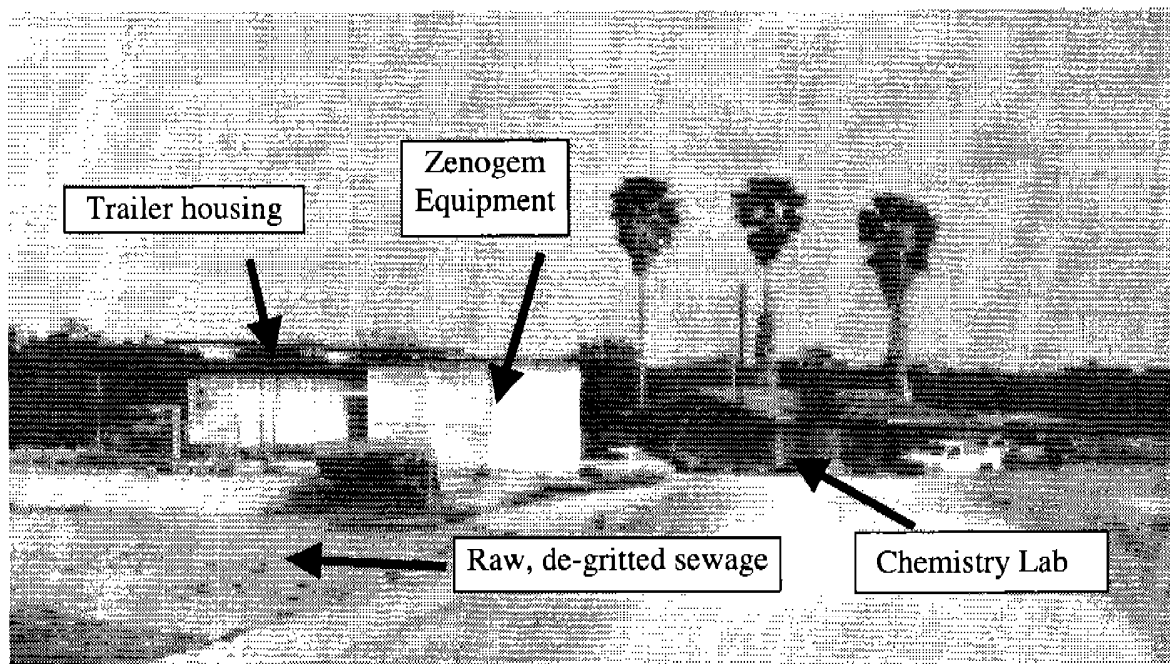


Figure 1 .-Pilot plant site at the South Municipal Waste Treatment Plant in McAllen Texas.

Trailer and shade cover for RO equipment (far left), structure with tarps for Zenon bioreactor and various tanks (middle), site laboratory (right), raw de-gritted sewage feed to bioreactor (foreground).



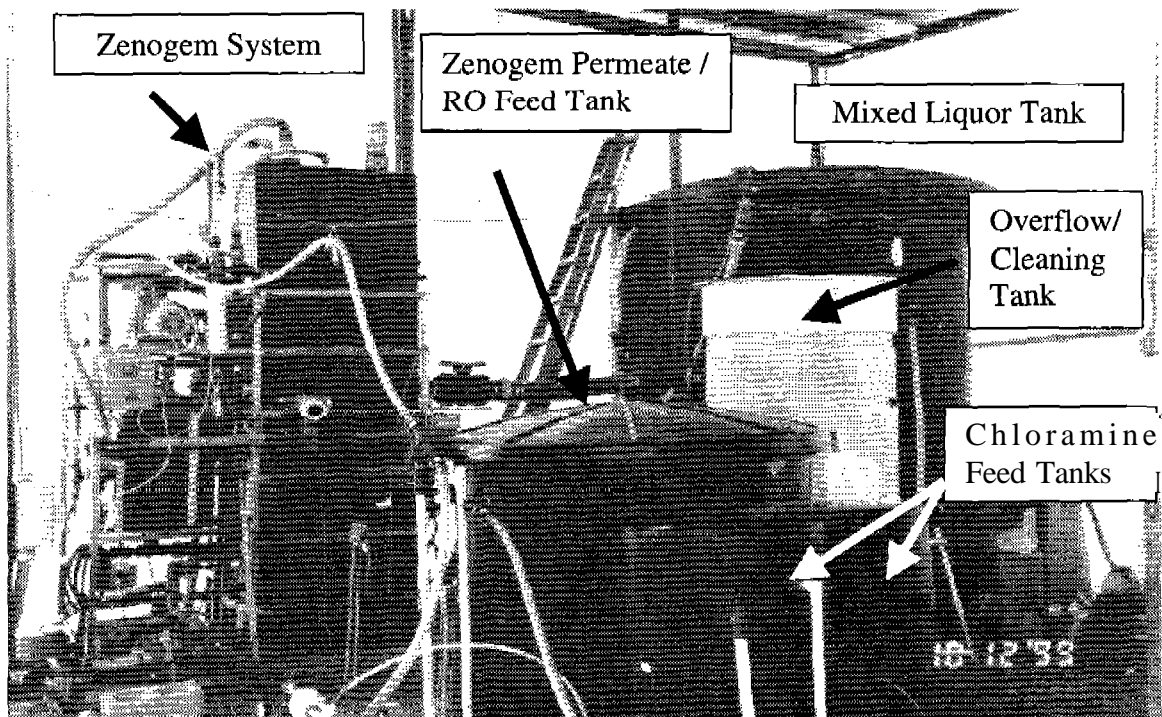


Figure 2a.—Process equipment: ZenoGem® MF/bioreactor system and RO feed tanks.

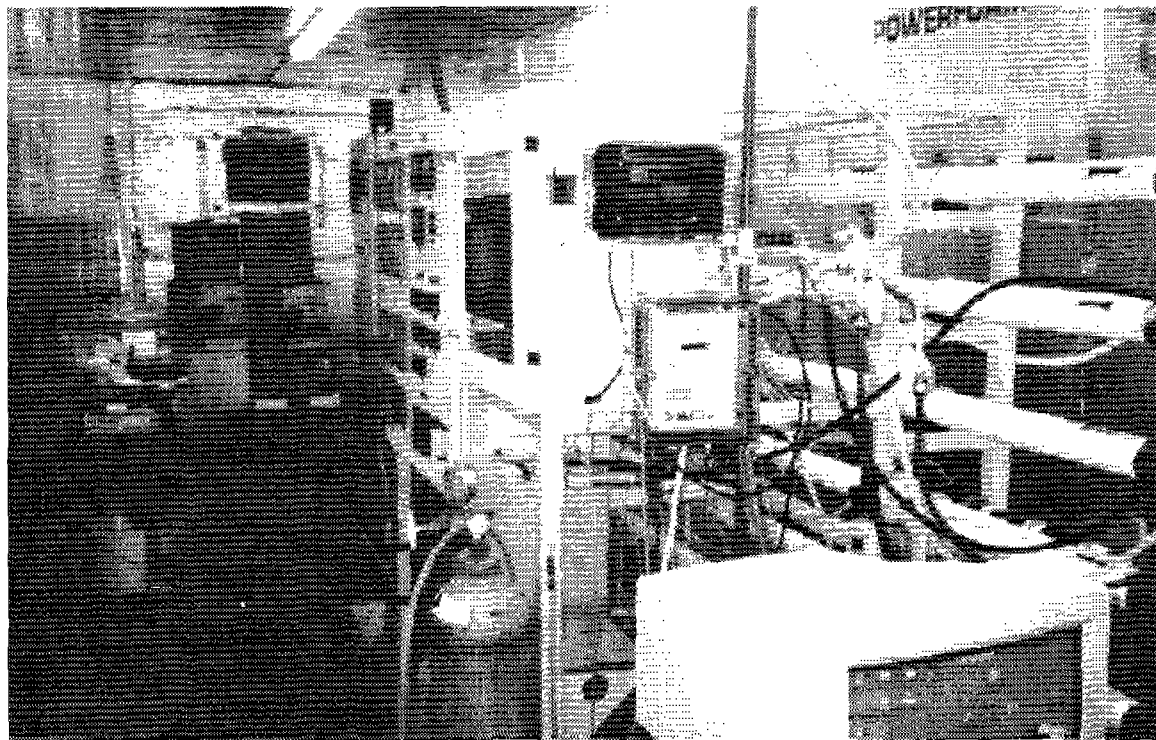


Figure 2b.—Process Equipment: RO equipment (inside trailer), Particle monitor and particle counter are shown mounted on end of RO skid.

After the six-month pilot study a series of five tests were run with different degrees of purposeful damage to the membrane system to determine the responsiveness of the integrity monitoring methods. Destruction inflicted on the membranes were:

- Filed o-ring,
- Narrow slice cut from one o-ring,
- Twisted brine seal,
- Sections cut from an o-ring,
- Membranes punctured with a needle.

Figure 3 shows the extent of the o-ring damage and brine seal damage. Figure 4 shows the position of the o-rings and brine seal in a membrane vessel. The purpose of the o-rings is to seal off the product flow tube at the center of the membrane element from feed and concentrate flow. Therefore, it is expected that damage to an o-ring would result in leakage of the concentrate, containing retained microorganisms, into the product stream. The brine seal merely directs the feed stream into the membrane spiral at the feed end. The outlet end of the element does not have a brine seal, so the concentrate from one element can seep back to the outlet side of the brine seal on the same element. Damage to a brine seal is not expected to result in a breach of integrity. Pinholes in the membrane envelope will result in leakage if they are large enough so that they are not plugged by fouling material. Small pinholes are often covered over by scale and/or gelatinous biological material in the concentrate stream.

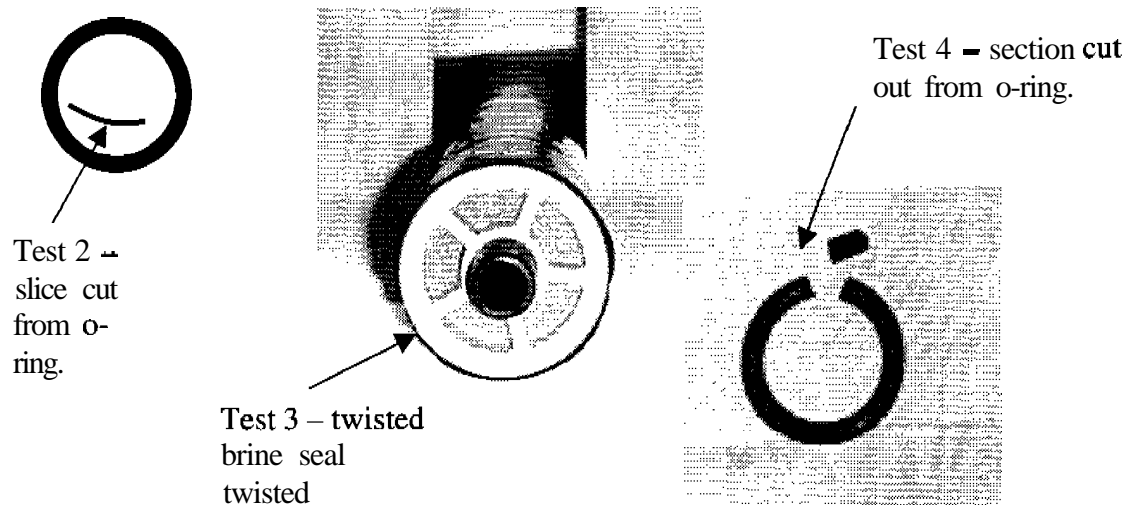


Figure 3.-Damaged parts: sliced o-ring, twisted brine seal, cut o-ring

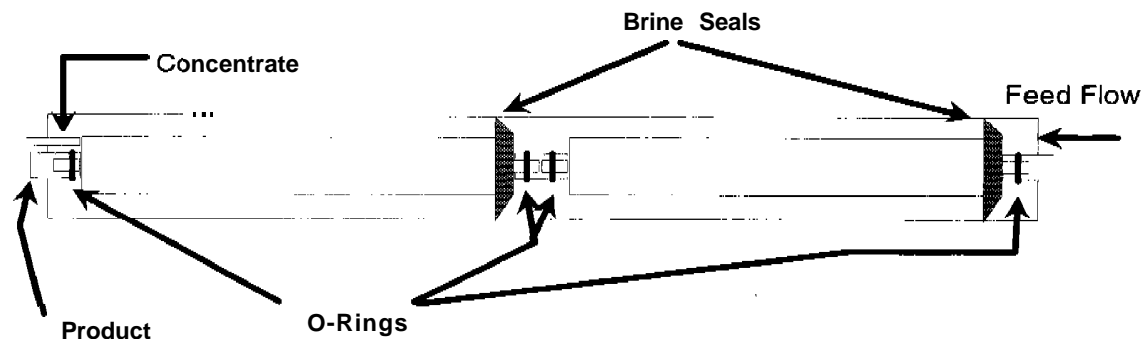


Figure 4.—Location of o-rings and brine Seals in a vessel loaded with two spiral wound elements.

### Reverse Osmosis System

The RO/NF system, hereafter referred to as the “RO skid,” was designed to evaluate the performance of RO or NF membrane elements under a variety of operating conditions. The system produces about 17 L/min (4.5 GPM) with a recovery of 75% from a feed flow of 22.7 L/min (6 GPM). The concentrate flow from the first 2 sets of pressure vessels (stage 1) goes to the second set of pressure vessels (stage 2). This arrangement is referred to as a 2: 1 array. The bottom 4 housings are the first stage, and the top 2 housings are the second stage. The six fiberglass housings, or pressure vessels, each house three 2.5-inch diameter x 40-inch long membrane elements for a total of 18 membrane elements. A picture of the RO skid is shown in figure 5, and figure 6 is a process flow diagram. A separate skid holds clean-in-place equipment for the RO skid. Additional equipment, not typically found on an RO system, has also been added to run integrity testing.

The data acquisition and control system for the test skid were sufficient to provide full evaluation of the performance of the membranes. The meters on the instrumentation panel received signals from sensors that read turbidity, pH, flow, pressure, temperature, and conductivity values. The meters provided this performance data to the programmable logic controller (PLC). The data was then displayed on a color Allen Bradley 900 PanelView ® touch screen. The PLC also sent the data to a dedicated computer loaded with software and spreadsheets for data collection and trending. The dedicated computer was equipped with a modem connection for remote access by a computer off-site. The remote access permitted data collection and minor programming changes to the PLC program or the spreadsheet programs. The PanelView touch screen enabled the operator to make adjustments to the skid operation. For quick reference, Table 1 summarizes the instrumentation functions.

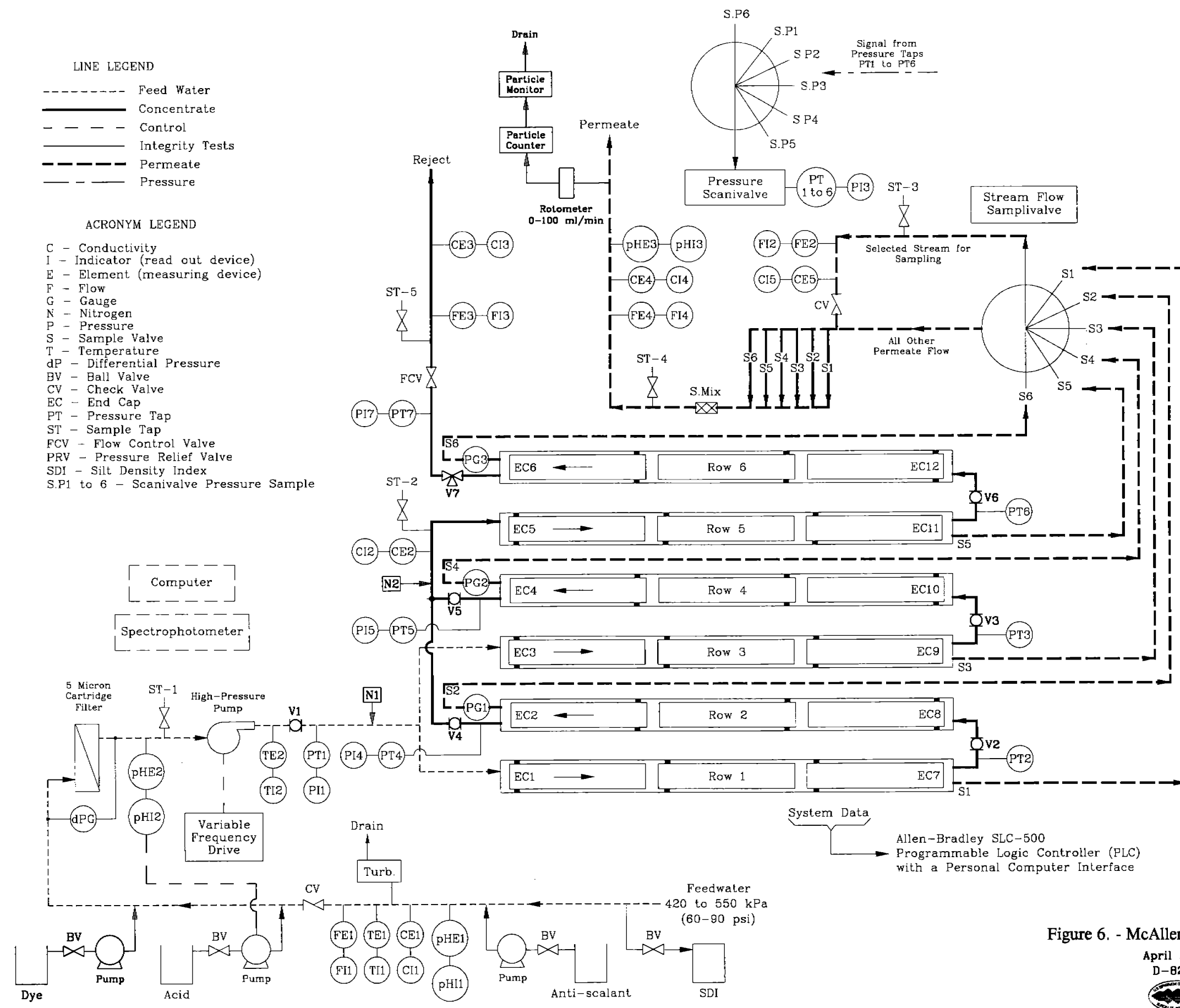


Figure 6. - McAllen RO Pilot System

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The pre-treatment chemical feed system consists of acid and anti-sealant tanks with metering pumps. The acid pump operation is adjusted by the PLC, which maintained a constant pH in the feed line as defined by the operator. Both tanks are equipped with level sensors that send a signal to the PLC when the chemical tank is empty causing the skid to shut down.

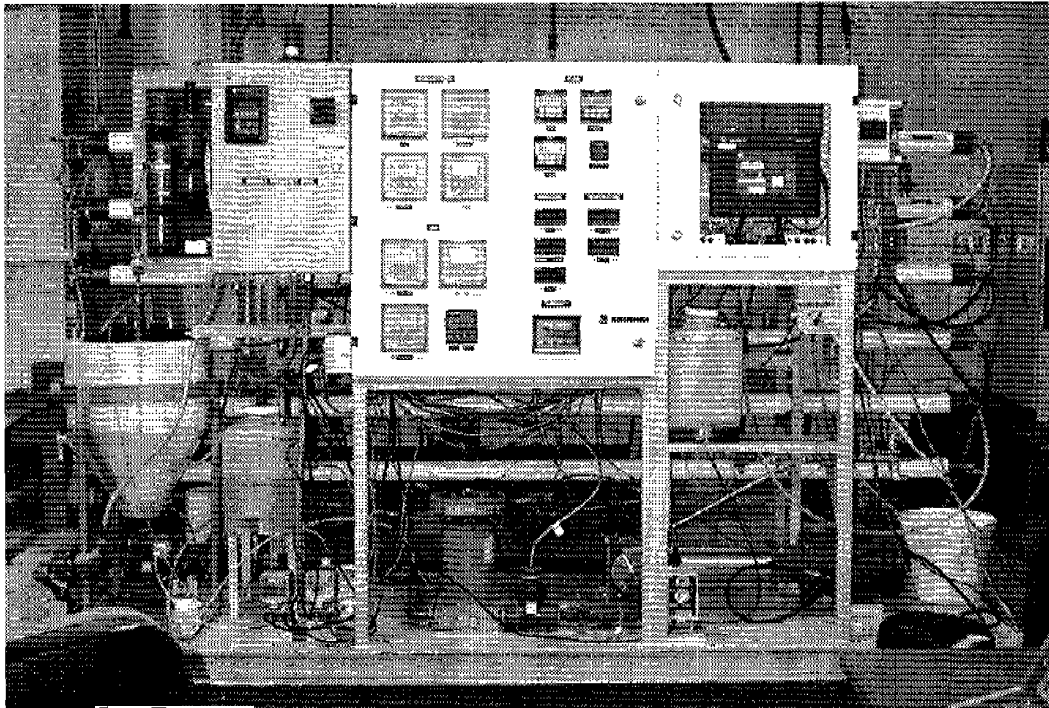


Figure 5.—Reverse Osmosis test skid

Table 1 .-Summary of instrumentation provided on skid.

	Flow rate (L/min)	Temp (°C)	Pressure (kPa)	pH	Conductivity (μS/cm)	Turbidity (ntu)	SDI *
Raw Feed	X	X		X	X	x	x
RO Feed		X	X	X			
Interstage			X		X		
Concentrate	X		X		X		
Permeate	X			X	X		

\* SDI (silt density index) measurements are performed semi-automatically

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The multistage centrifugal booster pump on the RO skid delivers process water to the membranes over a broad range of feed flow and pressure conditions. Adjusting the variable-frequency drive (VFD) and reject flow control valve set flow and pressure conditions. The VFD maintains a constant pressure or flow by adjusting the speed of the motor on the multi-stage pump.

This system is equipped with additional instrumentation and valves to perform integrity testing. Valves were added to isolate the first and second stages during the pressure hold tests, an extra chemical injection system was provided for the dye challenge tests and extra sample taps were installed for the TOC analyzers, particle counter and particle monitor. Detailed itemization of the instrumentation is included as Appendix A.

### **Performance Parameters**

Table 2 lists the components of the RO data acquisition system. Data was recorded and saved in an Excel spreadsheet every 30 minutes. Equation 1 was used to convert conductivity to concentration as NaCl. While it is true that each stream should have its own conductivity conversion, in this case we were looking for qualitative changes over time and not absolute concentrations. Those were determined by chemical analysis for the primary pilot study.

$$C_i = \frac{0.4682}{58.44} \cdot (1 + 0.001946 \cdot \sqrt{K}) \cdot K \quad \text{Eq. 1}$$

$C_i$  is the concentration in mol/m<sup>3</sup> and K is the conductivity of the stream of interest.

The average Net Driving Pressure (NDP) calculated from Equation 2 is used to calculate the temperature pressure normalized permeate flow (NPF) as shown in equation 3.

$$NDP = P_{ave} - [(C_{fc} - C_p) \cdot RTin] - P_{pb} \quad \text{Eq. 2}$$

$P_{ave}$  is the average of the feed, interstage and concentrate pressures.  $C_{fc}$  is the average of the feed and concentrate concentrations.  $C_p$  is the total product concentration. R is the gas constant 0.008314 Pa mol<sup>-1</sup> K<sup>-1</sup>, i is the disassociation constant for NaCl, n is 2 for the number of ions per molecule,  $P_{pb}$  is the permeate backpressure and T is the temperature in degrees Kelvin.

$$NPF_i = F_p \cdot TCF \cdot \frac{NDP_o}{NDP_i} \quad \text{Eq. 3}$$

Where  $F_p$  is the current total product flow,  $NDP_o$  is the initial NDP and  $NDP_i$  is the current NDP. TCF is a temperature correction factor calculated in equation 4.

$$TCF = \exp^{-[2640 \cdot (1/298.5 - 1/T)]} \quad \text{Eq. 4}$$

The pressure differential is the difference between the feed pressure and interstage pressure for stage 1,  $dP_1$ , and difference between the interstage pressure and concentrate pressure for stage 2,  $dP_2$ .

Flow normalized percent salt passage is calculated according to equation 5.

$$\% SP = \frac{NPF_i}{NPF_o} * \left[ 1 - \left( \frac{C_{fc} - C_p}{C_{fc}} \right) \right] * 100 \quad \text{Eq. 5}$$

The concentrations are the same as used above for NPF.  $NPF_i$  is the current condition and  $NPF_o$  is the baseline.

Table 2.—RO Data Acquisition System

Parameter	Range
Feed Conductivity	0 – 3,000 $\mu\text{S}/\text{cm}$
Concentrate Conductivity	0 – 10,000 $\mu\text{S}/\text{cm}$
Total Product Conductivity	0 – 100 $\mu\text{S}/\text{cm}$
Product Sample Conductivity	0 – 1,760 $\mu\text{S}/\text{cm}$
Feed Flow	0 – 40 L/min
Concentrate Flow	0 – 40 L/min
Total Product Flow	0 – 40 L/min
Product Sample Flow	0 – 12 L/min
Feed, Interstage & Concentrate Pressure	0 – 3440 kPa
Feed Temperature	0 – 100°C
Feed & Concentrate pH	0 – 14
Particle Monitor	0 – 9999
Feed Turbidity	0 – 2 NTU
Allen-Bradley SLC 503 w/RS232 link	

## TOC Monitors

Two types of TOC monitors were tested for long term on-line operation. The Anatel 2000 operation is described by ASTM Standard D 4839 – 94, *Standard Test Method for Total Carbon and Organic Carbon in Water by Ultraviolet, or Persulfate Oxidation, or Both, and Infrared Detection*. The Sievers 800 operates according to ASTM Standard D5904–96, *Standard Test Method for Total Carbon, Inorganic Carbon, and Organic Carbon in Water by Ultraviolet, Persulfate Oxidation and Membrane Conductivity Detection*.

Both models use acidification to bring the sample to pH 2 to convert inorganic carbon to  $\text{CO}_2$ . The Sievers instrument uses a chemical/UV oxidation step on a parallel stream to convert organic carbon to  $\text{CO}_2$  then both streams are analyzed with a proprietary membrane based  $\text{CO}_2$  analyzer. The IC (inorganic carbon) is determined from the first



stream and TC (total carbon) from the second stream, TOC (total organic carbon) is then the difference between the two concentrations. The Anatel instrument can be programmed to operate in different modes, but to detect TOC, it off-gasses the  $\text{CO}_2$  from the initial acidification, uses chemical/W oxidation to convert the remaining organic carbon, then uses a proprietary non-dispersive infrared detector for  $\text{CO}_2$  concentration. In both cases the  $\text{CO}_2$  concentration is translated to a TOC concentration by comparison with a calibration table tailored to the sample. Figures 7 – 9 are pictures and a diagram of the Anatel 2000. Figures 10 and 11 are a picture and diagram of the Sievers 800. Table 3 compares features of the two models.

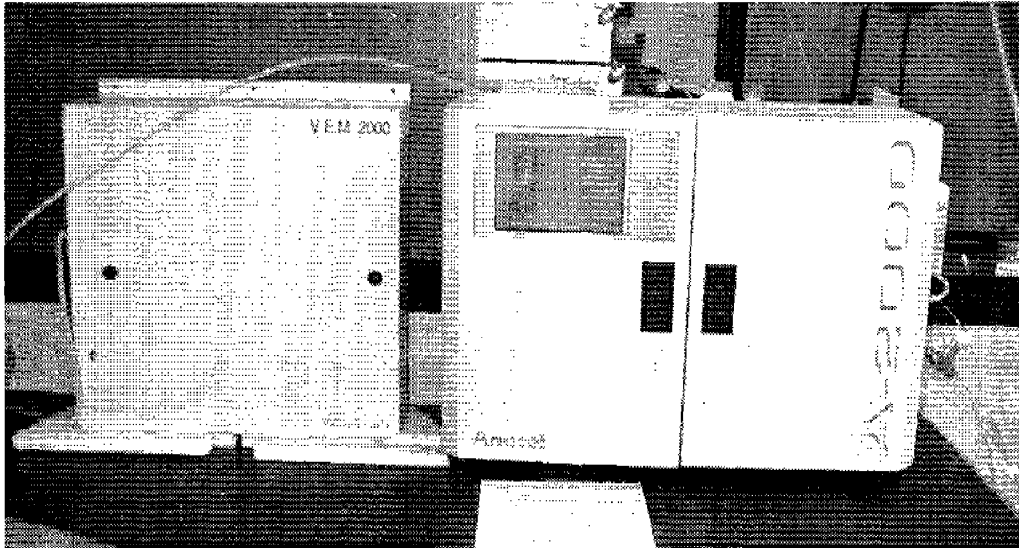


Figure 7.—Anatel A-2000 Total Organic Carbon analyzer with Watman compressor.

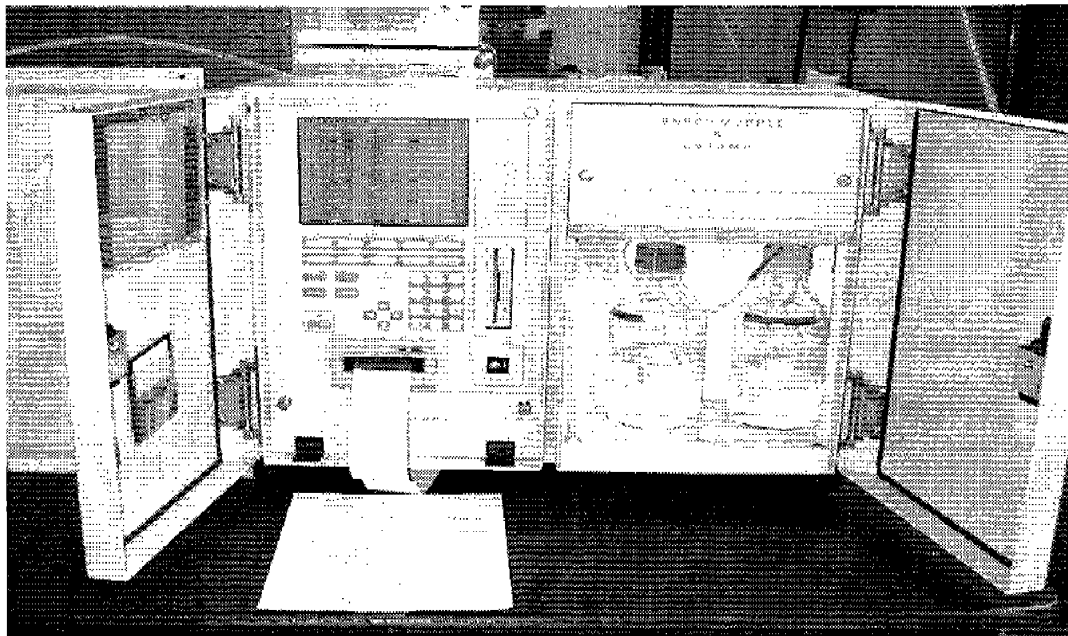


Figure 8.—Inside of Anatel 2000 showing display, controls and chemical feed system.

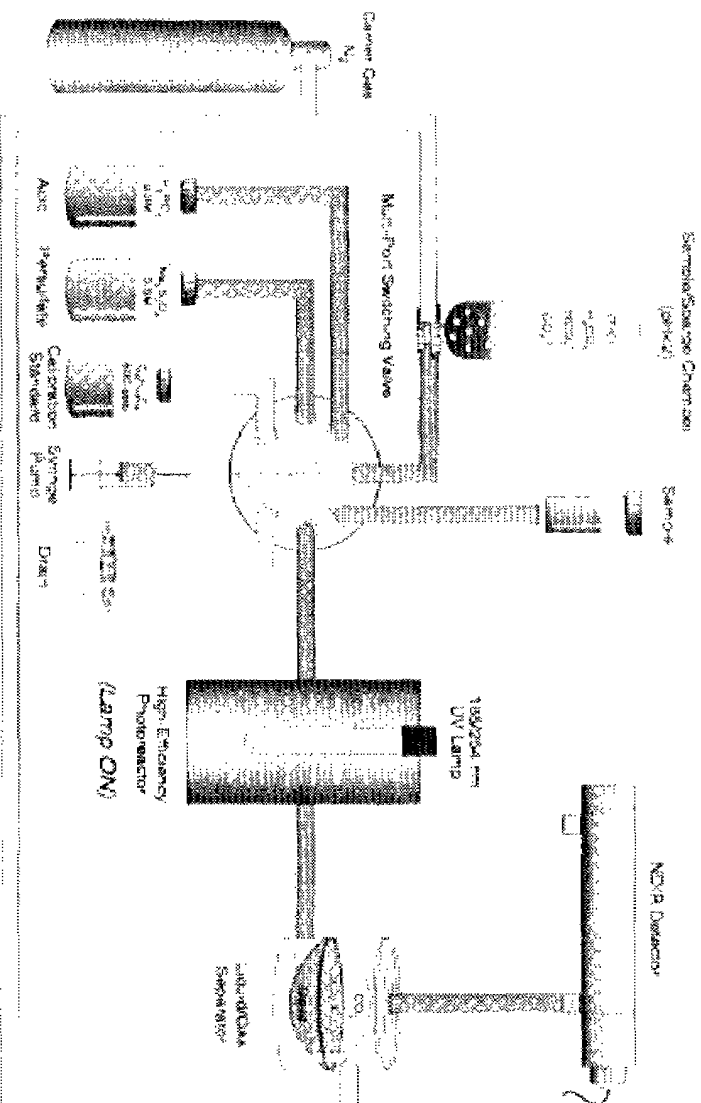


Figure 9.—Diagram of Anatel process for total organic carbon detection.

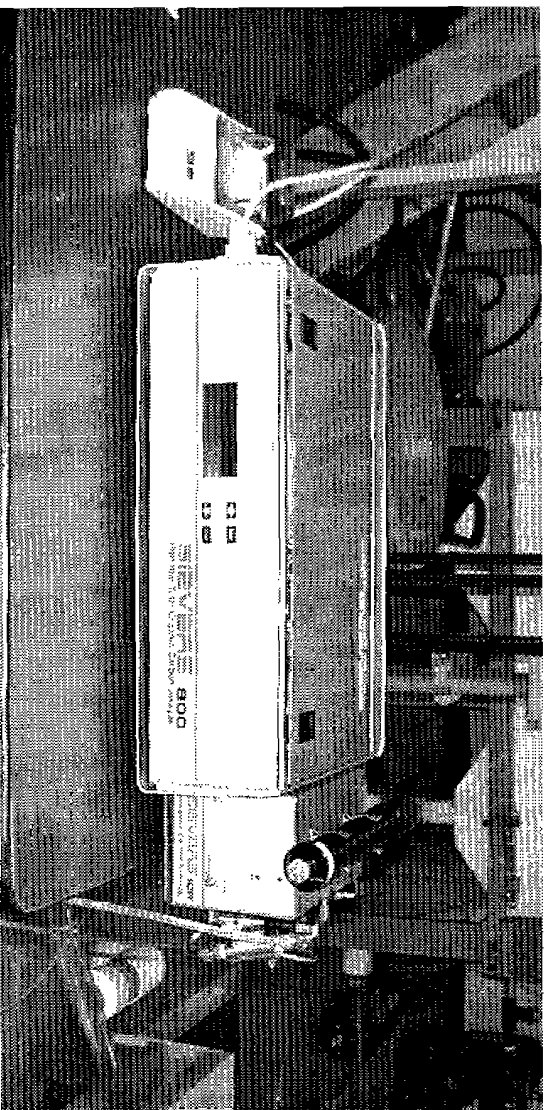


Figure 10.—Sievers Total Organic Carbon Analyzer with Inorganic Carbon Reactor attached on the right.

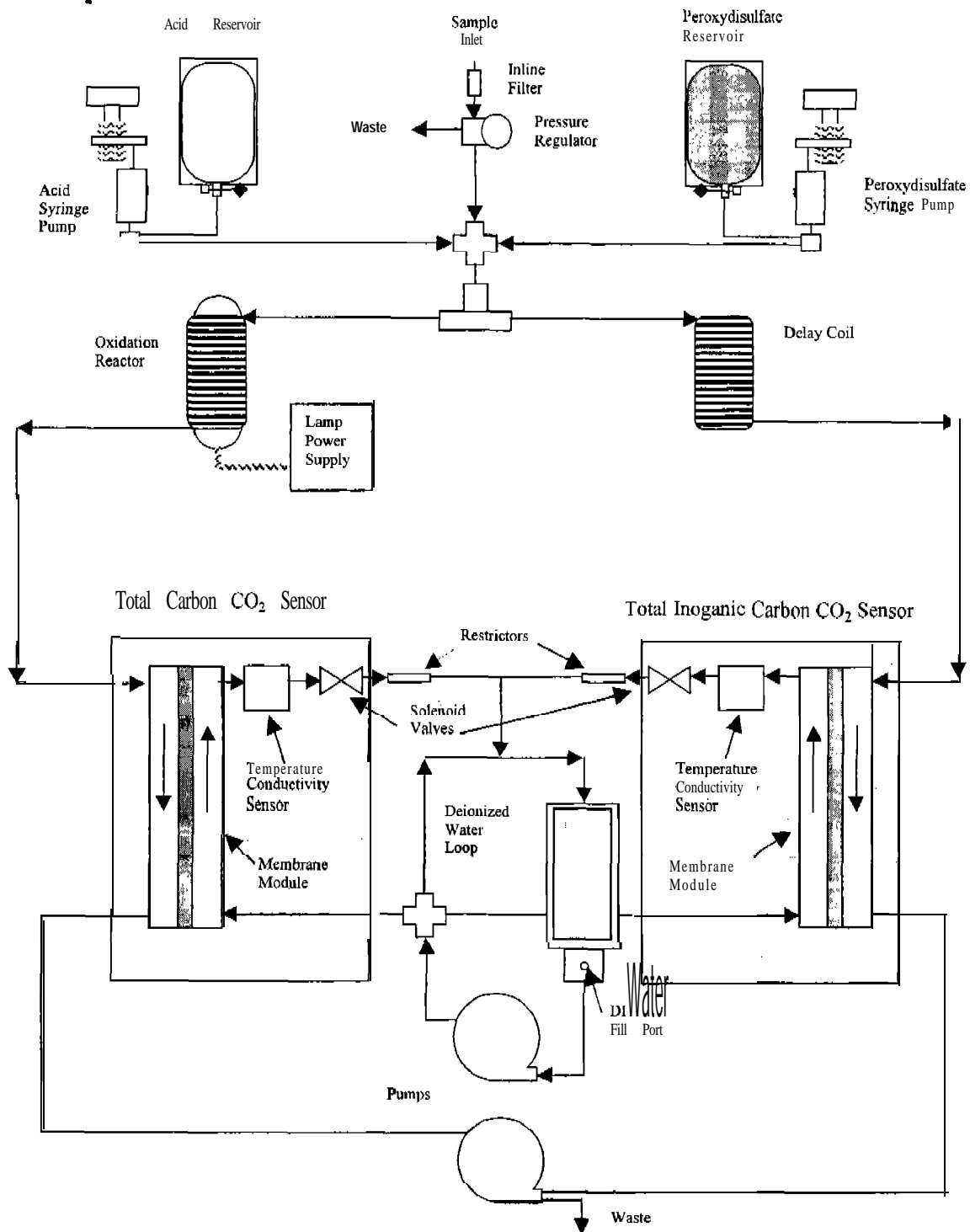


Figure 11 .-Schematic of the Sievers Model 800 TOC Analyzer process.

Table 3.--Comparison of the two TOC Analyzers

	Model 1	Model 2
Make/Model Tested	Sievers 800	Anatel 2000
Detection Range	0.5 ppb to 50 ppm	20 ppb to 1000 ppm
Online/Offline Sampling	Both	Both
outputs	0 – 10 V, 4 – 20 mA, RS-232, parallel printer port and alarms	Graphic (8" color LCD) Thermal printer or external printer 3.5" floppy drive RS-232 RS-485
Inputs	Back-lit display w 3 significant digits	2 Isolated digital inputs
Alarms	3	5
Chemicals	3 month supply of Ammonium Persulfate and 6 M Phosphoric Acid Calibration Standard	3 week supply of Phosphoric Acid Sodium Persulfate Nitrogen Gas Calibration Standard
Oxidizer	6 month 184/254 nm UV Lamp	1 year 185/254 nm UV Lamp
Detector	Membrane based conductometric CO <sub>2</sub> sensors	Non-dispersive Infrared Detector (NDIR)
On-line flow rate and determination	0.35 mL/min, syringe pump	350-500 mL/min, beaker stop watch method
Equipment Protections	Not Sealed	Splash proof
Size/Weight	50 cm x 34 cm x 15 cm 13 kg	457 mm H x 635 mm W x 254 mm D /32.7 kg (1 8"H x 25"W x 10"D /72 lb.)
Particulate Protection	60 micron filter	100 micron filter
Safety Precautions	Chemical wastes stream, Chemical handling	Chemical wastes stream, Chemical handling

Two sample valves were placed at the end of the total product line to supply water to the two TOC monitors. The instruments require approximately 6 minutes to analyze a sample. During this time the contents of the sample line were bypassed to drain to ensure a fresh sample for each analysis. The Sievers unit output data to a printer while the Anatel unit saved data for a day on a 3.5" disk.

Both instruments require the feed tube and interface between tube and the light source to be clean. They are easily wiped off with a clean lint-free, damp cloth. The particle monitor signal is ranged between 0 and 9999. It can be calibrated to a particle counter for direct comparison, but it is not necessary. Its main use is detecting changes in particle numbers. The particle counter must be returned to the factory for calibration, Ours

began reporting a calibration error after six months when it was returned to Denver. Of course this may be due to jarring in transit.

### **Particle Monitor and Particle Counter**

The Met One particle counter and Chemtrac particle monitor, shown in Figure 12, ran in series from a tap on the permeate line as shown in Figure 13. The accuracy of both instruments depends on a constant flow. An adjustable rotameter is used to control flow to roughly 110 ml/min. A Water Weir PVC tube assembly was placed next in line to serve the purpose of further ensuring flow at 100 mL/min and to give the water a chance to off-gas bubbles which are mistaken for particles. The same water flow moves from the particle counter through to the particle monitor.

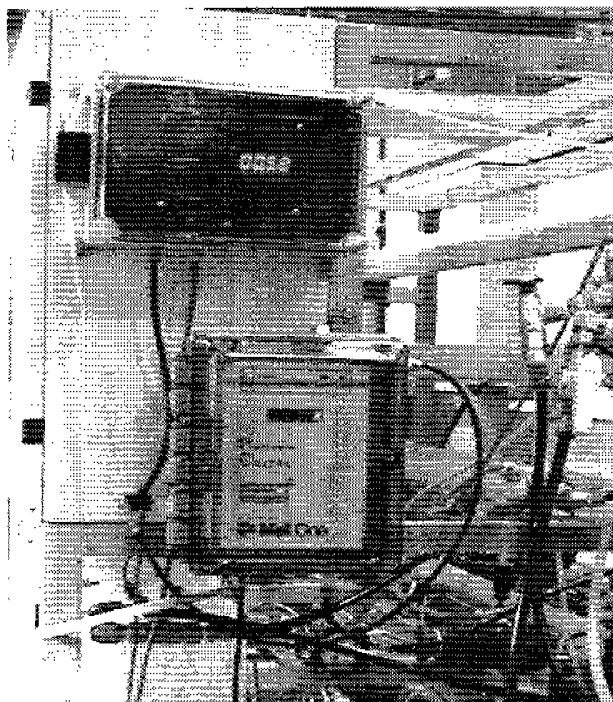


Figure 12.—Chemtrac Particle Monitor on top and Met-One Particle Counter on bottom.

### Particle Counter and Particle Monitor Plumbing and Instrumentation

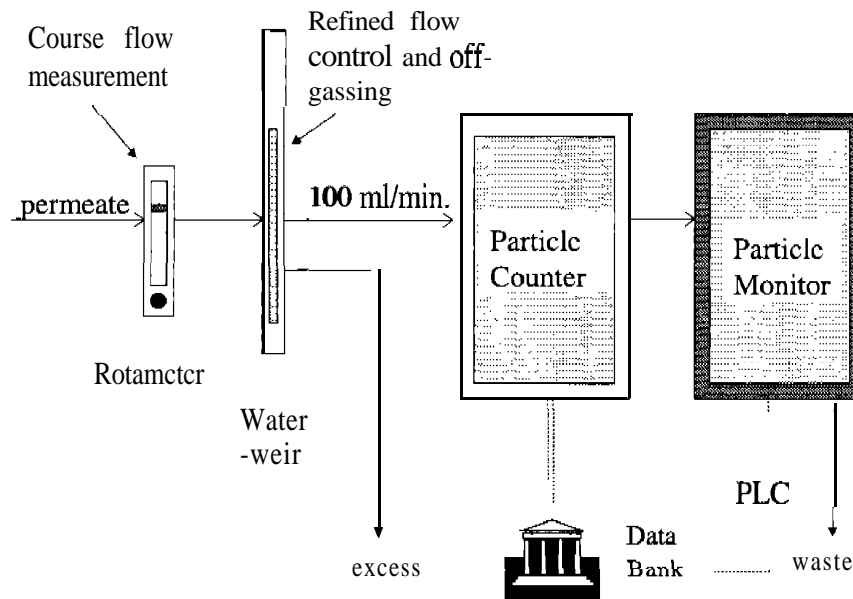


Figure 13 .-Schematic of particle counter and particle monitor flow.

The particle monitor converts the degree of light obscuration to a 4-20 mA signal that is transmitted to the **data** acquisition computer along with the rest of the performance data. It can detect particles as small as 0.2 microns. The particle counter actually counts instances and degrees of light blocking by particles in six factory calibrated size ranges. It requires its own 9-pin connector and software to record the numbers of particles in each size range from 2 to 750 microns. Data is then saved as an Excel file for posterity,

### *Pseudomonas aeruginosa* Analysis

Operators collected grab samples of the feed and product to analyze for *P. aeruginosa* to serve as a baseline in determining the effectiveness of the integrity tests. Samples were analyzed using standard method 9213 E twice a week during the on-line test period and the destructive test period (Standard Methods, 1995). Feed and product cell counts are normally evaluated by determining the log reduction calculated in equation 6,

$$\log(cfu_f) - \log(cfu_p) = L.R. \quad \text{Eq. 6}$$

Where  $cfu_f$  and  $cfu_p$  are the colony counts for the feed and product samples respectively. However in cases such as these when the challenge is variable, log reduction is not a very satisfying statistic. If there is only a 2 log challenge, 2 log reduction is as good as one can expect, but not at all comparable to a 2 log reduction when the challenge is 5 log. To overcome this difficulty we will use the reduction index (RI) as calculated in equation 7 to evaluate the efficacy of treatment.

$$\left[ \frac{\log(cf_u_f) - \log(cf_u_p)}{\log(cf_u_f)} \right] = RI \quad \text{Eq. 7}$$

*P. aeruginosa* will grow in an aerobic environment or can use NO<sub>3</sub> as an electron acceptor making it useful in a nitrification/denitrification environment as was found at the McAllen wastewater treatment plant

(<http://www.bact.wisc.edu/Bact330/lecturepseudomonas>, 1999). It was chosen because it is common enough to be analyzed by microbiology labs and is similar in size to *Cryptosporidia* or *Giardia* (Highsmith, 1999). *P. aeruginosa* are rod shaped bacteria measuring 0.5 by 2 to 3 μm in size. They are hardy, pathogenic organisms capable of surviving in conditions that few other organisms can tolerate including distilled water and high temperatures of 42 °C. A blue or green pigment and a fruity odor characterize *P. aeruginosa*. Hospitals and immune-compromised individuals find *P. aeruginosa* difficult to fight, but is not commonly a threat to healthy individuals (<http://medic.med.uth.tmc.edu/path/00001519.htm>, 1999).

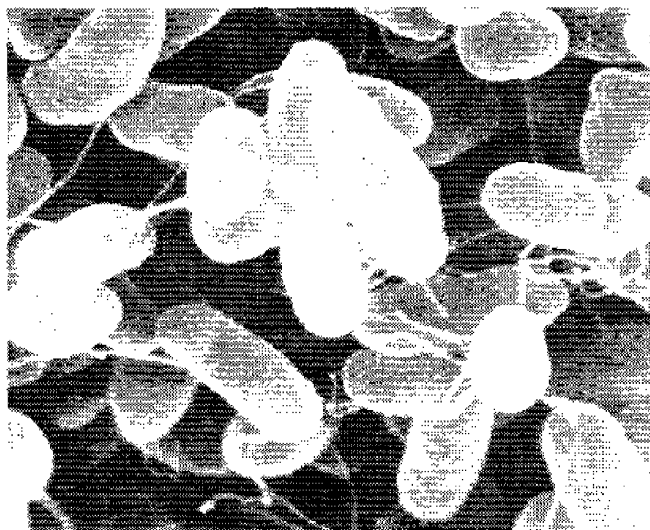


Figure 14.—Pseudomonas Aeruginosa.  
(Characklis and Marshall, John Wiley & Sons, 1990)

### UV Analysis and Dye Challenge

A Spectronic Genesys Spectrophotometer, as shown in figure 15, is capable of measuring absorbance over a wide range of wavelengths for characterizing color, organic carbon concentration, and dye concentration. Grab samples were poured into 50 mm cuvetts and placed into the 8-sample rack. The color samples were tested for absorbance in the indigo range at 455 nm because CH2M Hill Representatives had used that wavelength in other areas. A complete spectrum analysis can be done to identify the best wavelength for a particular water source. TOC absorbance was measured at 254 nm (Standard methods, 1995).



Figure 15.—Spectronics Genesis Spectrophotometer with dye challenge samples of feed, concentrate, and product.

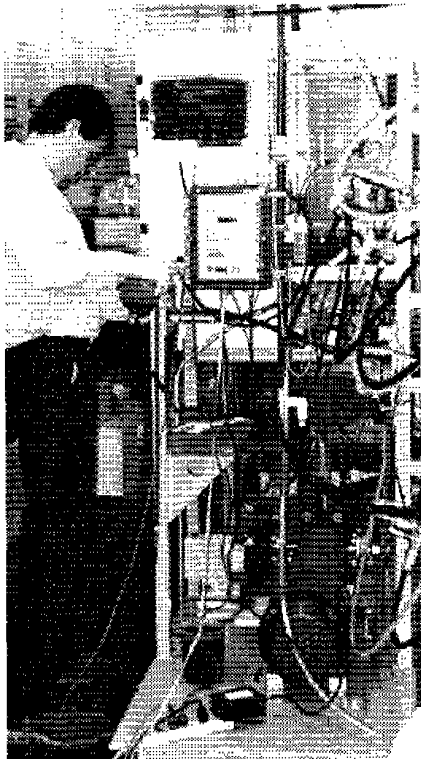


Figure 16.—Javier adds FD&C #40 red dye to the burette for injection into the feed stream.

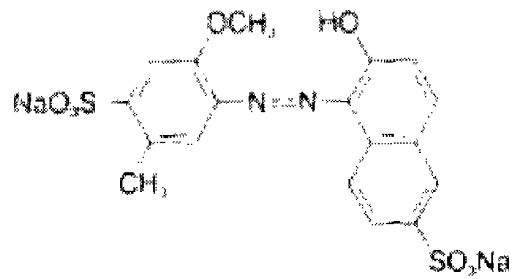


Figure 17.-A molecule of FD&C #40 Dye, Allura Red.



A food grade dye was chosen because it would be safe for drinking water systems. Food, Drug, and Cosmetic (FD&C) dye #40, allura red is a relatively stable **dye** at various pH levels and when exposed to light. At a molecular weight of 496, it is one of the smaller food dye molecules. It absorbs at a wavelength of 530 nm in the spectrophotometer (Handbook of Colorants, 1991). It is so vibrant that it is one of only food grade dyes that fluoresce.

A mixture of 1 to 2 mg/L of the dye was mixed at least ½ hour before running the test to let the dye finish reacting. The conductivity of the dye solution in a 2 mg/L concentration is 361 @cm. A calibration curve was developed using known concentrations of various dye solutions, shown in Figure 18. The reaction time of ½ hour was checked at this **time** also. Setting the wavelength at 530 nm provided a steeper calibration curve than the literature value of 502 nm.

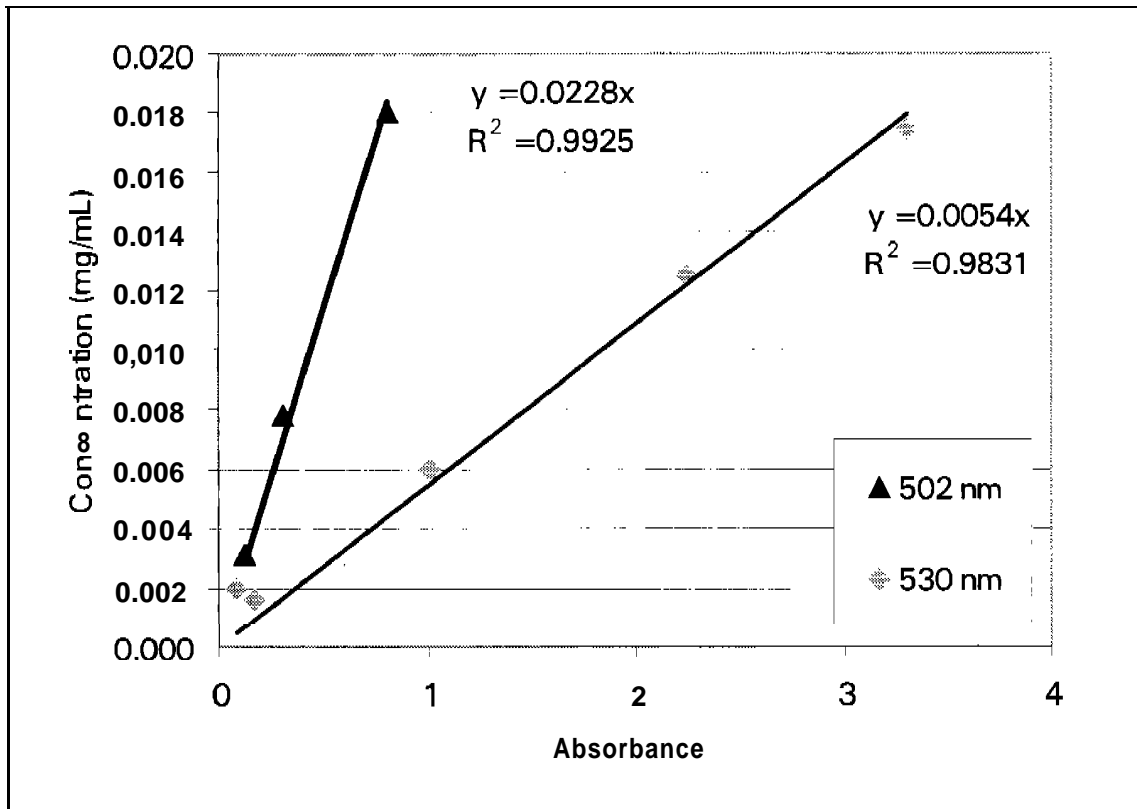


Figure 18.—Absorbance vs. concentration for FD&C #40 dye at recommended wavelength of 502 nm and 530 nm.

### Pressure Hold Test

Several manufacturers use a pressure test to spot check the integrity of membrane elements before they leave the factory. The bubble point test is used for MF membranes. The bubble point is the point at which bubbles are visible coming through the pores of a wet membrane as pressurized gas is fed to the other side. The pressure at which this occurs is used to estimate the largest pore size based on the pore **geometry** (Memcor,

1999). RO membranes, however, do not have pores. RO membranes are pressure tested by applying a low pressure (5 psi) to product side of the membrane to detect failures in the glue lines (Wammes, 2000). Others use a vacuum on the feed side with the product side blocked off to test for leaks. The membrane element is placed into a clean water bath for several hours, then drained. The permeate tube is plugged, a vacuum is applied, and vacuum decay is measured (Adham, et. al., 1998).

We adapted these methods for a pressure hold test that could be used on a whole stage of membranes without removing them from the pressure vessels. The brine seals, o-rings, and valves are tested at the same time. The two stages are isolated using valves placed just for that purpose. One stage at a time was pressurized to 600 kPa using compressed air, the air hose was disconnected and the pressure decay was measured for 10 minutes. The slope of the pressure decay was compared to the intact response to detect failures.

## RESULTS AND DISCUSSION

Table 4 gives the vital statistics for each of the methods tested. Individual time graphs are shown below in their respective sections. The pressure hold tests and dye challenge were only performed twice – once when the system had stabilized and again at the end of the six-month pilot study.

Table 4.—Statistics for long term integrity—

Method	Duration (days)	Number of Observations	Average	Max	Min	Standard Deviation
1st Stage dP (kPa)	1x2	1982	148	912	26	153
2nd Stage dP (kPa)	182	1764	74	381	8	38
Particle Monitor	149	1945	123	2274	88	82
Particle Counter (Total)	182	20982	3	2594	0	41
>15.0		3497	1	1318	0	26
10.0-15.0µm		<b>3497</b>	1	1249	0	<b>24</b>
2.0-3.0µm		3497	6	<b>2476</b>	0	<b>55</b>
3.0-5.0µm		3497	6	2594	0	70
5.0-7.0µm		3497	1	778	0	17
7.0-10.0µm		3497	1	1317	0	26
TOC	89	2479	311	7220	0	330
LR P. A.	161	34	2.91	4.14	1.15	0.79
UVA 254	9	14	0.037	0.200	0.000	0.050
UVA 455	9	14	0.003	0.012	0.000	0.004

### Performance Data

Figures 19 -21 show changes in NPF, %SP and pressure differentials with reduction index for *P. AERUGINOSA* and recovery rate for the six-month pilot study. Destructive challenges performed after October 7 are apparent from the resulting high salt passage. Performance **data** mainly reflect changes in operating conditions under the circumstances of this pilot study. There was wide variation in operating conditions and membrane condition during the first two months of the study while we adjusted the pretreatment system to accommodate for some unexpected phosphate scaling. The system needed to be cleaned once a week. In August the chemistry problems were resolved and the operating conditions stabilized. While there is still variability in the NPF and %SP, it is only one quarter the range they traversed during start-up. Under stable operation, performance parameters such as NPF, %SP and pressure differential are good for monitoring fouling and scaling. Only when there is extensive damage, as occurred in October, did the %SP signal a problem, even then the difference was not reflected in NPF and pressure differential.

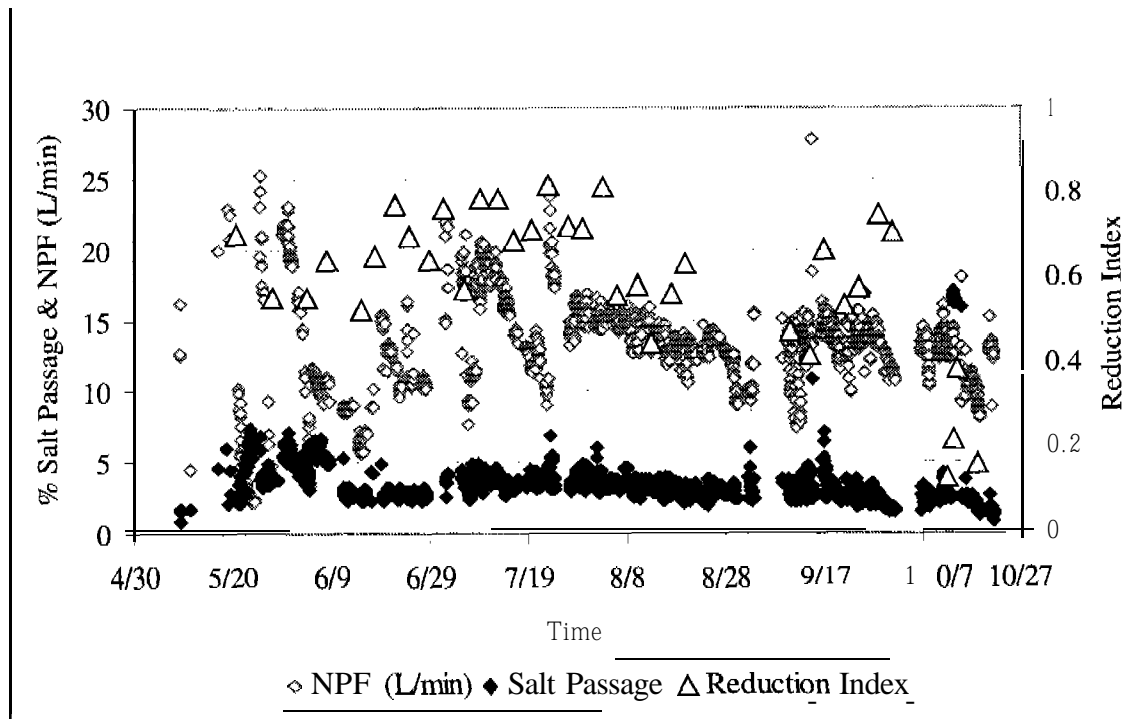


Figure 19.—NPF, %SP and reduction index for Pseudomonas. The first two months show erratic behavior due to unexpected phosphate scaling.

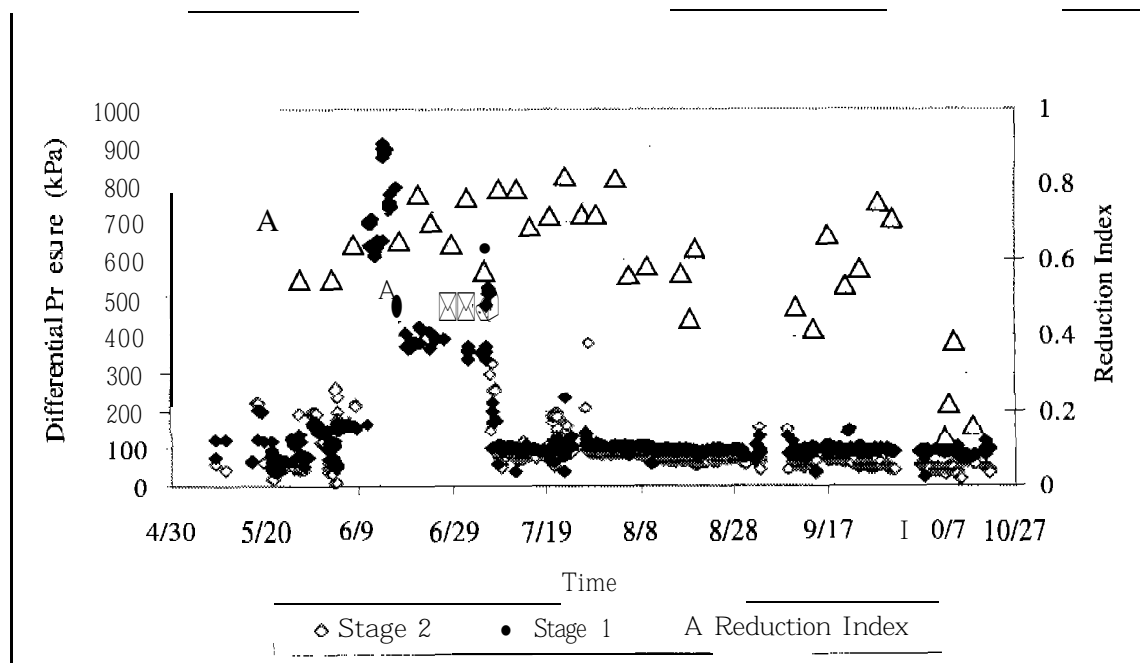


Figure 20.—Pressure differentials for both stages and reduction index for Pseudomonas. From 6/8/99 – 7/14/99 the stage 2 was taken off line to gain control of phosphate scaling problems.

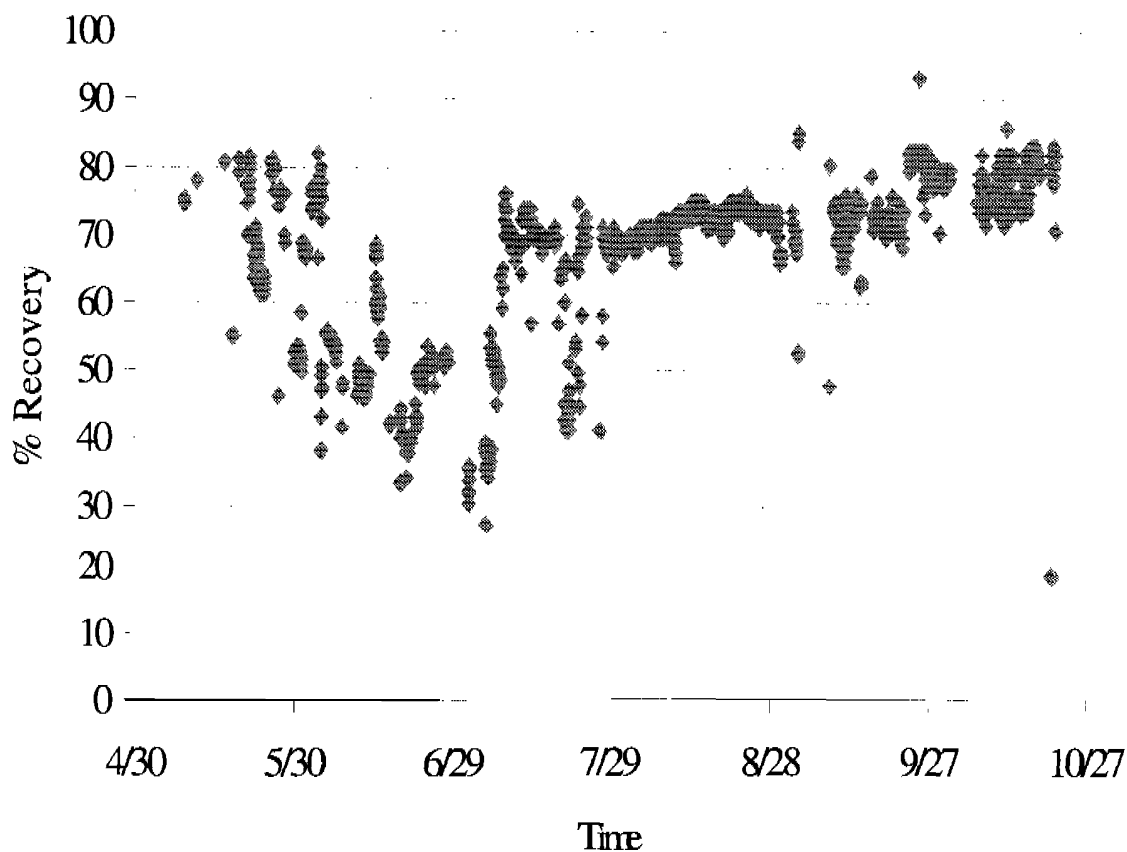


Figure 2 1 .-Recovery rate over the six-month pilot study.

### ***Pseudomonas aeruginosa* Counts**

Figure 22 shows the relation between the *P. aeruginosa* challenge and log reduction during the six-month pilot study. Challenge levels varied from less than three to almost six log. The average challenge was 4.9 log cfu while the average retention rate was 2.9 log. Of course it is impossible to achieve a log reduction greater than the challenge, so to be fair, we will use the RI in subsequent comparisons. The RI is a measure of the deviation from complete removal of cells as shown in figure 22 by the dashed line. The data deviation from the solid best-fit line is due in part to an artifact of the method. While the exact sample time is not known and there is a great deal of variability in NPF on any given day and there is a strong correspondence between NPF and RI. When the NPF is high, the RI is also high, indicating a high degree of removal. However, if a portion of the product count is due to constant sloughing of bacteria from the walls of the product piping, then a lower product flow rate would result in a higher concentration of bacteria in the product sample, thus a low RI. When the NPF is higher and the rate of sloughing is the same, the cells are diluted and the RI is high. Bacteria did grow in the product piping as evidenced by pink coloring there by the end of the pilot study.

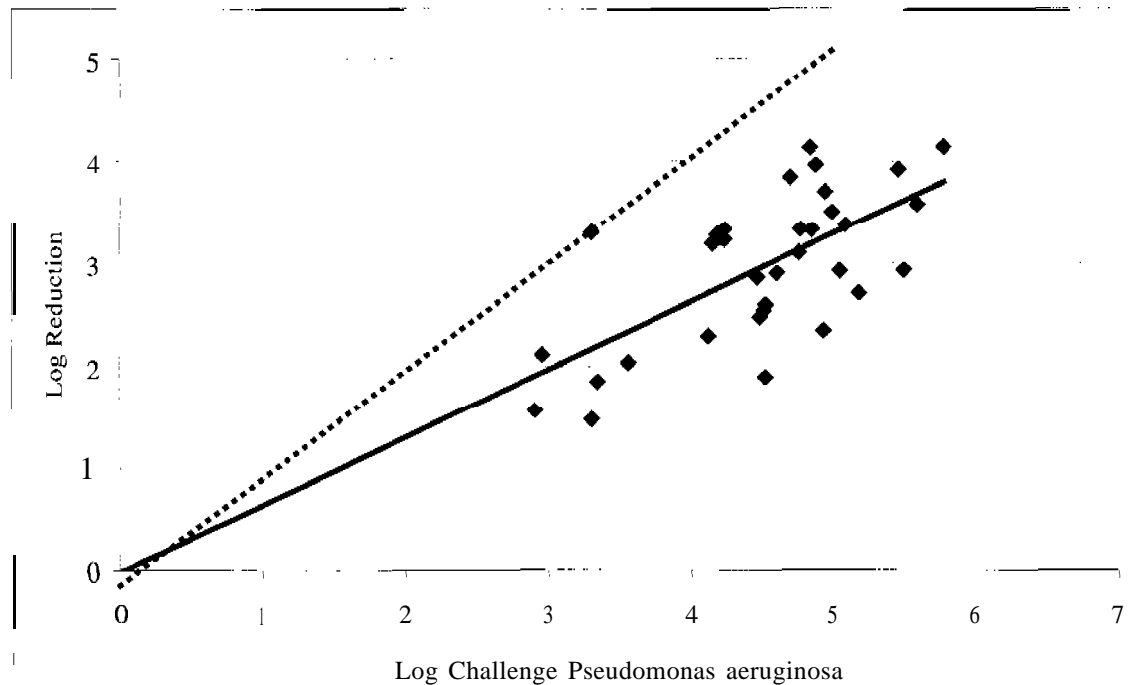


Figure 22.—Log of *P. aeruginosa* counts in feed and product samples. Heavy line is the linear fit for the data. The lighter line reflects total retention. Deviation from this line indicates treatment efficacy and is reflected in the Reduction Index used on subsequent graphs.

## TOC Data

The TOC analyzers were brought on-line July 9, 1999. The next day there was a severe electrical storm that put the Sievers unit out of commission until a new power supply could be shipped. The two analyzers did agree well at first when they were both on line, but after the new Sievers power supply arrived, the acid dose was not set correctly so only the inorganic carbon was reported. The Anatel instrument does not require the chemical dose as input; it is part of the calibration curve. The results presented here are from the Anatel 2000. Figure 23 shows the RO product TOC concentration for a representative month (July) with the error codes indicating when events such as a wash cycle, power cycle, low gas pressure or expired reagents occurred. Table 5 gives the average TOC concentrations for the product, feed and concentrate.

The TOC concentration, or the apparent concentration, varies over each day. There are apparent excursions when the RO system is down (such as on July 17) and also when a sample of the feed or concentrate stream is analyzed off-line (the "99"s in figure 22). Variation does not appear to correspond to pressure differential (figure 24) or NPF, but does look like it may be inversely proportional to temperature and %SP (figure 25). This may be due to temperature effects on both salt and organic passage and the oxidation process within the TOC analyzer.

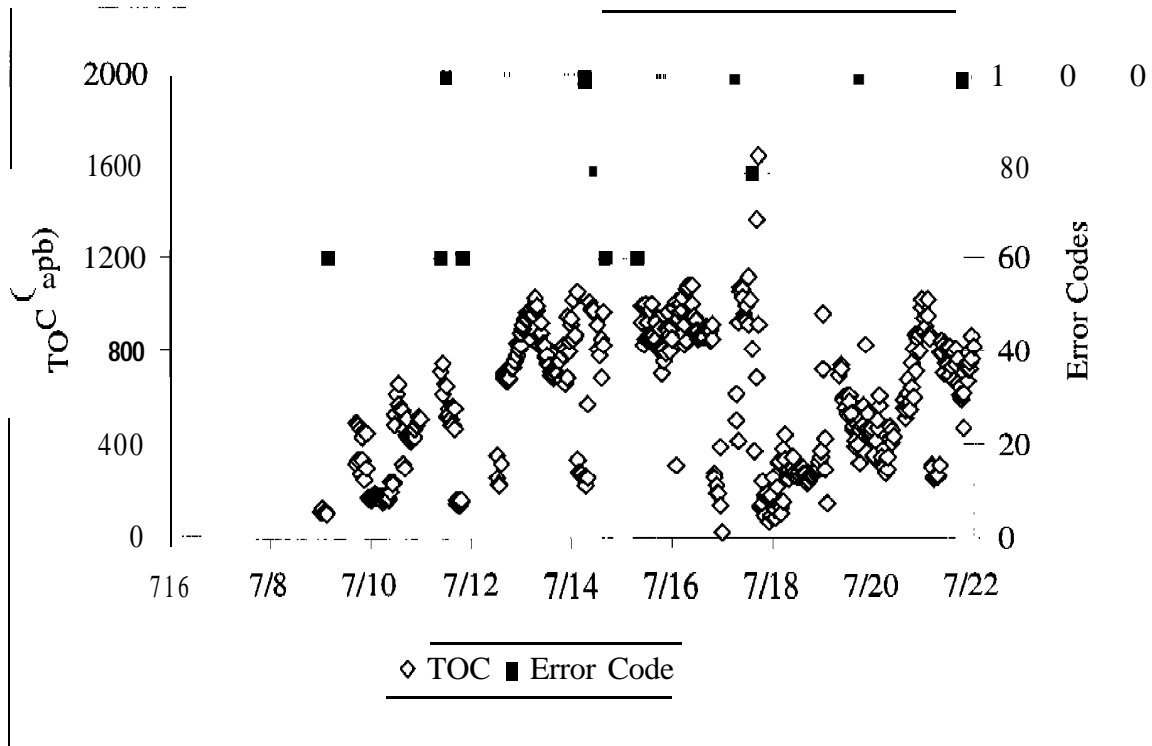


Figure 23.-Total Organic Carbon in product water for two weeks in July. Error Codes are: 99 for Manual Mode/Wash, 60 for Low Gas Pressure, 80 for Power Cycle even and 20 for Reagents Expired.

Table 5.-TOC Concentration statistics during the six-month pilot study.

	Feed	Product	Concentrate
Average (mg/L)	5.5	0.33	25.0
Standard Deviation (mg/L)	2.5	0.31	6.0
Number of measurements	56	2479	15

The Anatel unit required a source of nitrogen gas. At first, we used a cylinder of compressed gas, but it would last only two days, When the gas pressure is low, there is an error and no samples are analyzed. We switched to a compressor in mid-July and had no further problems with gas pressure. Another problem comes up when the chemicals expire another error is recorded and no samples taken. The chemicals need to be sparged of air for a day before they are ready for use. This causes a loss of data when the chemicals expire at night. A better maintenance schedule could alleviate both these problems. The Sievers unit does not require gas and the chemicals come in cartridges that are replaced less frequently.

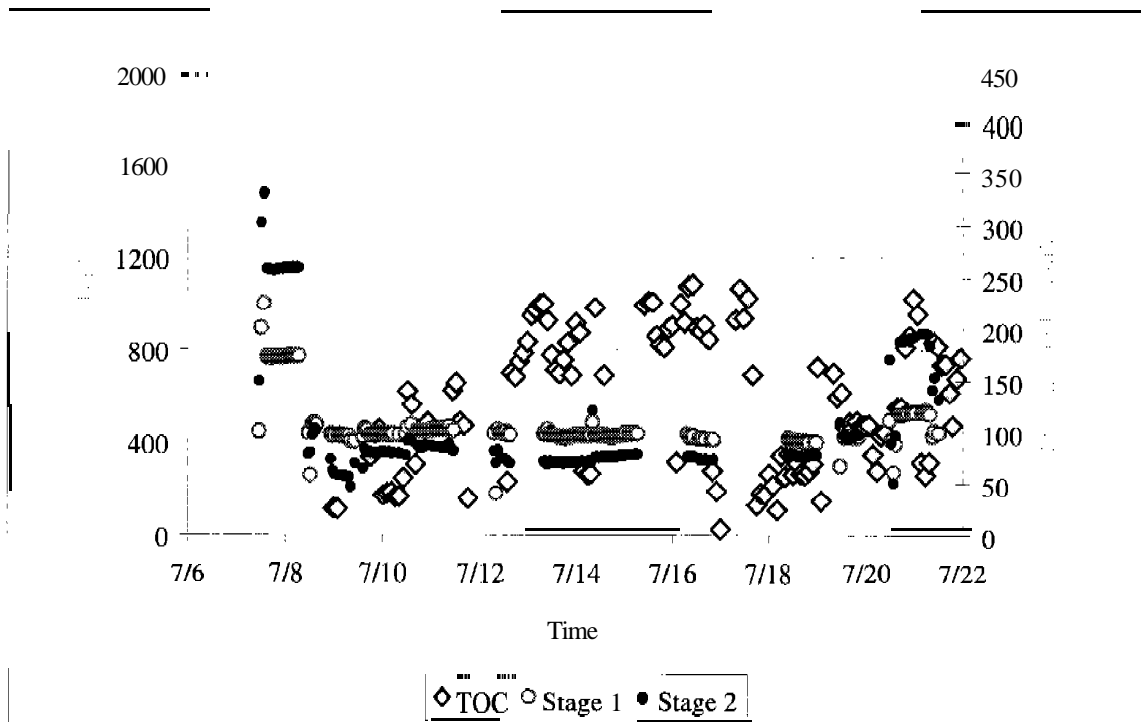


Figure 24.-Total Organic carbon and pressure differential.

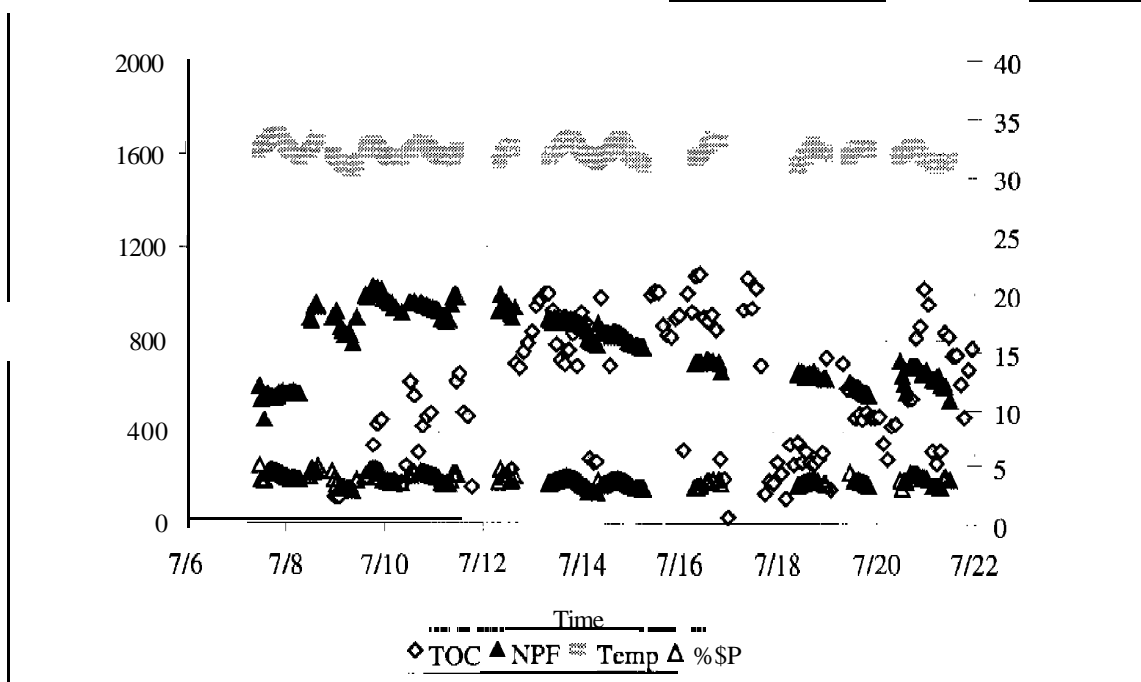


Figure 25.—NPF, %SP, Temperature (°C) and TOC for mid-July



Two sources of potential confusion in interpreting the data arise when off-line samples are run using a different calibration table. One needs to be sure the line is flushed well before collecting on-line data again. In our case, this process took two data cycles, or about 15 minutes. Until the line is completely replaced with sample, the readings reflect the previous sample concentration or the flush water rather than the current. The data for all samples are recorded in the same column of the data sheet. Good bookkeeping and sharp eyes, or a smart macro, are required to sort out the off-line measurements from the on-line measurements and then to assign the readings to the correct samples

## **Particle Counter and Particle Monitor**

*Particle Counter.*—The software for the particle counter is extremely memory intensive. Sometimes it would lock up the computer causing loss of performance data for long periods of time. Unfortunately we only had one computer for automated data acquisition and could not have it monopolized by one piece of equipment. As a result, the particle counter software was often turned off. The loss of data is regrettable, but ease of use is an important aspect of the method and performance data was our primary objective during the pilot study. There was one two-week period when the particle counter was on continuously. Total particle count is shown in figures 26 and 27 with performance parameters and reduction index for P.A. The majority of counts are from the size categories between 2 and 5  $\mu\text{m}$ . Refer to table 3 for the count statistics.

Particle count increases during the period between August 9 and 11 appear to be related to changes in differential pressure rather than a breach of integrity. There is no significant change in NPF or salt passage at that time though there was a decrease in feed flow and feed pressure.

*Particle Monitor.*—Figures 28 and 29 show particle monitor data for the same two weeks in July examined above in the section on TOC monitoring. Particle index spikes appear whenever the system was restarted. If these spikes are discounted, there is not much response from the particle monitor. This is probably good since there was no damage to the membranes at this time.

*Pros and Cons.*—Particle counting and monitoring are not affected by temperature changes like the TOC monitor. The problem with both was the difficulty in maintaining a steady flow rate of 100 mL/min. An enclosed holding reservoir and peristaltic pump should be added to isolate the instruments from changes in operating conditions and to regulate flow. The particle counter software, was problematic and memory intensive. However, there are instruments that graph input from particle counters on a display and store data to disk. This is definitely the way to go. If data is recorded at the same interval as the rest of the performance data it will still be directly comparable. In this case, conditions changed so dramatically over time, especially in the first two months, that the difference in recording time rendered direct comparison irrelevant except for general trends.

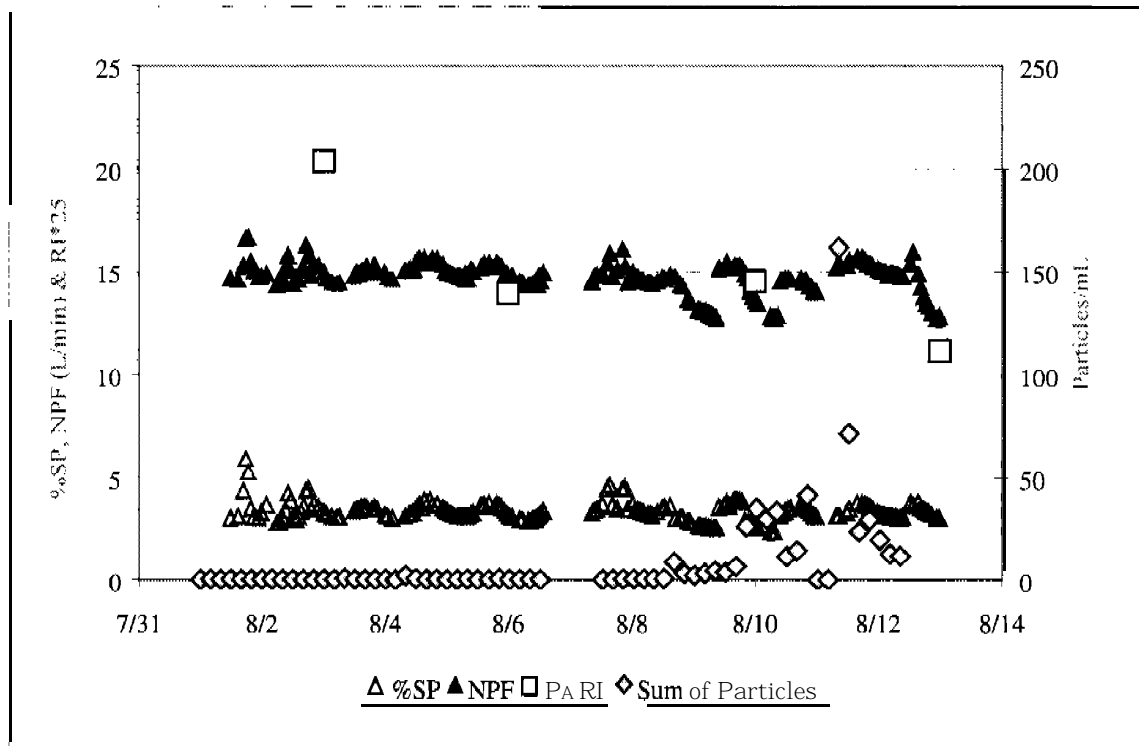


Figure 26.—Particle counts for a two-week period with %SP, NPF and RI. RI is multiplied by 25 to fit it to the left y-axis.

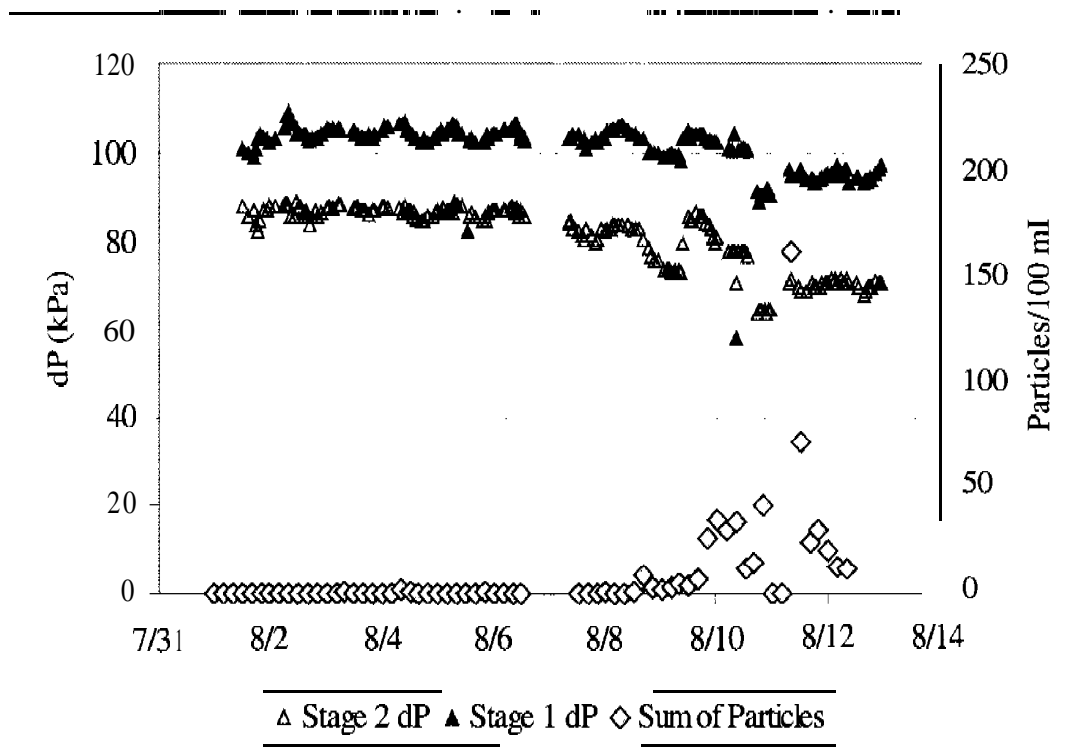


Figure 27.—Total particle counts with differential pressure.

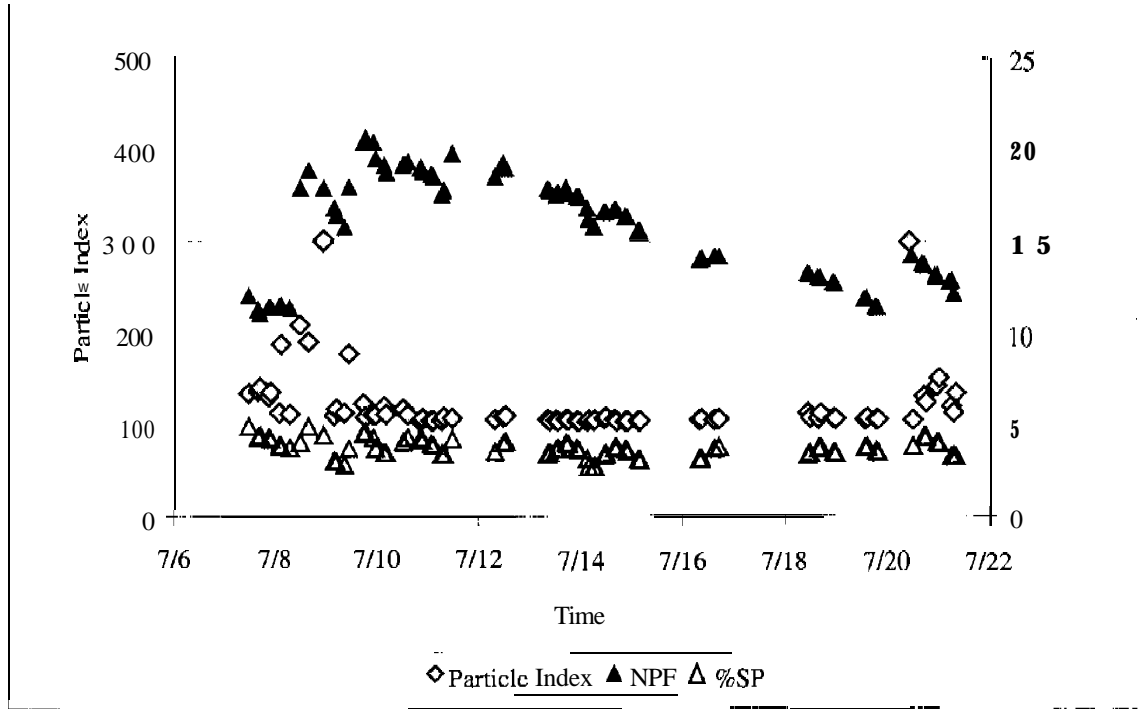


Figure 28.—Particle index with NPF, %SP.

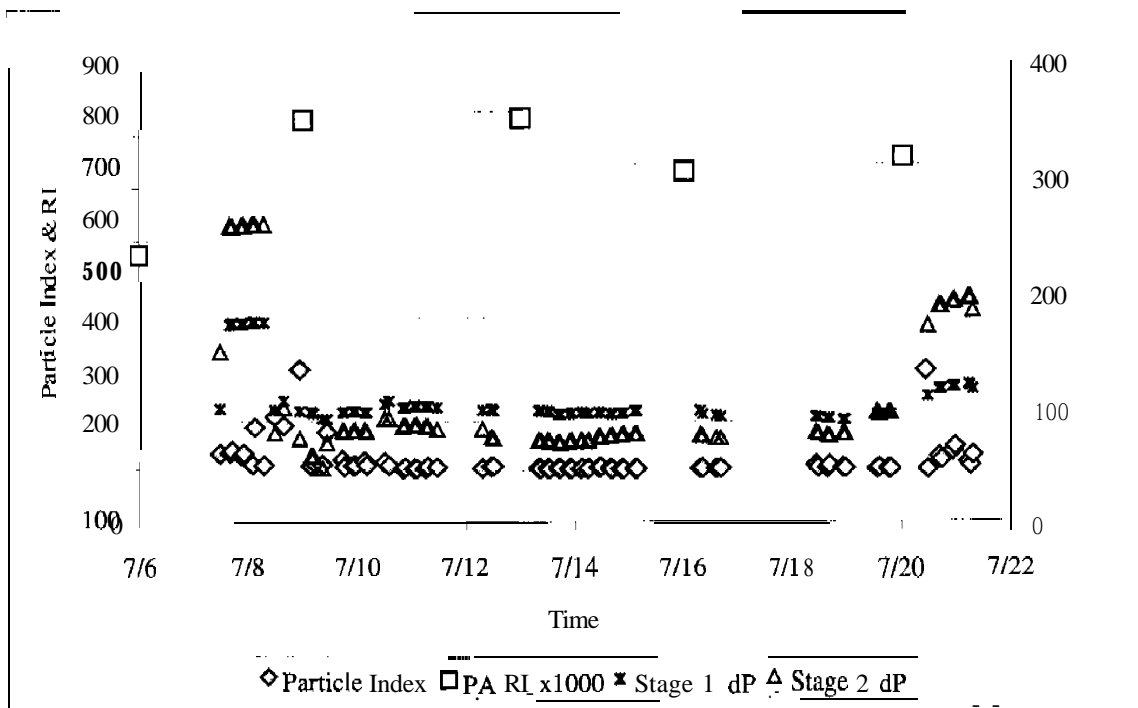


Figure 29.-Particle index with differential pressure and PA Reduction Index.

The particle monitor had a very stable response. There were spikes as mentioned above, but they did not last as long as the particle counter spikes. The input signal is acquired with the rest of the performance data so readings correspond directly with performance while the particle counter was on a slightly different recording schedule.

## UV Absorbance and Dye Challenge

Periodically during the pilot study, samples of the feed, concentrate and product were analyzed for their absorbance at three different wavelengths: 530, 455 and 254 nm. The dye for the dye challenge tests absorbs at 530 nm, 455 is a good wavelength for estimating color units and 254 nm absorbance is used to estimate humic and fulvic acids. A dye challenge test was also performed with the system intact to determine the baseline 530 nm absorbance with dye in the system. Table 6 reports the average and standard deviation for each of the wavelengths

Table 6.—UV Analysis for three wavelengths during normal operation

	530 nm (No Dye)	530 nm (w/Dye)	455 nm (Color)	254 nm (Humics)
Average	0.001	0.002	0.002	0.012
Standard Deviation	0.002	0.002	0.002	0.004
High End Confidence Limit	0.007	0.008	0.008	0.24

After the six-month pilot study was complete, the series of purposeful damage tests were run to determine the response of the monitoring methods with known damage. Table 7 lists the damage events and a code letter that will be used to indicate that event for the rest of this report. After each damage was inflicted, three samples each of feed, concentrate and product were analyzed at the three wavelengths when the system had stabilized from restarting and again the next day. Then a dye solution of 1 or 2 g/L was injected into the feed line for the dye challenge test. Absorbance for the dye wavelength of 530 was measured at 15-minute intervals for 45 minutes after injection of the dye. Absorbance was converted to concentration (mg/L) using the calibration curve in figure 18. Results of all 3 wavelengths are reported in table 8 and shown in figure 30.

Table 7.—Code for damage events

Code	Damage Event	Initiation Time
A	One O-Ring Filed	10/9/99 9 pm
B	O-Ring Nicked	10/10/99 7 pm
C	Brine Seal Twisted	10/11/99 9 pm
D	Two O-rings Cut	10/12/99 9 pm
E	System Intact	10/15/99 9 am
F	Cleaning	10/18/99 12 noon
G	Clean, Intact	10/20/99 2 pm
H	Two pinholes	10/21/99 12 noon
I	Several holes	12/99

During the dye challenge, the dye injected resulted in a concentration of 8  $\mu\text{g/L}$ . A significant response for the tests in this experiment is above 0.53  $\mu\text{g/L}$  in the total product stream using the average baseline response plus a 95% confidence interval. The most significant response occurred when 2 o-rings were cut. Dye concentrations in each stream for the damage events listed in table 9 and shown in figure 30. Additional confirmation testing was done the in Denver lab. One of those tests is designated as event I where several holes were punctured into a membrane and tested with the dye challenge test.

Samples from the individual vessels were analyzed to see if damage would be more obvious in the whole system or by looking at the individual product streams. Also, the flows and conductivity measurements were taken for the individual vessels as a comparison to the dye test. The results of the individual vessel data are presented in figures 30 to 33.

Table S.-Absorbance after damage events and dye concentration in product samples. Values are averages of all samples taken after the event

Damage Code	530 nm (With Dye)	455 nm (Color)	254 nm (Humics)	Dye Concentration (mg/L)
A	0.006	0.004	0.066	0.14
B	0.004	0	0.009	0.09
c	0.002	-0.006	0.026	0.05
D	0.150	0.075	0.65	3.42
G	0.006	<b>0.011</b>	0.061	0.14

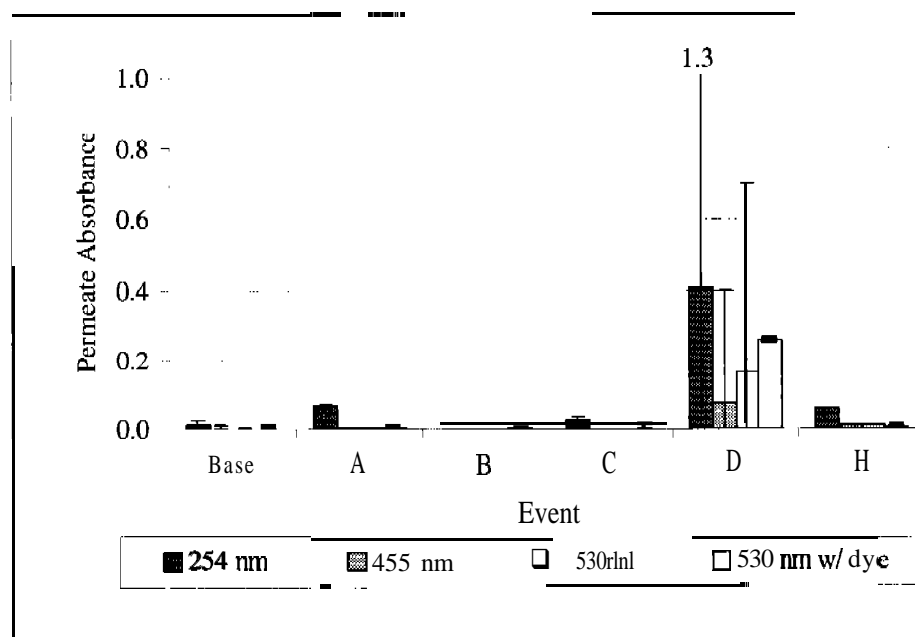


Figure 30.—Absorbance at the three wavelengths of interest. Error bars represent 3 standard deviations. (Dye test value for event D was the strongest response)

Table 9.-Absorbance and concentration for the feed, concentrate and permeate during each dye challenge test.  
 Shaded cells show a statistically significant response based on the confidence limits in table 6.

Events	UV 530 (absorbance)			Concentration (mg/L)		
	Feed	Permeate	Concentrate	Feed	Permeate	Concentrate
Baseline background - no dye, 14 samples	0.014	.003	.050	0.32	.07	1.14
Baseline with dye, no damage, 1 sample	0.821	.000	2.62	18.72	0	59.74
95% confidence interval		0.02			0.46	
A	0.417	.006	1.911	9.51	0.14	43.58
B	0.385	0.004	2.065	8.77	0.10	47.07
c	0.373	0.002	1.805	8.50	0.05	41.16
D - trial 1	0.376	<b>0.113</b>	1.666	8.57	2.58	37.98
D - trial 2	0.376	0.260	0.945	8.58	5.94	21.55
D - trail 3	0.138	0.078	2.09	3.15	<b>1.78</b>	47.65
D average 3 trials	0.297	<b>0.150</b>	1.567	6.76	3.43	37.98
G	0.274	.006	1.401	6.24	0.14	31.95
H	0.632	0.209	2.247	14.41	4.77	51.23

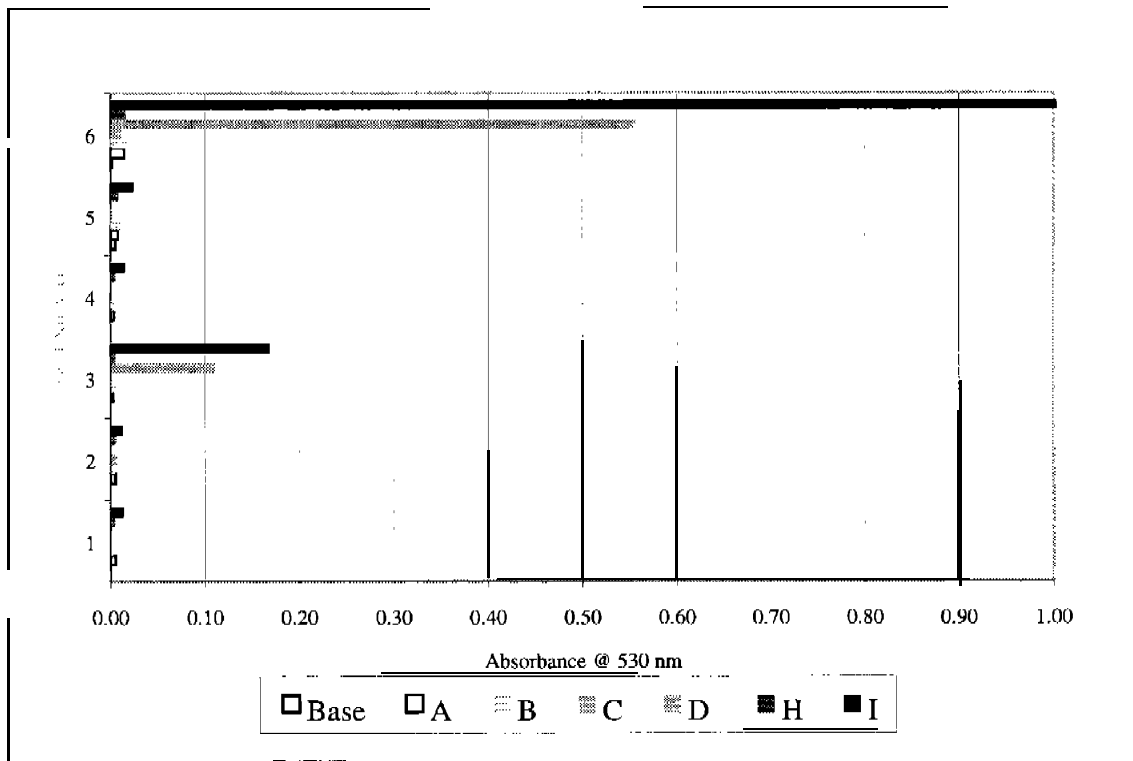


Figure 3 1 .--Dye concentrations in individual vessel permeate after damage events.

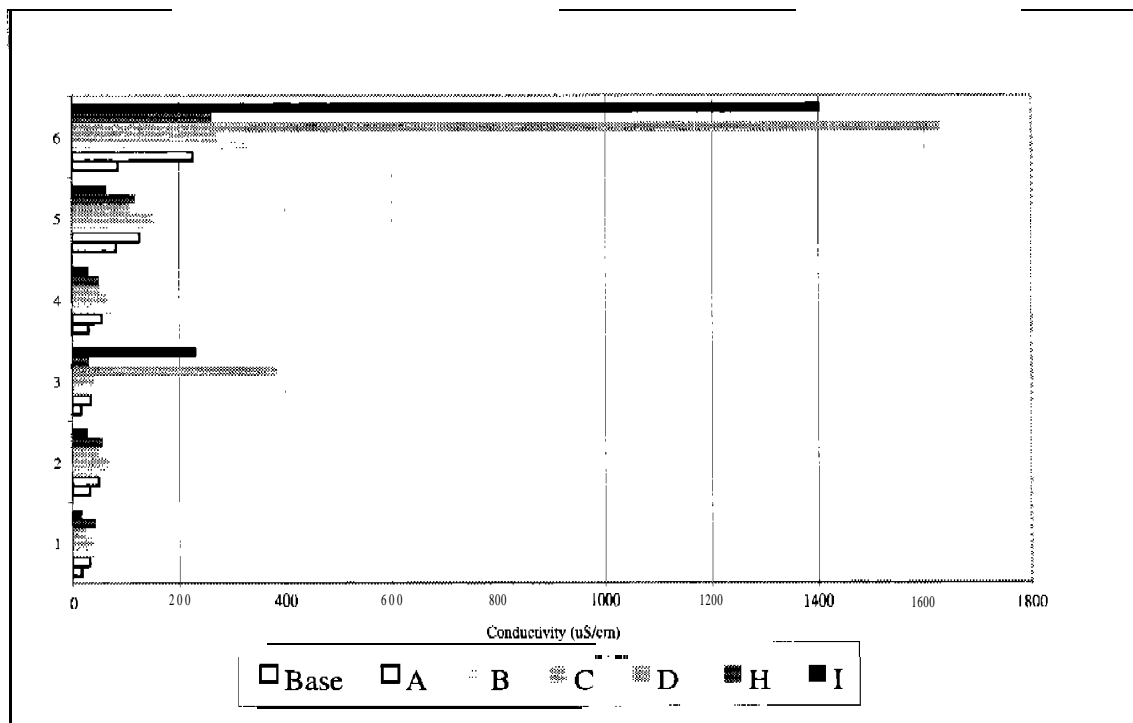


Figure 32.--Conductivity of individual vessel permeate after damage.

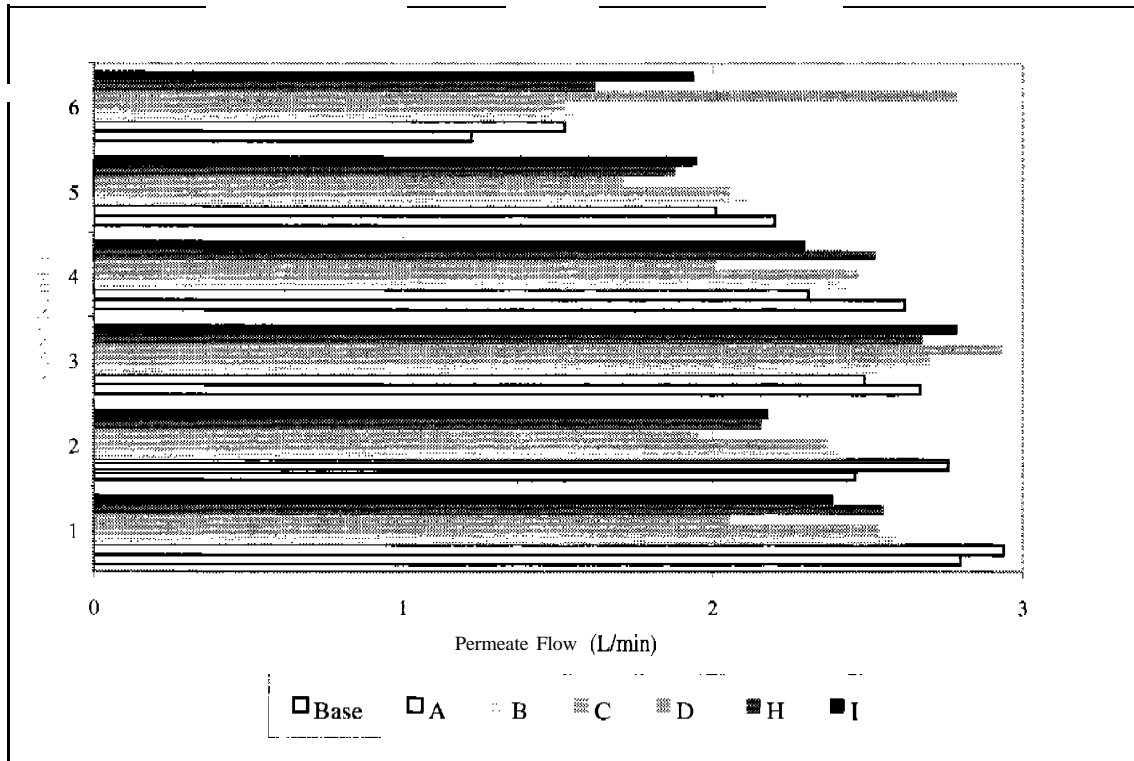


Figure 33.—Permeate flow from individual vessels after damage.

### Dye Test and Spectrophotometer Results

Individual vessel flow does not give as clear a response to damage as do individual vessel conductivity and dye challenge. Conductivity increases through the system because of the increase in the bulk concentration as permeate is removed after each vessel. Increases due to damage would have to be significantly higher than this normal increase. Scaling in the later vessels would also cause a higher conductivity in those vessels due the increased salt concentration at the membrane. The conductivity bar chart for individual vessels, figure 32 shows a significant increase in salt passage only for severe damage in events D and I, when two o-rings were cut and the last element had several pinholes. Salt passage for the total system shown in figure 39 also shows an increase for damage event D only.

The dye tests provided a known concentration for a feed challenge to the membranes. Dye molecules are too large to pass the membrane barrier unless the membrane is damaged and consequently provide a theoretically more definitive indication of damage than the flow or conductivity. In figure 31 there is a distinct indication of damage at events D and I. Conductivity in figure 32 does show a similar response except that the natural increase in conductivity through the vessels may obscure smaller damage events

Vessel permeate flow is dependent on the operating conditions and is less sensitive than conductivity as shown in figure 33 for individual vessel flow and in figure 38, normalized



permeate flow for the system. Indication of membrane damage can easily be obscured by normal flow variations.

There was a stronger response for UV 254 with damage events A, C, D, and H than for dye as shown in figure 30. Organics, especially at a wastewater treatment plant, are likely to be found at a consistent concentration. Using UV 254 as an indicator of impaired integrity is a useful integrity indicator based on our test results. This test is a less expensive way to indicate TOC than the on-line TOC analyzers, which also detected the same damage events. Whether UV 254 absorbance would work at a particular site would depend on the normal TOC concentrations.

The color test at UV 455 did not provide as strong of a response as the UV 254, the TOC monitor or the dye test. It may be that there was not a consistent feed concentration of color in this source water. The full spectrum of colors may need to be analyzed for a particular site to find an appropriate wavelength.

### **Results for on-line test equipment during destructive tests**

Figure 34 - 36 are time series plots of %SP, NPF, pressure differential and particle index and particle count over the two weeks of damage events. For each damage event the performance parameters settled down to a normal condition after damage was inflicted. There was an accident on 10/14 where the snap rings on the end caps of the pressure vessels did not hold and the system had to be shut down temporarily. Particle index and counts spike, as the system is re-pressurized, but then quickly fall off to normal uninteresting levels.

Figures 37 - 41 are bar charts showing performance parameters, on-line TOC concentration and particle data averages for each damage event with error bars showing the 95% confidence interval. Table 10 compares detection sensitivity for the various methods.

### **Pressure Hold Test**

The pressure hold test results are presented for normal operation, cut o-rings, and 2 small needle holes in Figure 42. The top horizontal lines represent the pressure loss when the system is intact and no damage was present for each stage. The other 4 lines represent the pressure rate loss during 2 damage events - 1 line for each stage in the system. Other damage events caused similar pressure decline responses.

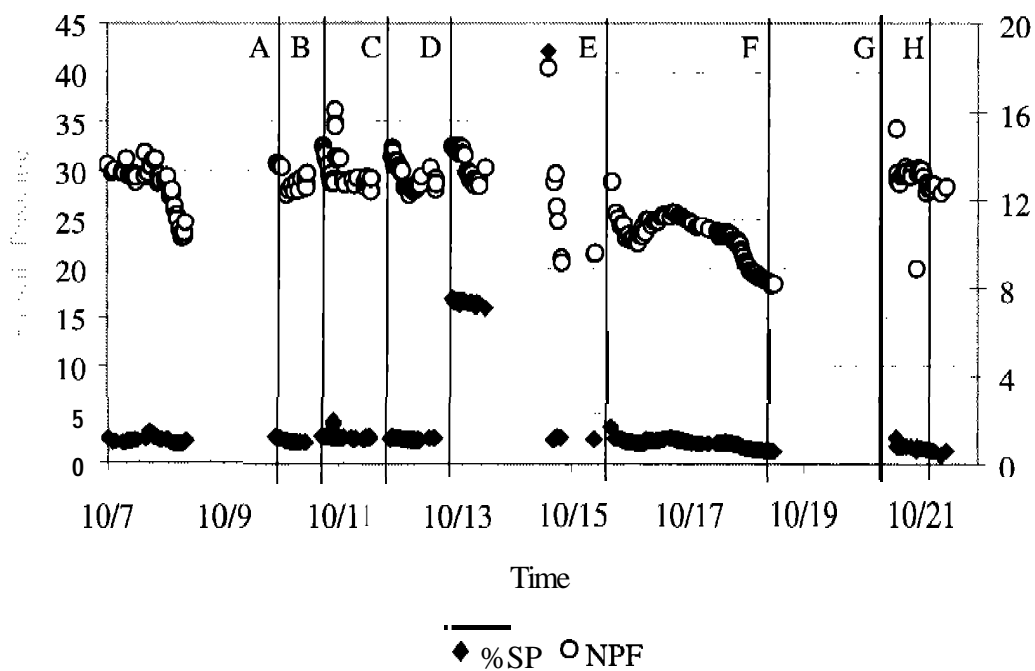


Figure 34.—Time series NPF and %SP during damage events. Cut O-rings of event D are detected by salt passage until after the accident which may have closed off the cut o-rings.

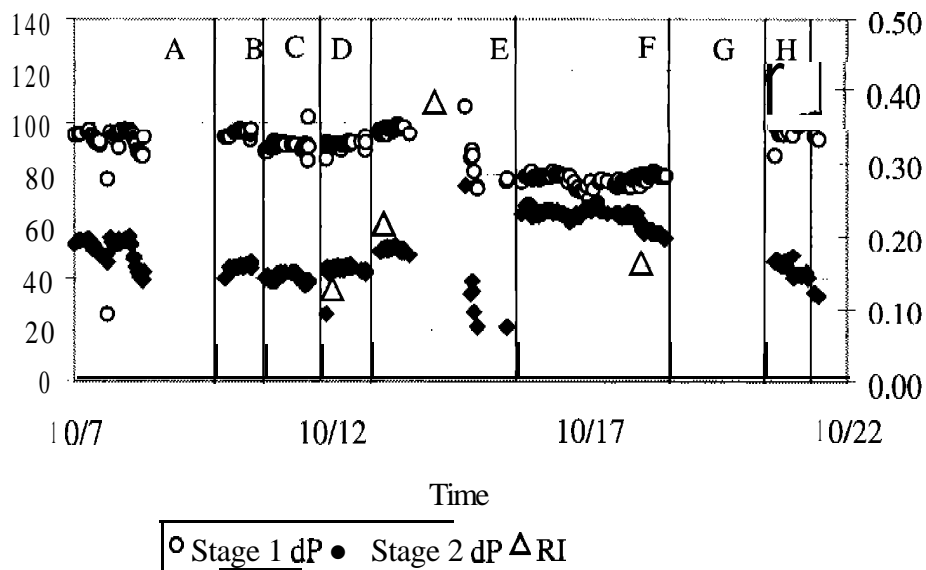


Figure 35.—Time series pressure differential during damage events with reduction index for *Pseudomonas aeruginosa*.

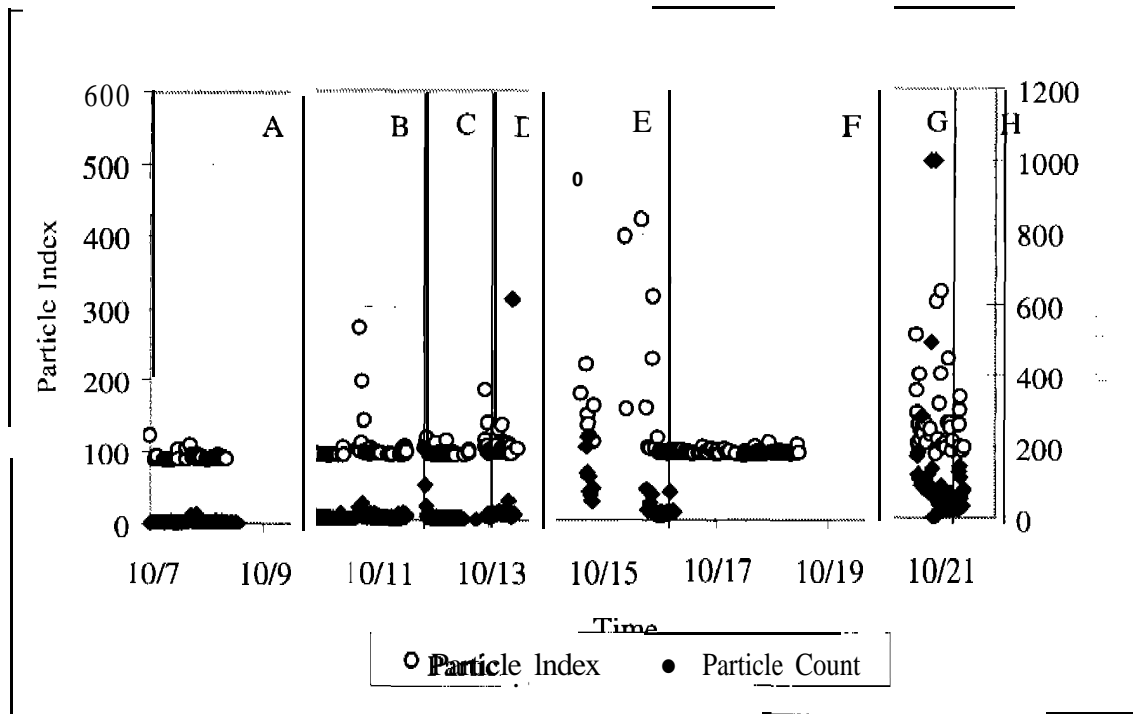


Figure 36.—Time series particle index and counts during damage events.

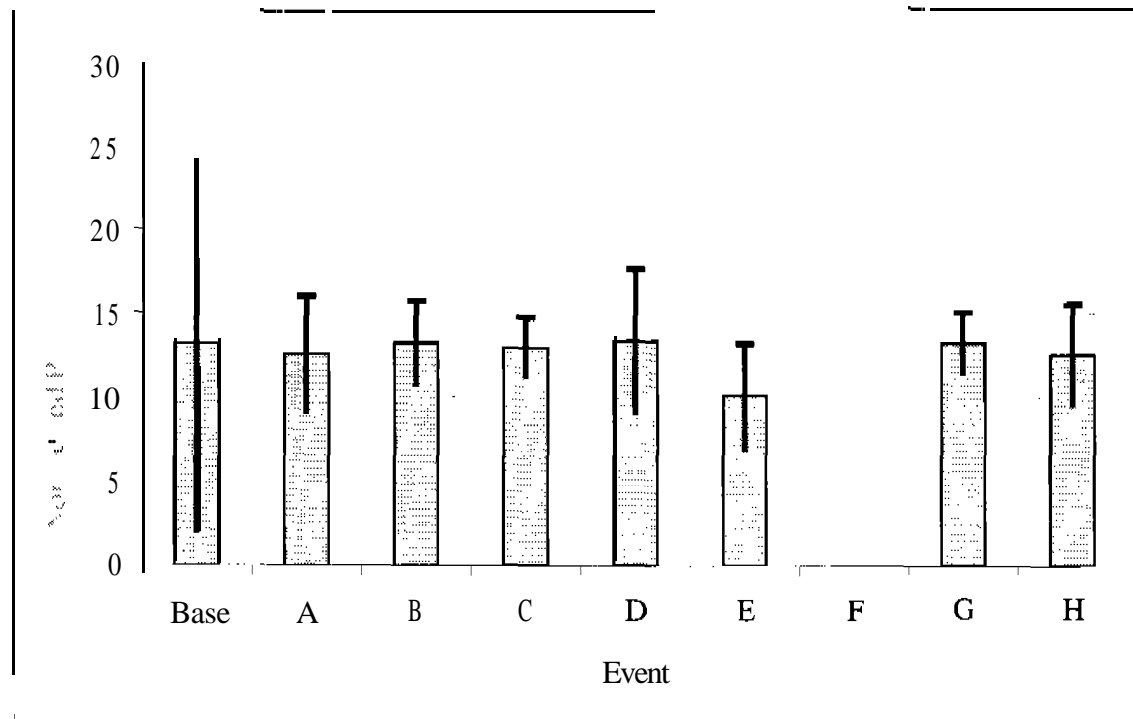


Figure 37.—Average NPF during damage events. NPF does not reflect any damage in excess of normal variation.

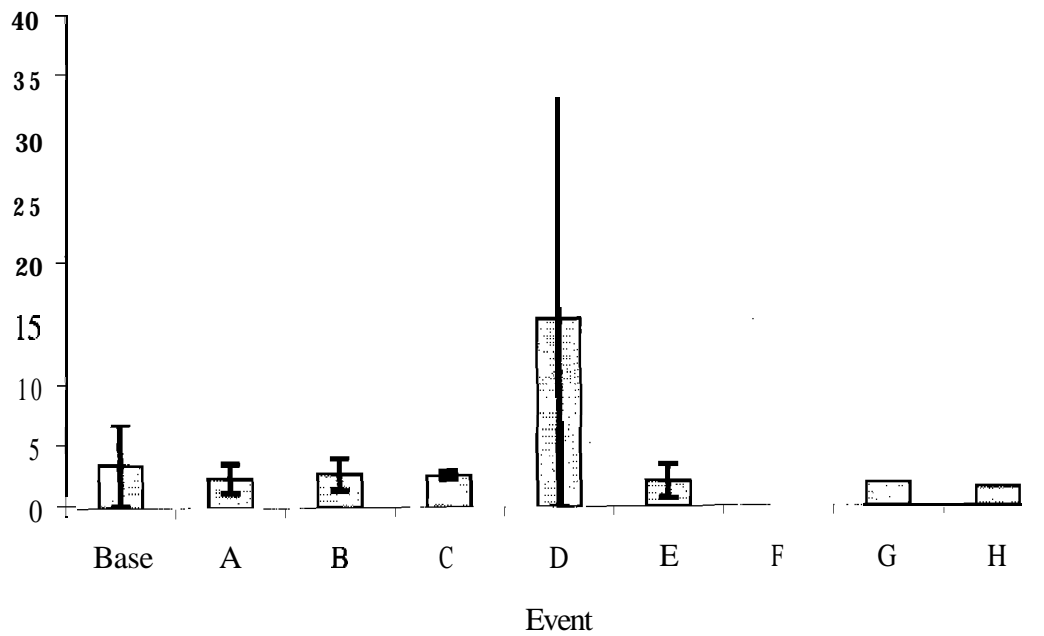


Figure 38.—Average salt passage during damage is only significantly higher with severe O-ring damage.

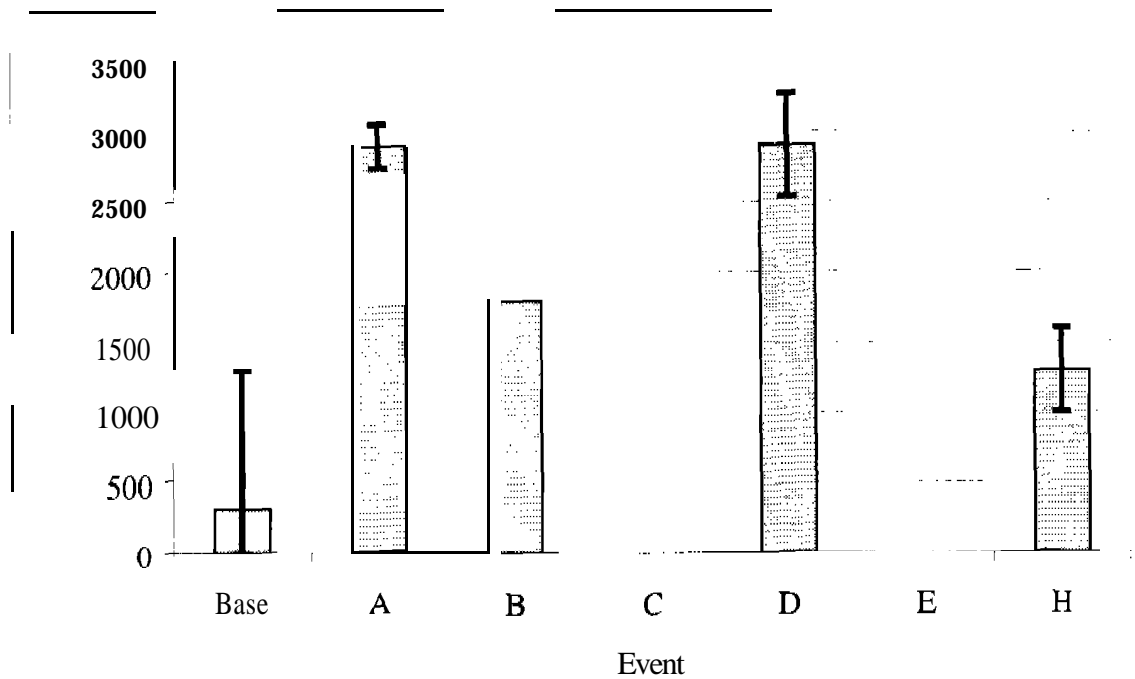


Figure 39.—TOC concentration during damage events. TOC does detect damage reliably. Value for damage event B is from one sample.

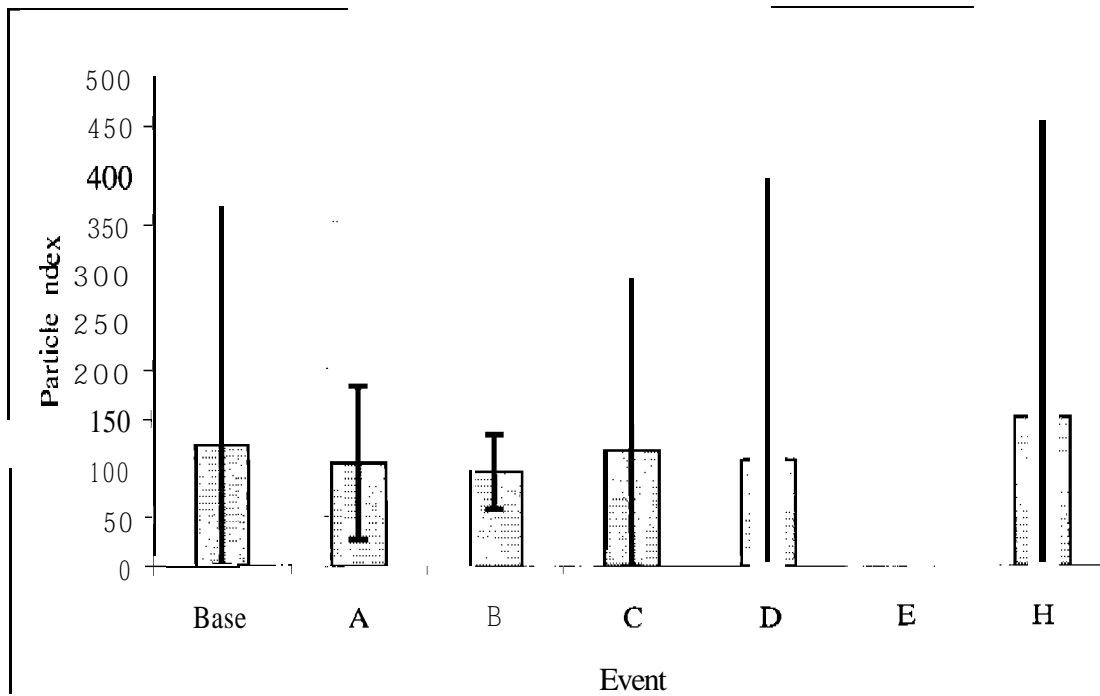


Figure 40.—Average Particle index with damage events. Particle Index becomes more variable with damage but much of it is due to the initial start-up disturbance.

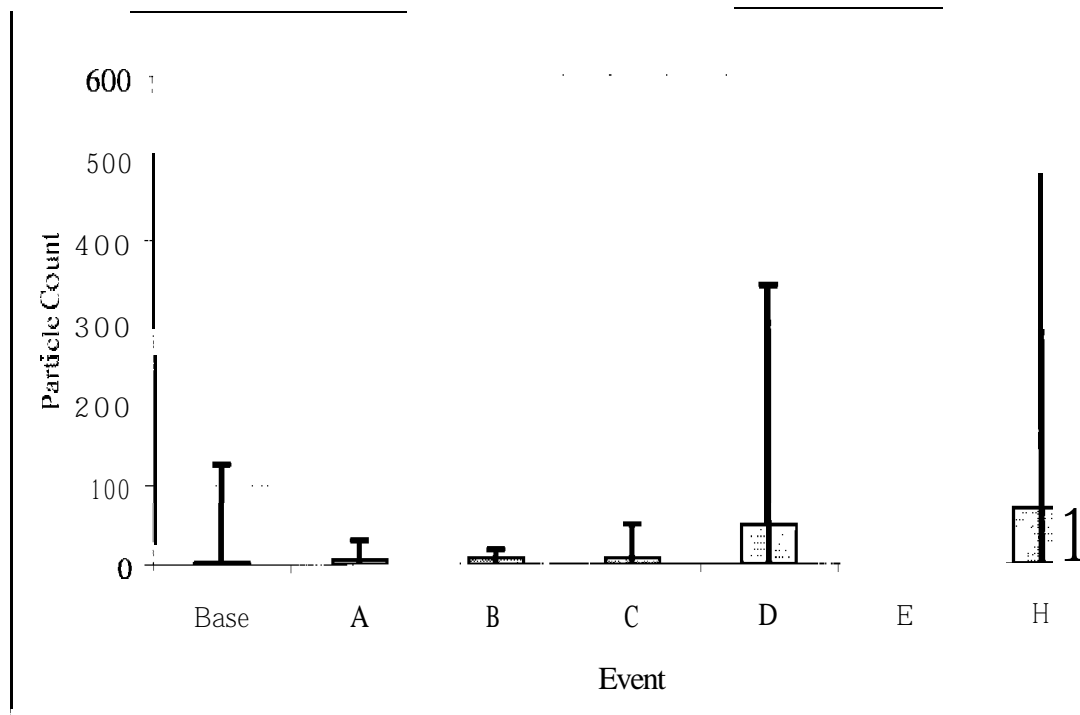


Figure 41 .-Average total particle count with damage events. Particle count also becomes more variable with increasing damage. Not definitive, but error would have been indicated eventually after H damage.

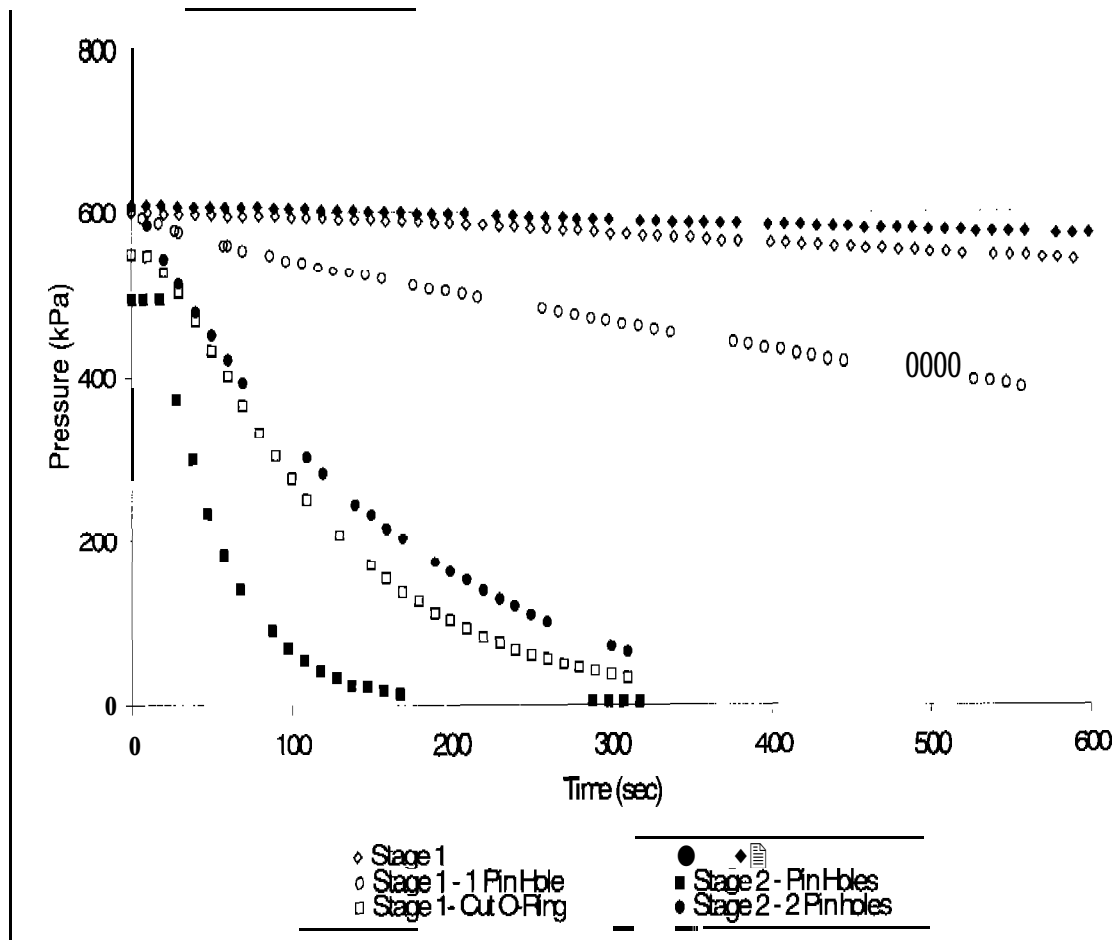


Figure 42.-Pressure hold test results for 2 types of damage; cut o-rings and 2 small needle holes.

## CONCLUSIONS

Working with so many methods for evaluating a RO system, it is evident there are several considerations regarding the simple goals set out for an integrity test method at the beginning of this effort. Those goals were slightly modified with experience.

### Meaningful to Membrane Experts and Regulators

For an integrity test to be meaningful to a membrane expert, the method has to have some basis in separation theory. For the regulator, the method must correlate with some regulated microorganism or other contaminant. Regulators have primarily focused on log reduction as the measurement of treatment effectiveness. Because log reduction is a function of the challenge level, this evaluation method has led to stories of plants where a substance must be added to their water to prove that they have filtered it out. We ran into the same problem in this study. Our ground truth organism, *P. aeruginosa*, did not always have a high challenge level as the feed concentration of this organism varied. Salt

passage and recovery are discussed as percentages of the feed flow and average feed-concentrate concentration. It seems logical to extend this to log reductions, as was done in this report with the "reduction index". The index is merely the fraction of log reduction. It is a useful substitute when challenge levels fluctuate.

The "sensitivity of response" criteria focused on whether a test method could identify small changes in the membrane system which are opportunities for pathogens, such as *cryptosporidia* and *giardia*, to leak into potable water supplies. Regardless of the feed concentrations, our membrane system consistently provided a superior removal rate. If there is a breach in integrity, the log removal may appear fantastic, but dangerous levels of organisms may still be allowed through the membrane barrier. Regulators will, therefore, be pushed to change their evaluation method of tight membrane systems to ensure the barrier is intact, not just to show reduction in feed concentration. We evaluated the sensitivity of response with these thoughts in mind.

### **Representative of Separations Phenomena**

RO, NF and tight UF membranes effect separation through the different rates of dissolution of the various components of the feed into the membrane polymer. Flow, pressure and concentration differentials are the driving forces controlling these phenomena. When they are operating as intended, with integrity, they are complete barriers to suspended solids. They can not handle much in the way of a particulate challenge though because the tight flow-path becomes fouled. If they are constructed with more open flow path, particles are less of a problem, but the consequent reduction in surface area is usually unacceptable. We evaluated the methods to monitor integrity on whether they were representative of these phenomena and examined the meaning of a positive result in each method using the "sensitivity of response\*" as our criteria.

### **User Friendly**

Both "ease of interpretation", and "operator labor and maintenance" indicate user friendliness. Normalizing data has prevented many operators from evaluating the operational efficiency of their membrane systems in real time. In categorizing a technique as user friendly we considered these attributes:

- how much training will be required,
- how quickly can the results be interpreted due to the need for calculations, computer graphing, or need for someone other than the person doing the testing to take time to manipulate the test results and,
- how physically demanding and time consuming will the work be.

We assumed that most operators take pride in learning something new and will embrace the knowledge as long as it is well presented and useful to them in making their job easier and more enjoyable. Many are capable sophisticated work, but if it is of long duration and/or high frequency, other tasks will often be given a higher priority. Finally, if the operator understands that the data he or she is collecting is useful, makes their job easier,

and ensures the water they produce is the proper quality without a lot of guess work, the test will more likely be a priority task. A user friendly test, as we define it, would require a limited amount of special training, entail work that is not physically demanding or time-consuming, and allow for full involvement of the operator in all phases of data analysis. Better ranking tests provided the operator the ability to identify integrity breaches immediately and identify the location of the problem.

## RECOMMENDATIONS

Table 10 summarizes our experience with the methods tested and table 11 is a numerical evaluation. Based on the two summaries, we can make the following recommendations:

- Tracking vessel (or individual stage) flows and conductivity is instructive for monitoring fouling and scaling, but requires too much interpretation to allow quick response.
- On-line TOC monitors were the most responsive and reliable on-line method.
- UV analysis for organic components is the least expensive, and one of the most sensitive methods as long as the feed stream has a sufficient challenge. This method has the advantages of not adding anything to the treatment stream, and was found to demonstrate few artifacts.
- UV analysis using the dye challenge is also inexpensive, simple, and sensitive enough to identify possible passage of pathogens quickly. It is less labor intensive than the pressure hold test, which is just as sensitive, and does not require going off-line and draining the system. This test was the easiest and most satisfying test for the operators to use. Damage, especially for the individual housing tests, was at times visible with the naked eye allowing the operator to make immediate conclusions about the integrity of the enclosed membrane system. The dye provided a known challenge concentration, but could be messy. The concentrate stream may need to be diverted while color is high depending on the duration of the tests and discharge issues.
- An on-line method is preferable, but requires a trained and observant operator to track the response levels to establish normal variability and set response levels. These methods may also provide an opportunity for an alarm if the response is out of specification.
- The pressure decay test, while sensitive, is not desirable because it requires draining the system and the time and ability to plot the slope of the pressure decay.
- Particle counters and particle monitors were not the best choice for integrity testing.



Table IO.-Summary of Comments on Each Method.

No.	Method	Sensitivity of Response	Ease of Interpretation	Operator Labor and Maintenance	Additional Cost
<b>PERFORMANCE PARAMETERS OR CONVENTIONAL METHODS</b>					
1	Normalized Permeate Flow	NPF is averaged over the whole system. If individual vessels are sampled, a hole might be detected.	Highly dependent on temperature and operating conditions. Best at detecting fouling and scaling.	Computer generated, but learning to control or interpret changes takes training and experience.	None
2	Salt Passage (or Conductivity)	Same as above.	Dependent on operating conditions and somewhat on temperature.	Same as above	None
3	Individual Vessel Conductivity	Indicates salt passage increase, but changes in operating conditions have to be accounted for.	Requires more instrumentation or operator time.	Time consuming if not automated	-\$1000 + 100/sample tap,
4	Individual Vessel Flow	Indicates permeation increase that may be due to damage: but changes in operating conditions have to be accounted for.	Same as above	Same as above	Comes with above
5	Pressure differential	If there is a sudden drop in pressure differential with no change in feed flow or applied pressure, a failure is indicated.	Depends on feed flow and applied pressure. Best for detecting fouling or scaling.	Computer generated, but learning to control or interpret changes takes training and experience.	None
<b>PERIODIC METHODS</b>					
6	UV Methods - UV 254 - organics	Similar to TOC monitoring but depends on the composition of the feed stream.	Sensitive to increases in organics. Specific signal wavelength depends on source water.	Time consuming but easy work. Operators can see results immediately. Low variability.	\$6000 for Spectrophotometer
7	<b>W</b> Methods - <b>W</b> 455 - color	Depends on concentration of color in source water	Difficult to determine significant changes in concentration.	Same as above.	Same as above
8	<b>W</b> Methods UV 530 - dye	Very sensitive	Visible without instrumentation at times.	Same as above.	\$500 per injection point
9	<b>W</b> Method: Individual Vessel UV 530 - dye	Even more sensitive in determining specific damage location.	Same as above	Same as above.	\$500 per injection point

No.	Method	Sensitivity of Response	Ease of Interpretation	Operator Labor and Maintenance	Additional Cost
10	Pressure Decay	Intact system should hold pressure, any small leak will leak air. Leaking valves may result in false positive response.	Off-line test, <b>Need</b> to determine slope of pressure decay. Labor and time intensive.	Need to drain system! Intimidating at first, but well received with further training.	\$1000 for compressor
11	Biological Assay - Reduction Index for pseudomonas aeruginosa	Similar to particle monitoring or counting. There are indications that many of the cells detected arise from sloughing from <b>biofilm</b> on permeate piping.	Highly variable.	Takes 1 to 2 <b>weeks</b> for results.	\$35/ sample set (feed, product)
<b>ON-LINE METHODS</b>					
12	On-line TOC instrument	RO and NF retain most all organic molecules. TOC analyzers are very sensitive. When there is a small leak it shows up.	Sensitive to temperature and water chemistry changes. Air pressure and chemical expiration are problematic for remote sites.	Easy to keep in operation. Requires a <b>degree</b> of computer literacy to <b>interpret</b> data files.	\$30,000/ sample tap
13	Particle counters	If particle count increases suddenly with no change in operating conditions, there is probably a failure, but particles tend to plug small holes so that the response is soon lost. Permeate flow is slow, <b>low</b> pressure, most particles fall out, adsorbing to the piping, affecting particle <b>count</b> with changes in pressure. Spikes occur with start-up and changes in pressure.	Spikes at pressure or flow change. Response returns to normal reading soon after spikes.	Neutral unresponsiveness led to neglect. Needs to be returned to factory for calibration.	\$5000/ sample tap
14	Particle monitor index	Same as above	Same as above	Software and calibration are problematic	\$4000/ sample tap

Table 11 .-Ranking of Integrity Monitoring Methods.  
 Low scores are best in this evaluation.

NO.	METHOD	Sensitivity of Response	Ease of Interpretation	Operator Labor and Maintenance	score
<b>PERFORMANCE PARAMETERS OR CONVENTIONAL METHODS</b>					
1	Normalized permeate flow	60	60	10	43
2	Salt Passage (or conductivity)	40	60	10	37
3	Individual vessel conductivity	30	40	10	27
4	Individual vessel flow	30	50	10	30
5	Pressure change	60	50	10	40
<b>PERIODIC METHODS</b>					
6	UV methods - <del>UV 254</del> , organics	<del>30</del>	<del>20</del>	20	23
7	UV methods - <del>W 455</del> - color	60	60	20	47
8	UV methods - <del>W 530</del> - dye	30	30	20	27
9	Individual vessel dye test - UV 530	20	10	30	20
10	Pressure decay	20	50	60	43
11	Biological assay reduction index for pseudomonas aeruginosa	60	70	50	60
<b>ON-LINE METHODS</b>					
12	On-line TOC instrument	10	20	20	17
13	Particle counters	70	50	70	37
14	Particle monitor index	70	40	20	43



## BIBLIOGRAPHY

S. Adham, P.Gagliardo, D.Smith, D. Ross, K. Gramith and R. Trussell, Monitoring the integrity of reverse osmosis membranes presented at Membranes In Drinking and Industrial Water Production Conference, Amsterdam, The Netherlands, Sept. 21-24, 1998.

Lozier, J. 1998. *Wastewater Reclamation Pilot Study; City of McAllen Texas*. Water Treatment Technology Program Report # 26, U.S. Bureau of Reclamation.

ASTM Annual Book of Standards, Volume 11.02, 1998.

AWWA, Standard Methods for the Examination of Water and Wastewater, 19th Ed., .Standard method 5910 B, Published by American Public Health Assoc., American Water Works Assoc., and the Water Environment Federation, 1995.

<http://www.bact.wisc.edu/Bact330/lecturepseudomonas>, Bacteriology at UW-Madison

Highsmith, A. 1999, personal communication.

<http://medic.med.uth.tmc.edu/path/00001519.htm>, 1999

Characklis and Marshall, 1990. *Biofilms*. John Wiley & Sons.

Marmion, Daniel M., *Handbook of U.S. Colorants*, 3<sup>rd</sup> edition, , John Wiley and Sons, Inc. Publishers, N.Y. 199 1.

Memcor, Integrity Testing: Bubble Point and Diffusion Testing,  
<http://www.milipore.com:80/analytical/catalog/nonus/00000148.html>.

<http://medic.med.uth.tmc.edu/path/00001519.htm>, University of Texas - Houston Medical School, DPALM MEDIC, Copyright © 1995

Wammes, John, Hydraulics, personal conversation 1/10/00

R-00-02A



**EVALUATION OF METHODS FOR  
MONITORING THE INTEGRITY OF  
REVERSE OSMOSIS MEMBRANE  
SYSTEMS**

**Desalting and Water Purification  
Research Report No. 55A**



April 2000

**U.S. DEPARTMENT OF THE INTERIOR  
Bureau of Reclamation  
Technical Service Center  
Environmental Resources Services  
Water Treatment Engineering and Research  
Denver, Colorado**

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### NOTE

Report 55 contains summaries of the data collected for this study and represents portions of the detailed data in graphs. The Report 55A version contains appendices of the complete data set.

**Appendix A: RO System P&ID Equipment List**

<b>Description</b>	<b>Vendor</b>	<b>Model</b>	<b>PIP No.</b>
1 Anitscalant Metering Pump	Prominent	Gamma 4 Metering Pump	Pump
2 Acid Metering Pump	Prominent	Gamma 4 Metering Pump	Pump
3 High Pressure Booster pump	<b>Goulds</b>	5 HP, Multistage, stainless Steel	High-Press. Pump
4 Differential Pressure Guage on Cartridge filter			DPG
5 5 Micron Cartridge Filter	<b>Serfilco</b>	Model No. <b>CL30(1)S1-G3</b> P-78-0250	5 micron cart. Filt
6 pH Sensor ▀ Raw Feed	Rosemount	396 pH/ORP Sensor	<b>pHI-1</b>
7 pH Meter ▀ Raw Feed	Rosemount	<b>54</b> pH/ORP Microprocessor Analyzer	<b>pHE-1</b>
8 pH Sensor ▀ RO Feed	Rosemount	396 pH/ORP Sensor	<b>pHI-2</b>
9 pH Meter ▀ RO Feed	Rosemount	54 pH/ORP Microprocessor Analyzer	<b>pHE-2</b>
10 pH Sensor ▀ Permeate	Rosemount	396 pH/ORP Sensor	<b>pHI-3</b>
11 pH Meter ▀ Permeate	Rosemount	54 pH/ORP Microprocessor Analyzer	<b>pHE-3</b>
12 Turbidity ▀ In-Line Sensor and Meter	Rosemount	2120	Turb
13 Conductivity Sensor ▀ Raw Feed	Rosemount	396 pH/ORP Sensor	CI-1
14 Conductivity Meter ▀ Raw Feed	Rosemount	54 pH/ORP Microprocessor Analyzer	CD-1
15 Conductivity Sensor ▀ Interstage	Rosemount	396 pH/ORP Sensor	CI-2
16 Conductivity Meter ▀ Interstage	Rosemount	<b>54</b> pH/ORP Microprocessor Analyzer	<b>CE-2</b>
17 Conductivity Sensor ▀ Concentrate	Rosemount	396 pH/ORP Sensor	CI-3
18 Conductivity Meter ▀ Concentrate	Rosemount	64 pH/ORP Microprocessor Analyzer	CE-3
19 Conductivity Sensor ▀ Permeate	Rosemount	396 pH/ORP Sensor	CI-4
20 Conductivity Meter ▀ Permeate	Rosemount	<b>54</b> pH/ORP Microprocessor Analyzer	CE-4
21 Conductivity Sensor & Meter ▀ Sample Line	Signet	3-8800 Conductivity Transmitter	CIE-5
22 Temperature Sensor ▀ Raw Feed	Omega		TI-1
23 Temperature Meter ▀ Raw Feed	Omega	<b>DP41-RTD</b>	TE-1
24 Temperature Sensor ▀ RO Feed	Omega		TI-2
25 Temperature Meter ▀ RO Feed	Omega	<b>DP41-RTD</b>	TE-2
26 Flow Sensor ▀ Raw Feed	Signet	3-2536 Flow Sensor	FI-1
27 Flow Meter ▀ Raw Feed	Signet	9010 Flow Controller	FE-1
28 Flow Sensor ▀ Sample Line	Signet		FI-2
Flow Meter ▀ Sample Line Display on-line &			
29 Samplivalve output to <b>PanelView</b>	Signet & Scanivalve	Compact Flow <b>Transmitter</b>	FE-2
30 Flow Sensor ▀ Concentrate	Signet	3-2536 Flow Sensor	FI-3
31 Flow Meter ▀ Concentrate	Signet	9010 Flow Controller	FE-3
32 Flow Sensor ▀ Permeate	Signet	3-2536 Flow Sensor	<b>FI-4</b>
33 Flow Meter ▀ Permeate	Signet	9010 Flow Controller	FE-4
34 Feed Pressure Transmitter	Omega	Transmitter	PT-1
35 Pressure monitor 1 ▀ Feed	Omega	<b>DP41-E</b> Process Indicator	PI-1
Pressure Taps <b>2,3,4,5</b> and 6 are read through the			
Scanivalve ports to Meter Display and Panelview			
36 display	Scanivalve	Transmitter	PT 2-6
37 Ressure Monitor 2 ▀ Scanivalve	Omega	<b>DP41-E</b> Process Indicator	<b>PI2</b>
38 Concentrate Pressure Transmitter	Omega	Transmitter	PT-7
39 Pressure Monitor 3 ▀ Concentrate	Omega	<b>DP41-E</b> Process Indicator	PI-3
<b>40</b> Pressure Gauges on Permeate of Vessels <b>2,4</b> and 6			<b>PG 1,2,3</b>



**Appendix B**

**McAllen Wastewater Reclamation Project - April Particle Counts**

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/15/99 17:11	0.00	0.03	0.38	0.60	0.18	0.13	1.30
4/15/99 17:31	0.00	0.00	0.15	0.53	0.10	0.10	0.88
4/15/99 17:51	0.00	0.00	0.40	0.45	0.03	0.00	0.88
4/15/99 18:11	0.00	0.03	0.33	0.33	0.05	0.08	0.80
4/15/99 18:31	0.00	0.00	0.25	0.35	0.00	0.05	0.65
4/15/99 18:51	0.00	0.00	0.18	0.18	0.00	0.05	0.40
4/15/99 19:11	0.00	0.00	0.28	0.15	0.00	0.03	0.45
4/15/99 19:31	0.00	0.03	0.40	0.20	0.05	0.00	0.68
4/15/99 19:51	0.00	0.00	0.45	0.23	0.03	0.00	0.70
4/15/99 20: 11	0.00	0.00	0.78	0.15	0.03	0.03	0.98
4/15/99 20:31	0.03	0.03	0.33	0.25	0.03	0.00	0.65
4/15/99 20: 5 1	0.03	0.00	0.40	0.43	0.08	0.03	0.95
4/15/99 21: 11	0.00	0.03	0.30	0.28	0.05	0.03	0.68
4/15/99 21:31	0.00	0.00	0.33	0.08	0.03	0.08	0.50
4/15/99 21:51	0.00	0.00	0.28	0.23	0.00	0.05	0.55
4/15/99 22: 11	0.03	0.00	0.38	0.33	0.03	0.03	0.78
4/15/99 22:31	0.00	0.00	0.38	0.15	0.03	0.03	0.58
4/15/99 22:51	0.00	0.03	0.33	0.25	0.03	0.03	0.65
4/15/99 23: 11	0.00	0.00	0.33	0.10	0.00	0.03	0.45
4/15/99 23:31	0.00	0.00	0.33	0.13	0.00	0.00	0.45
4/15/99 23:51	0.00	0.00	0.15	0.15	0.03	0.00	0.33
4/16/99 0:11	0.00	0.00	0.23	0.23	0.03	0.00	0.48
4/16/99 0:31	0.00	0.00	0.10	0.10	0.00	0.03	0.23
4/16/99 0:51	0.00	0.00	0.15	0.15	0.00	0.00	0.30
4/16/99 1:11	0.00	0.00	1.83	0.70	0.13	0.03	2.68
4/16/99 1:31	0.00	0.00	0.35	0.10	0.00	0.05	0.50
4/16/99 1:51	0.00	0.00	0.28	0.15	0.00	0.03	0.45
4/16/99 2: 11	0.00	0.03	0.35	0.10	0.03	0.08	0.58
4/16/99 2:31	0.03	0.00	0.25	0.15	0.00	0.03	0.45
4/16/99 2:51	0.00	0.00	0.20	0.13	0.00	0.00	0.33
4/16/99 3: 11	0.00	0.00	0.08	0.10	0.00	0.00	0.18
4/16/99 3:31	0.00	0.00	0.45	0.10	0.05	0.00	0.60
4/16/99 3:51	0.00	0.00	0.20	0.08	0.00	0.00	0.28
4/16/99 4: 11	0.00	0.00	0.30	0.25	0.00	0.03	0.58
4/16/99 4:30	0.00	0.00	0.15	0.05	0.03	0.00	0.23
4/16/99 4:50	0.00	0.00	0.10	0.15	0.00	0.00	0.25
4/16/99 5:10	0.00	0.00	0.23	0.00	0.03	0.00	0.25
4/16/99 5:30	0.00	0.03	0.15	0.13	0.05	0.00	0.35
4/16/99 5:50	0.00	0.03	0.18	0.23	0.00	0.00	0.43
4/16/99 6:10	0.00	0.00	0.15	0.05	0.00	0.03	0.23
4/16/99 6:30	0.00	0.00	1.25	0.20	0.08	0.05	1.58
4/16/99 6:50	0.00	0.00	0.33	0.15	0.00	0.00	0.48
4/16/99 7:10	0.00	0.05	0.35	0.18	0.05	0.00	0.63
4/16/99 7:30	0.00	0.03	0.35	0.18	0.03	0.03	0.60
4/16/99 7:50	0.00	0.05	0.23	0.35	0.03	0.03	0.68
4/16/99 8:10	0.00	0.00	0.30	0.25	0.00	0.00	0.55

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/16/99 8:30	0.00	0.00	0.33	0.05	0.00	0.00	0.38
4/16/99 8:50	0.00	0.00	0.03	0.15	0.00	0.00	0.18
4/16/99 9:10	0.00	0.00	0.13	0.00	0.00	0.03	0.15
4/16/99 9:30	0.00	0.00	0.18	0.08	0.00	0.03	0.28
4/16/99 9:50	0.00	0.00	0.18	0.13	0.03	0.00	0.33
4/16/99 10:10	0.00	0.03	0.10	0.18	0.03	0.00	0.33
4/16/99 10:30	0.00	0.00	0.05	0.10	0.00	0.00	0.15
4/16/99 10:50	0.00	0.00	0.05	0.15	0.00	0.00	0.20
4/16/99 11:10	0.00	0.00	0.13	0.03	0.00	0.03	0.18
4/16/99 11:30	0.00	0.00	0.00	0.03	0.00	0.00	0.03
4/16/99 11:50	0.00	0.03	0.75	0.35	0.05	0.05	1.23
4/16/99 12:10	0.00	0.00	0.48	0.25	0.05	0.00	0.78
4/16/99 12:30	0.00	0.03	0.18	0.15	0.03	0.05	0.43
4/16/99 12:50	0.00	0.00	0.18	0.18	0.00	0.00	0.35
4/16/99 13:10	0.00	0.00	0.05	0.13	0.00	0.00	0.18
4/16/99 13:30	0.00	0.00	0.13	0.10	0.00	0.03	0.25
4/16/99 13:50	0.00	0.00	0.03	0.00	0.00	0.03	0.05
4/16/99 14:10	0.00	0.00	0.15	0.15	0.00	0.00	0.30
4/16/99 14:30	0.00	0.00	0.10	0.10	0.00	0.00	0.20
4/16/99 14:50	0.00	0.00	0.05	0.05	0.08	0.00	0.18
4/16/99 15:10	0.00	0.00	0.15	0.05	0.00	0.03	0.23
4/16/99 15:30	0.00	0.00	0.23	0.08	0.03	0.03	0.35
4/16/99 15:50	0.00	0.03	0.13	0.08	0.00	0.03	0.25
4/16/99 16:10	0.00	0.00	0.20	0.03	0.00	0.00	0.23
4/16/99 16:30	0.00	0.00	0.13	0.00	0.00	0.03	0.15
4/16/99 16:50	0.03	0.00	0.03	0.10	0.00	0.00	0.15
4/16/99 17:10	0.00	0.03	0.10	0.08	0.00	0.00	0.20
4/16/99 17:30	0.00	0.00	0.15	0.13	0.03	0.00	0.30
4/16/99 17:50	0.00	0.00	0.15	0.10	0.05	0.00	0.30
4/16/99 18:10	0.00	0.03	0.10	0.20	0.03	0.00	0.35
4/16/99 18:30	0.00	0.00	0.13	0.05	0.00	0.03	0.20
4/16/99 18:50	0.00	0.00	0.10	0.03	0.00	0.05	0.18
4/16/99 19:10	0.00	0.00	0.08	0.10	0.00	0.00	0.18
4/16/99 19:30	0.00	0.00	0.15	0.03	0.08	0.00	0.25
4/16/99 19:50	0.00	0.03	0.08	0.05	0.00	0.00	0.15
4/16/99 20:10	0.00	0.00	0.13	0.08	0.00	0.00	0.20
4/16/99 20:30	0.00	0.00	0.10	0.05	0.03	0.05	0.23
4/16/99 20:50	0.00	0.00	0.05	0.05	0.03	0.00	0.13
4/16/99 21:10	0.00	0.00	0.15	0.08	0.03	0.00	0.25
4/16/99 21:30	0.00	0.00	0.10	0.00	0.00	0.00	0.10
4/16/99 21:50	0.00	0.00	0.08	0.00	0.00	0.03	0.10
4/16/99 22:10	0.00	0.00	0.05	0.05	0.00	0.00	0.10
4/16/99 22:30	0.00	0.00	0.13	0.05	0.03	0.00	0.20
4/16/99 22:50	0.00	0.03	0.10	0.13	0.00	0.00	0.25
4/16/99 23:10	0.00	0.00	0.05	0.05	0.00	0.00	0.10
4/16/99 23:30	0.00	0.00	0.13	0.10	0.00	0.00	0.23
4/16/99 23:50	0.00	0.00	0.10	0.10	0.00	0.00	0.20

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/17/99 0:10	0.00	0.00	0.05	0.03	0.00	0.00	0.08
4/17/99 0:30	0.00	0.00	0.15	0.08	0.00	0.03	0.25
4/17/99 0:50	0.00	0.00	0.05	0.03	0.00	0.00	0.08
4/17/99 1:10	0.00	0.00	0.08	0.03	0.00	0.00	0.10
4/17/99 1:30	0.00	0.00	0.03	0.08	0.00	0.00	0.10
4/17/99 1:50	0.00	0.03	0.10	0.03	0.00	0.00	0.15
4/17/99 2:10	0.00	0.00	0.10	0.10	0.00	0.03	0.23
4/17/99 2:30	0.00	0.00	0.10	0.03	0.00	0.00	0.13
4/17/99 2:50	0.00	0.00	0.10	0.00	0.00	0.00	0.10
4/17/99 3:10	0.00	0.00	0.10	0.05	0.00	0.00	0.15
4/17/99 3:30	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/17/99 3:50	0.00	0.00	0.10	0.05	0.03	0.00	0.18
4/17/99 4:10	0.00	0.00	0.05	0.05	0.00	0.00	0.10
4/17/99 4:30	0.00	0.00	0.05	0.10	0.00	0.00	0.15
4/17/99 4:50	0.00	0.00	0.03	0.05	0.05	0.00	0.13
4/17/99 5:10	0.00	0.00	0.03	0.10	0.03	0.03	0.18
4/17/99 5:30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/17/99 5:50	0.00	0.00	0.15	0.10	0.00	0.00	0.25
4/17/99 6:10	0.00	0.00	0.10	0.03	0.00	0.00	0.13
4/17/99 6:30	0.00	0.00	0.05	0.00	0.00	0.00	0.05
4/17/99 6:50	0.00	0.03	0.10	0.03	0.00	0.00	0.15
4/17/99 7:10	0.00	0.00	0.05	0.03	0.00	0.00	0.08
4/17/99 7:30	0.00	0.00	0.15	0.15	0.03	0.00	0.33
4/17/99 7:50	0.00	0.00	0.10	0.03	0.00	0.00	0.13
4/17/99 8:10	0.03	0.00	0.10	0.08	0.00	0.00	0.20
4/17/99 8:30	0.00	0.00	0.03	0.10	0.00	0.00	0.13
4/17/99 8:50	0.00	0.00	0.13	0.05	0.00	0.00	0.18
4/17/99 9:10	0.00	0.00	0.05	0.10	0.03	0.03	0.20
4/17/99 9:30	0.00	0.00	0.08	0.08	0.03	0.00	0.18
4/17/99 9:50	0.00	0.00	0.05	0.00	0.00	0.00	0.05
4/17/99 10:10	0.00	0.00	0.13	0.03	0.00	0.00	0.15
4/17/99 10:30	0.00	0.00	0.13	0.05	0.00	0.03	0.20
4/17/99 10:50	0.00	0.00	0.13	0.10	0.00	0.00	0.23
4/17/99 11:10	0.00	0.00	0.08	0.10	0.00	0.00	0.18
4/17/99 11:30	0.00	0.00	0.05	0.03	0.00	0.00	0.08
4/17/99 11:50	0.00	0.00	0.13	0.08	0.00	0.03	0.23
4/17/99 12:10	0.00	0.03	0.13	0.00	0.00	0.03	0.18
4/17/99 12:30	0.00	0.00	0.23	0.05	0.03	0.03	0.33
4/17/99 12:50	0.00	0.00	0.10	0.15	0.00	0.00	0.25
4/17/99 13:10	0.00	0.00	0.13	0.05	0.00	0.00	0.18
4/17/99 13:30	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/17/99 13:50	0.00	0.00	0.10	0.03	0.00	0.00	0.13
4/17/99 14:10	0.00	0.00	0.13	0.00	0.03	0.03	0.18
4/17/99 14:30	0.00	0.03	0.05	0.15	0.00	0.00	0.23
4/17/99 14:50	0.03	0.00	0.18	0.08	0.00	0.00	0.28
4/17/99 15:10	0.00	0.00	0.08	0.13	0.00	0.00	0.20
4/17/99 15:30	0.00	0.00	0.13	0.08	0.00	0.00	0.20

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/17/99 15:50	0.00	0.00	0.05	0.08	0.00	0.00	0.13
4/17/99 16:10	0.00	0.00	0.03	0.05	0.00	0.03	0.10
4/17/99 16:30	0.00	0.00	0.05	0.03	0.03	0.00	0.10
4/17/99 16:50	0.00	0.00	0.08	0.05	0.03	0.00	0.15
4/17/99 17:10	0.00	0.00	0.05	0.08	0.00	0.00	0.13
4/17/99 17:30	0.00	0.00	0.10	0.13	0.03	0.00	0.25
4/17/99 17:50	0.00	0.03	0.18	0.23	0.03	0.00	0.45
4/17/99 18:10	0.00	0.00	0.10	0.10	0.00	0.00	0.20
4/17/99 18:30	0.00	0.00	0.15	0.05	0.03	0.00	0.23
4/17/99 18:50	0.00	0.00	0.18	0.10	0.00	0.00	0.28
4/17/99 19:10	0.00	0.03	0.05	0.05	0.00	0.03	0.15
4/17/99 19:30	0.00	0.00	0.10	0.08	0.00	0.00	0.18
4/17/99 1950	0.00	0.00	0.05	0.08	0.00	0.00	0.13
4/17/99 20:10	0.00	0.00	0.20	0.23	0.03	0.08	0.53
4/17/99 20:30	0.00	0.00	0.13	0.10	0.03	0.00	0.25
4/17/99 20:50	0.00	0.00	0.08	0.13	0.03	0.00	0.23
4/17/99 21:10	0.00	0.00	0.05	0.03	0.00	0.00	0.08
4/17/99 21:30	0.00	0.00	0.18	0.05	0.00	0.03	0.25
4/17/99 21:50	0.00	0.00	0.08	0.08	0.00	0.00	0.15
4/17/99 22:10	0.00	0.00	0.10	0.10	0.03	0.00	0.23
4/17/99 22:30	0.00	0.00	0.08	0.18	0.03	0.03	0.30
4/17/99 22:50	0.00	0.00	0.15	0.03	0.00	0.00	0.18
4/17/99 23:10	0.00	0.00	0.08	0.08	0.03	0.00	0.18
4/17/99 23:30	0.00	0.00	0.13	0.10	0.00	0.00	0.23
4/17/99 23:50	0.00	0.00	0.10	0.10	0.00	0.00	0.20
4/18/99 0:10	0.00	0.00	0.10	0.03	0.00	0.05	0.18
4/18/99 0:30	0.00	0.00	0.08	0.03	0.00	0.00	0.10
4/18/99 0:50	0.00	0.00	0.03	0.10	0.00	0.00	0.13
4/18/99 1:10	0.00	0.00	0.05	0.05	0.00	0.00	0.10
4/18/99 1:30	0.00	0.00	0.10	0.20	0.00	0.00	0.30
4/18/99 1:50	0.00	0.03	0.15	0.05	0.03	0.00	0.25
4/18/99 2:10	0.00	0.00	0.10	0.18	0.00	0.00	0.28
4/18/99 2:30	0.00	0.00	0.10	0.05	0.05	0.00	0.20
4/18/99 2:50	0.00	0.00	0.05	0.18	0.03	0.00	0.25
4/18/99 3:10	0.00	0.00	0.03	0.03	0.03	0.03	0.10
4/18/99 3:30	0.00	0.00	0.10	0.08	0.03	0.00	0.20
4/18/99 3:50	0.00	0.00	0.03	0.18	0.03	0.00	0.23
4/18/99 4:10	0.00	0.00	0.05	0.05	0.00	0.00	0.10
4/18/99 4:30	0.00	0.00	0.18	0.10	0.00	0.00	0.28
4/18/99 4:50	0.00	0.05	0.55	0.30	0.10	0.03	1.03
4/18/99 5:10	0.00	0.00	0.00	0.05	0.00	0.00	0.05
4/18/99 5:30	0.00	0.00	0.08	0.03	0.00	0.00	0.10
4/18/99 5:50	0.00	0.00	0.10	0.05	0.00	0.00	0.15
4/18/99 6:10	0.00	0.00	0.05	0.03	0.00	0.00	0.08
4/18/99 6:30	0.00	0.00	0.05	0.05	0.00	0.00	0.10
4/18/99 6:50	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/18/99 7:10	0.00	0.00	0.08	0.08	0.00	0.00	0.15

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/18/99 7:30	0.00	0.00	0.05	0.08	0.00	0.03	0.15
4/18/99 7:50	0.00	0.03	0.08	0.13	0.00	0.03	0.25
4/18/99 8:35	0.03	0.00	0.28	0.35	0.03	0.13	0.80
4/18/99 8:55	0.00	0.03	0.20	0.15	0.03	0.00	0.40
4/18/99 9:15	0.00	0.03	0.15	0.15	0.03	0.00	0.35
4/18/99 9:35	0.00	0.00	0.13	0.15	0.05	0.03	0.35
4/18/99 9:55	0.00	0.00	0.18	0.03	0.00	0.03	0.23
4/18/99 10:15	0.00	0.03	0.03	0.10	0.00	0.03	0.18
4/18/99 10:35	0.00	0.00	0.05	0.15	0.00	0.00	0.20
4/18/99 10:55	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/18/99 11:15	0.00	0.03	0.13	0.05	0.00	0.00	0.20
4/18/99 11:35	0.00	0.00	0.05	0.10	0.00	0.00	0.15
4/18/99 11:55	0.00	0.00	0.13	0.18	0.00	0.03	0.33
4/18/99 12:15	0.00	0.00	0.15	0.10	0.03	0.03	0.30
4/18/99 12:35	0.00	0.00	0.13	0.00	0.00	0.00	0.13
4/18/99 12:55	0.00	0.00	0.33	0.13	0.00	0.03	0.48
4/18/99 13:15	0.00	0.00	0.08	0.08	0.00	0.00	0.15
4/18/99 13:35	0.00	0.03	0.20	0.10	0.00	0.03	0.35
4/18/99 13:55	0.00	0.00	0.18	0.10	0.03	0.00	0.30
4/18/99 14:15	0.00	0.00	0.08	0.08	0.00	0.03	0.18
4/18/99 14:35	0.00	0.00	0.15	0.08	0.00	0.00	0.23
4/18/99 14:55	0.00	0.00	0.05	0.05	0.05	0.03	0.18
4/18/99 15:15	0.03	0.00	0.13	0.08	0.03	0.00	0.25
4/18/99 15:35	0.00	0.00	0.13	0.10	0.05	0.00	0.28
4/18/99 15:55	0.00	0.00	0.15	0.08	0.03	0.00	0.25
4/18/99 16:15	0.00	0.00	0.08	0.05	0.03	0.00	0.15
4/18/99 16:35	0.00	0.03	0.08	0.10	0.00	0.00	0.20
4/18/99 16:55	0.00	0.05	0.20	0.08	0.03	0.00	0.35
4/18/99 17:15	0.00	0.00	0.13	0.05	0.00	0.00	0.18
4/18/99 17:35	0.00	0.00	0.13	0.10	0.00	0.00	0.23
4/18/99 17:55	0.00	0.03	0.10	0.13	0.03	0.03	0.30
4/18/99 18:15	0.00	0.00	0.15	0.15	0.00	0.00	0.30
4/18/99 18:35	0.00	0.00	0.08	0.13	0.00	0.00	0.20
4/18/99 18:55	0.00	0.00	0.25	0.05	0.00	0.00	0.30
4/18/99 19:15	0.00	0.00	0.10	0.23	0.00	0.00	0.33
4/18/99 19:35	0.00	0.00	0.13	0.08	0.00	0.00	0.20
4/18/99 19:55	0.00	0.00	0.08	0.13	0.00	0.00	0.20
4/18/99 20:15	0.00	0.00	0.05	0.18	0.00	0.00	0.23
4/18/99 20:35	0.00	0.00	0.15	0.05	0.03	0.03	0.25
4/18/99 20:55	0.00	0.00	0.05	0.10	0.00	0.00	0.15
4/18/99 21:15	0.00	0.00	0.13	0.08	0.00	0.00	0.20
4/18/99 21:35	0.00	0.00	0.10	0.13	0.03	0.03	0.28
4/18/99 21:55	0.00	0.00	0.08	0.10	0.03	0.00	0.20
4/18/99 22:15	0.00	0.00	0.15	0.15	0.00	0.00	0.30
4/18/99 22:35	0.00	0.00	0.08	0.18	0.00	0.00	0.25
4/18/99 22:55	0.00	0.00	0.03	0.15	0.00	0.00	0.18
4/18/99 23:15	0.00	0.00	0.18	0.03	0.00	0.00	0.20

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/18/99 23:35	0.00	0.00	0.05	0.05	0.00	0.00	0.10
4/18/99 23:55	0.00	0.00	0.03	0.05	0.03	0.00	0.10
4/19/99 0:15	0.00	0.00	0.20	0.00	0.00	0.00	0.20
4/19/99 0:35	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/19/99 0:55	0.00	0.00	0.23	0.08	0.00	0.03	0.33
4/19/99 1:15	0.00	0.00	0.08	0.20	0.03	0.00	0.30
4/19/99 1:35	0.00	0.00	0.08	0.08	0.00	0.00	0.15
4/19/99 1:55	0.00	0.00	0.08	0.15	0.00	0.00	0.23
4/19/99 2:15	0.00	0.00	0.15	0.05	0.00	0.00	0.20
4/19/99 2:35	0.00	0.00	0.08	0.08	0.00	0.00	0.15
4/19/99 2:55	0.00	0.00	0.05	0.10	0.00	0.00	0.15
4/19/99 3:15	0.00	0.00	0.13	0.03	0.05	0.00	0.20
4/19/99 3:35	0.00	0.00	0.08	0.03	0.00	0.00	0.10
4/19/99 3:55	0.00	0.00	0.10	0.13	0.00	0.00	0.23
4/19/99 4:15	0.00	0.00	0.03	0.13	0.00	0.00	0.15
4/19/99 4:35	0.00	0.00	0.15	0.05	0.00	0.00	0.20
4/19/99 4:55	0.00	0.00	0.05	0.08	0.00	0.00	0.13
4/19/99 5:15	0.00	0.00	0.05	0.08	0.00	0.00	0.13
4/19/99 5:35	0.00	0.00	0.08	0.10	0.00	0.00	0.18
4/19/99 5:55	0.00	0.00	0.10	0.08	0.00	0.00	0.18
4/19/99 6:15	0.00	0.00	0.15	0.05	0.00	0.00	0.20
4/19/99 6:35	0.00	0.00	0.13	0.08	0.03	0.00	0.23
4/19/99 6:55	0.00	0.00	0.05	0.05	0.00	0.00	0.10
4/19/99 7:15	0.00	0.00	0.10	0.13	0.00	0.00	0.23
4/19/99 7:35	0.00	0.00	0.20	0.10	0.00	0.00	0.30
4/19/99 7:55	0.00	0.00	0.15	0.18	0.03	0.00	0.35
4/19/99 8:15	0.00	0.00	0.10	0.05	0.00	0.00	0.15
4/19/99 8:35	0.00	0.00	0.03	0.03	0.00	0.00	0.05
4/19/99 8:55	0.00	0.00	0.08	0.10	0.00	0.00	0.18
4/19/99 9:15	0.00	0.00	0.10	0.05	0.05	0.05	0.25
4/19/99 9:35	0.00	0.00	0.10	0.10	0.00	0.00	0.20
4/19/99 9:55	0.00	0.00	0.18	0.18	0.03	0.00	0.38
4/19/99 10:15	0.00	0.00	0.13	0.13	0.00	0.00	0.25
4/19/99 10:35	0.00	0.00	0.23	0.05	0.00	0.00	0.28
4/19/99 10:55	0.00	0.00	0.10	0.20	0.03	0.03	0.35
4/19/99 11:15	0.00	0.00	0.85	0.20	0.05	0.05	1.15
4/19/99 11:34	0.00	0.00	0.18	0.45	0.00	0.00	0.63
4/19/99 11:54	0.00	0.00	0.25	0.10	0.00	0.00	0.35
4/19/99 12:14	0.00	0.03	0.20	0.20	0.00	0.00	0.43
4/19/99 12:34	0.03	0.00	0.20	0.08	0.00	0.00	0.30
4/19/99 12:54	0.00	0.00	0.05	0.10	0.00	0.00	0.15
4/19/99 13:14	0.00	0.00	0.15	0.20	0.03	0.05	0.43
4/19/99 13:34	0.00	0.00	0.13	0.10	0.05	0.00	0.28
4/19/99 13:54	0.00	0.03	0.13	0.10	0.03	0.00	0.28
4/19/99 14:14	0.00	0.03	0.15	0.18	0.00	0.00	0.35
4/19/99 14:34	0.00	0.00	0.18	0.00	0.03	0.00	0.20
4/19/99 14:54	0.00	0.00	0.13	0.18	0.03	0.00	0.33

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/19/99 15:14	0.00	0.03	0.23	0.10	0.03	0.00	0.38
4/19/99 15:34	0.00	0.00	0.13	0.23	0.00	0.00	0.35
4/19/99 15:54	0.00	0.00	0.18	0.30	0.03	0.00	0.50
4/19/99 16:14	0.00	0.00	0.30	0.18	0.05	0.00	0.53
4/19/99 16:34	0.00	0.00	0.18	0.15	0.00	0.00	0.33
4/19/99 16:54	0.00	0.00	0.25	0.13	0.05	0.00	0.43
4/19/99 17:14	0.00	0.03	0.20	0.20	0.08	0.00	0.50
4/19/99 17:34	0.00	0.00	0.10	0.15	0.00	0.00	0.25
4/19/99 17:54	0.00	0.00	0.20	0.05	0.08	0.00	0.33
4/19/99 18:14	0.00	0.00	0.10	0.03	0.03	0.03	0.18
4/19/99 18:34	0.00	0.00	0.23	0.15	0.00	0.00	0.38
4/19/99 18:54	0.00	0.03	0.20	0.10	0.00	0.00	0.33
4/19/99 19:14	0.00	0.00	0.03	0.18	0.03	0.00	0.23
4/19/99 19:34	0.00	0.00	0.15	0.03	0.03	0.05	0.25
4/19/99 19:54	0.00	0.00	0.30	0.20	0.03	0.00	0.53
4/19/99 20:14	0.00	0.00	0.23	0.08	0.03	0.00	0.33
4/19/99 20:34	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/19/99 20:54	0.00	0.00	0.10	0.08	0.00	0.03	0.20
4/19/99 21:14	0.00	0.03	0.10	0.08	0.00	0.00	0.20
4/19/99 21:34	0.00	0.00	0.20	0.15	0.00	0.00	0.35
4/19/99 21:54	0.00	0.00	0.10	0.10	0.00	0.00	0.20
4/19/99 22:14	0.00	0.00	0.05	0.10	0.00	0.00	0.15
4/19/99 22:34	0.00	0.00	0.13	0.10	0.00	0.03	0.25
4/19/99 22:54	0.00	0.00	0.10	0.10	0.00	0.03	0.23
4/19/99 23: 14	0.00	0.00	0.20	0.10	0.00	0.05	0.35
4/19/99 23:34	0.00	0.03	0.15	0.08	0.00	0.00	0.25
4/19/99 23:54	0.00	0.00	0.10	0.13	0.03	0.00	0.25
4/20/99 0:14	0.00	0.00	0.18	0.18	0.03	0.00	0.38
4/20/99 0:34	0.00	0.03	0.13	0.00	0.00	0.00	0.15
4/20/99 0:54	0.03	0.00	0.10	0.10	0.00	0.00	0.23
4/20/99 1:14	0.00	0.00	0.05	0.10	0.00	0.00	0.15
4/20/99 1:34	0.00	0.00	0.10	0.18	0.03	0.00	0.30
4/20/99 1:54	0.00	0.00	0.15	0.05	0.00	0.00	0.20
4/20/99 2:14	0.00	0 00	0.15	0.13	0.00	0.00	0.28
4/20/99 2:34	0.00	0.00	0.15	0.08	0.03	0.00	0.25
4/20/99 2:54	0.00	0.00	0.10	0.05	0.00	0.00	0.15
4/20/99 3:14	0.00	0.00	0.15	0.08	0.00	0.00	0.23
4/20/99 3:34	0.00	0 00	0.13	0.13	0.03	0.00	0.28
4/20/99 3:54	0.00	0 00	0.10	0.13	0.00	0.00	0.23
4/20/99 4:14	0.00	0.00	0.10	0.08	0.03	0.00	0.20
4/20/99 4:34	0.00	0.00	0.08	0.23	0.00	0.00	0.30
4/20/99 4:54	0.00	0.00	0.15	0.08	0.00	0.00	0.23
4/20/99 5:14	0.00	0.00	0.10	0.13	0.00	0.00	0.23
4/20/99 5:34	0.03	0.00	0.18	0.10	0.00	0.00	0.30
4/20/99 5:54	0.00	0.00	0.13	0.20	0.03	0.00	0.35
4/20/99 6: 14	0.00	0.00	0.23	0.05	0.00	0.00	0.28
4/20/99 6:34	0.00	0.00	0.15	0.13	0.03	0.00	0.30

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of articles
4/20/99 6:54	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/20/99 7:14	0.00	0.03	0.05	0.13	0.03	0.00	0.23
4/20/99 7:34	0.00	0.00	0.18	0.03	0.00	0.03	0.23
4/20/99 7:54	0.00	0.00	0.23	0.10	0.00	0.00	0.33
4/20/99 8:14	0.00	0.00	0.08	0.05	0.03	0.03	0.18
4/20/99 8:34	0.00	0.00	0.13	0.20	0.00	0.00	0.33
4/20/99 8:54	0.03	0.00	0.13	0.08	0.00	0.03	0.25
4/20/99 9:14	0.00	0.00	0.20	0.18	0.00	0.00	0.38
4/20/99 9:34	0.00	0.00	0.18	0.05	0.03	0.00	0.25
4/20/99 9:54	0.00	0.00	0.18	0.05	0.00	0.00	0.23
4/20/99 10:14	0.00	0.00	0.20	0.15	0.00	0.00	0.35
4/20/99 10:34	0.00	0.03	0.08	0.23	0.05	0.00	0.38
4/20/99 10:54	0.00	0.00	0.05	0.10	0.00	0.05	0.20
4/20/99 11:14	0.00	0.00	0.13	0.15	0.03	0.03	0.33
4/20/99 11:34	0.00	0.00	0.05	0.15	0.00	0.00	0.20
4/20/99 11:54	0.00	0.00	0.10	0.10	0.00	0.00	0.20
4/20/99 12:14	0.00	0.00	0.20	0.15	0.00	0.00	0.35
4/20/99 12:34	0.00	0.00	0.08	0.13	0.00	0.00	0.20
4/20/99 12:54	0.00	0.00	0.10	0.18	0.03	0.03	0.33
4/20/99 13:14	0.00	0.00	0.20	0.08	0.00	0.03	0.30
4/20/99 13:34	0.00	0.00	0.28	0.10	0.03	0.03	0.43
4/20/99 13:54	0.00	0.00	0.05	0.10	0.00	0.00	0.15
4/20/99 14:14	0.00	0.00	0.20	0.15	0.00	0.00	0.35
4/20/99 14:34	0.00	0.00	0.15	0.08	0.03	0.00	0.25
4/20/99 14:54	0.00	0.00	0.18	0.20	0.03	0.00	0.40
4/20/99 15:14	0.00	0.00	0.15	0.18	0.00	0.03	0.35
4/20/99 15:34	0.00	0.00	0.18	0.20	0.00	0.03	0.40
4/20/99 15:54	0.00	0.00	0.13	0.05	0.00	0.00	0.18
4/20/99 16:14	0.00	0.00	0.10	0.18	0.00	0.05	0.33
4/20/99 16:34	0.00	0.00	0.10	0.13	0.00	0.00	0.23
4/20/99 16:54	0.00	0.00	0.18	0.18	0.05	0.00	0.40
4/20/99 17:14	0.00	0.00	0.08	0.10	0.00	0.00	0.18
4/20/99 17:34	0.00	0.00	0.15	0.10	0.00	0.03	0.28
4/20/99 17:54	0.00	0.03	0.15	0.10	0.00	0.00	0.28
4/20/99 18:14	0.00	0.00	0.15	0.13	0.05	0.03	0.35
4/20/99 18:34	0.00	0.00	0.20	0.10	0.00	0.00	0.30
4/20/99 18:54	0.00	0.00	0.10	0.08	0.00	0.00	0.18
4/20/99 19:14	0.00	0.00	0.05	0.10	0.03	0.00	0.18
4/20/99 19:34	0.00	0.00	0.10	0.08	0.00	0.00	0.18
4/20/99 19:54	0.00	0.00	0.13	0.05	0.05	0.03	0.25
4/20/99 20:14	0.00	0.00	0.10	0.03	0.00	0.00	0.13
4/20/99 20:34	0.00	0.00	0.13	0.10	0.03	0.03	0.28
4/20/99 20:54	0.00	0.00	0.10	0.10	0.00	0.00	0.20
4/20/99 21:14	0.00	0.00	0.08	0.08	0.00	0.00	0.15
4/20/99 21:34	0.00	0.00	0.08	0.08	0.00	0.00	0.15
4/20/99 21:54	0.00	0.00	0.10	0.05	0.00	0.00	0.15
4/20/99 22:14	0.00	0.00	0.08	0.03	0.00	0.03	0.13



### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/20/99 22:34	0.00	0.00	0.18	0.18	0.00	0.00	0.35
4/20/99 22:54	0.00	0.00	0.20	0.08	0.00	0.00	0.28
4/20/99 23:14	0.00	0.00	0.15	0.15	0.00	0.00	0.30
4/20/99 23:34	0.00	0.00	0.10	0.08	0.00	0.00	0.18
4/20/99 23:54	0.00	0.00	0.10	0.05	0.05	0.00	0.20
4/21/99 0:14	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/21/99 0:34	0.00	0.00	0.08	0.13	0.00	0.00	0.20
4/21/99 0:54	0.00	0.00	0.08	0.10	0.00	0.00	0.18
4/21/99 1:14	0.00	0.00	0.15	0.08	0.03	0.00	0.25
4/21/99 1:34	0.00	0.00	0.10	0.08	0.00	0.00	0.18
4/21/99 1:54	0.00	0.00	0.08	0.10	0.03	0.00	0.20
4/21/99 2:14	0.00	0.00	0.20	0.03	0.00	0.00	0.23
4/21/99 2:34	0.00	0.00	0.15	0.08	0.00	0.00	0.23
4/21/99 2:54	0.00	0.00	0.10	0.15	0.03	0.00	0.28
4/21/99 3:14	0.00	0.00	0.08	0.08	0.00	0.00	0.15
4/21/99 3:34	0.00	0.00	0.20	0.05	0.03	0.00	0.28
4/21/99 3:54	0.00	0.00	0.13	0.00	0.00	0.00	0.13
4/21/99 4:14	0.00	0.00	0.00	0.15	0.03	0.00	0.18
4/21/99 4:34	0.00	0.00	0.08	0.13	0.00	0.00	0.20
4/21/99 4:54	0.00	0.00	0.10	0.05	0.00	0.00	0.15
4/21/99 5:14	0.00	0.00	0.15	0.03	0.00	0.00	0.18
4/21/99 5:34	0.00	0.00	0.10	0.10	0.03	0.03	0.25
4/21/99 5:54	0.00	0.00	0.08	0.03	0.00	0.00	0.10
4/21/99 6:14	0.00	0.00	0.10	0.13	0.03	0.03	0.28
4/21/99 6:34	0.00	0.00	0.08	0.05	0.05	0.00	0.18
4/21/99 6:54	0.00	0.00	0.10	0.13	0.00	0.00	0.23
4/21/99 7:14	0.00	0.00	0.05	0.10	0.00	0.00	0.15
4/21/99 7:34	0.00	0.00	0.18	0.08	0.00	0.00	0.25
4/21/99 7:54	0.00	0.00	0.18	0.18	0.08	0.00	0.43
4/21/99 8:14	0.00	0.00	0.10	0.18	0.03	0.00	0.30
4/21/99 8:34	0.03	0.00	0.13	0.13	0.00	0.00	0.28
4/21/99 8:54	0.00	0.03	0.10	0.15	0.00	0.00	0.28
4/21/99 9:14	0.00	0.00	0.05	0.13	0.03	0.00	0.20
4/21/99 9:34	0.00	0.00	0.13	0.18	0.00	0.00	0.30
4/21/99 9:54	0.00	0.00	0.15	0.13	0.00	0.00	0.28
4/21/99 10:14	0.00	0.00	0.08	0.03	0.00	0.00	0.10
4/21/99 10:34	0.00	0.00	0.08	0.10	0.00	0.00	0.18
4/21/99 12:27	0.05	0.18	12.50	6.93	0.35	0.53	20.53
4/21/99 12:47	0.05	0.08	1.03	1.60	0.23	0.25	3.23
4/21/99 13:07	0.00	0.03	0.58	0.43	0.05	0.00	1.08
4/21/99 13:27	0.00	0.03	0.40	0.43	0.08	0.03	0.95
4/21/99 13:47	0.03	0.03	0.60	0.30	0.13	0.08	1.15
4/21/99 14:07	0.00	0.03	0.20	0.55	0.00	0.03	0.80
4/21/99 14:27	0.00	0.00	0.35	0.18	0.03	0.00	0.55
4/21/99 14:47	0.00	0.05	0.53	0.35	0.08	0.05	1.05
4/21/99 15:07	0.00	0.03	0.33	0.25	0.03	0.03	0.65
4/21/99 15:27	0.00	0.03	0.25	0.05	0.03	0.00	0.35

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4121199 15:47	0.00	0.05	0.10	0.15	0.05	0.03	0.38
4/21/99 16:07	0.00	0.00	0.10	0.15	0.00	0.05	0.30
4/21/99 16:27	0.00	0.00	0.15	0.23	0.03	0.08	0.48
4121199 16:47	0.00	0.00	0.23	0.28	0.05	0.03	0.58
4/21/99 17:07	0.00	0.03	0.20	0.13	0.00	0.00	0.35
4/21/99 17:27	0.00	0.00	0.18	0.10	0.00	0.00	0.28
4/21/99 17:47	0.00	0.03	0.25	0.28	0.03	0.03	0.60
4/21/99 18:07	0.00	0.03	0.15	0.13	0.03	0.00	0.33
4/21/99 18:27	0.00	0.00	0.05	0.08	0.03	0.05	0.20
4/21/99 18:47	0.00	0.00	0.08	0.18	0.00	0.03	0.28
4/21/99 19:07	0.00	0.00	0.15	0.15	0.00	0.00	0.30
4/21/99 19:27	0.03	0.00	0.15	0.05	0.03	0.00	0.25
4121199 19:47	0.00	0.00	0.13	0.23	0.03	0.00	0.38
4/21/99 20:07	0.00	0.03	0.03	0.00	0.00	0.03	0.08
4/21/99 20:27	0.00	0.00	0.13	0.03	0.00	0.00	0.15
4121199 20:47	0.00	0.00	0.05	0.03	0.03	0.03	0.13
4121199 21:07	0.00	0.00	0.00	0.05	0.00	0.00	0.05
4/21/99 21:27	0.00	0.00	0.10	0.05	0.00	0.00	0.15
4/21/99 21:47	0.00	0.00	0.18	0.10	0.03	0.00	0.30
4/21/99 22:07	0.00	0.00	0.05	0.10	0.03	0.00	0.18
4/21/99 22:27	0.00	0.00	0.03	0.03	0.00	0.00	0.05
4/21/99 22:47	0.00	0.00	0.08	0.13	0.00	0.00	0.20
4/21/99 23:07	0.00	0.00	0.10	0.03	0.00	0.00	0.13
4/21/99 23:27	0.00	0.00	0.08	0.08	0.03	0.00	0.18
4/21/99 23:47	0.00	0.00	0.03	0.00	0.03	0.05	0.10
4122199 0:07	0.00	0.00	0.10	0.05	0.00	0.00	0.15
4/22/99 0:27	0.00	0.08	0.15	0.13	0.03	0.03	0.40
4122199 0:47	0.00	0.00	0.13	0.08	0.00	0.00	0.20
4/22/99 1:07	0.00	0.00	0.05	0.08	0.00	0.00	0.13
4/22/99 1:27	0.00	0.00	0.05	0.05	0.00	0.00	0.10
4122199 1:47	0.03	0.00	0.03	0.10	0.00	0.05	0.20
4/22/99 2:07	0.00	0.00	0.10	0.05	0.03	0.00	0.18
4/22/99 2:27	0.00	0.00	0.08	0.05	0.00	0.03	0.15
4/22/99 2:47	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/22/99 3:07	0.00	0.00	0.05	0.08	0.00	0.00	0.13
4/22/99 3:27	0.00	0.00	0.03	0.03	0.00	0.00	0.05
4/22/99 3:47	0.00	0.00	0.05	0.15	0.00	0.00	0.20
4/22/99 4:07	0.00	0.00	0.05	0.03	0.03	0.00	0.10
4122199 4:27	0.00	0.00	0.05	0.08	0.00	0.00	0.13
4/22/99 4:47	0.00	0.00	0.10	0.05	0.03	0.00	0.18
4/22/99 5:07	0.00	0.00	0.03	0.08	0.00	0.00	0.10
4/22/99 5:27	0.00	0.00	0.05	0.08	0.03	0.00	0.15
4/22/99 5:47	0.00	0.00	0.13	0.13	0.00	0.03	0.28
4/22/99 6:07	0.00	0.00	0.13	0.05	0.05	0.00	0.23
4122199 6:27	0.00	0.00	0.13	0.05	0.00	0.03	0.20
4/22/99 6:47	0.00	0.00	0.13	0.13	0.03	0.05	0.33
4/22/99 7:07	0.00	0.00	0.05	0.05	0.03	0.00	0.13

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/22/99 7:27	0.00	0.00	0.08	0.05	0.00	0.03	0.15
4/22/99 7:47	0.00	0.00	0.18	0.10	0.00	0.00	0.28
4/22/99 8:07	0.00	0.00	0.15	0.05	0.00	0.03	0.23
4/22/99 8:27	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/22/99 8:47	0.00	0.00	0.25	0.25	0.03	0.00	0.53
4/22/99 9:07	0.00	0.03	0.10	0.10	0.00	0.00	0.23
4/22/99 9:27	0.00	0.00	0.13	0.03	0.00	0.00	0.15
4/22/99 9:47	0.00	0.00	0.13	0.08	0.00	0.03	0.23
4/22/99 10:07	0.00	0.00	0.13	0.13	0.03	0.00	0.28
4/22/99 10:27	0.03	0.00	0.20	0.15	0.00	0.03	0.40
4/22/99 10:47	0.00	0.00	0.10	0.10	0.03	0.03	0.25
4/22/99 11:07	0.00	0.00	0.10	0.05	0.03	0.03	0.20
4/22/99 11:27	0.00	0.00	0.03	0.13	0.00	0.00	0.15
4/22/99 11:47	0.00	0.00	0.10	0.13	0.00	0.03	0.25
4/22/99 12:07	0.00	0.00	0.08	0.05	0.00	0.03	0.15
4/22/99 12:27	0.00	0.03	0.05	0.03	0.03	0.03	0.15
4/22/99 12:47	0.00	0.00	0.05	0.10	0.00	0.03	0.18
4/22/99 13:07	0.03	0.00	0.08	0.03	0.00	0.00	0.13
4/22/99 13:27	0.00	0.00	0.10	0.03	0.00	0.00	0.13
4/22/99 13:47	0.00	0.00	0.18	0.05	0.00	0.00	0.23
4/22/99 14:07	0.00	0.00	0.13	0.05	0.00	0.05	0.23
4/22/99 14:27	0.00	0.00	0.03	0.08	0.00	0.03	0.13
4/22/99 14:47	0.00	0.00	0.10	0.03	0.05	0.08	0.25
4/22/99 15:07	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/22/99 15:27	0.00	0.00	0.03	0.05	0.05	0.00	0.13
4/22/99 15:47	0.00	0.00	0.05	0.20	0.00	0.05	0.30
4/22/99 16:07	0.00	0.03	0.05	0.10	0.03	0.03	0.23
4/22/99 16:27	0.00	0.03	0.13	0.08	0.05	0.03	0.30
4/22/99 16:47	0.00	0.03	0.13	0.20	0.03	0.03	0.40
4/22/99 17:07	0.03	0.00	0.08	0.10	0.00	0.03	0.23
4/22/99 17:27	0.00	0.00	0.05	0.10	0.03	0.03	0.20
4/22/99 17:47	0.00	0.03	0.13	0.13	0.00	0.03	0.30
4/22/99 18:07	0.05	0.05	0.10	0.13	0.00	0.03	0.35
4/22/99 18:27	0.00	0.00	0.08	0.05	0.00	0.03	0.15
4/22/99 18:47	0.00	0.00	0.25	0.23	0.05	0.05	0.58
4/22/99 19:07	0.00	0.00	0.15	0.08	0.00	0.00	0.23
4/22/99 19:27	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/22/99 19:47	0.00	0.03	0.15	0.18	0.08	0.03	0.45
4/22/99 20:07	0.00	0.00	0.03	0.03	0.00	0.00	0.05
4/22/99 20:27	0.00	0.00	0.18	0.05	0.00	0.00	0.23
4/22/99 20:47	0.00	0.00	0.25	0.18	0.00	0.00	0.43
4/22/99 21:07	0.00	0.00	0.13	0.08	0.00	0.00	0.20
4/22/99 21:27	0.00	0.00	0.28	0.08	0.03	0.05	0.43
4/22/99 21:47	0.00	0.00	0.15	0.23	0.03	0.00	0.40
4/22/99 22:07	0.00	0.03	0.00	0.10	0.03	0.00	0.15
4/22/99 22:27	0.00	0.00	0.05	0.03	0.00	0.03	0.10
4/22/99 22:47	0.03	0.03	0.23	0.13	0.03	0.03	0.45

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/22/99 23:07	0.00	0.00	0.05	0.08	0.03	0.00	0.15
4/22/99 23:27	0.00	0.00	0.08	0.08	0.00	0.03	0.18
4/22/99 23:47	0.03	0.03	0.18	0.15	0.00	0.00	0.38
4/23/99 0:07	0.00	0.00	0.10	0.05	0.00	0.00	0.15
4/23/99 0:27	0.00	0.00	0.00	0.03	0.03	0.03	0.08
4/23/99 0:47	0.00	0.00	0.20	0.13	0.00	0.00	0.33
4/23/99 1:07	0.00	0.00	0.08	0.03	0.00	0.00	0.10
4/23/99 1:27	0.00	0.00	0.05	0.03	0.00	0.00	0.08
4/23/99 1:47	0.00	0.00	0.15	0.15	0.00	0.00	0.30
4/23/99 2:07	0.00	0.00	0.10	0.08	0.00	0.00	0.18
4/23/99 2:27	0.00	0.00	0.03	0.03	0.00	0.00	0.05
4/23/99 2:47	0.00	0.00	0.15	0.08	0.00	0.00	0.23
4/23/99 3:07	0.00	0.00	0.10	0.08	0.00	0.00	0.18
4/23/99 3:27	0.00	0.00	0.03	0.03	0.00	0.00	0.05
4/23/99 3:47	0.00	0.00	0.13	0.10	0.00	0.00	0.23
4/23/99 4:07	0.00	0.00	0.08	0.03	0.00	0.00	0.10
4/23/99 4:27	0.00	0.00	0.03	0.00	0.00	0.00	0.03
4/23/99 4:47	0.00	0.03	0.20	0.05	0.00	0.03	0.30
4/23/99 5:07	0.00	0.03	0.10	0.00	0.00	0.03	0.15
4/23/99 5:27	0.00	0.00	0.03	0.13	0.00	0.00	0.15
4/23/99 5:47	0.00	0.00	0.13	0.13	0.03	0.00	0.28
4/23/99 6:07	0.00	0.00	0.10	0.08	0.00	0.00	0.18
4/23/99 6:27	0.00	0.00	0.05	0.03	0.03	0.00	0.10
4/23/99 6:47	0.00	0.03	0.13	0.15	0.03	0.00	0.33
4/23/99 7:07	0.00	0.00	0.03	0.05	0.03	0.05	0.15
4/23/99 7:27	0.00	0.03	0.10	0.03	0.00	0.00	0.15
4/23/99 7:47	0.00	0.03	0.10	0.10	0.00	0.00	0.23
4/23/99 8:07	0.00	0.00	0.05	0.15	0.00	0.03	0.23
4/23/99 8:27	0.00	0.03	0.03	0.13	0.00	0.00	0.18
4/23/99 8:47	0.00	0.00	0.15	0.15	0.00	0.00	0.30
4/23/99 9:07	0.00	0.00	0.03	0.10	0.00	0.00	0.13
4/23/99 9:27	0.00	0.00	0.05	0.00	0.00	0.00	0.05
4/23/99 9:47	0.00	0.00	0.15	0.03	0.00	0.00	0.18
4/23/99 10:07	0.00	0.00	0.08	0.05	0.00	0.00	0.13
4/23/99 10:27	0.00	0.00	0.05	0.05	0.00	0.03	0.13
4/23/99 10:47	0.00	0.00	0.08	0.13	0.00	0.00	0.20
4/23/99 11:07	0.00	0.00	0.08	0.05	0.05	0.00	0.18
4/23/99 11:27	0.00	0.00	0.13	0.00	0.00	0.00	0.13
4/23/99 11:47	0.00	0.00	0.33	0.53	0.10	0.05	1.00
4/23/99 12:07	0.00	0.00	0.05	0.13	0.05	0.00	0.23
4/23/99 12:27	0.33	0.78	3.63	5.38	1.13	1.70	12.93
4/23/99 12:47	0.00	0.05	0.13	0.18	0.03	0.00	0.38
4/23/99 13:07	0.00	0.00	0.08	0.10	0.08	0.00	0.25
4/23/99 13:27	0.00	0.00	0.03	0.00	0.03	0.00	0.05
4/23/99 13:47	0.03	0.15	1.95	2.50	0.38	0.38	5.38
4/23/99 14:07	0.00	0.00	0.10	0.10	0.03	0.05	0.28
4/23/99 14:27	0.00	0.03	0.20	0.28	0.05	0.03	0.58

## McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
4/23/99 14:47	0.00	0.03	0.18	0.23	0.03	0.03	0.48
4/23/99 15:07	0.03	0.03	0.43	0.73	0.13	0.05	1.38
4/23/99 15:27	0.15	0.23	2.20	3.38	0.43	0.68	7.05
4123199 15:47	0.03	0.00	0.28	0.13	0.00	0.03	0.45
4/23/99 16:07	0.03	0.13	1.08	1.03	0.23	0.20	2.68
4/23/99 16:27	0.25	0.20	1.38	1.95	0.50	0.33	4.60
4/23/99 16:47	0.00	0.00	0.08	0.18	0.08	0.00	0.33
4/23/99 17:07	0.00	0.08	0.88	1.30	0.20	0.40	2.85
4/23/99 17:27	0.03	0.00	0.30	0.60	0.08	0.08	1.08
4123199 17:47	0.00	0.00	0.03	0.20	0.03	0.00	0.25
4/23/99 18:07	0.00	0.05	0.38	0.63	0.10	0.18	1.33
4/23/99 18:27	0.03	0.03	0.18	0.15	0.05	0.08	0.50
4/23/99 18:47	0.00	0.00	0.08	0.08	0.03	0.00	0.18
4/23/99 19:07	0.00	0.05	0.38	0.35	0.05	0.10	0.93
4/23/99 19:27	0.00	0.00	0.13	0.13	0.00	0.03	0.28
4/23/99 19:47	0.00	0.00	0.13	0.13	0.00	0.05	0.30
4/23/99 20:07	0.03	0.03	0.45	0.65	0.18	0.13	1.45
4/23/99 20:27	0.00	0.00	0.25	0.28	0.10	0.05	0.68
4/23/99 20:47	0.00	0.05	0.23	0.38	0.05	0.10	0.80
4/23/99 21:07	0.03	0.05	0.38	0.65	0.18	0.13	1.40
4/23/99 21:27	0.03	0.00	0.25	0.10	0.05	0.03	0.45
4/23/99 21:47	0.00	0.00	0.20	0.15	0.03	0.00	0.38
4/23/99 22:07	0.00	0.03	0.58	0.88	0.10	0.15	1.73
4/23/99 22:27	0.03	0.08	0.28	0.43	0.10	0.05	0.95
4/23/99 22:47	0.05	0.03	0.18	0.35	0.03	0.08	0.70
4/23/99 23:07	0.00	0.03	0.68	0.48	0.03	0.10	1.30
4/23/99 23:27	0.03	0.05	0.18	0.23	0.10	0.00	0.58
4123199 23:47	0.00	0.00	0.10	0.10	0.00	0.03	0.23
4/24/99 0:07	0.03	0.03	0.30	0.30	0.03	0.00	0.68
4124199 0:27	0.00	0.00	0.08	0.33	0.05	0.03	0.48
4124199 0:47	0.00	0.00	0.08	0.18	0.00	0.05	0.30
4/24/99 1:07	0.00	0.10	0.53	0.90	0.15	0.10	1.78
4124199 1:27	0.00	0.00	0.53	0.63	0.08	0.08	1.30
4/24/99 1:47	0.00	0.00	0.13	0.10	0.00	0.05	0.28
4124199 2:07	0.00	0.08	2.55	2.35	0.50	0.73	6.20
4124199 2:27	0.00	0.08	0.35	0.80	0.18	0.13	1.53
4/24/99 2:47	0.00	0.05	0.83	1.10	0.25	0.15	2.38
4124199 3:07	0.05	0.28	5.43	7.20	1.53	1.75	16.23
4124199 3:27	0.00	0.05	1.08	1.50	0.23	0.23	3.08
4/24/99 3:47	0.00	0.15	1.23	1.48	0.38	0.38	3.60
4124199 4:07	0.05	0.18	1.38	2.08	0.63	0.60	4.90
4/24/99 4:27	0.00	0.08	1.80	3.28	0.45	0.48	6.08
4/24/99 4:47	0.05	0.08	1.85	1.98	0.35	0.28	4.58
4/24/99 5:07	0.10	0.28	4.63	4.45	0.58	0.73	10.75
4/24/99 5:27	0.00	0.05	1.08	0.88	0.30	0.05	2.35
4124199 5:47	0.13	0.20	3.73	4.95	0.88	0.83	10.70
4/24/99 6:07	0.55	1.20	13.38	15.88	2.60	2.60	36.20

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0um	2.0-3.0um	3.0-5.0um	5.0-7.0um	7.0-10.0um	Sum of Particles
4/24/99 6:27	0.03	0.15	3.55	4.38	0.80	0.53	9.43
4/24/99 6:47	0.03	0.05	1.23	1.50	0.15	0.18	3.13
4/26/99 13:47	0.00	0.05	0.73	0.73	0.10	0.10	1.70
4/26/99 14:07	0.00	0.05	0.20	0.28	0.03	0.00	0.55
4/26/99 14:27	0.18	0.83	3.55	4.50	1.30	1.43	11.78
4/26/99 14:47	0.00	0.03	0.18	0.13	0.03	0.03	0.38
4/26/99 15:07	0.00	0.08	0.78	0.70	0.23	0.13	1.90
4/26/99 15:27	0.03	0.05	0.25	0.33	0.05	0.08	0.78
4/26/99 15:47	0.00	0.00	0.25	0.23	0.13	0.00	0.60
4/26/99 16:07	0.00	0.00	0.08	0.20	0.00	0.03	0.30
4/26/99 16:27	0.00	0.00	0.13	0.10	0.03	0.03	0.28
4/26/99 16:47	0.00	0.00	0.08	0.18	0.00	0.00	0.25
4/26/99 17:07	0.00	0.00	0.03	0.18	0.03	0.03	0.25
4/26/99 17:27	0.00	0.00	0.00	0.10	0.03	0.00	0.13
4/26/99 17:47	0.03	0.00	0.08	0.05	0.00	0.00	0.15
4/26/99 18:07	0.00	0.00	0.13	0.03	0.00	0.03	0.18
4/26/99 18:27	0.00	0.00	0.13	0.10	0.00	0.00	0.23
4/26/99 18:47	0.00	0.00	0.03	0.03	0.03	0.00	0.08
4/26/99 19:07	0.00	0.00	0.03	0.08	0.03	0.00	0.13
4/26/99 19:27	0.00	0.03	0.08	0.05	0.03	0.00	0.18
4/26/99 19:47	0.00	0.00	0.03	0.13	0.05	0.00	0.20
4/26/99 20:07	0.00	0.00	0.03	0.05	0.03	0.00	0.10
4/26/99 20:27	0.00	0.00	0.08	0.00	0.00	0.00	0.08
4/26/99 20:47	0.00	0.00	0.03	0.03	0.00	0.03	0.08
4/26/99 21:07	0.00	0.00	0.03	0.00	0.00	0.00	0.03
4/26/99 21:27	0.00	0.00	0.08	0.03	0.00	0.03	0.13
4/26/99 21:47	0.00	0.00	0.03	0.10	0.00	0.00	0.13
4/26/99 22:07	0.00	0.00	0.00	0.00	0.03	0.00	0.03
4/26/99 22:27	0.00	0.00	0.03	0.00	0.00	0.00	0.03
4/26/99 22:47	0.00	0.00	0.05	0.03	0.00	0.00	0.08
4/26/99 23:07	0.00	0.00	0.03	0.00	0.00	0.00	0.03
4/26/99 23:27	0.00	0.00	0.03	0.00	0.00	0.00	0.03
4/26/99 23:47	0.00	0.00	0.00	0.03	0.03	0.00	0.05
4/27/99 0:07	0.00	0.00	0.05	0.03	0.00	0.00	0.08
4/27/99 0:27	0.00	0.00	0.03	0.03	0.03	0.00	0.08
4/27/99 0:47	0.00	0.00	0.00	0.03	0.00	0.00	0.03
4/27/99 1:07	0.00	0.00	0.08	0.10	0.00	0.00	0.18
4/27/99 1:27	0.00	0.00	0.03	0.00	0.00	0.00	0.03
4/27/99 1:47	0.00	0.00	0.03	0.03	0.00	0.00	0.05
4/27/99 2:07	0.00	0.00	0.00	0.03	0.00	0.03	0.05
4/27/99 2:27	0.00	0.00	0.05	0.00	0.00	0.00	0.05
4/27/99 2:47	0.00	0.00	0.00	0.00	0.03	0.00	0.03
4/27/99 3:07	0.00	0.00	0.03	0.03	0.00	0.00	0.05
4/27/99 3:27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 3:47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 4:07	0.00	0.00	0.00	0.10	0.00	0.00	0.10
4/27/99 4:27	0.00	0.00	0.03	0.08	0.00	0.00	0.10

### McAllen Wastewater Reclamation Project - April Particle Counts

Date	>15.0	10.0-15.0um	2.0-3.0um	3.0-5.0um	5.0-7.0um	7.0-10.0um	Sum of Particles
4/27/99 4:47	0.00	0.00	0.03	0.05	0.00	0.00	0.08
4/27/99 5:07	0.00	0.00	0.08	0.03	0.03	0.00	0.13
4/27/99 5:27	0.00	0.00	0.08	0.00	0.00	0.00	0.08
4/27/99 5:47	0.00	0.00	0.00	0.03	0.00	0.00	0.03
4/27/99 6:07	0.00	0.03	0.00	0.13	0.08	0.03	0.25
4/27/99 6:27	0.00	0.00	0.03	0.03	0.00	0.00	0.05
4/27/99 6:47	0.00	0.00	0.03	0.03	0.00	0.00	0.05
4/27/99 7:07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 7:27	0.00	0.00	0.05	0.00	0.00	0.03	0.08
4/27/99 7:47	0.00	0.00	0.00	0.05	0.00	0.00	0.05
4/27/99 8:07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 8:27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 8:47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 9:07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 9:27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 9:47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 10:07	0.65	1.70	61.70	59.98	5.05	3.40	132.48
4/27/99 10:27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 10:47	0.00	0.00	0.08	0.03	0.00	0.00	0.10
4/27/99 11:07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 11:27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 11:47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 12:07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 12:27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 12:47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 13:07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 13:27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 13:47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/99 14:07	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### McAllen Wastewater Reclamation Project - July Particle Counts

Date	>15.0	10.0-15.0um	2.0-3.0um	3.0-5.0um	5.0-7.0um	7.0-10.0um	Sum of Particles
7/8/99 17:04	0.08	0.35	3.00	3.68	0.50	0.88	8.48
7/8/99 17:24	0.15	0.38	2.75	3.10	0.75	0.78	7.90
7/8/99 17:44	0.20	0.43	2.95	3.43	0.68	0.90	8.58
7/8/99 18:04	0.10	0.53	2.65	3.58	0.68	0.73	8.25
7/8/99 18:24	0.08	0.45	3.15	5.23	1.23	0.83	10.95
7/8/99 22:53	0.45	0.63	2.33	2.30	0.63	0.60	6.93
7/8/99 23:13	0.10	0.28	1.55	1.65	0.25	0.73	4.55
7/10/99 9:04	0.05	0.18	0.38	0.70	0.13	0.18	1.60
7/15/99 10:42	0.00	0.00	0.45	0.28	0.00	0.08	0.80
7/15/99 11:02	0.00	0.05	0.43	0.33	0.05	0.03	0.88
7/15/99 11:22	0.00	0.03	0.25	0.38	0.05	0.00	0.70
7/15/99 11:42	0.00	0.00	0.23	0.28	0.00	0.03	0.53
7/15/99 12:02	0.03	0.00	0.55	0.28	0.03	0.05	0.93
7/15/99 12:22	0.00	0.00	0.25	0.33	0.05	0.03	0.65
7/15/99 12:42	0.00	0.00	0.30	0.23	0.03	0.08	0.63
7/15/99 13:02	0.05	0.05	0.45	0.38	0.08	0.08	1.08
7/15/99 13:22	0.15	0.13	1.43	1.53	0.23	0.33	3.78
7/15/99 13:42	0.00	0.00	0.33	0.48	0.15	0.05	1.00
7/15/99 14:02	0.00	0.03	0.33	0.25	0.03	0.03	0.65
7/15/99 14:22	0.08	0.15	0.38	0.45	0.15	0.08	1.28
7/15/99 14:42	0.00	0.03	0.35	0.50	0.08	0.00	0.95
7/15/99 15:02	0.00	0.00	0.43	0.28	0.15	0.08	0.93
7/15/99 15:22	0.08	0.13	0.53	0.43	0.10	0.10	1.35
7/15/99 15:42	0.00	0.08	0.45	0.25	0.05	0.08	0.90
7/15/99 16:02	0.00	0.05	0.68	0.48	0.08	0.00	1.28
7/15/99 16:22	0.00	0.00	0.55	0.33	0.13	0.05	1.05
7/15/99 16:42	0.00	0.03	0.48	0.35	0.03	0.08	0.95
7/15/99 17:02	0.00	0.00	0.43	0.68	0.00	0.05	1.15
7/15/99 17:22	0.00	0.00	0.25	0.23	0.03	0.03	0.53
7/15/99 17:42	0.00	0.00	0.45	0.38	0.05	0.08	0.95
7/15/99 18:02	0.00	0.00	0.43	0.38	0.00	0.00	0.80
7/15/99 18:22	0.00	0.03	0.53	0.35	0.15	0.03	1.08
7/15/99 18:42	0.00	0.03	0.35	0.50	0.03	0.05	0.95
7/15/99 19:02	0.03	0.03	0.35	0.45	0.05	0.03	0.93
7/15/99 19:22	0.00	0.00	0.38	0.30	0.00	0.05	0.73
7/15/99 19:42	0.03	0.00	0.35	0.33	0.03	0.00	0.73
7/15/99 20:02	0.03	0.05	0.35	0.45	0.05	0.00	0.93
7/15/99 20:22	0.03	0.10	0.40	0.78	0.20	0.03	1.53
7/15/99 20:42	0.03	0.05	0.50	0.30	0.08	0.03	0.98
7/15/99 21:02	0.00	0.00	0.65	0.33	0.10	0.03	1.10
7/15/99 21:22	0.00	0.00	0.63	0.50	0.05	0.05	1.23
7/15/99 21:42	0.00	0.03	0.43	0.10	0.03	0.00	0.58
7/15/99 22:02	0.00	0.05	0.55	0.40	0.03	0.03	1.05
7/15/99 22:22	0.03	0.00	0.25	0.35	0.00	0.05	0.68
7/15/99 22:42	0.03	0.03	0.50	0.45	0.03	0.08	1.10
7/15/99 23:02	0.03	0.00	0.50	0.28	0.00	0.03	0.83



Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7/15/99 23:22	0.00	0.05	0.38	0.33	0.05	0.00	0.80
7/15/99 23:42	0.00	0.03	0.53	0.25	0.05	0.00	0.85
7/16/99 0:02	0.00	0.00	0.58	0.40	0.03	0.03	1.03
7/16/99 0:22	0.03	0.03	0.43	0.40	0.03	0.03	0.93
7/16/99 0:42	0.00	0.00	0.53	0.30	0.03	0.03	0.88
7/16/99 1:02	0.00	0.03	0.48	0.38	0.05	0.00	0.93
7/16/99 1:22	0.03	0.00	0.63	0.18	0.03	0.05	0.90
7/16/99 1:42	0.05	0.00	0.55	0.30	0.08	0.08	1.05
7/16/99 2:02	0.03	0.00	0.53	0.38	0.10	0.10	1.13
7/16/99 2:22	0.00	0.05	0.53	0.23	0.05	0.03	0.88
7/16/99 2:42	0.00	0.00	0.48	0.60	0.03	0.00	1.10
7/16/99 3:02	0.00	0.03	0.48	0.35	0.03	0.10	0.98
7/16/99 3:22	0.03	0.00	0.55	0.43	0.03	0.08	1.10
7/16/99 3:42	0.03	0.03	0.43	0.43	0.05	0.00	0.95
7/16/99 4:02	0.00	0.03	0.38	0.33	0.00	0.03	0.75
7/16/99 4:22	0.03	0.03	0.83	0.48	0.05	0.03	1.43
7/16/99 4:42	0.00	0.05	0.63	0.43	0.00	0.05	1.15
7/16/99 5:02	0.00	0.03	0.50	0.43	0.03	0.00	0.98
7/16/99 5:22	0.00	0.00	0.85	0.40	0.08	0.00	1.33
7/16/99 5:42	0.00	0.00	0.58	0.40	0.08	0.05	1.10
7/16/99 6:02	0.00	0.03	0.45	0.23	0.03	0.00	0.73
7/16/99 6:22	0.03	0.05	0.58	0.53	0.05	0.13	1.35
7/16/99 6:42	0.03	0.03	0.65	0.35	0.08	0.08	1.20
7/16/99 7:02	0.00	0.00	0.53	0.30	0.10	0.00	0.93
7/16/99 7:22	0.03	0.03	0.55	0.38	0.05	0.05	1.08
7/16/99 7:42	0.00	0.00	0.43	0.25	0.05	0.05	0.78
7/16/99 8:02	0.03	0.03	0.38	0.38	0.03	0.05	0.88
7/16/99 8:22	0.05	0.05	0.45	0.50	0.08	0.08	1.20
7/16/99 8:42	0.00	0.08	0.55	0.48	0.03	0.03	1.15
7/16/99 9:02	0.03	0.00	0.45	0.55	0.13	0.05	1.20
7/16/99 9:22	0.00	0.00	0.40	0.53	0.00	0.08	1.00
7/16/99 9:42	0.03	0.00	0.30	0.35	0.10	0.03	0.80
7/16/99 10:02	0.05	0.08	0.63	0.40	0.18	0.05	1.38
7/16/99 10:22	0.00	0.00	0.43	0.20	0.08	0.05	0.75
7/16/99 10:42	0.05	0.03	0.40	0.35	0.03	0.05	0.90
7/16/99 11:02	0.00	0.00	0.63	0.30	0.13	0.03	1.08
7/16/99 11:22	0.00	0.00	0.38	0.43	0.03	0.00	0.83
7/16/99 11:42	0.00	0.00	0.53	0.48	0.05	0.08	1.13
7/16/99 12:02	0.00	0.00	0.50	0.33	0.03	0.05	0.90
7/16/99 12:22	0.03	0.00	0.53	0.35	0.00	0.03	0.93
7/16/99 12:42	0.00	0.03	0.40	0.45	0.08	0.05	1.00
7/16/99 13:02	0.00	0.03	0.53	0.30	0.05	0.05	0.95
7/16/99 13:22	0.08	0.23	1.78	2.13	0.48	0.35	5.03
7/16/99 13:42	0.00	0.03	0.68	0.28	0.03	0.08	1.08
7/16/99 14:02	0.00	0.03	0.45	0.45	0.00	0.00	0.93
7/16/99 14:22	0.00	0.03	0.53	0.35	0.03	0.00	0.93
7/16/99 14:42	0.03	0.05	0.33	0.58	0.08	0.05	1.10
7/16/99 15:02	0.05	0.10	0.73	0.60	0.03	0.08	1.58

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7/16/99 15:22	0.03	0.05	0.65	0.45	0.08	0.08	1.33
7/16/99 15:42	0.05	0.00	0.60	0.35	0.08	0.05	1.13
7/16/99 16:02	0.00	0.03	0.78	0.40	0.13	0.18	1.50
7/16/99 16:22	0.00	0.00	0.45	0.30	0.03	0.10	0.88
7/16/99 16:42	0.03	0.05	0.50	0.43	0.05	0.08	1.13
7/16/99 17:02	0.00	0.00	0.65	0.45	0.05	0.03	1.18
7/16/99 17:22	0.05	0.08	0.50	0.55	0.00	0.08	1.25
7/16/99 17:42	0.00	0.03	0.43	0.53	0.08	0.08	1.13
7/16/99 18:02	0.08	0.10	0.68	0.48	0.05	0.10	1.48
7/16/99 18:22	0.00	0.03	0.53	0.53	0.13	0.08	1.28
7/16/99 18:42	0.00	0.03	0.60	0.40	0.03	0.05	1.10
7/16/99 19:02	0.00	0.05	0.68	0.33	0.03	0.08	1.15
7/16/99 19:22	0.03	0.03	0.53	0.48	0.03	0.00	1.08
7/16/99 19:42	0.00	0.05	0.70	0.48	0.08	0.03	1.33
7/16/99 20:02	0.00	0.03	0.45	0.58	0.05	0.10	1.20
7/16/99 20:22	0.00	0.03	0.70	0.58	0.08	0.15	1.53
7/16/99 20:42	0.00	0.00	0.55	0.55	0.05	0.00	1.15
7/16/99 21:02	0.03	0.03	0.50	0.55	0.08	0.03	1.20
7/16/99 21:22	0.05	0.08	0.53	0.90	0.23	0.15	1.93
7/16/99 21:42	0.03	0.00	0.78	0.65	0.08	0.13	1.65
7/16/99 22:02	0.00	0.08	0.83	0.53	0.10	0.10	1.63
7/16/99 22:22	0.03	0.00	0.73	0.63	0.08	0.05	1.50
7/16/99 22:42	0.00	0.00	1.03	0.88	0.15	0.08	2.13
7/16/99 23:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/16/99 23:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/16/99 23:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 0:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 0:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 0:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 1:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 1:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 1:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 2:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 2:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 2:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 3:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 3:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 3:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 4:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 4:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 4:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 5:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 5:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 5:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 6:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 6:21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/17/99 6:41	2.50	2.45	14.50	17.53	3.98	5.20	46.15
7/17/99 7:01	1.48	1.50	2.90	4.98	1.18	2.05	14.08

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7/17/99 7:21	0.13	0.23	1.13	1.28	0.28	0.23	3.25
7/17/99 7:41	0.00	0.15	0.75	0.55	0.18	0.10	1.73
7/17/99 8:01	1.85	2.20	13.55	19.28	4.73	4.85	46.45
7/17/99 8:21	0.83	0.93	1.83	1.85	0.43	0.90	6.75
7/17/99 8:41	0.20	0.20	0.78	1.03	0.23	0.43	2.85
7/17/99 9:01	0.28	0.33	0.30	0.95	0.23	0.18	2.25
7/17/99 9:21	0.23	0.15	0.35	0.63	0.15	0.18	1.68
7/17/99 9:41	0.08	0.10	0.40	0.60	0.08	0.18	1.43
7/17/99 10:01	0.38	0.05	0.60	0.58	0.15	0.05	1.80
7/17/99 10:21	0.05	0.05	0.43	0.33	0.15	0.10	1.10
7/17/99 10:41	0.05	0.08	0.28	0.25	0.10	0.05	0.80
7/17/99 11:01	0.05	0.10	0.38	0.63	0.05	0.15	1.35
7/17/99 11:21	0.13	0.03	0.28	0.48	0.08	0.15	1.13
7/17/99 11:41	0.08	0.08	0.45	0.25	0.10	0.15	1.10
7/17/99 12:01	0.10	0.13	0.25	0.23	0.08	0.13	0.90
7/17/99 12:21	0.38	0.50	0.38	0.70	0.30	0.43	2.68
7/17/99 12:41	0.18	0.10	0.40	0.70	0.15	0.20	1.73
7/17/99 13:01	0.03	0.13	0.30	0.43	0.03	0.10	1.00
7/17/99 13:21	0.65	0.50	0.48	1.13	0.30	0.55	3.60
7/17/99 13:41	0.13	0.03	0.30	0.25	0.00	0.08	0.78
7/17/99 14:01	0.03	0.03	0.35	0.30	0.05	0.05	0.80
7/17/99 14:21	0.00	0.08	0.33	0.28	0.03	0.10	0.80
7/20/99 10:15	0.00	0.00	3.53	0.10	0.00	0.00	3.63
7/20/99 10:35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 10:55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 11:15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 11:35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 11:55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 12:15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 12:35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 12:55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 13:15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 13:35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 13:55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/20/99 14:15	28.65	24.88	36.18	58.65	17.08	25.63	191.05
7/20/99 14:35	6.45	6.73	11.85	18.88	5.33	7.55	56.78
7/20/99 14:55	3.10	3.88	9.98	13.53	3.43	5.10	39.00
7/20/99 15:15	0.53	1.08	2.80	3.75	0.95	1.25	10.35
7/20/99 15:35	0.33	0.73	1.80	2.33	0.53	0.95	6.65
7/20/99 15:55	0.95	1.48	4.35	6.55	1.58	2.20	17.10
7/20/99 16:15	0.40	0.33	2.30	3.23	0.83	0.78	7.85
7/20/99 16:35	0.15	0.40	2.45	2.95	0.58	0.60	7.13
7/20/99 16:55	0.30	0.40	2.58	2.70	0.73	0.43	7.13
7/20/99 17:15	0.28	0.33	1.85	2.30	0.95	0.63	6.33
7/20/99 17:35	0.43	0.23	2.45	2.23	0.43	0.78	6.53
7/20/99 17:55	0.38	0.35	2.75	2.28	0.48	0.50	6.73
7/20/99 18:15	0.35	0.30	1.93	2.48	0.75	0.53	6.33
7/20/99 18:35	0.20	0.20	1.73	2.28	0.45	0.45	5.30

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7/20/99 18:55	0.33	0.55	2.20	2.55	0.80	0.53	6.95
7/20/99 19:15	0.23	0.43	2.60	2.45	0.63	0.55	6.88
7/20/99 19:35	0.15	0.38	4.95	6.98	1.43	1.60	15.48
7/20/99 19:55	0.25	0.40	2.25	2.30	0.55	0.43	6.18
7/20/99 20:15	0.35	0.25	2.70	2.73	0.65	0.50	7.18
7/20/99 20:35	0.10	0.20	1.90	1.83	0.45	0.35	4.83
7/20/99 20:55	0.15	0.25	1.88	2.05	0.28	0.73	5.33
7/20/99 21:15	0.13	0.33	1.78	2.78	0.40	0.48	5.88
7/20/99 21:35	0.20	0.23	4.78	6.00	1.30	0.75	13.25
7/20/99 21:55	0.13	0.33	1.63	1.95	0.58	0.48	5.08
7/20/99 22:15	0.23	0.15	1.88	2.03	0.40	0.48	5.15
7/20/99 22:35	0.13	0.30	2.30	3.10	0.58	0.50	6.90
7/20/99 22:55	0.35	0.20	1.90	2.13	0.50	0.48	5.55
7/20/99 23:15	0.18	0.25	2.15	2.55	0.43	0.63	6.18
7/20/99 23:35	0.38	0.18	5.80	5.65	0.95	0.65	13.60
7/20/99 23:55	0.15	0.15	2.38	2.55	0.35	0.48	6.05
7/21/99 0:15	0.05	0.23	2.40	2.93	0.48	0.38	6.45
7/21/99 0:34	0.10	0.23	3.90	3.45	0.50	0.43	8.60
7/21/99 0:54	0.18	0.30	2.03	1.33	0.48	0.28	4.58
7/21/99 1:14	0.15	0.15	2.58	2.10	0.50	0.33	5.80
7/21/99 1:34	0.13	0.28	5.95	5.58	0.70	0.50	13.13
7/21/99 1:54	0.18	0.03	1.48	1.90	0.20	0.30	4.08
7/21/99 2:14	0.28	0.28	2.20	1.63	0.33	0.35	5.05
7/21/99 2:34	0.20	0.20	2.48	1.80	0.30	0.30	5.28
7/21/99 2:54	0.08	0.15	2.05	1.83	0.15	0.35	4.60
7/21/99 3:14	0.15	0.13	2.20	2.00	0.38	0.43	5.28
7/21/99 3:34	0.05	0.15	1.63	2.13	0.30	0.23	4.48
7/21/99 3:54	0.18	0.38	2.18	2.30	0.65	0.43	6.10
7/21/99 4:14	0.15	0.05	1.55	1.70	0.23	0.30	3.98
7/21/99 4:34	0.15	0.20	1.68	1.38	0.25	0.28	3.93
7/21/99 4:54	0.05	0.30	1.68	1.70	0.40	0.15	4.28
7/21/99 5:14	0.08	0.33	2.05	1.70	0.45	0.18	4.78
7/21/99 5:34	0.10	0.25	1.95	2.33	0.55	0.43	5.60
7/21/99 5:54	0.10	0.25	1.63	2.08	0.28	0.25	4.58
7/21/99 6:14	0.05	0.18	2.18	1.55	0.38	0.55	4.88
7/21/99 6:34	0.10	0.15	1.68	1.83	0.23	0.23	4.20
7/21/99 6:54	0.20	0.18	1.50	1.95	0.28	0.33	4.43
7/21/99 7:14	0.33	0.25	1.58	1.93	0.28	0.53	4.88
7/21/99 7:34	0.33	0.35	2.20	2.05	0.50	0.53	5.95
7/21/99 7:54	42.48	38.25	88.30	124.93	32.28	44.33	370.55
7/21/99 8:14	6.05	5.13	11.53	15.40	4.48	5.08	47.65
7/21/99 8:34	1.95	2.25	4.95	7.00	1.38	2.33	19.85
7/21/99 8:54	2.60	1.70	4.78	5.08	1.70	2.30	18.15
7/21/99 9:14	2.05	1.20	3.93	4.58	1.00	2:00	14.75
7/21/99 9:34	0.88	1.10	2.60	3.15	0.68	0.83	9.23
7/21/99 9:54	1.50	1.05	3.10	3.70	0.80	1.33	11.48
7/21/99 10:14	0.88	0.90	2.40	2.60	0.98	0.85	8.60
7/21/99 10:34	2.33	2.18	3.90	5.48	1.05	2.23	17.15

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7/21/99 10:54	2.25	2.25	4.23	5.73	1.40	2.35	18.20
7/21/99 11:14	1.70	1.20	3.58	4.23	1.13	1.63	13.45
7/21/99 11:34	2.60	1.53	3.78	5.30	1.28	1.88	16.35
7/21/99 11:54	1.20	0.78	3.15	3.60	1.08	1.80	11.60
7/21/99 12:14	1.88	1.45	2.78	4.15	1.08	1.18	12.50
7/21/99 12:34	1.08	1.20	2.33	3.13	0.63	1.08	9.43
7/21/99 12:54	4.40	2.88	7.00	10.20	2.58	3.83	30.88
7/21/99 13:14	1.03	0.98	2.58	3.08	0.80	0.98	9.43
7/21/99 13:34	0.98	1.13	3.20	3.45	0.93	1.28	10.95
7/21/99 13:54	1.45	1.18	3.13	4.55	1.00	1.90	13.20
7/21/99 14:14	0.95	1.13	2.20	2.78	0.65	1.10	8.80
7/23/99 9:38	1.23	1.35	2.68	3.53	1.08	1.28	11.13
7/23/99 9:58	2.18	1.43	2.80	4.90	1.13	1.55	13.98
7/23/99 10:18	1.50	1.70	3.10	4.13	1.13	1.43	12.98
7/23/99 10:38	3.75	1.73	3.70	4.98	1.78	1.90	17.83
7/23/99 10:58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/23/99 11:18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/23/99 11:38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/23/99 11:58	37.70	45.95	99.23	156.33	43.08	60.68	442.95
7/23/99 12:18	6.13	6.55	12.73	19.75	4.80	7.48	57.43
7/23/99 12:38	794.05	608.70	692.90	1211.38	390.88	626.90	999.00
7/23/99 12:58	8.38	7.13	20.48	28.58	7.23	10.33	82.10
7/23/99 13:18	3.55	3.88	6.33	9.78	3.15	4.63	31.30
7/23/99 13:38	2.65	3.18	5.73	8.23	2.08	3.38	25.23
7/23/99 13:58	1.58	1.93	4.20	5.40	1.53	2.25	16.88
7/23/99 14:18	1.70	1.68	4.30	6.35	1.80	1.93	17.75
7/23/99 14:38	1.08	1.48	2.60	4.05	1.15	1.30	11.65
7/23/99 14:58	1.40	1.40	3.28	5.63	1.58	1.88	15.15
7/23/99 15:18	1.23	0.78	2.38	3.73	1.03	1.50	10.63
7/23/99 15:38	1.28	1.33	2.95	3.15	0.98	1.28	10.95
7/23/99 15:58	1.68	1.38	3.08	4.45	1.08	1.63	13.28
7/23/99 16:18	0.85	1.28	2.08	3.63	1.05	1.48	10.35
7/23/99 16:38	1.80	1.40	2.73	4.20	1.38	1.70	13.20
7/23/99 16:58	1.08	1.30	3.20	4.10	1.03	1.58	12.28
7/23/99 17:18	0.93	1.20	2.15	3.25	1.23	1.70	10.45
7/23/99 17:38	0.68	1.08	1.45	2.38	0.48	0.93	6.98
7/23/99 17:58	0.68	0.78	2.33	3.40	0.90	1.03	9.10
7/23/99 18:18	0.50	0.48	1.30	2.03	0.70	0.90	5.90
7/23/99 18:38	0.83	0.75	2.05	2.70	0.73	1.00	8.05
7/23/99 18:58	0.48	0.48	1.80	2.55	0.68	1.05	7.03
7/23/99 19:18	0.63	0.55	1.98	2.00	0.73	0.78	6.65
7/23/99 19:38	0.65	0.68	1.68	2.50	0.90	1.03	7.43
7/23/99 19:58	0.43	0.90	1.45	3.15	0.95	0.95	7.83
7/23/99 20:18	0.75	1.03	1.73	2.73	0.70	1.28	8.20
7/23/99 20:38	0.58	0.65	1.38	2.00	0.58	0.73	5.90
7/23/99 20:58	0.35	0.65	1.43	1.75	0.20	0.85	5.23
7/23/99 21:18	0.63	0.73	1.85	2.70	0.53	0.80	7.23
7/23/99 21:38	0.53	0.53	1.03	1.60	0.45	0.68	4.80

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7123199 21:57	0.88	0.88	1.45	2.53	0.80	0.93	7.45
7/23/99 22:17	0.48	0.55	1.73	2.13	0.50	0.78	6.15
7/23/99 22:37	0.20	0.38	0.88	1.18	0.35	0.55	3.53
71231992257	0.20	0.23	1.10	1.23	0.38	0.45	3.58
7/23/99 23: 17	0.33	0.40	1.38	1.85	0.45	0.55	4.95
7/23/99 23:37	0.60	0.75	1.48	1.93	0.75	0.35	5.85
7/23/99 23:57	0.25	0.43	1.38	1.65	0.50	0.75	4.95
7/24/99 0: 17	0.30	0.35	1.20	1.70	0.45	0.35	4.35
7/24/99 0:37	0.15	0.25	0.65	1.23	0.28	0.40	2.95
7124199 0:57	0.35	0.65	1.23	2.13	0.33	0.33	5.00
7/24/99 1: 17	0.20	0.60	1.10	1.23	0.28	0.58	3.98
7/24/99 1: 37	0.20	0.38	0.83	1.38	0.45	0.58	3.80
7/24/99 1: 57	0.15	0.35	0.85	1.00	0.15	0.65	3.15
7/24/99 2: 17	0.25	0.23	0.75	1.25	0.25	0.28	3.00
7/24/99 2:37	0.05	0.10	0.80	0.90	0.13	0.18	2.15
7/24/99 2: 57	0.35	0.38	1.20	1.40	0.45	0.53	4.30
7124199 3: 17	0.18	0.25	0.83	1.30	0.38	0.33	3.25
7/24/99 3: 37	0.28	0.33	1.00	1.50	0.30	0.58	3.98
7/24/99 3:57	0.05	0.33	0.93	1.45	0.30	0.60	3.65
7124199 4: 17	0.25	0.40	1.38	1.80	0.55	0.65	5.03
7124199 4: 37	0.15	0.20	0.73	0.90	0.20	0.15	2.33
7124199 4:57	0.10	0.20	1.23	1.33	0.25	0.25	3.35
7124199 5: 17	0.40	0.48	1.25	1.73	0.68	0.78	5.30
7124199 5:37	0.25	0.28	1.23	1.10	0.30	0.60	3.75
7/24/99 5:57	0.10	0.18	1.18	1.30	0.25	0.33	3.33
7124199 6: 17	0.05	0.15	1.00	1.35	0.25	0.50	3.30
7/24/99 6: 37	0.28	0.40	0.93	1.53	0.30	0.53	3.95
7/24/99 6:57	0.13	0.28	1.10	1.33	0.43	0.38	3.63
7/24/99 7: 17	0.25	0.28	1.05	1.05	0.35	0.40	3.38
7/24/99 7: 37	2.33	2.65	4.53	6.63	1.75	2.68	20.55
7/24/99 7:57	0.15	0.25	1.45	1.30	0.40	0.25	3.80
7/24/99 8: 17	3.58	4.40	24.20	28.33	6.30	6.90	73.70
7/24/99 8:37	1.35	1.45	3.90	5.78	1.63	1.95	16.05
7/24/99 8: 57	0.83	1.53	2.70	4.33	1.40	1.95	12.73
7124199 9: 17	0.83	1.30	1.98	3.10	1.25	1.15	9.60
7124199 9:37	0.75	0.65	1.80	2.63	0.85	1.58	8.25
7/24/99 9:57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/24/99 10: 17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/24/99 10:37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/24/99 10:57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/27/99 14:32	1.00	0.73	1.63	2.35	0.75	0.93	7.38
7/27/99 14:52	0.60	0.53	0.78	1.33	0.35	0.68	4.25
7/27/99 15: 12	0.50	0.40	0.45	0.70	0.28	0.48	2.80
7/27/99 15:32	0.35	0.18	0.28	0.70	0.20	0.38	2.08
7/27/99 15:52	0.35	0.30	0.25	0.28	0.13	0.25	1.55
7/27/99 16:12	0.25	0.13	0.28	0.43	0.05	0.18	1.30
7/27/99 16:32	0.23	0.03	0.15	0.23	0.03	0.13	0.78
7/27/99 16:52	0.33	0.15	0.20	0.23	0.13	0.05	1.08

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7/27/99 17:12	0.08	0.03	0.20	0.23	0.05	0.10	0.68
7/27/99 17:32	0.08	0.13	0.25	0.15	0.03	0.03	0.65
7/27/99 17:52	0.08	0.00	0.03	0.20	0.05	0.05	0.40
7/27/99 18:12	0.13	0.03	0.15	0.25	0.03	0.13	0.70
7/27/99 18:32	0.08	0.10	0.08	0.10	0.00	0.13	0.48
7/27/99 18:52	0.10	0.05	0.05	0.18	0.08	0.05	0.50
7/27/99 19:12	0.10	0.05	0.03	0.15	0.00	0.05	0.38
7/27/99 19:32	0.13	0.03	0.08	0.08	0.05	0.10	0.45
7/27/99 19:52	0.08	0.08	0.13	0.05	0.00	0.00	0.33
7/27/99 20:12	0.15	0.08	0.08	0.08	0.03	0.03	0.43
7/27/99 20:32	0.05	0.03	0.08	0.20	0.03	0.15	0.53
7/27/99 20:52	0.05	0.05	0.10	0.15	0.03	0.05	0.43
7/27/99 21:12	0.03	0.03	0.03	0.13	0.05	0.03	0.28
7/27/99 21:32	0.05	0.13	0.05	0.08	0.00	0.00	0.30
7/27/99 21:52	0.00	0.05	0.10	0.10	0.03	0.05	0.33
7/27/99 22:12	0.05	0.03	0.00	0.13	0.00	0.03	0.23
7/27/99 22:32	0.05	0.00	0.05	0.08	0.00	0.03	0.20
7/27/99 22:52	0.13	0.03	0.05	0.10	0.03	0.03	0.35
7/27/99 23:12	0.08	0.03	0.08	0.08	0.03	0.03	0.30
7/27/99 23:32	0.05	0.05	0.10	0.25	0.05	0.13	0.63
7/27/99 23:52	0.03	0.03	0.05	0.08	0.00	0.08	0.25
7/28/99 0:12	0.13	0.00	0.03	0.00	0.00	0.00	0.15
7/28/99 0:32	0.10	0.03	0.08	0.05	0.03	0.05	0.33
7/28/99 0:52	0.03	0.05	0.13	0.13	0.05	0.03	0.40
7/28/99 1:12	0.00	0.00	0.05	0.13	0.00	0.13	0.30
7/28/99 1:32	0.03	0.00	0.05	0.13	0.03	0.03	0.25
7/28/99 1:52	0.00	0.00	0.00	0.03	0.03	0.08	0.13
7/28/99 2:12	0.05	0.05	0.08	0.08	0.05	0.05	0.35
7/28/99 2:32	0.00	0.00	0.05	0.03	0.00	0.03	0.10
7/28/99 2:52	0.00	0.05	0.03	0.00	0.00	0.03	0.10
7/28/99 3:12	0.00	0.00	0.03	0.03	0.05	0.00	0.10
7/28/99 3:32	0.05	0.05	0.08	0.03	0.03	0.00	0.23
7/28/99 3:52	0.03	0.08	0.10	0.03	0.00	0.05	0.28
7/28/99 4:12	0.03	0.03	0.13	0.13	0.03	0.00	0.33
7/28/99 4:32	0.03	0.03	0.05	0.15	0.03	0.10	0.38
7/28/99 4:52	0.03	0.05	0.03	0.00	0.00	0.00	0.10
7/28/99 5:12	0.03	0.00	0.03	0.05	0.00	0.05	0.15
7/28/99 5:32	0.05	0.08	0.10	0.20	0.05	0.03	0.50
7/28/99 5:52	0.03	0.03	0.08	0.23	0.00	0.03	0.38
7/28/99 6:12	0.00	0.03	0.05	0.00	0.00	0.00	0.08
7/28/99 6:32	0.03	0.03	0.00	0.00	0.00	0.00	0.05
7/28/99 6:52	0.08	0.00	0.05	0.00	0.00	0.03	0.15
7/28/99 7:12	0.00	0.03	0.00	0.05	0.00	0.00	0.08
7/28/99 7:32	0.00	0.03	0.03	0.05	0.03	0.00	0.13
7/28/99 7:52	0.00	0.03	0.00	0.08	0.03	0.00	0.13
7/28/99 8:12	0.03	0.00	0.08	0.03	0.00	0.03	0.15
7/28/99 8:32	0.05	0.03	0.00	0.08	0.00	0.03	0.18
7/28/99 8:52	0.03	0.03	0.03	0.03	0.00	0.00	0.10

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7/28/99 9:12	0.00	0.00	0.08	0.08	0.05	0.00	0.20
7/28/99 9:32	0.03	0.00	0.00	0.08	0.03	0.00	0.13
7/28/99 9:52	0.00	0.03	0.08	0.03	0.03	0.00	0.15
7/28/99 10:12	2.05	2.45	9.48	11.85	2.98	3.78	32.58
7/28/99 10:32	0.33	0.38	0.43	0.73	0.25	0.28	2.38
7/28/99 10:52	0.03	0.00	0.13	0.05	0.08	0.08	0.35
7/28/99 11:12	0.05	0.10	0.05	0.00	0.00	0.03	0.23
7/28/99 11:32	0.00	0.00	0.08	0.00	0.00	0.03	0.10
7/28/99 11:52	41.43	55.38	51.68	100.48	36.60	56.85	344.40
7/28/99 12:12	1.60	2.15	7.38	9.85	2.35	3.08	26.40
7/28/99 12:32	0.75	1.00	2.25	3.60	1.23	1.30	10.13
7/28/99 12:52	0.55	0.88	1.55	2.95	0.70	1.15	7.78
7/28/99 13:12	0.68	0.73	1.05	1.95	0.48	0.80	5.68
7/28/99 13:32	0.23	0.35	0.50	1.43	0.23	0.38	3.10
7/28/99 13:52	0.15	0.28	0.55	0.80	0.25	0.33	2.35
7/28/99 14:12	0.18	0.15	0.60	0.98	0.13	0.33	2.35
7/28/99 14:32	0.23	0.45	2.08	2.78	0.75	0.65	6.93
7/28/99 14:52	0.03	0.20	0.40	0.70	0.20	0.23	1.75
7/28/99 15:12	0.05	0.33	0.53	0.78	0.15	0.28	2.10
7/28/99 15:32	0.10	0.20	0.53	0.78	0.20	0.25	2.05
7/28/99 15:52	0.15	0.30	0.48	0.83	0.23	0.18	2.15
7/28/99 16:12	0.10	0.25	0.48	0.53	0.28	0.18	1.80
7/28/99 16:32	0.13	0.25	0.50	0.53	0.15	0.25	1.80
7/28/99 16:52	0.03	0.08	0.33	0.40	0.08	0.18	1.08
7/28/99 17:12	0.03	0.13	0.48	0.53	0.23	0.25	1.63
7/28/99 17:32	0.05	0.15	0.30	0.88	0.15	0.20	1.73
7/28/99 17:52	0.13	0.18	0.38	0.88	0.20	0.48	2.23
7/28/99 18:12	0.15	0.38	0.70	1.05	0.23	0.45	2.95
7/28/99 18:32	0.05	0.13	0.55	0.65	0.08	0.18	1.63
7/28/99 18:52	0.13	0.20	0.30	0.73	0.18	0.28	1.80
7/28/99 19:12	0.10	0.10	0.45	0.43	0.13	0.08	1.28
7/28/99 19:32	0.08	0.08	0.18	0.43	0.13	0.10	0.98
7/28/99 19:52	0.00	0.13	0.35	0.65	0.03	0.10	1.25
7/28/99 20:12	0.10	0.05	0.35	0.50	0.08	0.18	1.25
7/28/99 20:32	0.08	0.13	0.30	0.43	0.08	0.15	1.15
7/28/99 20:52	0.03	0.05	0.30	0.30	0.13	0.08	0.88
7/28/99 21:12	0.05	0.03	0.25	0.25	0.13	0.15	0.85
7/28/99 21:32	0.05	0.03	0.23	0.20	0.05	0.08	0.63
7/28/99 21:52	0.03	0.18	0.60	0.73	0.18	0.13	1.83
7/28/99 22:12	0.08	0.08	0.38	0.40	0.18	0.10	1.20
7/28/99 22:32	0.03	0.10	0.15	0.28	0.05	0.23	0.83
7/28/99 22:52	0.05	0.00	0.33	0.15	0.13	0.15	0.80
7/28/99 23:12	0.00	0.03	0.13	0.23	0.05	0.00	0.43
7/28/99 23:32	0.03	0.03	0.20	0.20	0.08	0.03	0.55
7/28/99 23:52	0.05	0.10	0.13	0.23	0.03	0.18	0.70
7/29/99 0:12	0.03	0.05	0.03	0.38	0.03	0.03	0.53
7/29/99 0:32	0.03	0.08	0.23	0.35	0.05	0.08	0.80
7/29/99 0:52	0.00	0.05	0.08	0.23	0.20	0.10	0.65



Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7/29/99 1:12	0.05	0.00	0.28	0.18	0.10	0.05	0.65
7/29/99 1:32	0.03	0.08	0.20	0.30	0.08	0.13	0.80
7/29/99 1:52	0.05	0.10	0.28	0.20	0.00	0.05	0.68
7/29/99 2:12	0.03	0.05	0.15	0.25	0.08	0.10	0.65
7/29/99 2:32	0.00	0.10	0.23	0.33	0.00	0.03	0.68
7/29/99 2:52	0.03	0.13	0.13	0.30	0.05	0.10	0.73
7/29/99 3:12	0.08	0.00	0.08	0.10	0.03	0.03	0.30
7/29/99 3:32	0.03	0.15	0.45	0.53	0.13	0.20	1.48
7/29/99 3:52	0.03	0.05	0.15	0.15	0.03	0.03	0.43
7/29/99 4:12	0.05	0.03	0.18	0.43	0.05	0.08	0.80
7/29/99 4:32	0.03	0.00	0.08	0.08	0.03	0.00	0.20
7/29/99 4:52	0.00	0.03	0.23	0.38	0.00	0.10	0.73
7/29/99 5:12	0.10	0.05	0.05	0.28	0.05	0.15	0.68
7/29/99 5:32	0.05	0.10	0.13	0.30	0.03	0.13	0.73
7/29/99 5:52	0.03	0.00	0.25	0.18	0.08	0.08	0.60
7/29/99 6:12	0.05	0.03	0.08	0.18	0.05	0.10	0.48
7/29/99 6:32	0.00	0.03	0.08	0.08	0.00	0.00	0.18
7/29/99 6:52	0.03	0.03	0.18	0.15	0.10	0.08	0.55
7/29/99 7:12	0.05	0.08	0.28	0.30	0.05	0.08	0.83
7/29/99 7:32	0.00	0.00	0.13	0.20	0.05	0.05	0.43
7/29/99 7:52	0.00	0.03	0.20	0.23	0.10	0.08	0.63
7/29/99 8:12	0.05	0.20	0.25	0.28	0.10	0.10	0.98
7/29/99 8:32	0.05	0.05	0.08	0.05	0.00	0.10	0.33
7/29/99 8:52	0.00	0.03	0.13	0.13	0.03	0.08	0.38
7/29/99 9:12	0.10	0.25	0.35	0.43	0.20	0.13	1.45
7/29/99 9:32	0.08	0.10	0.20	0.33	0.05	0.05	0.80
7/29/99 9:52	0.00	0.10	0.18	0.15	0.00	0.00	0.43
7/29/99 10:12	#####	1248.88	1050.15	2148.65	777.80	1316.75	999.00
7/29/99 10:32	0.73	1.83	13.53	16.63	3.48	2.78	38.95
7/29/99 10:52	70.20	53.20	65.88	109.20	32.80	51.93	383.20
7/29/99 11:12	1.93	1.38	7.78	9.38	1.65	2.38	24.48
7/29/99 11:32	0.55	0.88	1.95	2.85	0.73	1.13	8.08
7/29/99 11:52	0.33	0.53	1.98	2.43	0.53	0.90	6.68
7/29/99 12:12	0.23	0.38	0.78	1.45	0.35	0.38	3.55
7/29/99 12:32	0.23	0.25	0.70	0.83	0.33	0.55	2.88
7/29/99 12:52	0.48	0.33	0.63	1.35	0.20	0.38	3.35
7/29/99 13:12	0.18	0.30	1.03	0.85	0.38	0.43	3.15
7/29/99 13:32	0.03	0.15	0.40	0.40	0.23	0.25	1.45
7/29/99 13:52	0.10	0.05	0.48	0.78	0.15	0.23	1.78
7/29/99 14:12	0.10	0.25	0.58	0.83	0.38	0.28	2.40
7/29/99 14:32	0.13	0.15	0.53	0.80	0.13	0.15	1.88
7/29/99 14:52	0.10	0.13	0.23	0.23	0.18	0.15	1.00
7/29/99 15:12	0.73	0.28	0.48	0.40	0.05	0.23	2.15
7/29/99 15:32	0.18	0.23	0.45	0.68	0.13	0.23	1.88
7/29/99 15:52	0.15	0.23	0.33	0.65	0.15	0.18	1.68
7/29/99 16:12	0.13	0.35	0.35	0.73	0.15	0.23	1.93
7/29/99 16:32	0.20	0.33	0.28	0.75	0.10	0.18	1.83
7/29/99 16:52	0.58	0.48	0.90	1.88	0.73	0.80	5.35

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7/30/99 9:03	0.03	0.10	0.20	0.30	0.05	0.10	0.78
7/30/99 9:23	0.03	0.03	0.08	0.13	0.03	0.03	0.30
7/30/99 9:43	0.00	0.03	0.08	0.05	0.08	0.03	0.25
7/30/99 10:03	0.10	0.03	0.18	0.33	0.10	0.03	0.75
7/30/99 10:23	0.05	0.05	0.03	0.18	0.00	0.03	0.33
7/30/99 10:43	0.03	0.03	0.18	0.15	0.05	0.10	0.53
7/30/99 11:03	0.08	0.03	0.08	0.23	0.03	0.08	0.50
7/30/99 11:23	0.03	0.03	0.13	0.23	0.03	0.08	0.50
7/30/99 11:43	0.00	0.03	0.10	0.20	0.05	0.03	0.40
7/30/99 12:03	0.00	0.00	0.08	0.15	0.00	0.00	0.23
7/30/99 12:23	0.05	0.03	0.03	0.13	0.03	0.10	0.35
7/30/99 12:43	0.00	0.00	0.05	0.13	0.00	0.00	0.18
7/30/99 13:03	0.00	0.05	0.05	0.08	0.03	0.00	0.20
7/30/99 13:23	0.00	0.00	0.10	0.05	0.00	0.05	0.20
7/30/99 13:43	0.03	0.03	0.15	0.13	0.10	0.03	0.45
7/30/99 14:03	0.00	0.03	0.08	0.05	0.05	0.00	0.20
7/30/99 14:23	0.00	0.03	0.13	0.10	0.03	0.00	0.28
7/30/99 14:43	0.08	0.00	0.15	0.18	0.03	0.08	0.50
7/30/99 15:03	0.00	0.00	0.13	0.08	0.03	0.03	0.25
7/30/99 15:23	0.00	0.00	0.15	0.13	0.05	0.10	0.43
7/30/99 15:43	0.03	0.05	0.10	0.10	0.05	0.00	0.33
7/30/99 16:03	0.00	0.05	0.13	0.05	0.03	0.00	0.25
7/30/99 16:23	0.10	0.08	0.25	0.13	0.15	0.20	0.90
7/31/99 0:03	0.00	0.03	0.00	0.03	0.00	0.03	0.08
7/31/99 0:23	0.00	0.00	0.10	0.08	0.00	0.00	0.18
7/31/99 0:43	0.08	0.00	0.10	0.08	0.00	0.03	0.28
7/31/99 1:03	0.05	0.05	0.10	0.05	0.00	0.05	0.30
7/31/99 1:23	0.00	0.03	0.08	0.03	0.00	0.00	0.13
7/31/99 1:43	0.03	0.03	0.10	0.13	0.10	0.05	0.43
7/31/99 2:03	0.00	0.03	0.03	0.05	0.00	0.03	0.13
7/31/99 2:23	0.00	0.00	0.05	0.08	0.03	0.00	0.15
7/31/99 2:43	0.03	0.00	0.03	0.08	0.03	0.03	0.18
7/31/99 3:03	0.03	0.00	0.03	0.13	0.03	0.00	0.20
7/31/99 3:23	0.03	0.00	0.08	0.20	0.10	0.00	0.40
7/31/99 3:43	0.00	0.00	0.00	0.05	0.00	0.03	0.08
7/31/99 4:03	0.03	0.00	0.03	0.15	0.00	0.00	0.20
7/31/99 4:23	0.00	0.00	0.10	0.13	0.03	0.05	0.30
7/31/99 4:43	0.00	0.00	0.00	0.05	0.00	0.00	0.05
7/31/99 5:03	0.05	0.03	0.05	0.08	0.03	0.03	0.25
7/31/99 5:23	0.00	0.05	0.05	0.13	0.03	0.08	0.33
7/31/99 5:43	0.03	0.05	0.05	0.08	0.03	0.03	0.25
7/31/99 6:03	0.05	0.05	0.13	0.08	0.00	0.05	0.35
7/31/99 6:23	0.00	0.00	0.08	0.08	0.00	0.00	0.15
7/31/99 6:43	0.00	0.00	0.05	0.03	0.00	0.08	0.15
7/31/99 7:03	0.00	0.00	0.03	0.05	0.00	0.03	0.10
7/31/99 7:23	0.00	0.00	0.05	0.13	0.03	0.03	0.23
7/31/99 7:43	0.00	0.00	0.03	0.05	0.00	0.00	0.08
7/31/99 8:03	0.00	0.00	0.05	0.15	0.03	0.03	0.25

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Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
7/31/99 8:23	0.05	0.15	0.15	0.18	0.08	0.35	0.95
7/31/99 8:43	0.00	0.03	0.05	0.05	0.00	0.03	0.15
7131199 9:03	0.00	0.00	0.00	0.05	0.00	0.05	0.10
7/31/99 9:23	0.00	0.00	0.08	0.05	0.00	0.00	0.13
7/31/99 9:43	0.00	0.05	0.05	0.00	0.00	0.05	0.15
7/31/99 10:03	0.00	0.00	0.08	0.03	0.03	0.00	0.13
7/31/99 10:23	0.00	0.00	0.08	0.08	0.00	0.13	0.28
7/31/99 10:43	0.00	0.05	0.15	0.05	0.03	0.03	0.30
7/31/99 11:03	0.03	0.00	0.03	0.10	0.05	0.05	0.25
7/31/99 11:23	0.03	0.05	0.08	0.18	0.05	0.08	0.45
7/31/99 11:43	0.00	0.00	0.10	0.08	0.05	0.00	0.23
7/31/99 12:03	0.00	0.00	0.08	0.03	0.00	0.03	0.13
7131199 12:23	0.00	0.13	0.10	0.20	0.00	0.20	0.63
7/31/99 12:43	0.00	0.03	0.00	0.15	0.03	0.03	0.23
7/31/99 13:03	0.00	0.00	0.10	0.03	0.00	0.03	0.15
7/31/99 13:23	0.00	0.00	0.10	0.18	0.00	0.03	0.30
7/31/99 13:43	0.03	0.00	0.10	0.08	0.03	0.00	0.23
7/31/99 14:03	0.00	0.00	0.13	0.10	0.05	0.00	0.28
7/31/99 14:23	0.00	0.03	0.15	0.13	0.05	0.00	0.35
7/31/99 14:43	0.00	0.03	0.03	0.18	0.05	0.00	0.28
7/31/99 15:03	0.05	0.05	0.05	0.08	0.03	0.08	0.33
7/31/99 15:23	0.08	0.03	0.08	0.05	0.03	0.00	0.25
7/31/99 15:43	0.00	0.05	0.00	0.05	0.05	0.03	0.18
7131199 16:03	0.00	0.00	0.03	0.05	0.00	0.00	0.08
7/31/99 16:23	0.00	0.08	0.25	0.35	0.13	0.28	1.08
7/31/99 16:43	0.05	0.00	0.08	0.13	0.00	0.00	0.25
7/31/99 17:03	0.03	0.00	0.10	0.03	0.00	0.00	0.15
7/31/99 17:23	0.00	0.03	0.08	0.10	0.05	0.03	0.28
7/31/99 17:43	0.03	0.03	0.13	0.10	0.10	0.08	0.45
7/31/99 18:03	0.00	0.00	0.08	0.05	0.00	0.00	0.13
7/31/99 18:23	0.08	0.00	0.08	0.13	0.00	0.13	0.40
7/31/99 18:43	0.00	0.00	0.03	0.03	0.03	0.00	0.08
7/31/99 19:03	0.00	0.03	0.03	0.15	0.05	0.00	0.25
7/31/99 19:23	0.00	0.00	0.05	0.08	0.03	0.00	0.15
7/31/99 19:43	0.00	0.05	0.03	0.13	0.03	0.00	0.23
7/31/99 20:03	0.08	0.08	0.15	0.20	0.08	0.05	0.63
7/31/99 20:23	0.00	0.00	0.05	0.03	0.10	0.03	0.20
7/31/99 20:43	0.03	0.03	0.05	0.25	0.10	0.03	0.48
7/31/99 21:03	0.00	0.03	0.08	0.15	0.05	0.08	0.38
7/31/99 21:23	0.03	0.00	0.00	0.03	0.03	0.05	0.13
7/31/99 21:43	0.00	0.03	0.08	0.18	0.03	0.05	0.35
7131199 22:03	0.00	0.03	0.08	0.08	0.00	0.03	0.20
7/31/99 22:23	0.03	0.03	0.10	0.18	0.03	0.10	0.45
7/31/99 22:43	0.00	0.00	0.10	0.00	0.00	0.03	0.13
7131199 23:03	0.00	0.00	0.08	0.03	0.00	0.05	0.15
7/31/99 23:23	0.00	0.03	0.10	0.18	0.10	0.03	0.43
7/31/99 23:43	0.00	0.03	0.08	0.10	0.08	0.03	0.30
8/1/99 0:03	0.00	0.00	0.03	0.08	0.00	0.03	0.13

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/1/99 0:23	0.03	0.00	0.28	0.28	0.10	0.10	0.78
8/1/99 0:43	0.00	0.00	0.05	0.13	0.03	0.03	0.23
8/1/99 1:03	0.03	0.00	0.05	0.03	0.03	0.03	0.15
8/1/99 1:23	0.00	0.00	0.00	0.18	0.03	0.00	0.20
8/1/99 1:43	0.00	0.00	0.05	0.00	0.03	0.03	0.10
8/1/99 2:03	0.00	0.03	0.10	0.13	0.05	0.05	0.35
8/1/99 2:23	0.00	0.00	0.05	0.03	0.00	0.00	0.08
8/1/99 2:43	0.00	0.03	0.18	0.15	0.00	0.03	0.38
8/1/99 3:03	0.00	0.00	0.03	0.05	0.03	0.00	0.10
8/1/99 3:23	0.00	0.03	0.08	0.08	0.00	0.03	0.20
8/1/99 3:43	0.00	0.00	0.10	0.08	0.03	0.00	0.20
8/1/99 4:03	0.03	0.00	0.15	0.13	0.03	0.00	0.33
8/1/99 4:23	0.00	0.03	0.13	0.03	0.08	0.00	0.25
8/1/99 4:43	0.00	0.00	0.10	0.10	0.00	0.03	0.23
8/1/99 5:03	0.03	0.03	0.00	0.15	0.03	0.05	0.28
8/1/99 5:23	0.00	0.00	0.08	0.10	0.03	0.03	0.23
8/1/99 5:43	0.00	0.00	0.03	0.00	0.00	0.03	0.05
8/1/99 6:03	0.00	0.00	0.08	0.20	0.00	0.00	0.28
8/1/99 6:23	0.00	0.00	0.03	0.10	0.05	0.03	0.20
8/1/99 6:43	0.08	0.00	0.13	0.10	0.00	0.03	0.33
8/1/99 7:03	0.00	0.00	0.03	0.03	0.00	0.05	0.10
8/1/99 7:23	0.00	0.03	0.05	0.10	0.00	0.00	0.18
8/1/99 7:43	0.08	0.15	0.23	0.30	0.10	0.08	0.93
8/1/99 8:03	0.00	0.00	0.00	0.03	0.05	0.05	0.13
8/1/99 8:23	0.00	0.00	0.03	0.05	0.00	0.00	0.08
8/1/99 8:43	0.00	0.00	0.08	0.13	0.05	0.05	0.30
8/1/99 9:03	0.00	0.03	0.13	0.23	0.05	0.08	0.50
8/1/99 9:23	0.03	0.00	0.05	0.23	0.00	0.05	0.35
8/1/99 9:43	0.00	0.00	0.05	0.10	0.03	0.03	0.20
8/1/99 10:03	0.05	0.03	0.08	0.08	0.03	0.05	0.30
8/1/99 10:23	0.00	0.00	0.03	0.08	0.00	0.00	0.10
8/1/99 10:43	0.00	0.03	0.03	0.05	0.00	0.00	0.10
8/1/99 11:03	0.03	0.00	0.03	0.13	0.03	0.03	0.23
8/1/99 11:23	0.03	0.05	0.08	0.10	0.00	0.00	0.25
8/1/99 11:43	0.03	0.00	0.03	0.05	0.00	0.00	0.10
8/1/99 12:03	0.00	0.00	0.08	0.15	0.03	0.03	0.28
8/1/99 12:23	0.00	0.03	0.15	0.05	0.00	0.03	0.25
8/1/99 12:43	0.00	0.00	0.05	0.05	0.00	0.00	0.10
8/1/99 13:03	0.00	0.00	0.03	0.08	0.00	0.00	0.10
8/1/99 13:23	0.03	0.05	0.15	0.05	0.03	0.03	0.33
8/1/99 13:43	0.00	0.10	0.10	0.10	0.00	0.05	0.35
8/1/99 14:03	0.00	0.03	0.10	0.20	0.05	0.03	0.40
8/1/99 14:23	0.00	0.00	0.08	0.08	0.00	0.00	0.15
8/1/99 14:43	0.00	0.03	0.03	0.15	0.00	0.00	0.20
8/1/99 15:03	0.00	0.03	0.10	0.13	0.00	0.03	0.28
8/1/99 15:23	0.00	0.00	0.05	0.00	0.00	0.03	0.08
8/1/99 15:43	0.00	0.00	0.05	0.03	0.03	0.00	0.10
8/1/99 16:03	0.05	0.00	0.08	0.08	0.00	0.03	0.23

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/1/99 16:23	0.00	0.00	0.05	0.05	0.00	0.05	0.15
8/1/99 16:43	0.00	0.00	0.00	0.08	0.05	0.08	0.20
8/1/99 17:03	0.00	0.03	0.05	0.13	0.05	0.00	0.25
8/1/99 17:23	0.00	0.00	0.08	0.03	0.00	0.03	0.13
8/1/99 17:43	0.00	0.18	0.23	0.25	0.18	0.10	0.93
8/1/99 18:03	0.03	0.00	0.00	0.10	0.00	0.05	0.18
8/1/99 18:23	0.00	0.00	0.10	0.20	0.03	0.03	0.35
8/1/99 18:43	0.00	0.00	0.08	0.08	0.00	0.03	0.18
8/1/99 19:03	0.00	0.03	0.10	0.08	0.00	0.05	0.25
8/1/99 19:23	0.00	0.03	0.03	0.08	0.03	0.08	0.23
8/1/99 19:43	0.00	0.03	0.03	0.13	0.00	0.05	0.23
8/1/99 20:03	0.00	0.00	0.03	0.10	0.00	0.00	0.13
8/1/99 20:23	0.00	0.00	0.05	0.10	0.00	0.13	0.28
8/1/99 20:43	0.00	0.00	0.10	0.03	0.03	0.08	0.23
8/1/99 21:03	0.05	0.03	0.10	0.15	0.00	0.05	0.38
8/1/99 21:23	0.00	0.03	0.05	0.05	0.00	0.05	0.18
8/1/99 21:43	0.00	0.00	0.08	0.03	0.00	0.00	0.10
8/1/99 22:03	0.00	0.03	0.03	0.10	0.03	0.05	0.23
8/1/99 22:23	0.00	0.05	0.20	0.15	0.08	0.03	0.50
8/1/99 22:43	0.00	0.03	0.25	0.08	0.00	0.00	0.35
8/1/99 23:03	0.00	0.03	0.05	0.10	0.00	0.00	0.18
8/1/99 23:23	0.00	0.00	0.03	0.03	0.00	0.05	0.10
8/1/99 23:43	0.00	0.03	0.03	0.08	0.00	0.00	0.13
8/2/99 0:03	0.00	0.03	0.05	0.15	0.03	0.03	0.28
8/2/99 0:23	0.00	0.00	0.00	0.05	0.00	0.05	0.10
8/2/99 0:43	0.00	0.03	0.13	0.08	0.03	0.03	0.28
8/2/99 1:03	0.03	0.00	0.08	0.05	0.00	0.00	0.15
8/2/99 1:23	0.00	0.03	0.00	0.03	0.00	0.00	0.05
8/2/99 1:42	0.00	0.00	0.10	0.20	0.08	0.00	0.38
8/2/99 2:02	0.00	0.00	0.03	0.08	0.03	0.05	0.18
8/2/99 2:22	0.00	0.03	0.05	0.03	0.00	0.00	0.10
8/2/99 2:42	0.00	0.03	0.00	0.05	0.00	0.00	0.08
8/2/99 3:02	0.03	0.03	0.05	0.05	0.03	0.00	0.18
8/2/99 3:22	0.00	0.03	0.03	0.03	0.00	0.00	0.08
8/2/99 3:42	0.00	0.00	0.05	0.05	0.03	0.03	0.15
8/2/99 4:02	0.00	0.03	0.10	0.13	0.05	0.03	0.33
8/2/99 4:22	0.00	0.03	0.05	0.00	0.00	0.00	0.08
8/2/99 4:42	0.00	0.03	0.03	0.08	0.00	0.08	0.20
8/2/99 5:02	0.03	0.00	0.05	0.03	0.00	0.00	0.10
8/2/99 5:22	0.00	0.00	0.05	0.03	0.03	0.08	0.18
8/2/99 5:42	0.00	0.03	0.00	0.03	0.03	0.03	0.10
8/2/99 6:02	0.00	0.10	0.08	0.10	0.00	0.08	0.35
8/2/99 6:22	0.00	0.00	0.05	0.00	0.03	0.00	0.08
8/2/99 6:42	0.00	0.03	0.03	0.10	0.00	0.08	0.23
8/2/99 7:02	0.00	0.10	0.05	0.15	0.05	0.03	0.38
8/2/99 7:22	0.00	0.03	0.03	0.00	0.00	0.08	0.13
8/2/99 7:42	0.00	0.00	0.05	0.05	0.00	0.00	0.10
8/2/99 8:02	0.00	0.00	0.03	0.00	0.00	0.03	0.05

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/2/99 8:22	0.00	0.00	0.05	0.03	0.00	0.03	0.10
8/2/99 8:42	0.00	0.00	0.08	0.05	0.00	0.00	0.13
8/2/99 9:02	0.03	0.00	0.03	0.10	0.03	0.03	0.20
8/2/99 9:22	0.03	0.00	0.03	0.00	0.00	0.00	0.05
8/2/99 9:42	0.03	0.03	0.03	0.05	0.00	0.00	0.13
8/2/99 10:02	0.00	0.00	0.08	0.03	0.03	0.00	0.13
8/2/99 10:22	0.00	0.03	0.05	0.03	0.05	0.08	0.23
8/2/99 10:42	0.03	0.05	0.03	0.05	0.00	0.05	0.20
8/2/99 11:02	0.03	0.00	0.08	0.05	0.00	0.03	0.18
8/2/99 11:22	0.00	0.05	0.23	0.23	0.10	0.00	0.60
8/2/99 11:42	0.00	0.03	0.13	0.13	0.00	0.05	0.33
8/2/99 12:02	0.00	0.00	0.08	0.08	0.05	0.03	0.23
8/2/99 12:22	0.00	0.03	0.08	0.05	0.03	0.03	0.20
8/2/99 12:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/99 13:02	0.00	0.00	0.03	0.00	0.03	0.03	0.08
8/2/99 13:22	0.00	0.10	0.20	0.23	0.05	0.13	0.70
8/2/99 13:42	0.00	0.00	0.05	0.05	0.00	0.05	0.15
8/2/99 14:02	0.00	0.03	0.00	0.20	0.08	0.03	0.33
8/2/99 14:22	0.25	0.60	4.88	7.13	1.75	1.53	16.13
8/2/99 14:42	0.00	0.03	0.13	0.03	0.00	0.05	0.23
8/2/99 15:02	0.00	0.03	0.05	0.03	0.00	0.00	0.10
8/2/99 15:22	0.00	0.05	0.03	0.08	0.05	0.00	0.20
8/2/99 15:42	0.03	0.03	0.00	0.08	0.00	0.03	0.15
8/2/99 16:02	0.03	0.00	0.03	0.08	0.00	0.00	0.13
8/2/99 16:22	0.00	0.03	0.08	0.00	0.03	0.00	0.13
8/2/99 16:42	0.00	0.05	0.10	0.13	0.15	0.03	0.45
8/2/99 17:02	0.00	0.00	0.05	0.10	0.03	0.03	0.20
8/2/99 17:22	0.03	0.00	0.05	0.08	0.00	0.00	0.15
8/2/99 17:42	0.00	0.05	0.13	0.13	0.03	0.00	0.33
8/2/99 18:02	0.00	0.00	0.05	0.05	0.03	0.00	0.13
8/2/99 18:22	0.00	0.00	0.03	0.05	0.03	0.03	0.13
8/2/99 18:42	0.00	0.05	0.03	0.10	0.03	0.00	0.20
8/2/99 19:02	0.00	0.00	0.05	0.03	0.00	0.00	0.08
8/2/99 19:22	0.00	0.00	0.13	0.05	0.03	0.05	0.25
8/2/99 19:42	0.00	0.03	0.00	0.08	0.00	0.00	0.10
8/2/99 20:02	0.00	0.00	0.05	0.13	0.03	0.00	0.20
8/2/99 20:22	0.00	0.00	0.15	0.13	0.00	0.00	0.28
8/2/99 20:42	0.00	0.00	0.03	0.10	0.00	0.00	0.13
8/2/99 21:02	0.05	0.00	0.10	0.08	0.00	0.00	0.23
8/2/99 21:22	0.00	0.00	0.10	0.15	0.05	0.03	0.33
8/2/99 21:42	0.00	0.03	0.08	0.10	0.00	0.00	0.20
8/2/99 22:02	0.00	0.05	0.15	0.08	0.00	0.08	0.35
8/2/99 22:22	0.00	0.00	0.03	0.10	0.05	0.00	0.18
8/2/99 22:42	0.00	0.00	0.18	0.05	0.03	0.03	0.28
8/2/99 23:02	0.00	0.00	0.05	0.05	0.00	0.00	0.10
8/2/99 23:22	0.00	0.00	0.08	0.13	0.03	0.08	0.30
8/2/99 23:42	0.00	0.00	0.10	0.05	0.05	0.03	0.23
8/3/99 0:02	0.00	0.03	0.13	0.00	0.03	0.03	0.20

Date	>15.0	10.0-15.0um	2.0-3.0um	3.0-5.0um	5.0-7.0um	7.0-10.0um	Sum of Particles
8/3/99 0:22	0.03	0.00	0.13	0.15	0.00	0.03	0.33
8/3/99 0:42	0.00	0.00	0.08	0.20	0.05	0.00	0.33
8/3/99 1:02	0.00	0.00	0.18	0.10	0.03	0.00	0.30
8/3/99 1:22	0.00	0.03	0.03	0.08	0.03	0.00	0.15
8/3/99 1:42	0.00	0.03	0.05	0.08	0.03	0.03	0.20
8/3/99 2:02	0.00	0.00	0.10	0.08	0.00	0.03	0.20
8/3/99 2:22	0.03	0.00	0.05	0.03	0.00	0.00	0.10
8/3/99 2:42	0.03	0.00	0.08	0.03	0.03	0.05	0.20
8/3/99 3:02	0.00	0.05	0.05	0.08	0.08	0.20	0.45
8/3/99 3:22	0.03	0.00	0.00	0.05	0.00	0.00	0.08
8/3/99 3:42	0.00	0.00	0.03	0.00	0.00	0.03	0.05
8/3/99 4:02	0.00	0.00	0.08	0.03	0.00	0.00	0.10
8/3/99 4:22	0.00	0.00	0.00	0.08	0.00	0.03	0.10
8/3/99 4:42	0.00	0.03	0.03	0.03	0.05	0.00	0.13
8/3/99 5:02	0.00	0.03	0.05	0.05	0.03	0.00	0.15
8/3/99 5:22	0.00	0.03	0.05	0.10	0.10	0.03	0.30
8/3/99 5:42	0.00	0.00	0.03	0.05	0.00	0.00	0.08
8/3/99 6:02	0.00	0.00	0.03	0.03	0.00	0.00	0.05
8/3/99 6:22	0.00	0.03	0.03	0.00	0.00	0.00	0.05
8/3/99 6:42	0.00	0.00	0.05	0.00	0.03	0.00	0.08
8/3/99 7:02	0.03	0.00	0.05	0.10	0.00	0.03	0.20
8/3/99 7:22	0.00	0.00	0.00	0.05	0.03	0.03	0.10
8/3/99 7:42	0.00	0.00	0.05	0.00	0.00	0.00	0.05
8/3/99 8:02	0.00	0.10	0.18	0.33	0.05	0.10	0.75
8/3/99 8:22	0.00	0.05	0.03	0.05	0.00	0.08	0.20
8/3/99 8:42	0.00	0.00	0.05	0.05	0.00	0.00	0.10
8/3/99 9:02	0.00	0.00	0.03	0.05	0.00	0.00	0.08
8/3/99 9:22	0.00	0.03	0.03	0.05	0.03	0.03	0.15
8/3/99 9:42	0.00	0.03	0.10	0.08	0.00	0.00	0.20
8/3/99 10:02	0.03	0.00	0.03	0.05	0.03	0.00	0.13
8/3/99 10:22	0.00	0.00	0.05	0.03	0.00	0.05	0.13
8/3/99 10:42	0.00	0.00	0.00	0.10	0.00	0.03	0.13
8/3/99 11:02	0.00	0.00	0.10	0.08	0.00	0.03	0.20
8/3/99 11:22	0.00	0.03	0.05	0.08	0.00	0.00	0.15
8/3/99 11:42	0.00	0.00	0.08	0.05	0.05	0.05	0.23
8/3/99 12:02	0.00	0.00	0.05	0.08	0.00	0.03	0.15
8/3/99 12:22	0.00	0.00	0.05	0.05	0.00	0.00	0.10
8/3/99 12:42	0.00	0.00	0.00	0.00	0.03	0.03	0.05
8/3/99 13:02	0.00	0.00	0.15	0.15	0.00	0.08	0.38
8/3/99 13:22	0.00	0.00	0.03	0.13	0.03	0.03	0.20
8/3/99 13:42	0.00	0.03	0.13	0.18	0.03	0.00	0.35
8/3/99 14:02	0.18	0.20	0.50	0.85	0.40	0.50	2.63
8/3/99 14:22	0.03	0.03	0.05	0.03	0.00	0.03	0.15
8/3/99 14:42	0.00	0.03	0.08	0.00	0.00	0.00	0.10
8/3/99 15:02	0.00	0.00	0.03	0.05	0.00	0.08	0.15
8/3/99 15:22	0.00	0.05	0.00	0.05	0.00	0.00	0.10
8/3/99 15:42	0.00	0.00	0.03	0.00	0.00	0.00	0.03
8/3/99 16:02	0.00	0.03	0.08	0.08	0.00	0.00	0.18

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/3/99 16:22	0.00	0.03	0.08	0.13	0.00	0.05	0.28
8/3/99 16:42	0.00	0.03	0.00	0.08	0.03	0.03	0.15
8/3/99 17:02	0.00	0.00	0.05	0.13	0.03	0.00	0.20
8/3/99 17:22	0.00	0.08	0.00	0.05	0.00	0.03	0.15
8/3/99 17:42	0.05	0.00	0.05	0.03	0.00	0.00	0.13
8/3/99 18:02	0.00	0.00	0.08	0.08	0.00	0.00	0.15
8/3/99 18:22	0.00	0.00	0.03	0.00	0.00	0.00	0.03
8/3/99 18:42	0.00	0.03	0.08	0.08	0.00	0.08	0.25
8/3/99 19:02	0.03	0.03	0.08	0.08	0.03	0.00	0.23
8/3/99 19:22	0.00	0.00	0.08	0.03	0.00	0.03	0.13
8/3/99 19:42	0.00	0.00	0.15	0.10	0.03	0.00	0.28
8/3/99 20:02	0.05	0.03	0.00	0.05	0.00	0.00	0.13
8/3/99 20:22	0.03	0.00	0.05	0.10	0.03	0.03	0.23
8/3/99 20:42	0.00	0.00	0.05	0.05	0.00	0.00	0.10
8/3/99 21:02	0.03	0.03	0.03	0.05	0.00	0.00	0.13
8/3/99 21:22	0.00	0.00	0.03	0.03	0.00	0.00	0.05
8/3/99 21:42	0.00	0.03	0.13	0.18	0.15	0.03	0.50
8/3/99 22:02	0.00	0.00	0.03	0.00	0.00	0.03	0.05
8/3/99 22:22	0.00	0.03	0.05	0.05	0.03	0.03	0.18
8/3/99 22:42	0.00	0.00	0.08	0.10	0.00	0.00	0.18
8/3/99 23:02	0.00	0.00	0.08	0.13	0.00	0.08	0.28
8/3/99 23:22	0.00	0.00	0.00	0.05	0.00	0.05	0.10
8/3/99 23:42	0.03	0.05	0.13	0.15	0.03	0.00	0.38
8/4/99 0:02	0.00	0.03	0.08	0.15	0.05	0.00	0.30
8/4/99 0:22	0.00	0.03	0.05	0.03	0.05	0.00	0.15
8/4/99 0:42	0.00	0.03	0.03	0.05	0.00	0.05	0.15
8/4/99 1:02	0.00	0.00	0.00	0.13	0.00	0.00	0.13
8/4/99 1:22	0.00	0.03	0.00	0.03	0.00	0.05	0.10
8/4/99 1:42	0.00	0.00	0.03	0.05	0.00	0.05	0.13
8/4/99 2:02	0.00	0.00	0.03	0.03	0.00	0.03	0.08
8/4/99 2:22	0.00	0.05	0.05	0.13	0.00	0.03	0.25
8/4/99 2:42	0.00	0.00	0.10	0.05	0.00	0.03	0.18
8/4/99 3:02	0.00	0.00	0.28	0.23	0.05	0.05	0.60
8/4/99 3:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 3:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 4:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 4:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 4:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 5:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 5:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 5:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 6:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 6:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 6:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 7:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 7:22	17.10	30.88	385.43	421.00	74.03	71.58	1000.00
8/4/99 7:42	0.40	0.35	2.50	2.60	0.45	0.60	6.90
8/4/99 8:02	0.15	0.08	0.70	1.03	0.13	0.15	2.23



Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/4/99 8:22	0.13	0.05	0.35	0.58	0.18	0.10	1.38
8/4/99 8:42	0.15	0.13	0.48	0.33	0.10	0.10	1.28
8/4/99 9:02	0.03	0.08	0.18	0.28	0.08	0.08	0.70
8/4/99 9:22	0.03	0.03	0.23	0.25	0.08	0.05	0.65
8/4/99 9:42	0.03	0.08	0.13	0.33	0.15	0.20	0.90
8/4/99 10:02	0.03	0.05	0.28	0.20	0.08	0.05	0.68
8/4/99 10:22	0.43	0.50	2.68	3.65	0.75	0.73	8.73
8/4/99 10:42	0.03	0.13	0.23	0.30	0.00	0.05	0.73
8/4/99 11:02	0.00	0.00	0.35	0.38	0.08	0.13	0.93
8/4/99 11:22	0.18	0.03	0.10	0.30	0.08	0.15	0.83
8/4/99 11:42	0.05	0.05	0.20	0.18	0.00	0.03	0.50
8/4/99 12:02	0.03	0.08	0.25	0.23	0.05	0.03	0.65
8/4/99 12:22	0.03	0.03	0.10	0.13	0.03	0.03	0.33
8/4/99 12:42	0.05	0.10	0.20	0.20	0.05	0.08	0.68
8/4/99 13:02	0.00	0.03	0.10	0.15	0.05	0.03	0.35
8/4/99 13:22	0.03	0.05	0.10	0.10	0.08	0.03	0.38
8/4/99 13:42	0.00	0.00	0.05	0.08	0.00	0.03	0.15
8/4/99 14:04	0.03	0.03	0.15	0.15	0.00	0.05	0.40
8/4/99 14:24	0.03	0.00	0.05	0.23	0.03	0.10	0.43
8/4/99 14:44	0.05	0.03	0.25	0.20	0.08	0.05	0.65
8/4/99 15:04	0.05	0.03	0.05	0.03	0.03	0.03	0.20
8/4/99 15:24	0.03	0.03	0.08	0.08	0.00	0.00	0.20
8/4/99 15:44	0.03	0.03	0.10	0.10	0.03	0.10	0.38
8/4/99 16:04	0.00	0.00	0.05	0.13	0.03	0.03	0.23
8/4/99 16:24	0.00	0.03	0.08	0.05	0.00	0.05	0.20
8/4/99 16:44	0.03	0.00	0.10	0.10	0.05	0.05	0.33
8/4/99 17:04	0.05	0.00	0.08	0.05	0.05	0.03	0.25
8/4/99 17:24	0.00	0.03	0.03	0.15	0.05	0.03	0.28
8/4/99 17:44	0.00	0.00	0.05	0.15	0.00	0.03	0.23
8/4/99 18:04	0.00	0.00	0.10	0.13	0.00	0.05	0.28
8/4/99 18:24	0.00	0.03	0.10	0.15	0.03	0.08	0.38
8/4/99 18:44	0.00	0.00	0.08	0.10	0.03	0.03	0.23
8/4/99 19:04	0.00	0.00	0.10	0.10	0.03	0.08	0.30
8/4/99 19:24	0.00	0.00	0.05	0.18	0.05	0.13	0.40
8/4/99 19:44	0.08	0.00	0.18	0.05	0.08	0.08	0.45
8/4/99 20:04	0.03	0.03	0.05	0.15	0.03	0.00	0.28
8/4/99 20:24	0.00	0.03	0.08	0.13	0.00	0.15	0.38
8/4/99 20:44	0.03	0.03	0.05	0.15	0.05	0.05	0.35
8/4/99 21:04	0.00	0.03	0.03	0.13	0.03	0.10	0.30
8/4/99 21:24	0.03	0.00	0.10	0.05	0.05	0.00	0.23
8/4/99 21:44	0.03	0.00	0.13	0.08	0.00	0.03	0.25
8/4/99 22:04	0.03	0.00	0.10	0.18	0.03	0.13	0.45
8/4/99 22:24	0.00	0.05	0.08	0.10	0.03	0.00	0.25
8/4/99 22:44	0.03	0.05	0.15	0.18	0.03	0.10	0.53
8/4/99 23:04	0.00	0.03	0.10	0.13	0.03	0.00	0.28
8/4/99 23:24	0.00	0.00	0.05	0.10	0.00	0.00	0.15
8/4/99 23:44	0.03	0.05	0.00	0.03	0.03	0.08	0.20

**McAllen Wastewater Reclamation Project - May Particle Counts**

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
5/7/99 17:40	0.00	0.00	0.30	0.53	0.03	0.10	0.95
5/7/99 18:00	0.00	0.00	0.43	0.18	0.03	0.10	0.73
5/7/99 18:20	0.00	0.00	0.30	0.20	0.03	0.00	0.53
5/7/99 18:40	0.00	0.00	0.18	0.10	0.08	0.05	0.40
5/7/99 19:00	0.00	0.00	0.08	0.30	0.00	0.03	0.40
5/7/99 19:20	0.00	0.00	0.13	0.08	0.08	0.03	0.30
5/7/99 19:40	0.00	0.00	0.05	0.05	0.00	0.03	0.13
5/7/99 20:00	0.00	0.00	0.10	0.13	0.00	0.03	0.25
5/7/99 20:20	0.00	0.00	0.10	0.20	0.05	0.00	0.35
5/7/99 20:40	0.00	0.03	0.13	0.18	0.00	0.03	0.35
5/7/99 21:00	0.00	0.00	0.05	0.10	0.00	0.03	0.18
5/7/99 21:20	0.00	0.00	0.08	0.00	0.00	0.00	0.08
5/7/99 21:40	0.00	0.00	0.03	0.08	0.00	0.00	0.10
5/7/99 22:00	0.00	0.00	0.15	0.15	0.00	0.00	0.30
5/7/99 22:20	0.00	0.00	0.03	0.03	0.05	0.00	0.10
5/7/99 22:40	0.00	0.00	0.03	0.13	0.03	0.00	0.18
5/7/99 23:00	0.00	0.00	0.03	0.03	0.00	0.03	0.08
5/7/99 23:20	0.00	0.00	0.18	0.23	0.05	0.05	0.50
5/7/99 23:40	0.00	0.05	0.53	0.98	0.28	0.23	2.05
5/8/99 0:00	0.03	0.03	0.40	0.70	0.20	0.13	1.48
5/8/99 0:20	0.00	0.00	0.08	0.15	0.03	0.05	0.30
5/8/99 0:40	0.00	0.03	0.05	0.05	0.00	0.03	0.15
5/8/99 1:00	0.00	0.00	0.03	0.05	0.00	0.00	0.08
5/8/99 1:20	0.00	0.00	0.10	0.03	0.00	0.00	0.13
5/8/99 1:40	0.00	0.00	0.05	0.05	0.00	0.00	0.10
5/8/99 2:00	0.00	0.00	0.03	0.13	0.03	0.00	0.18
5/8/99 2:20	0.00	0.00	0.00	0.08	0.00	0.03	0.10
5/8/99 2:40	0.00	0.00	0.05	0.03	0.00	0.00	0.08
5/8/99 3:00	0.00	0.00	0.03	0.00	0.03	0.03	0.08
5/8/99 3:20	0.00	0.03	0.03	0.03	0.00	0.00	0.08
5/8/99 3:40	0.00	0.00	0.03	0.05	0.00	0.03	0.10
5/8/99 4:00	0.00	0.00	0.03	0.03	0.00	0.00	0.05
5/8/99 4:20	0.00	0.00	0.03	0.05	0.00	0.00	0.08
5/8/99 4:40	0.00	0.00	0.03	0.15	0.05	0.00	0.23
5/8/99 5:00	0.00	0.00	0.08	0.00	0.00	0.00	0.08
5/8/99 5:20	0.00	0.00	0.05	0.03	0.00	0.03	0.10
5/8/99 5:40	0.03	0.00	0.03	0.05	0.00	0.00	0.10
5/8/99 6:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/8/99 6:20	0.00	0.00	0.08	0.00	0.00	0.00	0.08
5/8/99 6:40	0.00	0.00	0.05	0.03	0.00	0.00	0.08
5/8/99 7:00	0.00	0.00	0.05	0.03	0.00	0.00	0.08
5/8/99 7:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/8/99 7:40	0.00	0.03	0.03	0.03	0.00	0.00	0.08
5/8/99 8:00	0.00	0.00	0.00	0.05	0.00	0.00	0.05
5/8/99 8:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/8/99 8:40	0.00	0.00	0.00	0.00	0.00	0.00	0.00

<b>Date</b>	<b>&gt;15.0</b>	<b>10.0-15.0µm</b>	<b>2.0-3.0µm</b>	<b>3.0-5.0µm</b>	<b>5.0-7.0µm</b>	<b>7.0-10.0µm</b>	<b>Sum of Particles</b>
5/8/99 9:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/8/99 9:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/8/99 9:40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/8/99 10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/8/99 10:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/8/99 10:40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/8/99 11:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/8/99 11:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### McAllen Wastewater Reclamation Project - August Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/1/99 0:03	0.00	0.00	0.03	0.08	0.00	0.03	0.13
8/1/99 0:23	0.03	0.00	0.28	0.28	0.10	0.10	0.78
8/1/99 0:43	0.00	0.00	0.05	0.13	0.03	0.03	0.23
8/1/99 1:03	0.03	0.00	0.05	0.03	0.03	0.03	0.15
8/1/99 1:23	0.00	0.00	0.00	0.18	0.03	0.00	0.20
8/1/99 1:43	0.00	0.00	0.05	0.00	0.03	0.03	0.10
8/1/99 2:03	0.00	0.03	0.10	0.13	0.05	0.05	0.35
8/1/99 2:23	0.00	0.00	0.05	0.03	0.00	0.00	0.08
8/1/99 2:43	0.00	0.03	0.18	0.15	0.00	0.03	0.38
8/1/99 3:03	0.00	0.00	0.03	0.05	0.03	0.00	0.10
8/1/99 3:23	0.00	0.03	0.08	0.08	0.00	0.03	0.20
8/1/99 3:43	0.00	0.00	0.10	0.08	0.03	0.00	0.20
8/1/99 4:03	0.03	0.00	0.15	0.13	0.03	0.00	0.33
8/1/99 4:23	0.00	0.03	0.13	0.03	0.08	0.00	0.25
8/1/99 4:43	0.00	0.00	0.10	0.10	0.00	0.03	0.23
8/1/99 5:03	0.03	0.03	0.00	0.15	0.03	0.05	0.28
8/1/99 5:23	0.00	0.00	0.08	0.10	0.03	0.03	0.23
8/1/99 5:43	0.00	0.00	0.03	0.00	0.00	0.03	0.05
8/1/99 6:03	0.00	0.00	0.08	0.20	0.00	0.00	0.28
8/1/99 6:23	0.00	0.00	0.03	0.10	0.05	0.03	0.20
8/1/99 6:43	0.08	0.00	0.13	0.10	0.00	0.03	0.33
8/1/99 7:03	0.00	0.00	0.03	0.03	0.00	0.05	0.10
8/1/99 7:23	0.00	0.03	0.05	0.10	0.00	0.00	0.18
8/1/99 7:43	0.08	0.15	0.23	0.30	0.10	0.08	0.93
8/1/99 8:03	0.00	0.00	0.00	0.03	0.05	0.05	0.13
8/1/99 8:23	0.00	0.00	0.03	0.05	0.00	0.00	0.08
8/1/99 8:43	0.00	0.00	0.08	0.13	0.05	0.05	0.30
8/1/99 9:03	0.00	0.03	0.13	0.23	0.05	0.08	0.50
8/1/99 9:23	0.03	0.00	0.05	0.23	0.00	0.05	0.35
8/1/99 9:43	0.00	0.00	0.05	0.10	0.03	0.03	0.20
8/1/99 10:03	0.05	0.03	0.08	0.08	0.03	0.05	0.30
8/1/99 10:23	0.00	0.00	0.03	0.08	0.00	0.00	0.10
8/1/99 10:43	0.00	0.03	0.03	0.05	0.00	0.00	0.10
8/1/99 11:03	0.03	0.00	0.03	0.13	0.03	0.03	0.23
8/1/99 11:23	0.03	0.05	0.08	0.10	0.00	0.00	0.25
8/1/99 11:43	0.03	0.00	0.03	0.05	0.00	0.00	0.10
8/1/99 12:03	0.00	0.00	0.08	0.15	0.03	0.03	0.28
8/1/99 12:23	0.00	0.03	0.15	0.05	0.00	0.03	0.25
8/1/99 12:43	0.00	0.00	0.05	0.05	0.00	0.00	0.10
8/1/99 13:03	0.00	0.00	0.03	0.08	0.00	0.00	0.10
8/1/99 13:23	0.03	0.05	0.15	0.05	0.03	0.03	0.33
8/1/99 13:43	0.00	0.10	0.10	0.10	0.00	0.05	0.35
8/1/99 14:03	0.00	0.03	0.10	0.20	0.05	0.03	0.40
8/1/99 14:23	0.00	0.00	0.08	0.08	0.00	0.00	0.15
8/1/99 14:43	0.00	0.03	0.03	0.15	0.00	0.00	0.20
8/1/99 15:03	0.00	0.03	0.10	0.13	0.00	0.03	0.28

'Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/1/99 15:23	0.00	0.00	0.05	0.00	0.00	0.03	0.08
8/1/99 15:43	0.00	0.00	0.05	0.03	0.03	0.00	0.10
8/1/99 16:03	0.05	0.00	0.08	0.08	0.00	0.03	0.23
8/1/99 16:23	0.00	0.00	0.05	0.05	0.00	0.05	0.15
8/1/99 16:43	0.00	0.00	0.00	0.08	0.05	0.08	0.20
8/1/99 17:03	0.00	0.03	0.05	0.13	0.05	0.00	0.25
8/1/99 17:23	0.00	0.00	0.08	0.03	0.00	0.03	0.13
8/1/99 17:43	0.00	0.18	0.23	0.25	0.18	0.10	0.93
8/1/99 18:03	0.03	0.00	0.00	0.10	0.00	0.05	0.18
8/1/99 18:23	0.00	0.00	0.10	0.20	0.03	0.03	0.35
8/1/99 18:43	0.00	0.00	0.08	0.08	0.00	0.03	0.18
8/1/99 19:03	0.00	0.03	0.10	0.08	0.00	0.05	0.25
8/1/99 19:23	0.00	0.03	0.03	0.08	0.03	0.08	0.23
8/1/99 19:43	0.00	0.03	0.03	0.13	0.00	0.05	0.23
8/1/99 20:03	0.00	0.00	0.03	0.10	0.00	0.00	0.13
8/1/99 20:23	0.00	0.00	0.05	0.10	0.00	0.13	0.28
8/1/99 20:43	0.00	0.00	0.10	0.03	0.03	0.08	0.23
8/1/99 21:03	0.05	0.03	0.10	0.15	0.00	0.05	0.38
8/1/99 21:23	0.00	0.03	0.05	0.05	0.00	0.05	0.18
8/1/99 21:43	0.00	0.00	0.08	0.03	0.00	0.00	0.10
8/1/99 22:03	0.00	0.03	0.03	0.10	0.03	0.05	0.23
8/1/99 22:23	0.00	0.05	0.20	0.15	0.08	0.03	0.50
8/1/99 22:43	0.00	0.03	0.25	0.08	0.00	0.00	0.35
8/1/99 23:03	0.00	0.03	0.05	0.10	0.00	0.00	0.18
8/1/99 23:23	0.00	0.00	0.03	0.03	0.00	0.05	0.10
8/1/99 23:43	0.00	0.03	0.03	0.08	0.00	0.00	0.13
8/2/99 0:03	0.00	0.03	0.05	0.15	0.03	0.03	0.28
8/2/99 0:23	0.00	0.00	0.00	0.05	0.00	0.05	0.10
8/2/99 0:43	0.00	0.03	0.13	0.08	0.03	0.03	0.28
8/2/99 1:03	0.03	0.00	0.08	0.05	0.00	0.00	0.15
8/2/99 1:23	0.00	0.03	0.00	0.03	0.00	0.00	0.05
8/2/99 1:42	0.00	0.00	0.10	0.20	0.08	0.00	0.38
8/2/99 2:02	0.00	0.00	0.03	0.08	0.03	0.05	0.18
8/2/99 2:22	0.00	0.03	0.05	0.03	0.00	0.00	0.10
8/2/99 2:42	0.00	0.03	0.00	0.05	0.00	0.00	0.08
8/2/99 3:02	0.03	0.03	0.05	0.05	0.03	0.00	0.18
8/2/99 3:22	0.00	0.03	0.03	0.03	0.00	0.00	0.08
8/2/99 3:42	0.00	0.00	0.05	0.05	0.03	0.03	0.15
8/2/99 4:02	0.00	0.03	0.10	0.13	0.05	0.03	0.33
8/2/99 4:22	0.00	0.03	0.05	0.00	0.00	0.00	0.08
8/2/99 4:42	0.00	0.03	0.03	0.08	0.00	0.08	0.20
8/2/99 5:02	0.03	0.00	0.05	0.03	0.00	0.00	0.10
8/2/99 5:22	0.00	0.00	0.05	0.03	0.03	0.08	0.18
8/2/99 5:42	0.00	0.03	0.00	0.03	0.03	0.03	0.10
8/2/99 6:02	0.00	0.10	0.08	0.10	0.00	0.08	0.35
8/2/99 6:22	0.00	0.00	0.05	0.00	0.03	0.00	0.08
8/2/99 6:42	0.00	0.03	0.03	0.10	0.00	0.08	0.23
8/2/99 7:02	0.00	0.10	0.05	0.15	0.05	0.03	0.38

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10µm	Sum of Particles
8/2/99 7:22	0.01	0.03	0.03	0.00	0.00	0.08	0.13
8/2/99 7:42	0.01	0.00	0.05	0.05	0.00	0.00	0.10
8/2/99 8:02	0.01	0.00	0.03	0.00	0.00	0.03	0.05
8/2/99 8:22	0.01	0.00	0.05	0.03	0.00	0.03	0.10
8/2/99 8:42	0.01	0.00	0.08	0.05	0.00	0.00	0.13
8/2/99 9:02	0.01	0.00	0.03	0.10	0.03	0.03	0.20
8/2/99 9:22	0.01	0.00	0.03	0.00	0.00	0.00	0.05
8/2/99 9:42	0.01	0.03	0.03	0.05	0.00	0.00	0.13
8/2/99 10:02	0.01	0.00	0.08	0.03	0.03	0.00	0.13
8/2/99 10:22	0.01	0.03	0.05	0.03	0.05	0.08	0.23
8/2/99 10:42	0.01	0.05	0.03	0.05	0.00	0.05	0.20
8/2/99 11:02	0.01	0.00	0.08	0.05	0.00	0.03	0.18
8/2/99 11:22	0.01	0.05	0.23	0.23	0.10	0.00	0.60
8/2/99 11:42	0.01	0.03	0.13	0.13	0.00	0.05	0.33
8/2/99 12:02	0.01	0.00	0.08	0.08	0.05	0.03	0.23
8/2/99 12:22	0.01	0.03	0.08	0.05	0.03	0.03	0.20
8/2/99 12:42	0.01	0.00	0.00	0.00	0.00	0.00	0.00
8/2/99 13:02	0.01	0.00	0.03	0.00	0.03	0.03	0.08
8/2/99 13:22	0.01	0.10	0.20	0.23	0.05	0.13	0.70
8/2/99 13:42	0.01	0.00	0.05	0.05	0.00	0.05	0.15
8/2/99 14:02	0.01	0.03	0.00	0.20	0.08	0.03	0.33
8/2/99 14:22	0.21	0.60	4.88	7.13	1.75	1.53	16.13
8/2/99 14:42	0.01	0.03	0.13	0.03	0.00	0.05	0.23
8/2/99 15:02	0.01	0.03	0.05	0.03	0.00	0.00	0.10
8/2/99 15:22	0.01	0.05	0.03	0.08	0.05	0.00	0.20
8/2/99 15:42	0.01	0.03	0.00	0.08	0.00	0.03	0.15
8/2/99 16:02	0.01	0.00	0.03	0.08	0.00	0.00	0.13
8/2/99 16:22	0.01	0.03	0.08	0.00	0.03	0.00	0.13
8/2/99 16:42	0.01	0.05	0.10	0.13	0.15	0.03	0.45
8/2/99 17:02	0.01	0.00	0.05	0.10	0.03	0.03	0.20
8/2/99 17:22	0.01	0.00	0.05	0.08	0.00	0.00	0.15
8/2/99 17:42	0.01	0.05	0.13	0.13	0.03	0.00	0.33
8/2/99 18:02	0.01	0.00	0.05	0.05	0.03	0.00	0.13
8/2/99 18:22	0.01	0.00	0.03	0.05	0.03	0.03	0.13
8/2/99 18:42	0.01	0.05	0.03	0.10	0.03	0.00	0.20
8/2/99 19:02	0.01	0.00	0.05	0.03	0.00	0.00	0.08
8/2/99 19:22	0.01	0.00	0.13	0.05	0.03	0.05	0.25
8/2/99 19:42	0.01	0.03	0.00	0.08	0.00	0.00	0.10
8/2/99 20:02	0.01	0.00	0.05	0.13	0.03	0.00	0.20
8/2/99 20:22	0.01	0.00	0.15	0.13	0.00	0.00	0.28
8/2/99 20:42	0.01	0.00	0.03	0.10	0.00	0.00	0.13
8/2/99 21:02	0.01	0.00	0.10	0.08	0.00	0.00	0.23
8/2/99 21:22	0.01	0.00	0.10	0.15	0.05	0.03	0.33
8/2/99 21:42	0.01	0.03	0.08	0.10	0.00	0.00	0.20
8/2/99 22:02	0.01	0.05	0.15	0.08	0.00	0.08	0.35
8/2/99 22:22	0.01	0.00	0.03	0.10	0.05	0.00	0.18
8/2/99 22:42	0.01	0.00	0.18	0.05	0.03	0.03	0.28
8/2/99 23:02	0.01	0.00	0.05	0.05	0.00	0.00	0.10

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/2/99 23:22	0.00	0.00	0.08	0.13	0.03	0.08	0.30
8/2/99 23:42	0.00	0.00	0.10	0.05	0.05	0.03	0.23
8/3/99 0:02	0.00	0.03	0.13	0.00	0.03	0.03	0.20
8/3/99 0:22	0.03	0.00	0.13	0.15	0.00	0.03	0.33
8/3/99 0:42	0.00	0.00	0.08	0.20	0.05	0.00	0.33
8/3/99 1:02	0.00	0.00	0.18	0.10	0.03	0.00	0.30
8/3/99 1:22	0.00	0.03	0.03	0.08	0.03	0.00	0.15
8/3/99 1:42	0.00	0.03	0.05	0.08	0.03	0.03	0.20
8/3/99 2:02	0.00	0.00	0.10	0.08	0.00	0.03	0.20
8/3/99 2:22	0.03	0.00	0.05	0.03	0.00	0.00	0.10
8/3/99 2:42	0.03	0.00	0.08	0.03	0.03	0.05	0.20
8/3/99 3:02	0.00	0.05	0.05	0.08	0.08	0.20	0.45
8/3/99 3:22	0.03	0.00	0.00	0.05	0.00	0.00	0.08
8/3/99 3:42	0.00	0.00	0.03	0.00	0.00	0.03	0.05
8/3/99 4:02	0.00	0.00	0.08	0.03	0.00	0.00	0.10
8/3/99 4:22	0.00	0.00	0.00	0.08	0.00	0.03	0.10
8/3/99 4:42	0.00	0.03	0.03	0.03	0.05	0.00	0.13
8/3/99 5:02	0.00	0.03	0.05	0.05	0.03	0.00	0.15
8/3/99 5:22	0.00	0.03	0.05	0.10	0.10	0.03	0.30
8/3/99 5:42	0.00	0.00	0.03	0.05	0.00	0.00	0.08
8/3/99 6:02	0.00	0.00	0.03	0.03	0.00	0.00	0.05
8/3/99 6:22	0.00	0.03	0.03	0.00	0.00	0.00	0.05
8/3/99 6:42	0.00	0.00	0.05	0.00	0.03	0.00	0.08
8/3/99 7:02	0.03	0.00	0.05	0.10	0.00	0.03	0.20
8/3/99 7:22	0.00	0.00	0.00	0.05	0.03	0.03	0.10
8/3/99 7:42	0.00	0.00	0.05	0.00	0.00	0.00	0.05
8/3/99 8:02	0.00	0.10	0.18	0.33	0.05	0.10	0.75
8/3/99 8:22	0.00	0.05	0.03	0.05	0.00	0.08	0.20
8/3/99 8:42	0.00	0.00	0.05	0.05	0.00	0.00	0.10
8/3/99 9:02	0.00	0.00	0.03	0.05	0.00	0.00	0.08
8/3/99 9:22	0.00	0.03	0.03	0.05	0.03	0.03	0.15
8/3/99 9:42	0.00	0.03	0.10	0.08	0.00	0.00	0.20
8/3/99 10:02	0.03	0.00	0.03	0.05	0.03	0.00	0.13
8/3/99 10:22	0.00	0.00	0.05	0.03	0.00	0.05	0.13
8/3/99 10:42	0.00	0.00	0.00	0.10	0.00	0.03	0.13
8/3/99 11:02	0.00	0.00	0.10	0.08	0.00	0.03	0.20
8/3/99 11:22	0.00	0.03	0.05	0.08	0.00	0.00	0.15
8/3/99 11:42	0.00	0.00	0.08	0.05	0.05	0.05	0.23
8/3/99 12:02	0.00	0.00	0.05	0.08	0.00	0.03	0.15
8/3/99 12:22	0.00	0.00	0.05	0.05	0.00	0.00	0.10
8/3/99 12:42	0.00	0.00	0.00	0.00	0.03	0.03	0.05
8/3/99 13:02	0.00	0.00	0.15	0.15	0.00	0.08	0.38
8/3/99 13:22	0.00	0.00	0.03	0.13	0.03	0.03	0.20
8/3/99 13:42	0.00	0.03	0.13	0.18	0.03	0.00	0.35
8/3/99 14:02	0.18	0.20	0.50	0.85	0.40	0.50	2.63
8/3/99 14:22	0.03	0.03	0.05	0.03	0.00	0.03	0.15
8/3/99 14:42	0.00	0.03	0.08	0.00	0.00	0.00	0.10
8/3/99 15:02	0.00	0.00	0.03	0.05	0.00	0.08	0.15

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/3/99 15:22	0.00	0.05	0.00	0.05	0.00	0.00	0.10
8/3/99 15:42	0.00	0.00	0.03	0.00	0.00	0.00	0.03
8/3/99 16:02	0.00	0.03	0.08	0.08	0.00	0.00	0.18
8/3/99 16:22	0.00	0.03	0.08	0.13	0.00	0.05	0.28
8/3/99 16:42	0.00	0.03	0.00	0.08	0.03	0.03	0.15
8/3/99 17:02	0.00	0.00	0.05	0.13	0.03	0.00	0.20
8/3/99 17:22	0.00	0.08	0.00	0.05	0.00	0.03	0.15
8/3/99 17:42	0.05	0.00	0.05	0.03	0.00	0.00	0.13
8/3/99 18:02	0.00	0.00	0.08	0.08	0.00	0.00	0.15
8/3/99 18:22	0.00	0.00	0.03	0.00	0.00	0.00	0.03
8/3/99 18:42	0.00	0.03	0.08	0.08	0.00	0.08	0.25
8/3/99 19:02	0.03	0.03	0.08	0.08	0.03	0.00	0.23
8/3/99 19:22	0.00	0.00	0.08	0.03	0.00	0.03	0.13
8/3/99 19:42	0.00	0.00	0.15	0.10	0.03	0.00	0.28
8/3/99 20:02	0.05	0.03	0.00	0.05	0.00	0.00	0.13
8/3/99 20:22	0.03	0.00	0.05	0.10	0.03	0.03	0.23
8/3/99 20:42	0.00	0.00	0.05	0.05	0.00	0.00	0.10
8/3/99 21:02	0.03	0.03	0.03	0.05	0.00	0.00	0.13
8/3/99 21:22	0.00	0.00	0.03	0.03	0.00	0.00	0.05
8/3/99 21:42	0.00	0.03	0.13	0.18	0.15	0.03	0.50
8/3/99 22:02	0.00	0.00	0.03	0.00	0.00	0.03	0.05
8/3/99 22:22	0.00	0.03	0.05	0.05	0.03	0.03	0.18
8/3/99 22:42	0.00	0.00	0.08	0.10	0.00	0.00	0.18
8/3/99 23:02	0.00	0.00	0.08	0.13	0.00	0.08	0.28
8/3/99 23:22	0.00	0.00	0.00	0.05	0.00	0.05	0.10
8/3/99 23:42	0.03	0.05	0.13	0.15	0.03	0.00	0.38
8/4/99 0:02	0.00	0.03	0.08	0.15	0.05	0.00	0.30
8/4/99 0:22	0.00	0.03	0.05	0.03	0.05	0.00	0.15
8/4/99 0:42	0.00	0.03	0.03	0.05	0.00	0.05	0.15
8/4/99 1:02	0.00	0.00	0.00	0.13	0.00	0.00	0.13
8/4/99 1:22	0.00	0.03	0.00	0.03	0.00	0.05	0.10
8/4/99 1:42	0.00	0.00	0.03	0.05	0.00	0.05	0.13
8/4/99 2:02	0.00	0.00	0.03	0.03	0.00	0.03	0.08
8/4/99 2:22	0.00	0.05	0.05	0.13	0.00	0.03	0.25
8/4/99 2:42	0.00	0.00	0.10	0.05	0.00	0.03	0.18
8/4/99 3:02	0.00	0.00	0.28	0.23	0.05	0.05	0.60
8/4/99 3:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 3:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 4:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 4:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 4:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 5:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 5:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 5:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 6:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 6:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 6:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/99 7:02	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/4/99 7:22	17.10	30.88	385.43	421.00	74.03	71.58	1000.00
8/4/99 7:42	0.40	0.35	2.50	2.60	0.45	0.60	6.90
8/4/99 8:02	0.15	0.08	0.70	1.03	0.13	0.15	2.23
8/4/99 8:22	0.13	0.05	0.35	0.58	0.18	0.10	1.38
8/4/99 8:42	0.15	0.13	0.48	0.33	0.10	0.10	1.28
8/4/99 9:02	0.03	0.08	0.18	0.28	0.08	0.08	0.70
8/4/99 9:22	0.03	0.03	0.23	0.25	0.08	0.05	0.65
8/4/99 9:42	0.03	0.08	0.13	0.33	0.15	0.20	0.90
8/4/99 10:02	0.03	0.05	0.28	0.20	0.08	0.05	0.68
8/4/99 10:22	0.43	0.50	2.68	3.65	0.75	0.73	8.73
8/4/99 10:42	0.03	0.13	0.23	0.30	0.00	0.05	0.73
8/4/99 11:02	0.00	0.00	0.35	0.38	0.08	0.13	0.93
8/4/99 11:22	0.18	0.03	0.10	0.30	0.08	0.15	0.83
8/4/99 11:42	0.05	0.05	0.20	0.18	0.00	0.03	0.50
8/4/99 12:02	0.03	0.08	0.25	0.23	0.05	0.03	0.65
8/4/99 12:22	0.03	0.03	0.10	0.13	0.03	0.03	0.33
8/4/99 12:42	0.05	0.10	0.20	0.20	0.05	0.08	0.68
8/4/99 13:02	0.00	0.03	0.10	0.15	0.05	0.03	0.35
8/4/99 13:22	0.03	0.05	0.10	0.10	0.08	0.03	0.38
8/4/99 13:42	0.00	0.00	0.05	0.08	0.00	0.03	0.15
8/4/99 14:04	0.03	0.03	0.15	0.15	0.00	0.05	0.40
8/4/99 14:24	0.03	0.00	0.05	0.23	0.03	0.10	0.43
8/4/99 14:44	0.05	0.03	0.25	0.20	0.08	0.05	0.65
8/4/99 15:04	0.05	0.03	0.05	0.03	0.03	0.03	0.20
8/4/99 15:24	0.03	0.03	0.08	0.08	0.00	0.00	0.20
8/4/99 15:44	0.03	0.03	0.10	0.10	0.03	0.10	0.38
8/4/99 16:04	0.00	0.00	0.05	0.13	0.03	0.03	0.23
8/4/99 16:24	0.00	0.03	0.08	0.05	0.00	0.05	0.20
8/4/99 16:44	0.03	0.00	0.10	0.10	0.05	0.05	0.33
8/4/99 17:04	0.05	0.00	0.08	0.05	0.05	0.03	0.25
8/4/99 17:24	0.00	0.03	0.03	0.15	0.05	0.03	0.28
8/4/99 17:44	0.00	0.00	0.05	0.15	0.00	0.03	0.23
8/4/99 18:04	0.00	0.00	0.10	0.13	0.00	0.05	0.28
8/4/99 18:24	0.00	0.03	0.10	0.15	0.03	0.08	0.38
8/4/99 18:44	0.00	0.00	0.08	0.10	0.03	0.03	0.23
8/4/99 19:04	0.00	0.00	0.10	0.10	0.03	0.08	0.30
8/4/99 19:24	0.00	0.00	0.05	0.18	0.05	0.13	0.40
8/4/99 19:44	0.08	0.00	0.18	0.05	0.08	0.08	0.45
8/4/99 20:04	0.03	0.03	0.05	0.15	0.03	0.00	0.28
8/4/99 20:24	0.00	0.03	0.08	0.13	0.00	0.15	0.38
8/4/99 20:44	0.03	0.03	0.05	0.15	0.05	0.05	0.35
8/4/99 21:04	0.00	0.03	0.03	0.13	0.03	0.10	0.30
8/4/99 21:24	0.03	0.00	0.10	0.05	0.05	0.00	0.23
8/4/99 21:44	0.03	0.00	0.13	0.08	0.00	0.03	0.25
8/4/99 22:04	0.03	0.00	0.10	0.18	0.03	0.13	0.45
8/4/99 22:24	0.00	0.05	0.08	0.10	0.03	0.00	0.25
8/4/99 22:44	0.03	0.05	0.15	0.18	0.03	0.10	0.53
8/4/99 23:04	0.00	0.03	0.10	0.13	0.03	0.00	0.28

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/4/99 23:24	0.00	0.00	0.05	0.10	0.00	0.00	0.15
8/4/99 23:44	0.03	0.05	0.00	0.03	0.03	0.08	0.20
8/5/99 0:04	0.00	0.00	0.00	0.10	0.00	0.05	0.15
8/5/99 0:24	0.03	0.03	0.05	0.08	0.00	0.03	0.20
8/5/99 0:44	0.00	0.00	0.08	0.13	0.00	0.05	0.25
8/5/99 1:04	0.00	0.03	0.13	0.05	0.00	0.05	0.25
8/5/99 1:24	0.00	0.03	0.05	0.05	0.00	0.05	0.18
8/5/99 1:44	0.00	0.00	0.08	0.10	0.00	0.03	0.20
8/5/99 2:04	0.00	0.00	0.05	0.15	0.00	0.00	0.20
8/5/99 2:24	0.03	0.00	0.13	0.10	0.03	0.03	0.30
8/5/99 2:44	0.00	0.00	0.13	0.13	0.03	0.00	0.28
8/5/99 3: 04	0.00	0.00	0.10	0.18	0.00	0.05	0.33
8/5/99 3:24	0.00	0.00	0.05	0.13	0.00	0.05	0.23
8/5/99 3:44	0.00	0.03	0.03	0.15	0.08	0.05	0.33
8/5/99 4:04	0.00	0.00	0.08	0.05	0.00	0.03	0.15
8/5/99 4:24	0.03	0.03	0.05	0.08	0.00	0.03	0.20
8/5/99 4:44	0.00	0.00	0.13	0.15	0.05	0.05	0.38
8/5/99 5:04	0.03	0.00	0.10	0.13	0.08	0.00	0.33
8/5/99 5:24	0.03	0.00	0.08	0.10	0.05	0.03	0.28
8/5/99 5:44	0.00	0.03	0.08	0.08	0.03	0.05	0.25
8/5/99 6:04	0.00	0.03	0.10	0.10	0.00	0.00	0.23
8/5/99 6:24	0.00	0.05	0.00	0.08	0.03	0.03	0.18
8/5/99 6:44	0.00	0.03	0.08	0.08	0.00	0.05	0.23
8/5/99 7:04	0.00	0.00	0.10	0.08	0.00	0.05	0.23
8/5/99 7:24	0.00	0.03	0.03	0.10	0.03	0.03	0.20
8/5/99 7:44	0.40	0.65	1.63	2.25	0.58	0.58	6.08
8/5/99 8:04	0.05	0.00	0.23	0.03	0.00	0.08	0.38
8/5/99 8:24	0.00	0.03	0.05	0.13	0.05	0.05	0.30
8/5/99 8:44	0.00	0.00	0.08	0.05	0.03	0.03	0.18
8/5/99 9:04	0.00	0.00	0.10	0.03	0.03	0.03	0.18
8/5/99 9:24	0.00	0.10	0.15	0.05	0.05	0.05	0.40
8/5/99 9:44	0.00	0.00	0.00	0.13	0.03	0.00	0.15
8/5/99 10:04	0.05	0.05	0.03	0.00	0.00	0.03	0.15
8/5/99 10:24	0.03	0.00	0.05	0.08	0.05	0.00	0.20
8/5/99 10:44	0.00	0.03	0.00	0.03	0.03	0.03	0.10
8/5/99 11: 04	0.00	0.00	0.10	0.05	0.03	0.00	0.18
8/5/99 11:24	0.00	0.03	0.08	0.05	0.03	0.00	0.18
8/5/99 11:44	0.03	0.00	0.05	0.00	0.03	0.00	0.10
8/5/99 12: 04	0.00	0.03	0.08	0.05	0.03	0.03	0.20
8/5/99 12:24	0.03	0.03	0.05	0.03	0.00	0.03	0.15
8/5/99 12:44	0.00	0.00	0.03	0.05	0.00	0.00	0.08
8/5/99 13:04	0.00	0.00	0.13	0.10	0.05	0.03	0.30
8/5/99 13:24	0.20	0.18	0.38	0.50	0.20	0.25	1.70
8/5/99 13:44	0.00	0.03	0.20	0.08	0.00	0.00	0.30
8/5/99 14:04	0.05	0.00	0.10	0.05	0.03	0.03	0.25
8/5/99 14:49	0.05	0.00	0.13	0.13	0.03	0.00	0.33
8/5/99 15:09	0.03	0.03	0.03	0.18	0.00	0.03	0.28
8/5/99 15:29	0.00	0.00	0.05	0.05	0.00	0.05	0.15

Date	4 5.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum	of Particles
8/5/99 15:49	0.00	0.03	0.00	0.10	0.03	0.03	0.03	0.18
8/5/99 16:09	0.00	0.00	0.13	0.10	0.00	0.03	0.03	0.25
8/5/99 16:29	0.00	0.00	0.10	0.10	0.00	0.00	0.00	0.20
8/5/99 16:49	0.00	0.00	0.05	0.03	0.00	0.03	0.03	0.10
8/5/99 17:09	0.00	0.00	0.03	0.03	0.03	0.05	0.05	0.13
8/5/99 17:29	0.03	0.00	0.08	0.03	0.00	0.00	0.00	0.13
8/5/99 17:49	0.03	0.03	0.20	0.08	0.00	0.03	0.03	0.35
8/5/99 18:09	0.00	0.00	0.13	0.28	0.00	0.05	0.05	0.45
8/5/99 18:29	0.00	0.00	0.13	0.20	0.05	0.03	0.03	0.40
8/5/99 18:49	0.03	0.08	0.13	0.15	0.10	0.03	0.03	0.50
8/5/99 19:09	0.00	0.00	0.08	0.25	0.10	0.00	0.00	0.43
8/5/99 19:29	0.00	0.00	0.28	0.28	0.05	0.05	0.05	0.65
8/5/99 19:49	0.00	0.03	0.30	0.20	0.00	0.05	0.05	0.58
8/5/99 20:09	0.00	0.00	0.20	0.35	0.03	0.03	0.03	0.60
8/5/99 20:29	0.03	0.05	0.38	0.15	0.03	0.00	0.00	0.63
8/5/99 20:48	0.00	0.00	0.38	0.10	0.05	0.03	0.03	0.55
8/5/99 21:08	0.00	0.00	0.23	0.25	0.03	0.03	0.03	0.53
8/5/99 21:28	0.00	0.00	0.23	0.15	0.05	0.00	0.00	0.43
8/5/99 21:48	0.00	0.03	0.25	0.00	0.00	0.03	0.03	0.30
8/5/99 22:08	0.00	0.03	0.18	0.15	0.00	0.00	0.00	0.35
8/5/99 22:28	0.00	0.00	0.20	0.20	0.05	0.00	0.00	0.45
8/5/99 22:48	0.00	0.03	0.18	0.20	0.05	0.03	0.03	0.48
8/5/99 23:08	0.00	0.03	0.30	0.20	0.05	0.00	0.00	0.58
8/5/99 23:28	0.00	0.03	0.13	0.20	0.03	0.03	0.03	0.40
8/5/99 23:48	0.05	0.00	0.25	0.13	0.10	0.08	0.08	0.60
8/6/99 0:08	0.03	0.00	0.08	0.13	0.05	0.13	0.13	0.40
8/6/99 0:28	0.00	0.00	0.13	0.03	0.05	0.00	0.00	0.20
8/6/99 0:48	0.00	0.00	0.10	0.08	0.00	0.00	0.00	0.18
8/6/99 1:08	0.03	0.03	0.08	0.13	0.00	0.08	0.08	0.33
<del>8/6/99</del> 1:28	0.00	0.03	0.05	0.13	0.03	0.00	0.00	0.23
8/6/99 1:48	0.00	0.00	0.03	0.23	0.03	0.00	0.00	0.28
8/6/99 2:08	0.00	0.00	0.15	0.08	0.08	0.03	0.03	0.33
8/6/99 2:28	0.00	0.00	0.05	0.08	0.00	0.00	0.00	0.13
8/6/99 2:48	0.03	0.03	0.08	0.13	0.00	0.00	0.00	0.25
8/6/99 3:08	0.00	0.00	0.10	0.10	0.05	0.05	0.05	0.30
8/6/99 3:28	0.00	0.00	0.15	0.13	0.08	0.05	0.05	0.40
8/6/99 3:48	0.00	0.05	0.15	0.13	0.03	0.00	0.00	0.35
8/6/99 4:08	0.03	0.03	0.13	0.05	0.00	0.08	0.08	0.30
8/6/99 4:28	0.00	0.00	0.00	0.05	0.03	0.08	0.08	0.15
8/6/99 4:48	0.03	0.00	0.05	0.05	0.00	0.03	0.03	0.15
8/6/99 5:08	0.00	0.03	0.13	0.13	0.05	0.08	0.08	0.40
8/6/99 5:28	0.00	0.00	0.08	0.10	0.00	0.08	0.08	0.25
8/6/99 5:48	0.00	0.00	0.05	0.15	0.00	0.05	0.05	0.25
8/6/99 6:08	0.00	0.03	0.15	0.05	0.05	0.00	0.00	0.28
8/6/99 6:28	0.00	0.00	0.15	0.23	0.03	0.08	0.08	0.48
8/6/99 6:48	0.03	0.03	0.15	0.13	0.08	0.08	0.08	0.48
8/6/99 7:08	0.00	0.00	0.13	0.15	0.05	0.03	0.03	0.35
8/6/99 7:28	0.00	0.00	0.05	0.13	0.10	0.03	0.03	0.30

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/6/99 7:48	0.00	0.05	0.10	0.18	0.03	0.00	0.35
8/6/99 8:08	0.00	0.00	0.13	0.18	0.03	0.05	0.38
8/6/99 8:28	0.00	0.00	0.13	0.03	0.08	0.08	0.30
8/6/99 8:48	0.13	0.05	0.80	0.98	0.05	0.20	2.20
8/6/99 9:08	0.03	0.10	0.40	0.25	0.10	0.05	0.93
8/6/99 9:28	0.00	0.03	0.15	0.20	0.05	0.08	0.50
8/6/99 9:48	0.00	0.00	0.08	0.08	0.00	0.03	0.18
8/6/99 10:08	0.03	0.00	0.05	0.03	0.03	0.08	0.20
8/6/99 10:28	0.03	0.00	0.03	0.08	0.03	0.10	0.25
8/6/99 10:48	0.00	0.00	0.08	0.10	0.00	0.10	0.28
8/6/99 11: 08	0.03	0.05	0.10	0.05	0.00	0.10	0.33
8/6/99 11:28	0.00	0.00	0.10	0.05	0.03	0.00	0.18
8/6/99 11:48	0.08	0.15	0.85	0.85	0.18	0.15	2.25
8/6/99 12:08	0.00	0.00	0.05	0.13	0.03	0.05	0.25
8/6/99 12:28	0.03	0.00	0.08	0.05	0.00	0.03	0.18
8/6/99 12:48	0.00	0.00	0.10	0.13	0.03	0.03	0.28
8/6/99 13:08	0.00	0.00	0.08	0.00	0.00	0.00	0.08
8/6/99 13:28	0.00	0.03	0.03	0.00	0.03	0.05	0.13
8/6/99 13:48	0.00	0.00	0.10	0.00	0.00	0.00	0.10
8/6/99 14:08	0.00	0.00	0.15	0.18	0.05	0.08	0.45
8/6/99 14:28	0.00	0.03	0.05	0.05	0.03	0.10	0.25
8/6/99 14:48	0.00	0.00	0.10	0.08	0.00	0.08	0.25
8/7/99 11:18	0.00	0.00	0.05	0.13	0.00	0.03	0.20
8/7/99 11:38	0.05	0.05	0.10	0.18	0.05	0.03	0.45
8/7/99 11:58	0.00	0.03	0.08	0.08	0.00	0.03	0.20
8/7/99 12:18	0.03	0.00	0.10	0.05	0.03	0.05	0.25
8/7/99 12:38	0.05	0.03	0.03	0.08	0.03	0.03	0.23
8/7/99 12:58	0.03	0.00	0.05	0.08	0.05	0.00	0.20
8/7/99 13:18	0.00	0.08	0.10	0.15	0.10	0.05	0.48
8/7/99 13:38	0.13	0.05	0.13	0.13	0.00	0.10	0.53
8/7/99 13:58	0.05	0.08	0.18	0.05	0.08	0.05	0.48
8/7/99 14:18	0.03	0.00	0.18	0.08	0.05	0.03	0.35
8/7/99 14:38	0.00	0.00	0.20	0.08	0.03	0.00	0.30
8/7/99 14:58	0.15	0.10	0.10	0.13	0.20	0.18	0.85
8/7/99 15:18	0.03	0.00	0.08	0.13	0.03	0.05	0.30
8/7/99 15:38	0.00	0.00	0.08	0.18	0.03	0.05	0.33
8/7/99 15:58	0.00	0.00	0.00	0.13	0.03	0.05	0.20
8/7/99 16:18	0.03	0.03	0.08	0.15	0.05	0.03	0.35
8/7/99 16:38	0.08	0.05	0.05	0.13	0.00	0.05	0.35
8/7/99 16:58	0.05	0.05	0.15	0.10	0.03	0.03	0.40
8/7/99 17: 18	0.00	0.00	0.05	0.28	0.05	0.05	0.43
8/7/99 17:38	0.05	0.03	0.25	0.08	0.08	0.05	0.53
8/7/99 17:58	0.03	0.00	0.10	0.05	0.08	0.13	0.38
8/7/99 18:18	0.03	0.05	0.08	0.13	0.03	0.10	0.40
8/7/99 18:38	0.00	0.13	0.15	0.40	0.15	0.13	0.95
8/7/99 18:58	0.15	0.08	0.18	0.23	0.10	0.10	0.83
8/7/99 19:18	0.03	0.05	0.25	0.20	0.05	0.08	0.65
8/7/99 19:38	0.00	0.03	0.13	0.20	0.03	0.05	0.43

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/7/99 19:58	0.00	0.05	0.18	0.28	0.10	0.05	0.65
8/7/99 20:18	0.05	0.13	0.30	0.10	0.05	0.05	0.68
8/7/99 20:38	0.00	0.00	0.15	0.18	0.08	0.05	0.45
8/7/99 20:58	0.03	0.08	0.25	0.25	0.10	0.03	0.73
8/7/99 21:18	0.00	0.00	0.13	0.13	0.08	0.15	0.48
8/7/99 21:38	0.00	0.10	0.30	0.08	0.05	0.03	0.55
8/7/99 21:58	0.05	0.03	0.23	0.35	0.05	0.05	0.75
8/7/99 22:18	0.00	0.03	0.15	0.13	0.00	0.03	0.33
8/7/99 22:38	0.13	0.03	0.30	0.10	0.13	0.13	0.80
8/7/99 22:58	0.13	0.13	0.25	0.28	0.10	0.13	1.00
8/7/99 23:18	0.03	0.05	0.15	0.23	0.05	0.05	0.55
8/7/99 23:38	0.05	0.03	0.20	0.08	0.03	0.08	0.45
8/7/99 23:58	0.03	0.05	0.20	0.20	0.05	0.18	0.70
8/8/99 0:18	0.00	0.08	0.13	0.20	0.03	0.05	0.48
8/8/99 0:38	0.00	0.00	0.20	0.30	0.03	0.00	0.53
8/8/99 0:58	0.00	0.05	0.15	0.10	0.00	0.03	0.33
8/8/99 1:18	0.00	0.05	0.15	0.10	0.05	0.03	0.38
8/8/99 1:38	0.00	0.08	0.18	0.08	0.00	0.10	0.43
8/8/99 1:58	0.05	0.03	0.13	0.15	0.03	0.03	0.40
8/8/99 2:1 a	0.00	0.00	0.10	0.15	0.03	0.05	0.33
8/8/99 2:38	0.00	0.03	0.08	0.15	0.08	0.00	0.33
8/8/99 2:58	0.00	0.03	0.15	0.08	0.05	0.05	0.35
8/8/99 3:18	0.05	0.00	0.00	0.08	0.05	0.05	0.23
8/8/99 3:38	0.05	0.05	0.13	0.13	0.03	0.00	0.38
8/8/99 3:58	0.00	0.00	0.13	0.18	0.00	0.03	0.33
8/8/99 4:18	0.00	0.00	0.08	0.08	0.03	0.03	0.20
8/8/99 4:38	0.00	0.05	0.15	0.15	0.05	0.03	0.43
8/8/99 4:58	0.00	0.03	0.20	0.13	0.03	0.05	0.43
8/8/99 5:18	0.00	0.00	0.13	0.18	0.00	0.03	0.33
8/8/99 5:38	0.00	0.00	0.08	0.13	0.00	0.03	0.23
8/8/99 5:58	0.00	0.00	0.13	0.15	0.10	0.00	0.38
8/8/99 6:18	0.03	0.03	0.15	0.20	0.05	0.10	0.55
8/8/99 6:38	0.00	0.00	0.08	0.08	0.00	0.03	0.18
8/8/99 6:58	0.05	0.00	0.15	0.20	0.03	0.08	0.50
8/8/99 7:18	0.00	0.00	0.13	0.23	0.03	0.03	0.40
8/8/99 7:38	0.00	0.03	0.08	0.23	0.08	0.03	0.43
8/8/99 7:58	0.00	0.03	0.10	0.18	0.10	0.00	0.40
8/8/99 8:18	0.00	0.05	0.30	0.23	0.10	0.05	0.73
8/8/99 8:38	0.00	0.00	0.15	0.15	0.05	0.10	0.45
8/8/99 8:58	0.00	0.03	0.15	0.30	0.08	0.05	0.60
8/8/99 9:18	0.00	0.05	0.10	0.18	0.08	0.00	0.40
8/8/99 9:38	0.00	0.00	0.15	0.20	0.05	0.03	0.43
8/8/99 9:58	0.00	0.03	0.20	0.10	0.03	0.05	0.40
8/8/99 10:18	0.00	0.05	0.18	0.25	0.08	0.03	0.58
8/8/99 10:38	0.00	0.00	0.23	0.18	0.00	0.00	0.40
8/8/99 10:58	0.00	0.03	0.28	0.13	0.03	0.00	0.45
8/8/99 11:18	0.00	0.00	0.40	0.28	0.03	0.03	0.73
8/8/99 11:38	0.03	0.05	0.23	0.23	0.03	0.00	0.55

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/8/99 11:58	0.03	0.00	0.18	0.15	0.00	0.05	0.40
8/8/99 12:18	0.03	0.00	0.33	0.25	0.03	0.03	0.65
8/8/99 12: 38	0.00	0.10	0.15	0.20	0.08	0.05	0.58
8/8/99 12:58	0.03	0.05	0.50	0.35	0.00	0.08	1.00
8/8/99 13: 18	0.00	0.00	0.38	0.30	0.05	0.13	0.85
8/8/99 13:38	0.03	0.00	0.45	0.28	0.03	0.08	0.85
8/8/99 13:58	0.03	0.05	0.48	0.33	0.03	0.05	0.95
8/8/99 14: 18	0.05	0.00	0.60	0.75	0.15	0.13	1.68
8/8/99 14:38	0.00	0.00	1.28	0.83	0.08	0.13	2.30
8/8/99 14:58	0.00	0.08	1.63	1.63	0.10	0.10	3.53
8/8/99 15:18	0.03	0.08	2.70	2.03	0.40	0.10	5.33
8/8/99 15:38	0.03	0.10	4.43	3.23	0.40	0.15	8.33
8/8/99 15:58	0.05	0.13	4.50	3.23	0.25	0.23	8.38
8/8/99 16:18	0.00	0.25	5.23	3.25	0.60	0.55	9.88
8/8/99 16:38	0.13	0.10	3.78	3.78	0.88	0.38	9.03
8/8/99 16:58	0.05	0.18	3.48	3.20	0.53	0.18	7.60
8/8/99 17:18	0.28	0.28	4.08	2.90	0.43	0.35	8.30
8/8/99 17:38	0.05	0.05	3.23	2.58	0.30	0.35	6.55
8/8/99 17:58	0.03	0.05	3.15	2.43	0.13	0.25	6.03
8/8/99 18:17	0.05	0.05	2.80	2.30	0.43	0.28	5.90
8/8/99 18:37	0.05	0.10	2.50	2.70	0.28	0.15	5.78
8/8/99 18:57	0.08	0.15	3.03	2.03	0.13	0.10	5.50
8/8/99 19:17	0.08	0.13	2.63	1.53	0.40	0.23	4.98
8/8/99 19:37	0.05	0.05	2.20	1.53	0.20	0.13	4.15
8/8/99 19:57	0.08	0.00	2.23	1.75	0.25	0.23	4.53
8/8/99 20:17	0.00	0.08	2.25	1.38	0.15	0.08	3.93
8/8/99 20:37	0.00	0.00	1.80	1.18	0.10	0.08	3.15
8/8/99 20:57	0.00	0.00	1.90	1.13	0.10	0.18	3.30
8/8/99 21:17	0.03	0.05	1.60	1.28	0.28	0.13	3.35
8/8/99 21:37	0.03	0.05	1.73	1.23	0.05	0.05	3.13
8/8/99 21:57	0.03	0.03	1.43	0.95	0.13	0.13	2.68
8/8/99 22: 17	0.03	0.03	1.30	1.10	0.18	0.05	2.68
8/8/99 22:37	0.05	0.03	1.45	0.98	0.00	0.13	2.63
8/8/99 22:57	0.03	0.00	1.45	0.85	0.03	0.08	2.43
8/8/99 23: 17	0.00	0.08	1.43	0.88	0.10	0.05	2.53
8/8/99 23:37	0.03	0.03	1.05	0.80	0.03	0.13	2.05
8/8/99 23:57	0.00	0.00	1.78	0.88	0.00	0.05	2.70
8/9/99 0:17	0.00	0.03	1.15	0.58	0.13	0.05	1.93
8/9/99 0:37	0.00	0.00	1.35	0.78	0.03	0.05	2.20
8/9/99 0:57	0.03	0.05	1.15	0.75	0.05	0.10	2.13
8/9/99 1: 17	0.05	0.05	1.35	0.85	0.10	0.08	2.48
8/9/99 1: 37	0.03	0.03	1.48	0.83	0.05	0.03	2.43
8/9/99 1:57	0.00	0.00	1.50	0.68	0.05	0.13	2.35
8/9/99 2: 17	0.00	0.05	1.45	1.08	0.08	0.05	2.70
8/9/99 2:37	0.00	0.05	1.93	0.75	0.08	0.00	2.80
8/9/99 2: 57	0.03	0.00	1.98	0.95	0.05	0.00	3.00
8/9/99 3: 17	0.00	0.05	1.55	1.00	0.03	0.05	2.68
8/9/99 3:37	0.00	0.00	1.40	0.73	0.10	0.13	2.35

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/9/99 3:57	0.03	0.05	2.03	0.70	0.08	0.03	2.90
8/9/99 4:17	0.05	0.05	2.00	1.10	0.05	0.10	3.35
8/9/99 4:37	0.03	0.03	1.93	1.15	0.03	0.10	3.25
8/9/99 4:57	0.03	0.03	2.23	0.95	0.03	0.03	3.28
8/9/99 5:17	0.05	0.03	2.38	1.55	0.03	0.08	4.10
8/9/99 5:37	0.00	0.03	2.55	1.50	0.08	0.05	4.20
8/9/99 5:57	0.03	0.03	2.58	1.13	0.08	0.05	3.88
8/9/99 6: 17	0.03	0.03	2.73	1.45	0.08	0.13	4.43
8/9/99 6:37	0.00	0.00	2.35	1.65	0.05	0.10	4.15
8/9/99 6: 57	0.03	0.00	3.15	1.50	0.10	0.08	4.85
8/9/99 7: 17	0.03	0.03	3.30	1.50	0.08	0.03	4.95
8/9/99 7:37	0.00	0.00	3.68	1.95	0.05	0.08	5.75
8/9/99 7: 57	0.00	0.03	2.95	1.55	0.05	0.03	4.60
8/9/99 8: 17	0.03	0.10	7.25	3.65	0.38	0.20	11.60
8/9/99 8:37	0.00	0.05	2.95	1.40	0.13	0.03	4.55
8/9/99 8:57	0.00	0.08	2.73	2.13	0.10	0.13	5.15
8/9/99 9:17	5.98	12.75	53.28	64.43	14.10	19.80	170.33
8/9/99 9:37	0.40	0.63	6.70	6.95	1.03	1.28	16.98
8/9/99 9:57	0.30	0.45	4.38	3.70	0.68	0.60	10.10
8/9/99 10: 17	0.15	0.25	3.23	2.40	0.58	0.53	7.13
8/9/99 10:37	0.15	0.38	2.78	2.40	0.33	0.50	6.53
8/9/99 10: 57	1.18	1.90	11.38	13.85	2.83	3.28	34.40
8/9/99 11:17	0.18	0.18	2.18	2.35	0.28	0.30	5.45
8/9/99 11: 37	0.23	0.18	1.58	1.48	0.30	0.28	4.03
8/9/99 11: 57	0.03	0.08	1.58	1.28	0.18	0.05	3.18
8/9/99 12:17	0.58	0.45	3.03	3.75	0.58	0.63	9.00
8/9/99 12:37	0.08	0.20	1.83	1.40	0.10	0.25	3.85
8/9/99 12:57	0.03	0.10	1.78	1.23	0.20	0.20	3.53
8/9/99 13: 17	0.10	0.18	2.75	2.25	0.35	0.23	5.85
8/9/99 13:37	0.00	0.10	1.78	1.60	0.13	0.28	3.88
8/9/99 13:57	0.05	0.20	1.95	1.70	0.33	0.28	4.50
8/9/99 14:17	0.05	0.18	2.20	1.40	0.33	0.13	4.28
8/9/99 14:37	0.10	0.18	2.48	1.83	0.35	0.15	5.08
8/9/99 14:57	0.20	0.23	2.93	2.08	0.18	0.20	5.80
8/9/99 15:17	0.48	0.68	9.35	9.10	1.13	1.33	22.05
8/9/99 15:37	0.10	0.28	4.05	3.15	0.38	0.45	8.40
8/9/99 15:57	0.13	0.23	4.10	2.35	0.35	0.30	7.45
8/9/99 16: 17	0.05	0.00	3.60	2.33	0.30	0.18	6.45
8/9/99 16:37	0.03	0.18	3.78	2.28	0.33	0.23	6.80
8/9/99 16:57	0.08	0.18	4.40	2.68	0.25	0.48	8.05
8/9/99 17:17	0.03	0.10	4.20	2.60	0.25	0.18	7.35
8/9/99 17:37	0.10	0.18	5.25	2.90	0.20	0.23	8.85
8/9/99 17:57	0.05	0.13	5.75	3.20	0.05	0.25	9.43
8/9/99 18:17	0.03	0.10	6.28	3.75	0.23	0.20	10.58
8/9/99 18:37	0.05	0.08	7.25	3.55	0.38	0.25	11.55
8/9/99 18:57	0.05	0.15	9.28	4.45	0.38	0.33	14.63
8/9/99 19: 17	0.15	0.25	9.18	4.73	0.48	0.43	15.20
8/9/99 19:37	0.05	0.18	13.35	7.08	0.35	0.30	21.30

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/9/99 19:57	0.13	0.23	12.95	6.75	0.55	0.33	20.93
8/9/99 20:17	0.03	0.10	14.28	8.60	0.53	0.38	23.90
8/9/99 20:37	0.05	0.13	16.45	9.03	0.53	0.40	26.58
8/9/99 20:57	0.10	0.08	19.08	10.70	0.50	0.25	30.70
8/9/99 21:17	0.05	0.10	20.23	11.20	0.75	0.45	32.78
8/9/99 21:37	0.00	0.15	21.03	11.50	1.15	0.35	34.18
8/9/99 21:57	0.00	0.18	20.73	13.20	0.80	0.48	35.38
8/9/99 22:17	0.10	0.13	21.65	12.03	1.03	0.55	35.48
8/9/99 22:37	0.08	0.10	20.58	12.98	0.78	0.55	35.05
8/9/99 22:57	0.03	0.18	19.85	12.40	0.78	0.45	33.68
8/9/99 23:17	0.00	0.10	21.18	11.68	0.90	0.38	34.23
8/9/99 23:37	0.03	0.13	20.38	13.75	0.58	0.63	35.48
8/9/99 23:57	0.10	0.15	20.10	11.38	0.65	0.33	32.70
8/10/99 0:17	0.08	0.18	20.50	11.13	0.75	0.45	33.08
8/10/99 0:37	0.00	0.08	21.23	12.48	0.85	0.55	35.18
8/10/99 0:57	0.08	0.08	19.30	12.15	1.13	0.58	33.30
810199 1:17	0.18	0.25	19.00	10.98	0.83	0.83	32.05
8/10/99 1:37	0.03	0.28	18.83	11.83	0.48	0.23	31.65
8/10/99 1:57	0.00	0.18	19.33	10.58	0.58	0.48	31.13
8/10/99 2:17	0.10	0.18	17.05	10.10	0.73	0.23	28.38
8/10/99 2:37	0.00	0.13	17.95	11.48	0.68	0.48	30.70
8/10/99 2:57	0.03	0.18	19.00	10.93	0.63	0.30	31.05
8/10/99 3:17	0.05	0.10	17.20	10.70	0.75	0.30	29.10
8/10/99 3:37	0.08	0.10	17.23	11.35	0.78	0.35	29.88
8/10/99 3:57	0.03	0.10	17.58	10.73	0.58	0.60	29.60
8/10/99 4:17	0.03	0.20	17.38	11.33	0.70	0.55	30.18
8/10/99 4:37	0.05	0.10	18.65	10.43	0.65	0.38	30.25
8/10/99 4:57	0.10	0.30	19.28	11.55	0.95	0.48	32.65
8/10/99 5:17	0.08	0.18	19.08	11.38	0.63	0.48	31.80
8/10/99 5:37	0.03	0.13	18.78	11.05	0.65	0.23	30.85
8/10/99 5:57	0.08	0.25	19.55	11.75	0.40	0.30	32.33
8/10/99 6:17	0.05	0.00	19.63	12.33	0.48	0.40	32.88
8/10/99 6:37	0.08	0.08	20.23	11.68	0.65	0.33	33.03
8/10/99 6:57	0.05	0.08	20.55	12.18	0.73	0.40	33.98
8/10/99 7:17	0.05	0.18	22.08	12.08	0.90	0.53	35.80
8/10/99 7:37	0.03	0.10	19.23	11.28	0.63	0.30	31.55
8/10/99 7:57	0.05	0.03	17.50	10.95	0.63	0.33	29.48
8/10/99 8:17	0.03	0.18	35.98	23.20	1.40	0.50	61.28
8/10/99 8:37	0.03	0.25	19.65	12.40	0.93	0.53	33.78
8/10/99 8:57	0.13	0.53	8.95	6.95	0.95	0.60	18.10
8/10/99 9:17	0.75	0.78	29.13	22.38	1.90	1.68	56.60
8/10/99 9:37	0.60	0.35	17.45	12.98	1.08	0.68	33.13
8/10/99 9:57	1.18	0.95	14.00	9.98	1.48	1.33	28.90
8/10/99 10:17	0.53	0.53	10.73	7.58	0.73	0.93	21.00
8/10/99 10:37	0.18	0.40	8.48	6.48	0.58	0.75	16.85
8/10/99 10:57	0.15	0.23	8.35	5.15	0.75	0.65	15.28
8/10/99 11:17	0.48	0.25	11.63	7.95	1.05	0.95	22.30
8/10/99 11:37	0.20	0.30	7.60	4.90	0.70	0.75	14.45



/Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/10/99 11:57	0.65	0.68	8.00	5.45	1.08	1.18	17.03
8/10/99 12:17	0.15	0.33	6.58	4.63	0.55	0.58	12.80
8/10/99 12:37	0.20	0.08	5.93	4.43	0.53	0.50	11.65
8/10/99 12:57	0.58	0.63	18.40	14.30	1.30	1.45	36.65
8/10/99 13:17	0.18	0.33	8.38	6.55	0.70	0.65	16.78
8/10/99 13:37	0.20	0.28	7.23	5.40	0.83	0.68	14.60
8/10/99 13:57	0.18	0.23	6.60	4.40	0.70	0.68	12.78
8/10/99 14:17	0.20	0.28	7.90	6.73	0.85	0.83	16.78
8/10/99 14:37	0.20	0.48	7.13	5.18	0.58	0.75	14.30
8/10/99 14:57	0.18	0.20	6.90	4.50	0.65	0.80	13.23
8/10/99 15:17	0.13	0.40	12.60	10.20	0.98	0.90	25.20
8/10/99 15:37	0.15	0.30	7.98	5.90	0.73	0.88	15.93
8/10/99 15:57	0.40	0.60	8.30	5.95	0.73	0.93	16.90
8/10/99 16:17	0.18	0.45	7.13	5.45	0.83	0.55	14.58
8110199 16:37	0.05	0.18	7.10	6.50	0.38	0.55	14.75
8/10/99 16:57	0.08	0.08	8.88	5.80	0.45	0.53	15.80
8/10/99 17:17	0.10	0.33	9.65	6.80	0.73	0.50	18.10
8/10/99 17:37	0.13	0.23	10.55	6.30	0.68	0.50	18.38
8/10/99 17:57	0.23	0.25	11.73	7.60	1.10	0.68	21.58
8/10/99 18:17	0.15	0.33	12.68	8.23	0.85	0.73	22.95
8/10/99 18:37	0.20	0.43	12.95	8.93	0.90	0.70	24.10
8/10/99 18:57	0.28	0.50	15.35	9.15	1.15	0.93	27.35
8/10/99 19:17	0.30	0.38	17.50	10.43	0.85	0.85	30.30
8/10/99 19:37	0.05	0.30	17.90	10.15	0.83	0.60	29.83
8/10/99 19:57	0.35	0.60	22.90	13.38	1.53	1.50	40.25
8/10/99 20:17	0.18	0.40	23.60	12.88	0.85	0.80	38.70
8/10/99 20:37	0.03	0.25	25.13	14.35	0.98	0.80	41.53
8/10/99 20:57	0.13	0.33	26.80	15.28	1.00	0.85	44.38
8/10/99 21:17	0.05	0.43	29.20	16.13	1.05	0.55	47.40
8/10/99 21:37	0.15	0.35	29.30	17.08	1.03	0.80	48.70
8/10/99 21:57	0.08	0.20	31.55	18.98	0.83	0.70	52.33
8/10/99 22:17	0.18	0.35	32.08	20.08	1.18	0.85	54.70
8/10/99 22:37	0.23	0.23	33.63	19.08	1.03	0.70	54.88
8/10/99 22:57	0.00	0.28	32.95	20.50	1.33	0.68	55.73
8/10/99 23:17	0.08	0.25	34.20	22.63	1.13	0.60	58.88
8/10/99 23:37	0.08	0.15	37.00	21.60	1.28	0.78	60.88
8/10/99 23:57	0.08	0.13	36.80	19.28	1.25	0.78	58.30
8111199 0:17	0.08	0.28	34.58	22.20	0.98	0.80	58.90
8/11/99 0:37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 0:57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 1:17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 1:37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 1:57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 2:17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 2:37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 2:57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 3:17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 3:37	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/11/99 3:57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 4:17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 4:37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 4:57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 5:17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 5:37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 5:57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 6:17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 6:37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 6:57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 7:17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 7:37	1.85	1.90	141.48	98.38	7.75	5.93	257.28
8/11/99 7:57	0.83	1.38	106.98	62.05	4.25	3.08	178.55
8/11/99 8:17	3.20	4.93	76.13	68.75	9.13	9.98	172.10
8/11/99 8:37	3.38	5.63	60.30	68.40	12.30	11.58	161.58
8/11/99 8:57	2.00	4.48	57.68	64.43	10.93	11.25	150.75
8/11/99 9:17	1.30	3.30	54.05	60.10	10.45	9.43	138.63
8/11/99 9:37	0.68	2.20	50.08	52.83	8.10	6.40	120.28
8/11/99 9:57	0.35	1.45	47.23	45.23	5.33	3.93	103.50
8/11/99 10:17	0.45	0.93	48.08	43.35	3.95	3.03	99.78
8/11/99 10:37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/99 10:57	0.63	1.43	73.53	72.55	8.15	5.65	161.93
8/11/99 11:17	1.15	1.43	85.78	83.00	8.98	5.03	185.35
8/11/99 11:37	0.40	1.03	72.73	65.53	6.30	3.35	149.33
8/11/99 11:57	0.25	0.43	59.10	51.78	5.55	2.60	119.70
8/11/99 12:17	0.38	0.60	43.83	38.73	3.53	2.13	89.18
8/11/99 12:37	0.05	0.40	36.53	29.93	2.88	1.73	71.50
8/11/99 12:57	0.25	0.38	29.35	27.10	3.00	2.03	62.10
8/11/99 13:17	0.28	0.15	30.53	23.55	2.33	1.15	57.98
8/11/99 13:37	0.10	0.23	22.28	19.63	1.83	0.75	44.80
8/11/99 13:57	0.23	0.63	19.35	15.80	1.48	1.00	38.48
8/11/99 14:17	0.10	0.15	14.15	11.90	1.30	0.93	28.53
8/11/99 14:37	0.13	0.10	11.50	11.38	1.10	0.60	24.80
8/11/99 14:57	0.38	0.53	12.55	10.63	1.28	0.73	26.08
8/11/99 15:17	0.15	0.18	10.23	9.63	1.05	0.70	21.93
8/11/99 15:37	0.33	0.25	10.43	8.93	0.90	0.60	21.43
8/11/99 15:57	0.40	0.28	10.00	8.13	1.13	0.85	20.78
8/11/99 16:17	0.18	0.18	9.90	8.23	0.98	0.70	20.15
8/11/99 16:37	0.55	0.80	10.55	9.70	1.35	1.08	24.03
8/11/99 16:57	0.35	0.45	9.90	8.73	1.13	0.88	21.43
8/11/99 17:17	0.65	0.88	9.63	9.08	1.08	1.53	22.83
8/11/99 17:37	0.73	0.65	10.20	9.40	1.05	1.25	23.28
8/11/99 17:57	0.50	0.63	10.43	9.88	1.28	0.95	23.65
8/11/99 18:17	0.40	0.78	9.43	8.95	1.18	1.25	21.98
8/11/99 18:37	0.25	0.78	9.80	10.00	1.75	1.58	24.15
8/11/99 18:57	0.38	0.60	9.40	9.98	1.28	1.33	22.95
8/11/99 19:17	0.45	0.68	11.05	11.78	1.98	1.55	27.48
8/11/99 19:37	0.28	0.80	10.58	11.95	2.60	1.75	27.95

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
8/11/99 19:57	0.35	0.65	10.48	12.35	2.05	1.83	27.70
8/11/99 20:17	0.23	0.55	11.65	12.63	1.65	1.88	28.58
8/11/99 20:37	0.20	0.48	13.30	12.45	1.75	1.73	29.90
8/11/99 20:57	0.15	0.33	11.88	12.03	1.90	1.33	27.60
8/11/99 21:17	0.05	0.45	12.83	12.43	1.78	1.53	29.05
8/11/99 21:37	0.10	0.25	12.95	12.88	1.88	1.55	29.60
8/11/99 21:57	0.08	0.43	11.80	10.70	1.53	1.10	25.63
8/11/99 22:17	0.10	0.23	12.20	11.88	1.58	0.90	26.88
8/11/99 22:37	0.15	0.28	12.43	10.68	1.43	0.78	25.73
8/11/99 22:57	0.03	0.30	12.15	9.78	1.33	0.93	24.50
8/11/99 23:17	0.13	0.35	12.18	10.93	1.18	0.93	25.68
8/11/99 23:37	0.10	0.28	11.93	9.28	1.33	0.65	23.55
8/11/99 23:57	0.15	0.30	11.23	10.08	0.98	0.68	23.40
8/12/99 0:17	0.05	0.13	10.35	9.53	0.95	0.53	21.53
8/12/99 0:37	0.08	0.13	9.50	8.80	0.83	0.73	20.05
8/12/99 0:57	0.10	0.18	9.80	9.00	0.88	0.70	20.65
8/12/99 1:17	0.03	0.13	9.50	7.63	0.70	0.60	18.58
8/12/99 1:37	0.00	0.25	8.28	8.03	0.73	0.35	17.63
8/12/99 1:57	0.05	0.13	8.85	6.63	0.65	0.35	16.65
8/12/99 2:17	0.05	0.03	8.13	6.10	0.75	0.40	15.45
8/12/99 2:37	0.05	0.03	8.65	7.80	0.85	0.45	17.83
8/12/99 2:57	0.08	0.18	7.40	6.60	0.48	0.50	15.23
8/12/99 3:17	0.03	0.10	8.05	5.95	0.53	0.45	15.10
8/12/99 3:37	0.03	0.10	7.43	5.98	0.80	0.43	14.75
8/12/99 3:57	0.05	0.08	6.95	5.20	0.65	0.38	13.30
8/12/99 4:17	0.13	0.15	7.20	6.45	0.63	0.53	15.08
8/12/99 4:37	0.03	0.10	6.83	4.93	0.60	0.40	12.88
8/12/99 4:57	0.03	0.15	6.48	5.15	0.63	0.35	12.78
8/12/99 5:17	0.05	0.10	6.65	5.33	0.35	0.30	12.78
8/12/99 5:37	0.05	0.15	6.68	3.95	0.63	0.28	11.73
8/12/99 5:57	0.03	0.05	6.30	5.25	0.40	0.25	12.28
8/12/99 6:17	0.10	0.10	5.83	4.35	0.55	0.28	11.20
8/12/99 6:37	0.05	0.05	5.40	4.40	0.45	0.33	10.68
8/12/99 6:57	0.00	0.13	5.40	4.30	0.63	0.20	10.65
8/12/99 7:17	0.13	0.00	5.25	3.75	0.30	0.23	9.65
8/12/99 7:37	0.08	0.10	5.85	4.13	0.43	0.28	10.85
8/12/99 7:57	0.08	0.10	5.78	3.93	0.23	0.15	10.25
8/12/99 8:17	0.73	0.73	42.60	29.28	2.70	1.85	77.88
8/12/99 8:37	0.10	0.18	6.13	4.73	0.35	0.48	11.95
8/12/99 8:57	0.05	0.05	4.55	3.95	0.30	0.18	9.08
8/12/99 9:17	0.03	0.05	4.48	3.45	0.30	0.20	8.50

### McAllen Wastewater Reclamation Project - September Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/2/99 7:53	0.00	0.10	3.58	2.30	0.18	0.18	6.33
9/2/99 8:13	0.28	0.73	6.55	5.60	1.33	1.28	15.75
9/2/99 8:33	0.15	0.05	3.65	2.85	0.33	0.40	7.43
9/2/99 8:53	0.03	0.10	3.60	2.78	0.40	0.15	7.05
9/2/99 9:13	0.00	0.00	3.75	2.38	0.38	0.15	6.65
9/2/99 9: 33	0.00	0.13	3.45	2.50	0.20	0.15	6.43
9/2/99 9:53	6.35	6.80	79.13	82.45	15.18	13.60	203.50
9/2/99 10: 13	0.03	0.10	4.65	3.30	0.35	0.23	8.65
9/2/99 10:33	1.00	1.43	17.58	17.05	2.33	1.80	41.18
9/2/99 10:53	0.25	0.20	7.83	5.78	0.85	0.83	15.73
9/2/99 11:13	0.00	0.10	2.28	1.88	0.23	0.10	4.58
9/2/99 11:33	0.00	0.08	2.80	1.48	0.10	0.13	4.58
9/2/99 11:53	0.03	0.05	3.23	2.15	0.10	0.10	5.65
9/2/99 12:13	0.05	0.05	2.30	1.78	0.18	0.03	4.38
9/2/99 12:33	0.05	0.15	2.38	1.90	0.10	0.18	4.75
9/2/99 12:53	0.03	0.08	2.40	1.78	0.18	0.08	4.53
9/2/99 13: 13	0.03	0.08	2.60	1.93	0.18	0.08	4.88
9/2/99 13:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 13:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 14:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 14:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 14:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 15: 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 15:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 15:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 16: 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 16:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 16:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 17:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 17: 33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 17:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 18: 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 18:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 18:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 19: 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 19:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 19:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 20: 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 20:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 20:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 21:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 21:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 21:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 22:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 22:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 22:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/2/99 23:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 23:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/2/99 23:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 0:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 0:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 0:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 1:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 1:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 1:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 2:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 2:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 2:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 3:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 3:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 3:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 4:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 4:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 4:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 5:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 5:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 5:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 6:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 6:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 6:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 7:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 7:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 7:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/3/99 8:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/8/99 9:19	18.35	21.98	140.53	164.90	37.78	44.43	427.95
9/8/99 9:39	21.05	30.83	598.20	545.13	81.23	75.18	999.00
9/13/99 14:38	0.50	0.70	29.50	20.53	2.25	1.73	55.20
9/13/99 14:58	0.15	0.13	10.80	6.95	0.48	0.73	19.23
9/13/99 15:18	0.13	0.20	9.38	5.10	0.68	0.35	15.83
9/13/99 15:38	0.18	0.13	8.13	5.55	0.43	0.18	14.58
9/13/99 15:58	0.05	0.13	8.88	4.83	0.28	0.30	14.45
9/13/99 16:18	0.03	0.03	9.35	5.60	0.23	0.30	15.53
9/13/99 16:38	0.08	0.20	9.98	5.70	0.53	0.18	16.65
9/13/99 16:58	0.15	0.23	9.60	5.98	0.48	0.50	16.93
9/13/99 17:18	0.03	0.20	9.45	4.90	0.35	0.30	15.23
9/13/99 17:38	0.05	0.05	8.08	3.80	0.20	0.20	12.38
9/13/99 17:58	0.03	0.08	7.53	3.53	0.18	0.23	11.55
9/13/99 18:18	0.03	0.00	8.18	4.28	0.28	0.25	13.00
9/13/99 18:38	0.05	0.15	8.95	4.75	0.63	0.28	14.80
9/13/99 18:58	0.05	0.05	10.50	5.58	0.20	0.20	16.58
9/13/99 19:18	0.03	0.03	8.28	4.28	0.30	0.15	13.05
9/13/99 19:38	0.03	0.05	7.73	4.13	0.25	0.15	12.33
9/13/99 19:58	0.08	0.10	8.35	3.70	0.38	0.20	12.80
9/13/99 20:18	0.00	0.05	9.43	4.53	0.25	0.13	14.38

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/13/99 20:38	0.00	0.00	9.83	4.58	0.18	0.13	14.70
9/13/99 20:58	0.00	0.05	11.23	5.63	0.25	0.18	17.33
9/13/99 21:18	0.10	0.20	11.30	7.23	0.70	0.35	19.88
9/13/99 21:38	0.05	0.13	11.43	6.03	0.18	0.20	18.00
9/13/99 21:58	0.03	0.10	13.43	7.33	0.20	0.10	21.18
9/13/99 22:18	0.08	0.18	15.50	7.38	0.40	0.18	23.70
9/13/99 22:38	0.00	0.08	17.25	8.33	0.38	0.15	26.18
9/13/99 22:58	0.03	0.03	20.75	10.80	0.60	0.20	32.40
9/13/99 23:18	0.08	0.10	24.58	12.73	0.53	0.23	38.23
9/13/99 23:38	0.03	0.13	26.30	13.55	0.60	0.45	41.05
9/13/99 23:58	0.03	0.03	29.80	14.73	0.63	0.35	45.55
9/14/99 0:18	0.18	0.20	31.50	19.20	1.20	1.08	53.35
9/14/99 0:38	0.20	0.18	33.03	17.95	0.98	0.60	52.93
9/14/99 0:58	0.08	0.13	33.00	18.23	0.83	0.38	52.63
9/14/99 1:18	0.08	0.10	35.35	18.28	0.95	0.38	55.13
9/14/99 1:38	0.15	0.05	36.25	19.45	1.25	0.43	57.58
9/14/99 1:58	0.03	0.08	37.35	19.33	0.93	0.43	58.13
9/14/99 2:18	0.05	0.13	37.85	19.13	1.10	0.43	58.68
9/14/99 2:38	0.05	0.38	40.93	21.70	1.10	0.65	64.80
9/14/99 2:58	0.05	0.08	40.38	19.70	0.93	0.35	61.48
9/14/99 3:18	0.05	0.05	42.78	20.80	0.90	0.38	64.95
9/14/99 3:38	0.00	0.10	41.28	20.60	0.75	0.50	63.23
9/14/99 3:58	0.03	0.15	42.83	21.68	0.90	0.35	65.93
9/14/99 4:18	0.03	0.18	43.58	20.73	0.85	0.55	65.90
9/14/99 4:38	0.00	0.10	41.18	21.45	0.78	0.40	63.90
9/14/99 4:58	0.03	0.05	41.65	18.95	0.80	0.43	61.90
9/14/99 5:18	0.03	0.13	41.83	20.33	1.28	0.43	64.00
9/14/99 5:38	0.10	0.03	39.38	20.23	0.98	0.68	61.38
9/14/99 5:58	0.05	0.15	39.30	18.15	0.60	0.35	58.60
9/14/99 6:18	0.05	0.13	37.93	19.63	0.95	0.35	59.03
9/14/99 6:38	0.00	0.10	39.40	19.38	0.70	0.33	59.90
9/14/99 6:58	0.03	0.03	36.43	18.18	0.88	0.53	56.05
9/14/99 7:18	0.08	0.03	34.50	16.80	0.60	0.25	52.25
9/14/99 7:48	0.18	0.48	69.78	45.90	3.18	1.78	121.28
9/14/99 8:08	0.13	0.13	34.85	20.05	1.55	0.65	57.35
9/14/99 8:28	0.08	0.15	21.28	11.90	0.85	0.28	34.53
9/14/99 8:48	0.10	0.10	17.83	10.00	0.60	0.18	28.80
9/14/99 9:08	0.63	1.38	139.45	84.40	6.68	5.25	237.78
9/14/99 9:28	0.05	0.05	19.05	12.33	0.78	0.63	32.88
9/14/99 9:48	0.05	0.13	15.50	9.83	0.83	0.25	26.58
9/14/99 10:08	0.00	0.03	0.60	0.15	0.00	0.13	0.90
9/14/99 10:28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/14/99 10:48	1.90	3.13	98.20	76.93	9.13	7.73	197.00
9/14/99 11:08	0.68	1.08	42.60	31.28	3.33	2.55	81.50
9/14/99 11:28	0.55	0.98	42.00	28.33	2.60	2.40	76.85
9/14/99 11:48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/14/99 12:08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/14/99 12:28	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/14/99 12:48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/14/99 13:08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/14/99 13:28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/14/99 13:48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/20/99 15:32	0.08	0.18	7.30	5.30	0.65	0.53	14.03
9/20/99 15:52	0.08	0.10	5.80	4.18	0.63	0.23	11.00
9/20/99 16:12	0.08	0.08	5.00	5.10	0.80	0.45	11.50
9/20/99 16:32	0.08	0.13	5.60	4.40	0.55	0.65	11.40
9/20/99 16:52	0.05	0.18	5.63	4.03	0.45	0.48	10.80
9/20/99 17:12	0.03	0.10	5.88	4.63	0.43	0.53	11.58
9/20/99 17:32	0.03	0.05	6.75	5.68	0.60	0.38	13.48
9/20/99 17:52	0.28	0.15	6.48	5.00	0.55	0.50	12.95
9/20/99 18:12	0.23	0.23	7.05	6.05	0.90	0.80	15.25
9/20/99 18:32	0.08	0.00	5.85	4.50	0.33	0.18	10.93
9/20/99 18:52	0.08	0.08	5.98	4.70	0.48	0.25	11.55
9/20/99 19:12	0.03	0.15	5.80	4.83	0.43	0.43	11.65
9/20/99 19:32	0.10	0.10	5.43	4.20	0.45	0.63	10.90
9/20/99 19:52	0.08	0.13	6.23	4.55	0.48	0.28	11.73
9/20/99 20:12	0.03	0.05	6.25	4.38	0.43	0.20	11.33
9/20/99 20:32	0.00	0.03	5.85	4.10	0.55	0.25	10.78
9/20/99 20:52	0.03	0.10	6.30	5.60	0.65	0.48	13.15
9/20/99 21:12	0.08	0.20	6.63	5.93	0.68	0.55	14.05
9/20/99 21:32	0.03	0.10	5.83	4.05	0.50	0.35	10.85
9/20/99 21:52	0.03	0.08	6.48	4.93	0.43	0.30	12.23
9/20/99 22:12	0.03	0.05	6.03	4.08	0.50	0.43	11.10
9/20/99 22:32	0.10	0.10	7.43	5.05	0.53	0.43	13.63
9/20/99 22:52	0.03	0.08	7.08	4.05	0.45	0.23	11.90
9/20/99 23:12	0.05	0.05	6.13	5.03	0.40	0.23	11.88
9/20/99 23:31	0.05	0.13	6.63	4.80	0.48	0.38	12.45
9/20/99 23:51	0.00	0.05	6.03	4.50	0.38	0.28	11.23
9/21/99 0:11	0.00	0.03	7.48	4.58	0.63	0.28	12.98
9/21/99 0:31	0.05	0.08	7.03	4.88	0.35	0.25	12.63
9/21/99 0:51	0.03	0.05	7.35	5.73	0.38	0.40	13.93
9/21/99 1:11	0.03	0.10	7.13	4.15	0.30	0.40	12.10
9/21/99 1:31	0.03	0.03	6.88	4.28	0.53	0.33	12.05
9/21/99 1:51	0.03	0.13	6.85	4.80	0.40	0.33	12.53
9/21/99 2:11	0.00	0.05	7.38	4.58	0.45	0.38	12.83
9/21/99 2:31	0.08	0.10	7.50	4.38	0.35	0.15	12.55
9/21/99 2:51	0.00	0.10	7.70	4.75	0.55	0.30	13.40
9/21/99 3:11	0.03	0.05	7.68	4.65	0.45	0.35	13.20
9/21/99 3:31	0.00	0.00	7.28	4.95	0.45	0.25	12.93
9/21/99 3:51	0.03	0.03	7.08	4.40	0.48	0.45	12.45
9/21/99 4:11	0.03	0.08	7.70	4.53	0.38	0.43	13.13
9/21/99 4:31	0.05	0.13	8.05	4.68	0.40	0.35	13.65
9/21/99 4:51	0.05	0.08	7.28	5.28	0.33	0.35	13.35
9/21/99 5:11	0.05	0.18	7.70	4.63	0.65	0.38	13.58
9/21/99 5:31	0.00	0.15	7.35	4.95	0.43	0.28	13.15
9/21/99 5:51	0.03	0.05	8.25	4.80	0.48	0.28	13.88

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/21/99 6:11	0.03	0.15	7.73	4.83	0.50	0.38	13.60
9/21/99 6:31	0.00	0.10	7.78	4.60	0.58	0.38	13.43
9/21/99 6:51	0.00	0.08	7.95	5.55	0.48	0.30	14.35
9/21/99 7:11	0.00	0.05	7.70	4.23	0.43	0.28	12.68
9/21/99 7:31	0.08	0.10	8.65	4.75	0.50	0.43	14.50
9/21/99 7:51	0.05	0.08	6.80	4.18	0.43	0.43	11.95
9/21/99 8:11	0.00	0.00	6.95	4.35	0.33	0.25	11.88
9/21/99 8:31	0.00	0.15	11.55	8.15	0.78	0.58	21.20
9/21/99 8:51	0.10	0.15	8.93	6.33	0.68	0.43	16.60
9/21/99 9:11	0.10	0.10	6.18	4.85	0.53	0.38	12.13
9/21/99 9:31	0.00	0.23	6.65	4.55	0.38	0.45	12.25
9/21/99 9:51	0.00	0.10	5.80	4.65	0.48	0.40	11.43
9/21/99 10:11	0.08	0.08	6.80	4.63	0.53	0.35	12.45
9/21/99 10:31	0.03	0.13	6.90	3.95	0.53	0.48	12.00
9/21/99 10:51	0.00	0.10	6.10	3.53	0.35	0.23	10.30
9/21/99 11:11	0.08	0.10	7.15	4.63	0.48	0.38	12.80
9/21/99 11:31	0.15	0.23	8.70	7.33	0.75	0.63	17.78
9/21/99 11:51	0.03	0.20	5.60	4.00	0.48	0.38	10.68
9/21/99 12:11	0.03	0.13	4.55	4.30	0.33	0.33	9.65
9/21/99 12:31	0.03	0.13	11.40	8.15	0.73	0.45	20.88
9/21/99 12:51	0.03	0.10	10.43	5.68	0.78	0.53	17.53
9/21/99 13:11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/21/99 13:31	3.33	2.35	30.38	28.60	4.38	4.43	73.45
9/21/99 13:51	0.48	0.90	13.20	12.43	2.03	1.88	30.90
9/21/99 14:11	0.35	0.25	6.20	5.68	0.78	0.88	14.13
9/21/99 14:31	0.40	0.45	6.00	4.25	0.65	0.63	12.38
9/21/99 14:51	0.25	0.25	7.70	6.13	0.98	0.83	16.13
9/21/99 15:28	0.35	0.30	5.63	5.70	1.35	0.95	14.28
9/21/99 15:48	0.15	0.28	3.80	3.43	0.53	0.38	8.55
9/21/99 16:08	0.23	0.38	5.43	4.58	0.78	0.78	12.15
9/21/99 16:28	0.20	0.25	4.03	3.03	0.35	0.48	8.33
9/21/99 16:48	0.13	0.13	2.43	2.03	0.35	0.30	5.35
9/21/99 17:08	0.40	0.33	4.83	4.40	0.58	0.90	11.43
9/21/99 17:28	0.80	0.63	4.58	4.93	1.40	1.45	13.78
9/21/99 17:48	0.25	0.18	3.70	2.98	0.50	0.43	8.03
9/21/99 18:08	0.23	0.25	4.53	3.83	0.48	0.33	9.63
9/21/99 18:28	0.48	0.35	3.88	3.50	0.33	0.63	9.15
9/21/99 18:48	0.25	0.25	6.43	5.70	0.85	0.73	14.20
9/21/99 19:08	0.20	0.28	6.45	5.75	0.55	0.88	14.10
9/21/99 19:28	0.20	0.20	6.10	4.78	0.48	0.80	12.55
9/21/99 19:48	0.28	0.30	6.63	5.15	0.55	0.45	13.35
9/21/99 20:08	0.55	0.65	6.50	5.85	0.98	0.80	15.33
9/21/99 20:28	0.35	0.50	5.80	5.38	0.98	0.73	13.73
9/21/99 20:48	0.40	0.58	7.43	5.88	0.98	1.15	16.40
9/21/99 21:08	0.10	0.33	5.95	4.93	0.68	0.48	12.45
9/21/99 21:28	0.25	0.20	6.08	5.18	0.75	0.73	13.18
9/21/99 21:48	0.18	0.30	6.38	5.75	0.58	0.65	13.83
9/21/99 22:08	0.40	0.45	6.93	5.50	1.08	0.95	15.30



Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/21/99 22:28	0.13	0.15	7.65	5.18	0.78	0.60	14.48
9/21/99 22:48	0.30	0.68	7.40	5.80	0.95	0.80	15.93
9/21/99 23:08	0.35	0.43	7.55	6.45	1.25	1.15	17.18
9/21/99 23:28	0.40	0.55	8.25	6.80	1.20	0.63	17.83
9/21/99 23:48	0.25	0.25	8.85	6.65	0.90	0.75	17.65
9/22/99 0:08	0.15	0.15	8.40	6.40	0.85	0.43	16.38
9/22/99 0:28	0.38	0.43	8.90	7.23	1.00	1.20	19.13
9/22/99 0:48	0.35	0.55	11.58	9.48	1.45	1.15	24.55
9/22/99 1:08	0.10	0.33	10.30	7.25	1.03	0.73	19.73
9/22/99 1:28	0.13	0.20	9.65	7.28	0.80	0.50	18.55
9/22/99 1:48	0.10	0.35	10.65	7.80	1.00	1.00	20.90
9/22/99 2:08	0.10	0.30	11.63	7.55	1.03	0.98	21.58
9/22/99 2:28	0.05	0.20	10.60	8.30	1.10	0.68	20.93
9/22/99 2:48	0.08	0.38	11.30	8.80	1.43	1.20	23.18
9/22/99 3:08	0.33	0.43	10.98	8.23	1.05	1.03	22.03
9/22/99 3:28	0.15	0.35	11.05	8.73	1.00	0.80	22.08
9/22/99 3:48	0.13	0.25	11.05	8.25	0.93	1.28	21.88
9/22/99 4:08	0.15	0.20	11.00	8.63	0.98	0.83	21.78
9/22/99 4:28	0.15	0.28	11.60	7.63	1.23	0.90	21.78
9/22/99 4:48	0.15	0.28	11.05	7.58	1.10	0.78	20.93
9/22/99 5:08	0.13	0.35	12.20	8.35	1.20	0.70	22.93
9/22/99 5:28	0.15	0.43	11.30	8.70	0.93	1.08	22.58
9/22/99 5:48	0.10	0.15	10.95	8.43	0.95	0.60	21.18
9/22/99 6:08	0.20	0.38	12.15	10.53	1.45	1.50	26.20
9/22/99 6:28	0.10	0.30	13.53	9.73	1.15	1.18	25.98
9/22/99 6:48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/99 7:08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/99 7:28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/99 7:48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/99 8:08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/99 8:28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/99 8:48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/99 14:06	0.55	1.00	16.88	14.88	2.15	2.63	38.08
9/22/99 14:32	1.65	1.95	26.35	27.65	4.78	5.25	67.63
9/22/99 14:52	1.20	1.75	17.33	18.70	3.43	3.30	45.70
9/24/99 10:01	0.60	0.65	7.98	7.98	1.20	1.18	19.58
9/24/99 10:21	0.03	0.05	5.98	3.23	0.45	0.23	9.95
9/24/99 10:41	0.05	0.13	6.60	3.68	0.23	0.15	10.83
9/24/99 11:01	0.03	0.18	6.93	4.78	0.80	0.60	13.30
9/24/99 11:21	0.18	0.30	7.13	5.85	0.60	0.60	14.65
9/24/99 11:41	0.15	0.03	5.15	3.43	0.38	0.28	9.40
9/24/99 12:01	0.00	0.05	5.18	2.75	0.28	0.15	8.40
9/24/99 12:21	0.05	0.03	3.93	2.15	0.10	0.28	6.53
9/24/99 12:41	0.05	0.20	3.73	2.85	0.53	0.25	7.60
9/24/99 13:01	0.03	0.08	4.18	2.65	0.25	0.25	7.43
9/24/99 13:21	0.08	0.33	14.43	11.18	1.55	1.18	28.73
9/24/99 13:41	0.00	0.18	5.05	3.35	0.28	0.43	9.28
9/24/99 14:01	0.08	0.13	4.40	2.38	0.15	0.10	7.23

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/24/99 14:21	0.05	0.10	3.63	2.98	0.20	0.25	7.20
9/24/99 14:41	0.00	0.10	4.65	3.13	0.40	0.48	8.75
9/24/99 15:01	0.00	0.05	4.28	2.10	0.23	0.10	6.75
9/24/99 15:21	0.08	0.28	3.68	2.75	0.68	0.33	7.78
9/24/99 15:41	0.18	0.15	3.18	3.08	0.43	0.43	7.43
9/24/99 16:01	0.03	0.00	2.38	2.05	0.18	0.18	4.80
9/24/99 16:21	0.03	0.00	2.88	1.60	0.10	0.13	4.73
9/24/99 16:41	0.65	0.60	6.98	7.85	1.63	1.50	19.20
9/24/99 17:01	0.05	0.13	3.03	2.90	0.28	0.43	6.80
9/24/99 17:21	0.03	0.00	3.28	2.03	0.20	0.18	5.70
9/24/99 17:41	0.00	0.05	3.48	2.38	0.25	0.38	6.53
9/24/99 18:01	0.13	0.13	3.75	2.50	0.58	0.25	7.33
9/24/99 18:21	0.08	0.10	4.93	2.93	0.43	0.43	8.88
9/24/99 18:41	0.00	0.03	4.98	2.43	0.15	0.20	7.78
9/24/99 19:01	0.00	0.10	5.05	3.18	0.30	0.23	8.85
9/24/99 19:21	0.10	0.05	4.93	2.55	0.35	0.20	8.18
9/24/99 19:41	0.10	0.05	5.35	4.20	0.48	0.60	10.78
9/24/99 20:01	0.03	0.00	4.65	3.10	0.25	0.20	8.23
9/24/99 20:21	0.00	0.08	5.15	2.65	0.23	0.28	8.38
9/24/99 20:41	0.03	0.03	4.38	2.95	0.25	0.15	7.78
9/24/99 21:01	0.20	0.08	5.30	2.95	0.50	0.45	9.48
9/24/99 21:21	0.05	0.03	4.50	3.18	0.43	0.28	8.45
9/24/99 21:41	0.03	0.05	5.38	3.23	0.38	0.23	9.28
9/24/99 22:01	0.03	0.05	5.25	3.08	0.38	0.20	8.98
9/24/99 22:21	0.08	0.10	6.95	4.53	0.48	0.33	12.45
9/24/99 22:41	0.03	0.15	6.00	4.13	0.45	0.15	10.90
9/24/99 23:01	0.00	0.05	5.75	4.20	0.35	0.15	10.50
9/24/99 23:21	0.05	0.15	6.45	4.33	0.40	0.20	11.58
9/24/99 23:41	0.03	0.10	6.18	4.25	0.60	0.28	11.43
9/25/99 0:01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 0:21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 0:41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 1:01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 1:21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 1:41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 2:01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 2:21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 2:41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 3:01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 3:21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 3:41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 4:01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 4:21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 4:41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 5:01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 5:21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 5:41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 6:01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/25/99 6:21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/25/99 6:41	8.40	8.93	92.60	99.73	18.83	18.58	247.05
9/25/99 7:01	2.45	4.03	43.38	45.70	9.13	9.75	114.43
9/25/99 7:21	1.15	2.43	38.10	44.55	7.30	5.83	99.35
9/25/99 7:41	0.48	1.15	27.73	28.35	4.63	3.85	66.18
9/25/99 8:01	0.03	0.05	0.50	0.68	0.08	0.13	1.45
9/25/99 8:21	0.08	0.48	5.05	5.88	1.20	0.90	13.58
9/25/99 8:41	0.15	0.30	5.10	5.18	1.00	0.60	12.33
9/25/99 9:01	0.18	0.03	4.50	4.00	0.85	0.43	9.98
9/25/99 9:21	0.08	0.10	3.30	3.85	0.65	0.23	8.20
9/25/99 9:41	0.00	0.08	2.73	2.38	0.65	0.33	6.15
9/25/99 10:01	0.03	0.08	2.93	2.75	0.30	0.28	6.35
9/25/99 10:21	0.03	0.10	2.35	2.48	0.38	0.33	5.65
9/25/99 10:41	0.08	0.05	1.83	1.80	0.33	0.15	4.23
9/25/99 11:01	0.10	0.25	3.68	4.38	0.83	0.73	9.95
9/25/99 11:21	0.18	0.18	3.05	3.18	0.58	0.73	7.88
9/25/99 11:41	0.05	0.13	2.40	2.50	0.53	0.53	6.13
9/25/99 12:01	0.03	0.05	2.18	2.00	0.35	0.45	5.05
9/25/99 12:21	0.00	0.15	2.10	2.63	0.08	0.35	5.30
9/25/99 12:41	0.00	0.08	2.18	2.05	0.40	0.18	4.88
9/25/99 13:01	0.00	0.13	2.05	2.00	0.18	0.25	4.60
9/25/99 13:21	0.03	0.05	1.90	1.65	0.20	0.33	4.15
9/25/99 13:41	0.03	0.10	1.83	1.88	0.30	0.18	4.30
9/25/99 14:01	0.00	0.08	1.95	1.60	0.23	0.25	4.10
9/25/99 14:21	0.03	0.08	2.35	2.00	0.18	0.23	4.85
9/25/99 14:41	0.03	0.03	2.23	1.80	0.20	0.13	4.40
9/25/99 15:01	0.00	0.05	2.10	1.88	0.33	0.15	4.50
9/25/99 15:21	0.05	0.03	2.00	1.78	0.28	0.10	4.23
9/25/99 15:41	0.03	0.05	2.30	1.78	0.30	0.13	4.58
9/25/99 16:01	0.03	0.08	2.50	2.35	0.23	0.15	5.33
9/25/99 16:21	0.03	0.08	2.63	2.43	0.38	0.40	5.93
9/25/99 16:41	0.05	0.15	3.18	2.70	0.30	0.43	6.80
9/25/99 17:01	0.00	0.05	3.33	2.45	0.40	0.23	6.45
9/25/99 17:21	0.00	0.08	3.23	2.63	0.40	0.20	6.53
9/25/99 17:41	0.08	0.08	3.85	2.58	0.25	0.28	7.10
9/25/99 18:01	0.00	0.08	5.18	3.80	0.20	0.33	9.58
9/25/99 18:21	0.00	0.03	3.73	3.45	0.35	0.43	7.98
9/25/99 18:41	0.08	0.15	3.95	3.73	0.45	0.30	8.65
9/25/99 19:01	0.03	0.05	4.30	3.23	0.58	0.33	8.50
9/25/99 19:21	0.08	0.10	5.43	3.95	0.75	0.40	10.70
9/25/99 19:41	0.08	0.15	6.35	4.75	0.43	0.48	12.23
9/25/99 20:01	0.00	0.10	6.18	5.00	0.45	0.50	12.23
9/25/99 20:21	0.03	0.08	5.83	4.80	0.70	0.35	11.78
9/25/99 20:41	0.05	0.13	5.48	5.20	0.55	0.33	11.73
9/25/99 21:01	0.00	0.10	6.35	5.25	0.65	0.53	12.88
9/25/99 21:21	0.10	0.05	7.38	5.60	0.68	0.50	14.30
9/25/99 21:41	0.05	0.10	7.48	6.35	0.65	0.33	14.95
9/25/99 22:01	0.00	0.13	6.60	6.03	0.60	0.53	13.88

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/25/99 22:21	0.03	0.23	6.98	5.30	0.65	0.43	13.60
9/25/99 22:41	0.00	0.15	6.83	5.83	0.40	0.35	13.55
9/25/99 23:01	0.00	0.10	6.95	5.73	0.80	0.33	13.90
9/25/99 23:21	0.08	0.18	7.30	5.98	0.65	0.58	14.75
9/25/99 23:41	0.03	0.00	7.35	5.70	0.60	0.43	14.10
9/26/99 0:01	0.00	0.10	8.08	6.15	0.75	0.60	15.68
9/26/99 0:20	0.03	0.13	6.58	5.78	0.68	0.33	13.50
9/26/99 0:40	0.03	0.13	6.88	5.53	0.60	0.50	13.65
9/26/99 1:00	0.00	0.20	7.10	5.28	0.68	0.65	13.90
9/26/99 1:20	0.08	0.10	6.68	5.13	0.68	0.38	13.03
9/26/99 1:40	0.03	0.13	7.38	5.38	0.53	0.30	13.73
9/26/99 2:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 2:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 2:40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 3:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 3:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 3:40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 4:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 4:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 4:40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 5:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 5:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 5:40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 6:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 6:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 6:40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 7:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 7:20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/26/99 7:40	19.78	23.23	214.45	218.90	36.95	41.85	555.15
9/26/99 8:00	4.35	4.93	58.28	57.33	9.10	8.88	142.85
9/26/99 8:20	0.83	1.38	27.60	24.50	3.60	3.35	61.25
9/26/99 8:40	1.25	1.85	37.45	30.73	4.70	4.83	80.80
9/26/99 9:00	1.43	2.03	22.20	21.48	3.48	3.25	53.85
9/26/99 9:20	1.03	1.48	21.33	22.58	3.43	2.88	52.70
9/26/99 9:40	1.93	1.88	18.43	18.78	3.05	3.38	47.43
9/26/99 10:00	0.98	1.58	22.20	21.43	3.25	3.75	53.18
9/26/99 10:20	2.33	3.43	31.35	31.38	6.63	6.30	81.40
9/26/99 10:40	3.50	4.30	36.63	44.30	9.35	9.20	107.28
9/26/99 11:00	1.45	1.78	21.75	23.03	4.28	3.53	55.80
9/26/99 11:20	1.13	1.23	18.33	18.38	2.48	2.40	43.93
9/26/99 11:40	4.88	4.65	29.45	36.58	6.75	7.83	90.13
9/26/99 12:00	1.48	2.05	21.03	22.55	4.10	3.30	54.50
9/26/99 12:20	0.65	0.73	13.50	13.05	2.08	2.20	32.20
9/26/99 12:40	0.75	1.30	14.13	13.98	1.88	2.80	34.83
9/26/99 13:00	0.65	0.80	18.93	18.80	2.93	3.03	45.13
9/26/99 13:20	1.25	0.93	14.08	12.73	2.30	2.18	33.45
9/26/99 13:40	0.45	0.68	10.93	10.15	1.33	1.38	24.90
9/26/99 14:00	1.75	1.78	20.95	24.43	4.55	4.30	57.75

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/26/99 14:20	0.33	0.35	7.68	6.55	0.78	0.78	16.45
9/26/99 14:40	0.28	0.38	8.03	7.50	0.98	0.88	18.03
9/26/99 15:00	0.08	0.33	8.38	6.68	1.03	0.73	17.20
9/26/99 15:20	0.23	0.40	8.75	7.33	1.08	0.75	18.53
9/26/99 15:40	0.73	0.83	11.35	14.13	2.48	2.38	31.88
9/26/99 16:00	0.18	0.43	6.83	6.18	0.58	0.95	15.13
9/26/99 16:20	0.30	0.15	5.15	4.73	0.63	0.40	11.35
9/26/99 16:40	0.30	0.48	5.83	6.15	0.83	1.03	14.60
9/26/99 17:00	0.10	0.10	3.78	2.60	0.25	0.33	7.15
9/26/99 17:20	0.45	0.68	5.55	5.35	1.30	1.50	14.83
9/26/99 17:40	0.20	0.23	5.38	4.40	0.53	0.35	11.08
9/26/99 18:00	0.08	0.08	3.93	3.35	0.38	0.38	8.18
9/26/99 18:20	0.20	0.40	7.45	6.65	1.20	1.25	17.15
9/26/99 18:40	0.28	0.53	7.20	6.80	1.23	1.35	17.38
9/26/99 19:00	0.15	0.20	3.98	2.60	0.38	0.35	7.65
9/26/99 19:20	0.05	0.20	3.58	3.63	0.78	0.90	9.13
9/26/99 19:40	0.10	0.18	1.93	1.83	0.23	0.30	4.55
9/26/99 20:00	0.05	0.08	2.03	1.80	0.25	0.30	4.50
9/26/99 20:20	0.05	0.08	2.80	2.15	0.50	0.20	5.78
9/26/99 20:40	0.40	1.10	8.40	10.33	2.20	2.88	25.30
9/26/99 21:00	0.10	0.08	2.70	2.48	0.33	0.18	5.85
9/26/99 21:20	0.05	0.20	3.10	2.10	0.23	0.18	5.85
9/26/99 21:40	0.08	0.38	3.83	3.15	0.50	0.30	8.23
9/26/99 22:00	0.08	0.08	2.08	1.50	0.23	0.30	4.25
9/26/99 22:20	0.00	0.05	1.60	1.58	0.15	0.18	3.55
9/26/99 22:40	0.20	0.13	2.05	1.70	0.30	0.40	4.78
9/26/99 23:00	0.38	0.28	2.68	2.48	0.35	0.33	6.48
9/26/99 23:20	0.00	0.15	2.83	2.08	0.33	0.23	5.60
9/26/99 23:40	0.10	0.13	2.43	2.28	0.25	0.30	5.48
9/27/99 0:00	0.00	0.13	1.55	1.53	0.13	0.08	3.40
9/27/99 0:20	0.03	0.10	1.73	1.35	0.15	0.08	3.43
9/27/99 0:40	0.03	0.28	1.73	1.60	0.33	0.33	4.28
9/27/99 1:00	0.08	0.00	1.83	1.58	0.28	0.13	3.88
9/27/99 1:20	0.03	0.10	1.98	1.70	0.23	0.18	4.20
9/27/99 1:40	0.05	0.03	1.73	1.05	0.25	0.15	3.25
9/27/99 2:00	0.00	0.08	1.33	1.23	0.18	0.03	2.83
9/27/99 2:20	0.40	1.23	10.93	16.08	3.43	3.50	35.55
9/27/99 2:40	0.68	0.83	5.38	7.03	1.25	1.70	16.85
9/27/99 3:00	0.03	0.05	1.30	1.38	0.15	0.10	3.00
9/27/99 3:20	0.05	0.08	1.28	0.83	0.05	0.13	2.40
9/27/99 3:40	0.05	0.05	1.70	1.63	0.20	0.08	3.70
9/27/99 4:00	0.05	0.05	1.18	1.33	0.13	0.30	3.03
9/27/99 4:20	0.00	0.13	1.68	1.03	0.23	0.15	3.20
9/27/99 4:40	0.00	0.05	1.53	1.25	0.13	0.05	3.00
9/27/99 5:00	0.08	0.00	1.38	1.63	0.25	0.33	3.65
9/27/99 5:20	0.05	0.08	1.53	1.33	0.25	0.23	3.45
9/27/99 5:40	0.08	0.03	1.55	1.20	0.25	0.20	3.30
9/27/99 6:00	0.00	0.05	1.28	0.93	0.15	0.18	2.58

Date	>15.0	10.0-15.0um	2.0-3.0um	3.0-5.0um	5.0-7.0um	7.0-10.0um	Sum of Particles
9/27/99 6:20	0.08	0.08	1.63	1.90	0.30	0.05	4.05
9/27/99 6:40	0.03	0.05	1.28	1.23	0.13	0.10	2.80
9/27/99 7:00	0.10	0.03	0.93	1.08	0.13	0.03	2.28
9/27/99 7:20	0.15	0.68	6.78	9.30	1.48	1.63	20.00
9/27/99 7:40	0.03	0.05	1.13	1.10	0.15	0.15	2.60
9/27/99 8:00	3.75	6.20	25.13	34.35	9.33	11.78	90.53
9/27/99 8:20	0.15	0.25	2.65	3.03	0.48	0.63	7.18
9/27/99 8:40	0.00	0.05	1.48	1.63	0.13	0.38	3.65
9/27/99 9:00	0.00	0.05	1.73	1.25	0.30	0.05	3.38
9/27/99 9:20	0.15	0.13	2.98	2.95	0.53	0.45	7.18
9/27/99 9:40	0.00	0.03	1.70	1.15	0.23	0.10	3.20
9/27/99 10:00	0.08	0.08	1.48	1.48	0.30	0.18	3.58
9/27/99 10:20	0.00	0.15	1.10	1.35	0.15	0.13	2.88
9/27/99 10:40	3.70	5.95	32.10	44.58	9.63	11.55	107.50
9/27/99 11:00	0.03	0.15	1.60	1.48	0.15	0.20	3.60
9/27/99 11:20	0.00	0.05	2.13	1.98	0.20	0.40	4.75
9/27/99 11:40	0.03	0.10	1.78	1.98	0.38	0.23	4.48
9/27/99 12:00	0.03	0.08	1.08	1.25	0.10	0.13	2.65
9/27/99 12:20	0.28	0.30	2.65	3.43	0.63	0.98	8.25
9/27/99 12:40	0.03	0.18	1.80	2.20	0.35	0.43	4.98
9/27/99 13:00	0.03	0.08	1.40	1.05	0.08	0.15	2.78
9/27/99 13:38	0.08	0.10	2.03	2.08	0.30	0.38	4.95
9/27/99 14:21	0.25	0.15	3.70	5.53	0.88	0.58	11.08
9/27/99 14:41	0.23	0.18	2.23	2.50	0.33	0.40	5.85
9/27/99 15:01	0.10	0.05	1.65	1.13	0.13	0.33	3.38
9/27/99 15:21	0.08	0.03	1.28	1.63	0.18	0.23	3.40
9/27/99 15:41	0.00	0.10	1.13	1.00	0.13	0.13	2.48
9/27/99 16:01	0.05	0.08	2.15	2.05	0.28	0.48	5.08
9/27/99 16:21	0.03	0.10	0.98	1.18	0.23	0.15	2.65
9/27/99 16:41	0.03	0.03	1.28	1.20	0.10	0.15	2.78
9/27/99 17:01	0.05	0.10	1.03	1.55	0.08	0.20	3.00
9/27/99 17:21	0.05	0.08	1.10	1.20	0.18	0.15	2.75
9/27/99 17:41	0.00	0.03	1.35	1.38	0.10	0.05	2.90
9/27/99 18:01	0.10	0.03	1.30	1.13	0.33	0.23	3.10
9/27/99 18:21	0.00	0.05	1.23	1.20	0.20	0.10	2.78
9/27/99 18:41	0.05	0.05	1.30	1.60	0.10	0.23	3.33
9/27/99 19:01	0.08	0.03	1.35	1.03	0.15	0.08	2.70
9/27/99 19:21	0.00	0.05	0.98	1.05	0.08	0.05	2.20
9/27/99 19:41	0.05	0.00	0.85	1.10	0.15	0.05	2.20
9/27/99 20:01	0.03	0.00	1.20	1.23	0.20	0.08	2.73
9/27/99 20:21	0.03	0.05	1.25	1.18	0.23	0.18	2.90
9/27/99 20:41	0.03	0.00	0.85	0.80	0.13	0.00	1.80
9/27/99 21:01	0.03	0.10	1.55	1.85	0.40	0.33	4.25
9/27/99 21:21	0.00	0.03	1.03	0.78	0.08	0.00	1.90
9/27/99 21:41	0.05	0.05	1.03	0.65	0.23	0.08	2.08
9/27/99 22:01	0.08	0.03	0.90	0.68	0.00	0.18	1.85
9/27/99 22:21	0.03	0.03	1.00	0.83	0.10	0.15	2.13
9/27/99 22:41	0.03	0.05	1.05	0.83	0.08	0.03	2.05

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/27/99 23:01	0.00	0.03	1.03	0.85	0.10	0.08	2.08
9/27/99 23:21	0.00	0.00	1.15	0.65	0.05	0.00	1.85
9/27/99 23:41	0.00	0.05	0.93	0.88	0.10	0.08	2.03
9/28/99 0:01	0.08	0.03	1.30	0.78	0.15	0.13	2.45
9/28/99 0:21	0.00	0.08	1.45	1.30	0.13	0.15	3.10
9/28/99 0:41	0.03	0.00	1.05	0.85	0.08	0.05	2.05
9/28/99 1:01	0.03	0.05	1.00	0.88	0.08	0.03	2.05
9/28/99 1:21	0.03	0.03	1.03	0.65	0.05	0.05	1.83
9/28/99 1:41	0.03	0.05	0.98	1.10	0.15	0.23	2.53
9/28/99 2:01	0.00	0.00	1.33	0.80	0.05	0.03	2.20
9/28/99 2:21	0.03	0.08	1.08	1.15	0.08	0.18	2.58
9/28/99 2:41	0.03	0.05	0.78	0.63	0.03	0.08	1.58
9/28/99 3:01	0.00	0.05	1.15	1.18	0.15	0.20	2.73
9/28/99 3:21	2.03	4.83	25.55	34.48	7.80	9.33	84.00
9/28/99 3:41	0.00	0.05	0.90	0.68	0.08	0.03	1.73
9/28/99 4:01	0.03	0.05	0.90	1.10	0.30	0.10	2.48
9/28/99 4:21	0.03	0.00	1.33	0.50	0.10	0.15	2.10
9/28/99 4:41	0.00	0.03	1.43	1.28	0.23	0.15	3.10
9/28/99 5:01	0.03	0.03	0.85	0.68	0.13	0.00	1.70
9/28/99 5:21	0.03	0.00	0.95	0.60	0.03	0.08	1.68
9/28/99 5:41	0.03	0.03	1.18	1.20	0.13	0.10	2.65
9/28/99 6:01	0.03	0.03	1.38	1.23	0.25	0.10	3.00
9/28/99 6:21	0.05	0.00	0.90	0.65	0.20	0.08	1.88
9/28/99 6:41	0.00	0.05	2.58	2.05	0.30	0.23	5.20
9/28/99 7:01	0.00	0.00	0.85	0.58	0.05	0.05	1.53
9/28/99 7:21	0.00	0.03	1.23	0.88	0.15	0.18	2.45
9/28/99 7:41	0.20	0.08	1.05	0.93	0.23	0.08	2.55
<del>9/28/99</del> 8:01	0.50	0.85	13.05	12.28	1.98	2.05	30.70
9/28/99 8:21	0.30	0.18	2.93	2.85	0.48	0.33	7.05
9/28/99 8:41	0.05	0.03	1.43	1.23	0.10	0.18	3.00
9/28/99 9:01	0.03	0.05	1.75	1.48	0.23	0.08	3.60
9/28/99 9:21	0.03	0.00	0.83	0.60	0.08	0.08	1.60
9/28/99 9:41	0.08	0.08	1.75	1.05	0.10	0.10	3.15
9/28/99 10:01	0.00	0.05	0.88	1.35	0.15	0.25	2.68
9/28/99 10:33	0.05	0.08	1.05	1.08	0.28	0.08	2.60
9/28/99 10:53	0.00	0.03	0.75	0.68	0.10	0.08	1.63
9/28/99 11:13	0.03	0.00	0.65	0.90	0.13	0.08	1.78
9/28/99 11:33	0.00	0.00	1.00	0.65	0.05	0.08	1.78
9/28/99 11:53	0.03	0.00	0.83	0.48	0.00	0.00	1.33
9/28/99 12:13	0.03	0.08	1.03	0.73	0.10	0.13	2.08
9/28/99 12:33	0.05	0.03	0.88	1.18	0.15	0.18	2.45
9/28/99 12:53	0.00	0.05	0.68	0.63	0.15	0.13	1.63
9/28/99 13:13	0.08	0.05	1.75	1.38	0.18	0.15	3.58
9/28/99 13:33	0.00	0.05	0.80	1.03	0.08	0.10	2.05
9/28/99 13:53	0.00	0.08	1.38	1.63	0.30	0.10	3.48
9/28/99 14:13	1.45	3.83	28.95	36.45	6.55	6.18	83.40
9/28/99 14:33	0.03	0.05	0.98	1.05	0.18	0.10	2.38
9/28/99 14:53	0.03	0.00	0.78	1.43	0.25	0.10	2.58

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/28/99 15:13	0.03	0.00	0.80	1.10	0.20	0.08	2.20
9/28/99 15:33	0.03	0.13	1.25	1.68	0.20	0.15	3.43
9/28/99 15:53	0.08	0.13	2.68	2.68	0.50	0.33	6.38
9/28/99 16:13	0.03	0.03	1.15	0.90	0.15	0.10	2.35
9/28/99 16:33	0.05	0.13	1.13	1.00	0.13	0.18	2.60
9/28/99 16:53	0.05	0.03	1.35	1.30	0.33	0.05	3.10
9/28/99 17:13	0.05	0.08	1.18	1.23	0.23	0.20	2.95
9/28/99 17:33	0.05	0.00	0.70	0.85	0.08	0.05	1.73
9/28/99 17:53	0.03	0.13	1.10	0.85	0.18	0.25	2.53
9/28/99 18:13	0.00	0.00	0.90	0.85	0.08	0.08	1.90
9/28/99 18:33	0.05	0.03	3.13	3.23	0.48	0.38	7.28
9/28/99 18:53	0.00	0.05	1.10	0.83	0.18	0.13	2.28
9/28/99 19:13	0.00	0.13	1.45	1.85	0.25	0.28	3.95
9/28/99 19:33	0.08	0.08	1.08	1.10	0.35	0.38	3.05
9/28/99 19:53	0.00	0.00	1.03	0.98	0.08	0.05	2.13
9/28/99 20: 13	0.03	0.05	1.03	0.70	0.05	0.08	1.93
9/28/99 20:33	0.00	0.00	1.05	0.93	0.15	0.10	2.23
9/28/99 20:53	0.03	0.03	0.90	0.68	0.18	0.08	1.88
9/28/99 21:13	0.00	0.03	0.58	0.45	0.00	0.00	1.05
9/28/99 21:33	0.00	0.08	1.08	0.63	0.00	0.05	1.83
9/28/99 21:53	0.03	0.05	0.60	0.40	0.05	0.10	1.23
9/28/99 22: 13	0.03	0.00	0.88	0.63	0.03	0.05	1.60
9/28/99 22:33	0.00	0.05	1.30	1.08	0.13	0.05	2.60
9/28/99 22:53	0.00	0.00	0.80	0.40	0.05	0.05	A.30
9/28/99 23: 13	0.03	0.00	0.58	0.70	0.08	0.03	1.40
9/28/99 23:33	0.05	0.05	1.05	0.98	0.13	0.13	2.38
9/28/99 23:53	0.00	0.05	0.80	0.83	0.18	0.05	1.90
9/29/99 0: 13	0.00	0.03	1.13	0.93	0.13	0.05	2.25
9/29/99 0:33	0.00	0.00	0.95	0.60	0.20	0.03	1.78
9/29/99 0:53	0.03	0.00	1.18	0.85	0.13	0.10	2.28
9/29/99 1: 13	0.00	0.13	1.03	0.83	0.08	0.10	2.15
9/29/99 1:33	0.03	0.08	0.93	0.85	0.13	0.10	2.10
9/29/99 1:53	0.00	0.03	0.80	0.75	0.13	0.03	1.73
9/29/99 2: 13	0.03	0.00	1.18	0.65	0.10	0.08	2.03
9/29/99 2:33	0.00	0.03	0.90	0.68	0.13	0.03	1.75
9/29/99 2:53	0.03	0.10	1.30	0.88	0.20	0.13	2.63
9/29/99 3: 13	0.03	0.03	1.00	0.70	0.05	0.08	1.88
9/29/99 3:33	0.00	0.00	0.68	0.55	0.08	0.03	1.33
9/29/99 3:53	0.03	0.00	0.83	0.43	0.08	0.08	1.43
9/29/99 4: 13	0.00	0.05	0.83	0.63	0.13	0.13	1.75
9/29/99 4:33	0.03	0.00	0.63	0.50	0.03	0.03	1.20
9/29/99 4:53	0.00	0.00	2.73	2.00	0.25	0.13	5.10
9/29/99 5: 13	0.05	0.00	3.60	2.20	0.15	0.08	6.08
9/29/99 5:33	0.03	0.18	3.90	4.33	0.58	0.43	9.43
9/29/99 5:53	0.00	0.10	2.60	2.03	0.15	0.03	4.90
9/29/99 6:13	0.00	0.00	2.83	2.15	0.25	0.13	5.35
9/29/99 6:33	0.03	0.08	2.13	2.15	0.23	0.10	4.70
9/29/99 6:53	0.00	0.03	1.93	1.25	0.13	0.13	3.45



Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/29/99 7:13	0.05	0.05	2.80	2.35	0.30	0.33	5.88
9/29/99 7:33	0.05	0.00	2.40	1.95	0.15	0.13	4.68
9/29/99 7:53	0.03	0.10	2.73	1.35	0.13	0.10	4.43
9/29/99 8:13	0.03	0.10	1.55	1.15	0.10	0.18	3.10
9/29/99 8:33	0.00	0.05	1.20	0.85	0.05	0.08	2.23
9/29/99 8:53	0.00	0.03	1.20	0.53	0.00	0.15	1.90
9/29/99 9: 13	0.13	0.10	2.70	1.98	0.33	0.15	5.38
9/29/99 9:33	0.03	0.00	1.20	0.90	0.05	0.15	2.33
9/29/99 9:53	0.03	0.05	1.88	1.33	0.28	0.18	3.73
9/29/99 10: 13	0.00	0.03	1.20	0.85	0.10	0.13	2.30
9/29/99 10:33	0.05	0.00	1.30	1.63	0.23	0.25	3.45
9/29/99 10:53	0.05	0.15	2.50	1.60	0.18	0.18	4.65
9/29/99 11: 13	0.03	0.00	1.43	0.83	0.18	0.05	2.50
9/29/99 11:33	0.00	0.03	0.83	0.73	0.13	0.08	1.78
9/29/99 11:53	0.18	0.15	1.80	2.10	0.38	0.35	4.95
9/29/99 12:13	0.00	0.00	0.60	0.30	0.00	0.00	0.90
9/29/99 12:33	0.00	0.00	0.83	0.90	0.08	0.00	1.80
9/29/99 12:53	0.00	0.00	0.73	0.45	0.03	0.05	1.25
9/29/99 13:13	0.05	0.03	0.93	0.63	0.00	0.13	1.75
9/29/99 13:33	0.03	0.00	0.48	0.35	0.05	0.03	0.93
9/29/99 13:53	3.25	2.70	32.78	29.88	4.48	4.70	77.78
9/29/99 14:13	0.03	0.23	7.43	6.35	0.73	0.60	15.35
9/29/99 14:33	0.08	0.08	2.73	1.83	0.38	0.20	5.28
9/29/99 14:53	0.00	0.08	2.20	1.28	0.03	0.18	3.75
9/29/99 15:13	0.00	0.05	1.33	1.20	0.18	0.13	2.88
9/29/99 15:33	0.08	0.03	1.25	1.35	0.05	0.10	2.85
9/29/99 15:53	0.03	0.05	0.90	0.75	0.08	0.03	1.83
9/29/99 16:13	0.03	0.03	0.93	1.00	0.03	0.05	2.05
9/29/99 16:33	0.00	0.00	0.75	0.53	0.03	0.03	1.33
9/29/99 16:53	0.03	0.00	0.88	0.65	0.03	0.03	1.60
9/29/99 17:13	0.00	0.00	0.58	0.58	0.05	0.05	1.25
9/29/99 17:33	0.03	0.10	1.10	1.28	0.13	0.10	2.73
9/29/99 17:53	0.00	0.00	0.73	0.85	0.10	0.05	1.73
9/29/99 18:13	0.00	0.03	0.65	0.40	0.00	0.03	1.10
9/29/99 18:33	0.00	0.00	0.58	0.63	0.00	0.05	1.25
9/29/99 18:53	0.00	0.00	0.58	0.35	0.03	0.05	1.00
9/29/99 19:13	0.03	0.00	0.40	0.25	0.00	0.03	0.70
9/29/99 19:33	0.03	0.00	0.35	0.28	0.05	0.00	0.70
9/29/99 19:53	0.00	0.03	0.70	0.50	0.03	0.08	1.33
9/29/99 20: 13	0.00	0.00	0.68	0.60	0.20	0.05	1.53
9/29/99 20:33	0.00	0.00	0.63	0.53	0.03	0.03	1.20
9/29/99 20:53	0.00	0.03	1.13	0.45	0.08	0.13	1.80
9/29/99 21:13	0.03	0.00	0.73	0.45	0.03	0.05	1.28
9/29/99 21:33	0.00	0.00	0.55	0.43	0.03	0.10	1.10
9/29/99 21:53	0.03	0.00	1.00	0.80	0.10	0.03	1.95
9/29/99 22:13	0.00	0.03	0.38	0.45	0.00	0.03	0.88
9/29/99 22:33	0.00	0.03	0.68	0.48	0.00	0.05	1.23
9/29/99 22:53	0.33	0.30	1.05	0.60	0.25	0.30	2.83

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
9/29/99 23:13	0.00	0.05	0.58	0.53	0.03	0.00	1.18
9/29/99 23:33	0.00	0.08	1.40	1.08	0.13	0.08	2.75
9/29/99 23:53	0.00	0.05	0.60	0.43	0.03	0.13	1.23
9/30/99 0:13	40.55	37.68	166.55	241.18	57.38	66.65	609.98
9/30/99 0:33	0.00	0.03	1.05	0.55	0.03	0.05	1.70
9/30/99 0:53	0.03	0.03	0.93	0.80	0.08	0.10	1.95
9/30/99 1: 13	0.00	0.00	0.83	0.35	0.03	0.03	1.23
9/30/99 1:33	0.00	0.03	2.40	1.08	0.20	0.03	3.73
9/30/99 1:53	0.20	0.20	5.98	5.03	1.13	0.45	12.98
9/30/99 2:13	0.05	0.05	2.75	1.93	0.13	0.18	5.08
9/30/99 2:33	0.05	0.00	2.50	1.93	0.13	0.13	4.73
9/30/99 2:53	0.08	0.18	2.30	1.75	0.28	0.33	4.90
9/30/99 3:13	0.05	0.05	3.75	2.63	0.38	0.23	7.08
9/30/99 3:33	0.00	0.00	1.78	1.20	0.03	0.10	3.10
9/30/99 3:53	0.15	0.20	2.28	1.73	0.18	0.23	4.75
9/30/99 4:13	0.00	0.10	3.08	2.28	0.33	0.45	6.23
9/30/99 4:33	0.00	0.03	2.05	1.48	0.28	0.13	3.95
9/30/99 4:53	0.00	0.00	1.45	0.98	0.15	0.10	2.68
9/30/99 5:13	0.00	0.00	2.53	1.93	0.10	0.15	4.70
9/30/99 5:33	0.23	0.60	4.75	5.75	0.80	1.20	13.33
9/30/99 5:53	0.03	0.03	1.90	1.13	0.13	0.10	3.30
9/30/99 6:13	0.08	0.03	2.05	1.63	0.25	0.13	4.15
9/30/99 6:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/30/99 6:53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/30/99 7:13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/30/99 7:33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/30/99 7:53	2.43	2.23	51.55	40.83	4.68	4.48	106.18
9/30/99 8:13	0.45	0.48	6.60	5.68	0.60	0.85	14.65
9/30/99 8:32	0.63	0.50	5.65	5.20	0.68	0.75	13.40
9/30/99 8:52	0.35	0.38	3.00	2.63	0.68	0.60	7.63
9/30/99 9:12	0.20	0.15	2.85	2.50	0.48	0.48	6.65
9/30/99 9:32	0.30	0.53	2.70	2.18	0.40	0.25	6.35
9/30/99 9:52	0.05	0.23	1.85	1.43	0.23	0.25	4.03
9/30/99 10:12	0.15	0.10	1.95	2.43	0.40	0.30	5.33
9/30/99 10:32	0.25	0.30	4.08	3.83	0.45	0.85	9.75
9/30/99 10:52	0.15	0.20	2.20	1.85	0.35	0.38	5.13
9/30/99 11:12	0.13	0.05	1.85	1.60	0.15	0.25	4.03
9/30/99 11:32	0.08	0.13	1.15	1.23	0.28	0.25	3.10
9/30/99 11:52	0.28	0.23	1.63	1.28	0.20	0.25	3.85
9/30/99 12:12	0.20	0.25	4.50	3.83	0.60	0.38	9.75
9/30/99 12:32	0.18	0.08	1.15	0.88	0.08	0.18	2.53
9/30/99 12:52	0.05	0.05	1.10	0.63	0.08	0.10	2.00
9/30/99 13:12	0.25	0.23	1.83	2.38	0.28	0.40	5.35
9/30/99 13:32	0.13	0.13	1.03	0.95	0.18	0.03	2.43
9/30/99 13:52	0.13	0.08	1.33	0.68	0.08	0.10	2.38
9/30/99 14:12	0.48	0.38	1.35	2.05	0.40	0.48	5.13
9/30/99 14:32	0.13	0.15	1.95	1.80	0.25	0.10	4.38
9/30/99 14:52	0.08	0.15	1.28	0.83	0.13	0.05	2.50

### McAllen Wastewater Reclamation Project - October Particle Counts

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/1/99 0:12	0.03	0.00	1.28	0.95	0.15	0.23	2.63
10/1/99 0:32	0.00	0.03	0.95	0.75	0.08	0.05	1.85
10/1/99 0:52	0.05	0.05	1.35	0.60	0.13	0.05	2.23
10/1/99 1:12	0.00	0.03	1.28	0.75	0.05	0.10	2.20
10/1/99 1:32	0.03	0.03	0.95	1.03	0.13	0.08	2.23
10/1/99 1:52	0.08	0.03	1.50	0.85	0.08	0.13	2.65
10/1/99 2:12	0.00	0.05	1.38	1.30	0.05	0.15	2.93
10/1/99 2:32	0.05	0.03	1.15	0.75	0.18	0.15	2.30
10/1/99 2:52	0.03	0.10	1.28	0.70	0.20	0.03	2.33
10/1/99 3:12	0.03	0.00	1.20	0.50	0.13	0.10	1.95
10/1/99 3:32	0.03	0.28	1.80	1.58	0.23	0.18	4.08
10/1/99 3:52	0.03	0.08	1.00	0.80	0.10	0.13	2.13
10/1/99 4:12	0.00	0.18	1.65	0.88	0.08	0.08	2.85
10/1/99 4:32	0.08	0.13	1.43	0.70	0.13	0.05	2.50
10/1/99 4:52	0.03	0.00	1.28	0.88	0.13	0.08	2.38
10/1/99 5:12	0.03	0.03	1.43	0.63	0.10	0.20	2.40
10/1/99 5:32	0.00	0.08	1.60	0.83	0.10	0.13	2.73
10/1/99 5:52	0.05	0.10	1.50	1.05	0.13	0.10	2.93
10/1/99 6:12	0.00	0.05	1.35	0.73	0.20	0.03	2.35
10/1/99 6:32	0.03	0.05	1.60	0.83	0.13	0.08	2.70
10/1/99 6:52	0.05	0.03	2.03	0.75	0.03	0.03	2.90
10/1/99 7:12	0.03	0.05	0.95	0.63	0.05	0.03	1.73
10/1/99 7:32	0.05	0.10	2.10	0.83	0.18	0.08	3.33
10/1/99 7:52	0.05	0.10	1.33	0.95	0.18	0.08	2.68
10/1/99 8:12	0.08	0.03	1.08	0.85	0.13	0.13	2.28
10/1/99 8:32	0.00	0.03	1.13	0.68	0.13	0.08	2.03
10/1/99 8:52	0.05	0.08	1.50	1.30	0.13	0.15	3.20
10/1/99 9:12	0.10	0.13	1.55	0.95	0.15	0.08	2.95
10/1/99 9:32	0.05	0.10	1.68	0.80	0.05	0.20	2.88
10/1/99 9:52	10.38	7.55	92.48	78.90	12.38	12.78	214.45
10/1/99 10:12	0.30	0.80	5.18	6.65	1.40	1.25	15.58
10/1/99 10:32	0.03	0.05	1.25	0.93	0.08	0.10	2.43
10/1/99 10:52	0.08	0.05	1.00	1.18	0.08	0.15	2.53
10/1/99 11:23	0.03	0.13	1.25	0.73	0.20	0.08	2.40
10/1/99 11:43	0.03	0.03	1.05	0.50	0.05	0.03	1.68
10/1/99 12:03	0.00	0.05	1.25	0.75	0.10	0.03	2.18
10/1/99 12:23	0.00	0.08	0.95	0.70	0.10	0.13	1.95
10/1/99 12:43	0.33	0.28	1.40	1.20	0.28	0.35	3.83
10/1/99 13:03	0.13	0.08	3.33	2.53	0.38	0.15	6.58
10/1/99 13:23	0.08	0.05	1.08	0.98	0.13	0.18	2.48
10/1/99 13:43	0.25	0.13	1.48	1.25	0.13	0.13	3.35
10/1/99 14:03	0.00	0.05	0.93	0.58	0.20	0.08	1.83
10/1/99 14:23	3.68	3.85	47.35	44.90	7.55	7.98	115.30
10/1/99 14:43	0.05	0.05	1.20	1.43	0.13	0.10	2.95
10/1/99 15:03	0.05	0.08	1.33	0.88	0.08	0.00	2.40
10/1/99 15:23	0.10	0.03	0.83	0.88	0.13	0.03	1.98

/Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/1/99 15:43	0.03	0.00	1.38	0.55	0.03	0.05	2.03
10/1/99 16:03	0.05	0.18	1.33	0.68	0.15	0.05	2.43
10/1/99 16:23	0.03	0.00	1.38	0.78	0.18	0.03	2.38
10/1/99 16:43	0.03	0.00	1.15	0.88	0.03	0.05	2.13
10/1/99 17:03	0.08	0.00	1.08	0.70	0.15	0.00	2.00
10/1/99 17:23	0.03	0.00	0.90	0.53	0.03	0.15	1.63
10/1/99 17:43	0.10	0.03	0.68	0.73	0.03	0.08	1.63
10/1/99 18:03	0.03	0.05	1.35	0.75	0.13	0.08	2.38
10/1/99 18:23	0.00	0.00	1.00	0.88	0.15	0.18	2.20
10/1/99 18:43	0.00	0.03	0.63	0.53	0.05	0.03	1.25
10/1/99 19:03	0.00	0.00	0.98	0.90	0.05	0.08	2.00
10/1/99 19:23	0.00	0.03	1.23	0.45	0.10	0.05	1.85
10/1/99 19:43	0.00	0.05	0.70	0.65	0.13	0.08	1.60
10/1/99 20:03	0.00	0.03	0.98	0.88	0.05	0.10	2.03
10/1/99 20:23	0.15	0.00	1.30	0.93	0.15	0.20	2.73
10/1/99 20:43	0.03	0.00	0.73	0.55	0.05	0.03	1.38
10/1/99 21:03	0.00	0.05	1.20	0.70	0.05	0.13	2.13
10/1/99 21:23	0.03	0.00	0.63	0.73	0.05	0.03	1.45
10/1/99 21:43	0.00	0.00	0.93	0.58	0.05	0.03	1.58
10/1/99 22:03	0.03	0.05	1.03	0.55	0.03	0.03	1.70
10/1/99 22:23	0.00	0.03	0.70	0.45	0.05	0.08	1.30
10/1/99 22:43	0.08	0.05	0.88	0.75	0.13	0.03	1.90
10/1/99 23:03	0.05	0.00	0.93	0.70	0.05	0.10	1.83
10/1/99 23:23	0.00	0.00	0.90	0.48	0.05	0.03	1.45
10/1/99 23:43	0.03	0.03	0.83	0.73	0.05	0.03	1.68
10/2/99 0:03	0.00	0.00	1.00	0.65	0.05	0.08	1.78
10/2/99 0:23	0.00	0.03	0.78	0.58	0.03	0.03	1.43
10/2/99 0:43	0.00	0.00	1.00	0.65	0.03	0.05	1.73
10/2/99 1:03	0.00	0.03	0.68	0.35	0.03	0.00	1.08
10/2/99 1:23	0.00	0.03	1.03	0.55	0.03	0.05	1.68
10/2/99 1:43	0.00	0.00	0.88	0.55	0.08	0.08	1.58
10/2/99 2:03	0.03	0.03	1.00	0.58	0.00	0.10	1.73
10/2/99 2:23	0.00	0.10	1.00	0.63	0.05	0.08	1.85
10/2/99 2:43	0.03	0.03	0.95	0.88	0.03	0.00	1.90
10/2/99 3:03	0.03	0.05	1.40	1.35	0.20	0.13	3.15
10/2/99 3:23	0.03	0.05	1.25	0.68	0.08	0.05	2.13
10/2/99 3:43	0.00	0.00	0.90	0.58	0.08	0.10	1.65
10/2/99 4:03	0.03	0.20	1.73	1.60	0.18	0.30	4.03
10/2/99 4:23	0.00	0.00	1.10	0.75	0.10	0.05	2.00
10/2/99 4:43	0.00	0.00	1.05	0.75	0.05	0.15	2.00
10/2/99 5:03	0.00	0.00	1.38	0.53	0.15	0.05	2.10
10/2/99 5:23	0.08	0.03	1.10	0.70	0.23	0.03	2.15
10/2/99 5:43	0.00	0.03	1.18	0.80	0.13	0.10	2.23
10/2/99 6:03	0.00	0.10	1.45	0.55	0.10	0.03	2.23
10/2/99 6:23	0.03	0.00	1.08	0.70	0.03	0.10	1.93
10/2/99 6:43	0.03	0.00	1.70	0.98	0.03	0.08	2.80
10/2/99 7:03	0.20	0.55	2.18	2.25	0.53	0.53	6.23
10/2/99 7:23	0.03	0.03	1.30	1.33	0.20	0.05	2.93

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/2/99 7:43	0.03	0.03	0.83	0.58	0.10	0.03	1.58
10/2/99 8:03	0.28	0.58	5.55	5.90	1.35	1.28	14.93
10/2/99 8:23	0.05	0.08	1.88	1.35	0.15	0.18	3.68
10/2/99 8:43	0.03	0.00	1.48	1.63	0.15	0.23	3.50
10/2/99 9:03	0.05	0.10	1.48	1.20	0.13	0.15	3.10
10/2/99 9:23	0.03	0.03	1.15	0.78	0.08	0.13	2.18
10/2/99 9:43	0.00	0.05	1.25	0.98	0.13	0.10	2.50
10/2/99 10:03	0.00	0.10	1.43	0.78	0.03	0.03	2.35
10/2/99 10:23	0.05	0.00	1.63	0.60	0.08	0.08	2.43
10/2/99 10:43	0.03	0.08	1.35	0.98	0.13	0.18	2.73
10/2/99 11:03	0.13	0.03	1.30	0.98	0.18	0.18	2.78
10/2/99 11:23	0.05	0.05	1.23	0.95	0.13	0.05	2.45
10/2/99 11:43	0.10	0.03	1.00	0.68	0.00	0.13	1.93
10/2/99 12:03	0.03	0.08	0.95	0.75	0.03	0.10	1.93
10/2/99 12:23	0.03	0.10	1.13	1.03	0.05	0.08	2.40
10/2/99 12:43	0.08	0.05	1.53	1.03	0.13	0.10	2.90
10/2/99 13:03	0.00	0.05	0.88	0.75	0.08	0.08	1.83
10/2/99 13:23	0.00	0.03	1.28	0.93	0.13	0.15	2.50
10/2/99 13:43	0.05	0.05	1.35	1.08	0.20	0.15	2.88
10/2/99 14:03	0.03	0.03	1.08	0.90	0.03	0.05	2.10
10/2/99 14:23	0.08	0.03	1.00	0.88	0.08	0.10	2.15
10/2/99 14:43	0.00	0.08	1.70	1.18	0.03	0.05	3.03
10/2/99 15:03	0.00	0.03	1.03	1.05	0.13	0.10	2.33
10/2/99 15:23	0.00	0.03	1.38	0.98	0.15	0.08	2.60
10/2/99 15:43	0.03	0.03	1.53	1.23	0.10	0.15	3.05
10/2/99 16:03	0.00	0.23	2.53	3.25	0.43	0.30	6.73
10/2/99 16:23	0.03	0.05	4.03	2.93	0.35	0.23	7.60
10/2/99 16:43	0.03	0.08	3.65	2.65	0.28	0.30	6.98
10/2/99 17:03	0.00	0.10	2.83	2.35	0.23	0.28	5.78
10/2/99 17:23	0.00	0.08	2.60	2.13	0.25	0.18	5.23
10/2/99 17:43	0.00	0.03	2.53	2.03	0.13	0.10	4.80
10/2/99 18:03	0.08	0.15	2.90	2.85	0.25	0.13	6.35
10/2/99 18:23	0.05	0.03	2.75	1.90	0.18	0.20	5.10
10/2/99 18:43	0.03	0.05	2.93	2.10	0.10	0.08	5.28
10/2/99 19:03	0.00	0.10	2.90	2.43	0.38	0.23	6.03
10/2/99 19:23	0.08	0.05	3.15	1.73	0.18	0.10	5.28
10/2/99 19:43	0.03	0.05	3.08	1.85	0.15	0.15	5.30
10/2/99 20:03	0.00	0.10	3.08	1.85	0.30	0.20	5.53
10/2/99 20:23	0.00	0.05	3.00	2.03	0.20	0.08	5.35
10/2/99 20:43	0.03	0.08	3.33	2.03	0.15	0.18	5.78
10/2/99 21:03	0.05	0.08	3.08	2.25	0.18	0.38	6.00
10/2/99 21:23	0.05	0.05	3.10	2.58	0.10	0.18	6.05
10/2/99 21:43	0.00	0.03	3.65	2.53	0.15	0.08	6.43
10/2/99 22:03	0.05	0.08	4.00	2.13	0.23	0.15	6.63
10/2/99 22:23	0.00	0.00	3.70	2.40	0.38	0.13	6.60
10/2/99 22:43	0.00	0.03	3.88	2.45	0.20	0.20	6.75
10/2/99 23:03	0.08	0.13	3.45	2.40	0.18	0.25	6.48
10/2/99 23:23	0.03	0.08	4.10	2.90	0.23	0.13	7.45

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/2/99 23:43	0.00	0.05	4.53	3.15	0.30	0.05	8.08
10/3/99 0:03	0.00	0.00	3.80	2.55	0.13	0.18	6.65
10/3/99 0:23	0.10	0.10	4.30	2.83	0.18	0.13	7.63
10/3/99 0:43	0.03	0.03	4.50	3.08	0.23	0.23	8.08
10/3/99 1:03	0.10	0.10	4.80	2.68	0.23	0.15	8.05
10/3/99 1:23	0.05	0.05	4.30	2.75	0.20	0.08	7.43
10/3/99 1:43	0.08	0.08	4.43	2.60	0.20	0.18	7.55
10/3/99 2:03	0.08	0.05	4.15	2.48	0.18	0.20	7.13
10/3/99 2:23	0.05	0.08	3.85	3.38	0.23	0.30	7.88
10/3/99 2:43	0.03	0.20	4.05	2.90	0.38	0.43	7.98
10/3/99 3:03	0.03	0.05	3.83	2.20	0.15	0.15	6.40
10/3/99 3:23	0.03	0.05	3.53	2.88	0.25	0.20	6.93
10/3/99 3:43	0.03	0.10	4.20	2.83	0.25	0.28	7.68
10/3/99 4:03	0.03	0.05	4.13	2.30	0.23	0.10	6.83
10/3/99 4:23	0.03	0.05	3.33	2.28	0.20	0.15	6.03
10/3/99 4:43	0.03	0.05	3.58	2.45	0.28	0.13	6.50
10/3/99 5:03	0.03	0.03	4.08	2.55	0.18	0.15	7.00
10/3/99 5:23	0.05	0.05	4.15	2.58	0.20	0.25	7.28
10/3/99 5:43	0.05	0.10	4.75	2.83	0.33	0.10	8.15
10/3/99 6:03	0.03	0.08	3.78	2.73	0.18	0.23	7.00
10/3/99 6:23	0.08	0.00	4.25	2.98	0.18	0.25	7.73
10/3/99 6:43	0.15	0.15	5.83	5.08	0.53	0.23	11.95
10/3/99 7:03	0.00	0.03	4.55	3.05	0.30	0.15	8.08
10/3/99 7:23	0.00	0.05	4.00	2.60	0.15	0.18	6.98
10/3/99 7:43	0.00	0.05	3.68	2.63	0.30	0.20	6.85
10/3/99 8:03	0.45	0.50	6.70	5.15	0.95	1.00	14.75
10/3/99 8:23	0.08	0.05	4.38	2.43	0.08	0.13	7.13
10/3/99 8:43	0.05	0.08	3.78	2.20	0.33	0.05	6.48
10/3/99 9:03	0.05	0.03	3.45	2.53	0.35	0.18	6.58
10/3/99 9:23	0.05	0.08	10.68	7.60	0.73	0.28	19.40
10/3/99 9:43	0.00	0.00	4.33	3.38	0.38	0.20	8.28
10/3/99 10:03	0.05	0.08	4.05	3.30	0.48	0.35	8.30
10/3/99 10:23	0.00	0.03	4.00	2.20	0.25	0.13	6.60
10/3/99 10:43	0.05	0.08	3.00	2.23	0.25	0.13	5.73
10/3/99 11:03	0.18	0.33	6.73	4.70	0.60	0.40	12.93
10/3/99 11:23	131.23	123.50	2476.43	2594.38	368.98	308.00	999.00
10/3/99 11:43	0.10	0.15	9.03	7.38	0.63	0.53	17.80
10/3/99 12:03	0.18	0.10	7.30	5.80	0.70	0.35	14.43
10/3/99 12:23	0.08	0.00	5.08	3.63	0.23	0.13	9.13
10/3/99 12:43	0.03	0.05	5.03	2.93	0.43	0.15	8.60
10/3/99 13:03	0.00	0.13	4.38	2.65	0.23	0.10	7.48
10/3/99 13:23	0.03	0.00	4.18	3.00	0.25	0.13	7.58
10/3/99 13:43	0.00	0.15	3.60	2.53	0.25	0.18	6.70
10/3/99 14:03	0.00	0.03	3.78	2.23	0.20	0.10	6.33
10/3/99 14:23	0.00	0.08	3.65	2.40	0.13	0.08	6.33
10/3/99 14:43	0.05	0.05	3.05	1.88	0.25	0.10	5.38
10/3/99 15:03	0.00	0.00	3.23	1.75	0.20	0.03	5.20
10/3/99 15:23	0.68	0.75	5.45	5.25	1.23	1.45	14.80

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/3/99 15:43	0.00	0.13	3.93	2.88	0.18	0.13	7.23
10/3/99 16:03	0.03	0.00	5.55	3.83	0.43	0.33	10.15
10/3/99 16:23	0.00	0.03	4.43	2.55	0.23	0.15	7.38
10/3/99 16:43	0.35	0.18	4.18	3.43	0.25	0.18	8.55
10/3/99 17:03	0.00	0.05	5.03	3.10	0.25	0.10	8.53
10/3/99 17:23	0.00	0.10	4.35	2.88	0.08	0.25	7.65
10/3/99 17:43	0.03	0.00	4.28	2.45	0.20	0.15	7.10
10/3/99 18:03	0.03	0.00	4.25	2.60	0.23	0.08	7.18
10/3/99 18:23	0.00	0.08	3.68	2.48	0.10	0.23	6.55
10/3/99 18:43	0.00	0.05	3.55	2.40	0.10	0.18	6.28
10/3/99 19:03	0.00	0.03	4.00	2.00	0.18	0.10	6.30
10/3/99 19:23	0.03	0.03	3.90	2.33	0.20	0.18	6.65
10/3/99 19:43	0.00	0.00	3.65	2.30	0.28	0.08	6.30
10/3/99 20:03	0.03	0.08	4.05	2.50	0.18	0.18	7.00
10/3/99 20:23	0.03	0.08	3.83	2.25	0.13	0.05	6.35
10/3/99 20:43	0.00	0.03	4.43	2.80	0.10	0.13	7.48
10/3/99 21:03	0.00	0.00	4.48	2.65	0.13	0.05	7.30
10/3/99 21:23	0.03	0.03	4.38	2.48	0.20	0.10	7.20
10/3/99 21:43	0.00	0.00	3.40	2.18	0.15	0.10	5.83
10/3/99 22:03	0.00	0.00	4.65	2.35	0.15	0.10	7.25
10/3/99 22:23	0.00	0.03	4.20	2.38	0.23	0.08	6.90
10/3/99 22:43	0.00	0.03	4.33	2.55	0.15	0.08	7.13
10/3/99 23:03	0.00	0.13	5.53	2.03	0.15	0.05	7.88
10/3/99 23:23	0.03	0.03	4.38	2.50	0.20	0.08	7.20
10/3/99 23:43	0.00	0.03	4.28	2.30	0.20	0.03	6.83
10/4/99 0:03	0.03	0.20	4.90	3.00	0.23	0.30	8.65
10/4/99 0:23	0.03	0.00	4.38	2.03	0.18	0.03	6.63
10/4/99 0:43	0.00	0.00	4.45	2.23	0.13	0.13	6.93
10/4/99 1:03	0.03	0.00	4.30	2.63	0.18	0.10	7.23
10/4/99 1:23	0.00	0.08	5.23	2.00	0.15	0.05	7.50
10/4/99 1:43	0.00	0.00	4.20	2.63	0.05	0.03	6.90
10/4/99 2:03	0.00	0.05	3.50	2.18	0.18	0.10	6.00
10/4/99 2:23	0.03	0.03	3.68	1.83	0.15	0.05	5.75
10/4/99 2:43	0.00	0.05	4.03	2.50	0.18	0.18	6.93
10/4/99 3:03	0.00	0.03	3.63	2.15	0.15	0.10	6.05
10/4/99 3:23	0.00	0.00	3.95	2.48	0.08	0.08	6.58
10/4/99 3:43	0.00	0.05	3.70	2.55	0.05	0.10	6.45
10/4/99 4:03	0.03	0.00	4.08	2.58	0.13	0.23	7.03
10/4/99 4:23	0.00	0.03	4.10	2.20	0.25	0.05	6.63
10/4/99 4:43	0.03	0.00	3.93	2.38	0.28	0.28	6.88
10/4/99 5:03	0.00	0.00	3.60	2.78	0.28	0.13	6.78
10/4/99 5:23	0.00	0.03	3.73	2.25	0.15	0.00	6.15
10/4/99 5:43	0.00	0.03	3.93	1.88	0.08	0.05	5.95
10/4/99 6:03	0.05	0.00	3.53	2.35	0.23	0.08	6.23
10/4/99 6:23	0.00	0.08	3.60	2.18	0.28	0.08	6.20
10/4/99 6:43	0.03	0.03	3.65	2.18	0.18	0.15	6.20
10/4/99 7:03	0.03	0.00	3.60	1.83	0.13	0.03	5.60
10/4/99 7:23	0.10	0.00	3.70	2.18	0.20	0.18	6.35

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/4/99 7:43	0.08	0.03	2.78	1.55	0.18	0.18	4.78
10/6/99 13:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/6/99 13:42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/6/99 14:02	1.88	1.63	5.68	6.95	1.80	2.58	20.50
10/6/99 14:22	2.78	1.35	3.23	5.30	1.65	2.13	16.43
10/6/99 14:42	0.73	0.40	1.93	2.63	0.50	0.80	6.98
10/6/99 15:02	0.98	0.98	2.68	3.73	0.70	1.18	10.23
10/6/99 15:22	0.60	0.48	1.90	1.85	0.28	0.48	5.58
10/6/99 15:42	0.93	0.28	1.25	1.65	0.38	0.65	5.13
10/6/99 16:02	0.18	0.13	1.25	1.45	0.28	0.43	3.70
10/6/99 16:22	0.08	0.18	0.88	0.95	0.28	0.25	2.60
10/6/99 16:42	0.13	0.03	0.65	0.63	0.03	0.18	1.63
10/6/99 17:02	0.10	0.03	0.45	0.55	0.08	0.28	1.48
10/6/99 17:22	0.15	0.08	0.50	0.80	0.03	0.10	1.65
10/6/99 17:42	0.08	0.08	0.35	0.68	0.10	0.20	1.48
10/6/99 18:02	0.15	0.10	0.23	0.30	0.10	0.15	1.03
10/6/99 18:22	0.15	0.10	0.45	0.63	0.13	0.20	1.65
10/6/99 18:42	0.50	0.18	0.95	0.85	0.13	0.20	2.80
10/6/99 19:02	0.10	0.15	0.35	0.35	0.15	0.18	1.28
10/6/99 19:22	0.05	0.08	0.30	0.25	0.10	0.03	0.80
10/6/99 19:42	0.03	0.05	0.38	0.53	0.03	0.13	1.13
10/6/99 20:02	0.10	0.13	0.43	0.78	0.10	0.03	1.55
10/6/99 20:22	0.75	0.48	0.53	1.15	0.43	0.45	3.78
10/6/99 20:42	1.40	1.05	1.68	3.00	0.93	1.38	9.43
10/6/99 21:02	0.05	0.05	0.68	0.63	0.08	0.15	1.63
10/6/99 21:22	0.05	0.13	0.48	0.55	0.18	0.10	1.48
10/6/99 21:42	0.03	0.05	0.45	0.43	0.15	0.08	1.18
10/6/99 22:02	0.10	0.08	0.55	0.45	0.15	0.13	1.45
10/6/99 22:22	0.08	0.03	0.43	0.43	0.05	0.08	1.08
10/6/99 22:42	0.03	0.10	0.33	0.78	0.15	0.08	1.45
10/6/99 23:02	0.23	0.08	0.33	0.43	0.05	0.05	1.15
10/6/99 23:22	0.00	0.05	0.40	0.30	0.10	0.05	0.90
10/6/99 23:42	0.15	0.03	0.48	0.53	0.10	0.05	1.33
10/7/99 0:02	0.05	0.10	0.45	0.30	0.05	0.05	1.00
10/7/99 0:22	0.03	0.08	0.30	0.48	0.08	0.13	1.08
10/7/99 0:42	0.05	0.08	0.38	0.45	0.08	0.03	1.05
10/7/99 1:02	0.10	0.05	0.45	0.65	0.13	0.10	1.48
10/7/99 1:22	0.08	0.18	0.50	0.88	0.23	0.28	2.13
10/7/99 1:42	0.08	0.10	0.33	0.63	0.23	0.13	1.48
10/7/99 2:02	0.05	0.10	0.80	0.90	0.20	0.23	2.28
10/7/99 2:22	0.18	0.15	0.53	0.58	0.18	0.13	1.73
10/7/99 2:42	0.03	0.03	0.70	1.15	0.20	0.28	2.38
10/7/99 3:02	0.05	0.13	0.58	1.20	0.13	0.15	2.23
10/7/99 3:22	0.05	0.03	0.48	0.73	0.10	0.18	1.55
10/7/99 3:42	0.25	0.10	0.90	0.63	0.08	0.18	2.13
10/7/99 4:02	0.13	0.03	0.65	0.63	0.28	0.08	1.78
10/7/99 4:22	0.23	0.10	0.98	1.05	0.23	0.25	2.83
10/7/99 4:42	0.00	0.03	0.55	0.53	0.03	0.08	1.20



Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/7/99 5:02	0.03	0.13	0.85	0.68	0.08	0.20	1.95
10/7/99 5:22	0.05	0.13	0.78	0.83	0.13	0.30	2.20
10/7/99 5:42	0.00	0.08	0.53	0.40	0.18	0.08	1.25
10/7/99 6:02	0.15	0.15	0.83	1.28	0.13	0.23	2.75
10/7/99 6:22	0.53	0.43	1.10	1.38	0.45	0.38	4.25
10/7/99 6:42	0.18	0.15	0.93	0.78	0.10	0.20	2.33
10/7/99 7:02	0.08	0.25	0.65	1.08	0.15	0.33	2.53
10/7/99 7:22	0.10	0.03	0.90	0.80	0.18	0.20	2.20
10/7/99 7:42	0.28	0.23	1.18	1.60	0.30	0.50	4.08
10/7/99 8:02	0.08	0.10	1.08	1.30	0.23	0.18	2.95
10/7/99 8:22	0.15	0.05	1.15	0.98	0.20	0.23	2.75
10/7/99 8:42	0.05	0.05	1.70	1.88	0.45	0.43	4.55
10/7/99 9:02	0.35	0.40	1.28	1.88	0.38	0.48	4.75
10/7/99 9:22	0.23	0.23	0.63	1.03	0.30	0.35	2.75
10/7/99 9:42	0.05	0.03	0.63	0.73	0.08	0.15	1.65
10/7/99 10:02	0.00	0.00	0.83	0.58	0.20	0.18	1.78
10/7/99 10:22	0.18	0.28	1.90	1.93	0.43	0.28	4.98
10/7/99 10:42	0.35	0.15	1.10	1.63	0.33	0.33	3.88
10/7/99 11:02	0.05	0.03	0.68	0.95	0.15	0.15	2.00
10/7/99 11:22	0.08	0.05	0.80	0.73	0.13	0.13	1.90
10/7/99 11:42	0.05	0.03	0.80	0.75	0.10	0.23	1.95
10/7/99 12:02	0.30	0.20	0.78	0.93	0.15	0.15	2.50
10/7/99 12:22	0.05	0.03	0.85	0.85	0.08	0.10	1.95
10/7/99 12:42	0.15	0.18	1.13	1.45	0.20	0.43	3.53
10/7/99 13:02	0.10	0.05	0.83	0.58	0.10	0.10	1.75
10/7/99 13:22	0.53	0.43	1.10	1.60	0.28	0.65	4.58
10/7/99 13:42	0.05	0.15	0.85	1.13	0.13	0.20	2.50
10/7/99 14:02	0.03	0.08	0.75	0.88	0.13	0.13	1.98
10/7/99 14:22	0.03	0.08	0.78	0.65	0.18	0.20	1.90
10/7/99 14:42	0.23	0.13	0.95	0.65	0.20	0.10	2.25
10/7/99 15:02	0.10	0.23	1.00	1.33	0.15	0.28	3.08
10/7/99 15:22	0.25	0.05	1.13	0.98	0.30	0.18	2.88
10/7/99 15:42	0.18	0.08	0.45	0.90	0.23	0.18	2.00
10/7/99 17:16	2.75	1.98	5.25	7.30	1.75	2.60	21.63
10/7/99 17:36	1.15	0.95	2.75	3.78	0.80	1.48	10.90
10/7/99 17:56	0.43	0.55	1.93	2.10	0.55	0.73	6.28
10/7/99 18:16	0.35	0.35	1.08	1.80	0.20	0.50	4.28
10/7/99 18:36	1.03	0.75	1.63	3.40	1.18	1.00	8.98
10/7/99 18:56	0.20	0.15	0.98	1.35	0.25	0.38	3.30
10/7/99 19:16	0.25	0.33	0.90	1.68	0.30	0.45	3.90
10/7/99 19:36	2.70	2.53	5.45	8.10	2.43	3.18	24.38
10/7/99 19:56	0.13	0.23	0.63	1.10	0.28	0.30	2.65
10/7/99 20:16	0.53	0.35	1.05	1.78	0.65	0.38	4.73
10/7/99 20:36	0.13	0.13	0.93	1.08	0.30	0.33	2.88
10/7/99 20:56	0.15	0.10	0.98	1.13	0.20	0.13	2.68
10/7/99 21:16	0.05	0.20	1.03	0.93	0.23	0.25	2.68
10/7/99 21:36	0.30	0.20	0.83	0.88	0.28	0.20	2.68
10/7/99 21:56	0.20	0.08	0.63	1.00	0.08	0.08	2.05

/Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/7/99 22:16	0.18	0.15	1.00	1.15	0.38	0.40	3.25
10/7/99 22:36	0.08	0.08	0.75	0.95	0.20	0.20	2.25
10/7/99 22:56	0.00	0.10	0.80	0.85	0.25	0.23	2.23
10/7/99 23:16	0.15	0.15	0.73	1.03	0.35	0.38	2.78
10/7/99 23:36	0.15	0.10	0.73	0.95	0.25	0.30	2.48
10/7/99 23:56	0.08	0.03	0.53	0.63	0.10	0.10	1.45
10/8/99 0:16	0.13	0.03	0.60	0.53	0.15	0.08	1.50
10/8/99 0:36	0.18	0.05	0.83	0.60	0.20	0.35	2.20
10/8/99 0:56	0.28	0.15	1.00	1.35	0.20	0.33	3.30
10/8/99 1:16	0.30	0.33	1.10	1.28	0.30	0.33	3.63
10/8/99 1:36	0.08	0.05	0.55	0.50	0.10	0.23	1.50
10/8/99 1:56	0.15	0.15	0.68	0.95	0.13	0.25	2.30
10/8/99 2:16	0.13	0.10	1.05	1.00	0.18	0.15	2.60
10/8/99 2:36	0.13	0.13	0.73	1.13	0.18	0.25	2.53
10/8/99 2:56	0.05	0.13	0.90	0.80	0.13	0.30	2.30
10/8/99 3:16	0.08	0.15	0.88	0.93	0.15	0.10	2.28
10/8/99 3:36	0.08	0.15	1.10	1.05	0.15	0.15	2.68
10/8/99 3:56	0.40	0.30	2.45	2.48	0.63	0.83	7.08
10/8/99 4:16	0.08	0.18	0.88	1.00	0.13	0.25	2.50
10/8/99 4:36	0.08	0.08	1.28	1.03	0.33	0.35	3.13
10/8/99 4:56	0.05	0.20	0.65	1.05	0.20	0.25	2.40
10/8/99 5:16	0.10	0.08	1.15	0.98	0.15	0.18	2.63
10/8/99 5:36	0.08	0.05	1.10	1.03	0.13	0.30	2.68
10/8/99 5:56	0.23	0.15	0.75	0.68	0.18	0.18	2.15
10/8/99 6:16	0.20	0.23	1.60	1.60	0.40	0.53	4.55
10/8/99 6:36	0.45	0.33	1.43	1.75	0.38	0.45	4.78
10/8/99 6:56	0.05	0.10	0.93	0.58	0.13	0.23	2.00
10/8/99 7:16	0.05	0.08	0.80	0.80	0.23	0.35	2.30
10/8/99 7:36	0.23	0.20	1.13	1.38	0.35	0.30	3.58
10/8/99 7:56	0.18	0.15	1.35	1.28	0.23	0.43	3.60
10/8/99 8:16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 8:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 8:56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 9:16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 9:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 9:56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 10:16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 10:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 10:56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 11:16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 11:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 11:56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 12:16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 12:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 12:56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/8/99 13:16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/9/99 22:23	0.13	0.13	3.48	3.90	0.33	0.43	8.38
10/9/99 22:43	0.03	0.05	3.05	2.10	0.20	0.30	5.73

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/9/99 23:03	0.03	0.05	2.60	2.08	0.13	0.20	5.08
10/9/99 23:23	0.05	0.08	2.90	1.90	0.30	0.15	5.38
10/9/99 23:43	0.10	0.08	2.25	2.08	0.15	0.40	5.05
10/10/99 0:03	0.05	0.10	2.85	2.20	0.18	0.18	5.55
10/10/99 0:23	0.00	0.03	2.25	1.70	0.10	0.05	4.13
10/10/99 0:43	0.13	0.10	2.35	1.90	0.13	0.13	4.73
10/10/99 1:03	0.00	0.08	2.50	1.68	0.18	0.15	4.58
10/10/99 1:23	0.15	0.33	2.83	2.50	0.48	0.45	6.73
10/10/99 1:43	0.03	0.05	2.60	1.68	0.25	0.15	4.75
10110199 2:03	0.00	0.00	2.63	1.85	0.13	0.05	4.65
10/10/99 2:23	0.00	0.05	3.10	2.25	0.08	0.15	5.63
10/10/99 2:43	0.08	0.08	2.93	2.28	0.20	0.10	5.65
10/10/99 3:03	0.08	0.05	3.28	2.43	0.43	0.45	6.70
10/10/99 3:23	0.00	0.05	2.35	1.70	0.15	0.13	4.38
10/10/99 3:43	0.03	0.03	1.98	1.68	0.15	0.03	3.88
10/10/99 4:03	0.00	0.00	1.70	1.13	0.05	0.05	2.93
10/10/99 4:23	0.05	0.10	2.43	2.23	0.20	0.08	5.08
10/10/99 4:43	0.00	0.00	2.05	1.38	0.15	0.10	3.68
10/10/99 5:03	0.00	0.00	1.85	0.75	0.10	0.15	2.85
10110199 5:23	0.00	0.05	1.38	1.00	0.05	0.08	2.55
10/10/99 5:43	0.00	0.08	1.50	1.58	0.18	0.08	3.40
10/10/99 6:03	0.00	0.00	1.75	1.00	0.03	0.03	2.80
10/10/99 6:23	0.05	0.05	1.33	1.13	0.08	0.08	2.70
10/10/99 6:43	0.00	0.10	1.18	0.70	0.13	0.00	2.10
10/10/99 7:03	0.03	0.13	1.83	1.65	0.18	0.28	4.08
10/10/99 7:23	0.00	0.00	1.55	0.85	0.13	0.08	2.60
10/10/99 7:43	0.03	0.03	1.33	0.98	0.08	0.10	2.53
10/10/99 8:03	0.03	0.00	1.15	0.95	0.15	0.10	2.38
10/10/99 8:23	0.00	0.15	4.65	2.88	0.18	0.15	8.00
10/10/99 8:43	0.08	0.13	1.30	1.48	0.25	0.25	3.48
10/10/99 9:03	0.55	0.83	6.60	6.85	1.40	1.40	17.63
10/10/99 9:23	0.03	0.05	1.10	1.03	0.10	0.15	2.45
10/10/99 9:43	0.03	0.08	1.70	1.85	0.18	0.20	4.03
10/10/99 10:03	0.03	0.03	1.10	0.60	0.15	0.13	2.03
10/10/99 10:23	0.00	0.03	0.68	0.55	0.10	0.03	1.38
10/10/99 10:43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 11:03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 11:23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 11:43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 12:03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 12:23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 12:43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 13:03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 13:23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 13:43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 14:03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 14:23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/10/99 14:43	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/10/99 16:50	1.40	1.05	13.05	13.38	2.43	2.58	33.88
10/10/99 17:10	0.98	0.78	6.45	7.65	1.28	1.50	18.63
10/10/99 17:30	0.58	0.43	4.88	4.70	0.98	1.33	12.88
10/10/99 17:50	0.95	0.70	4.80	6.58	1.28	1.23	15.53
10/10/99 18:10	0.33	0.53	3.78	4.40	0.60	0.70	10.33
10/10/99 18:30	4.55	4.80	9.25	14.65	4.78	6.85	44.88
10/10/99 18:50	1.18	1.03	5.60	5.90	1.53	1.45	16.68
10/10/99 19:10	1.40	1.43	4.33	5.83	1.38	1.95	16.30
10/10/99 19:30	0.20	0.30	3.65	2.75	0.68	0.60	8.18
10/10/99 19:50	0.28	0.23	3.73	2.95	0.45	0.48	8.10
10/10/99 20:10	0.20	0.20	2.95	2.68	0.53	0.33	6.88
10/10/99 20:30	0.15	0.20	3.45	2.58	0.63	0.30	7.30
10/10/99 20:50	0.18	0.30	2.95	3.10	0.60	0.53	7.65
10/10/99 21:10	0.10	0.40	3.80	4.70	0.55	0.63	10.18
10/10/99 21:30	0.18	0.23	3.68	3.68	0.58	0.65	8.98
10/10/99 21:50	0.65	0.60	5.88	6.85	1.05	1.33	16.35
10/10/99 22:10	0.25	0.15	2.38	2.10	0.35	0.38	5.60
10/10/99 22:30	0.35	0.20	2.35	2.08	0.53	0.45	5.95
10/10/99 22:50	0.03	0.08	2.20	1.58	0.30	0.30	4.48
10/10/99 23:10	0.13	0.23	2.23	1.78	0.18	0.28	4.80
10/10/99 23:30	0.93	1.40	4.70	7.58	1.98	1.80	18.38
10/10/99 23:50	0.08	0.18	2.43	3.00	0.25	0.28	6.20
10/11/99 0:10	0.05	0.10	2.53	1.93	0.15	0.15	4.90
10/11/99 0:30	0.05	0.13	2.08	1.95	0.33	0.23	4.75
10/11/99 0:50	0.15	0.13	2.80	2.83	0.33	0.30	6.53
10/11/99 1:10	0.30	0.53	3.45	4.03	1.03	0.65	9.98
10/11/99 1:30	0.05	0.13	3.10	2.18	0.23	0.35	6.03
10/11/99 1:50	0.13	0.13	3.50	2.45	0.35	0.20	6.75
10/11/99 2:10	0.18	0.18	2.43	2.13	0.23	0.53	5.65
10/11/99 2:30	0.15	0.35	3.30	2.48	0.35	0.28	6.90
10/11/99 2:50	0.10	0.18	3.55	2.25	0.20	0.35	6.63
10/11/99 3:10	0.10	0.15	2.75	1.88	0.50	0.55	5.93
10/11/99 3:30	0.00	0.18	3.08	2.55	0.30	0.23	6.33
10/11/99 3:50	0.10	0.08	2.95	2.53	0.48	0.30	6.43
10/11/99 4:10	0.03	0.13	3.05	2.10	0.13	0.28	5.70
10/11/99 4:30	0.05	0.03	3.05	2.33	0.33	0.10	5.88
10/11/99 4:50	0.03	0.15	2.68	2.60	0.48	0.65	6.58
10/11/99 5:10	0.00	0.03	3.33	2.40	0.25	0.33	6.33
10/11/99 5:30	0.08	0.10	2.88	2.20	0.28	0.15	5.68
10/11/99 5:50	0.13	0.10	3.05	2.48	0.38	0.45	6.58
10/11/99 6:10	0.03	0.15	2.63	2.83	0.48	0.40	6.50
10/11/99 6:30	0.10	0.30	4.00	2.88	0.58	0.43	8.28
10/11/99 6:50	0.08	0.13	3.13	2.50	0.30	0.28	6.40
10/11/99 7:10	0.00	0.13	2.68	2.08	0.33	0.33	5.53
10/11/99 7:30	0.03	0.13	3.10	2.50	0.25	0.25	6.25
10/11/99 7:50	0.10	0.23	2.73	2.75	0.45	0.45	6.70
10/11/99 8:10	0.03	0.08	2.43	1.93	0.25	0.15	4.85
10/11/99 8:30	0.05	0.13	4.05	2.85	0.28	0.58	7.93

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/11/99 8:50	0.05	0.10	2.75	2.00	0.33	0.18	5.40
10/11/99 9:10	0.23	0.35	5.53	4.85	0.65	0.45	12.05
10/11/99 9:30	0.23	0.58	6.43	7.93	1.10	1.18	17.43
10/11/99 9:50	0.15	0.25	4.00	3.28	0.55	0.45	8.68
10/11/99 10:10	0.05	0.18	2.65	2.40	0.48	0.28	6.03
10/11/99 10:30	0.03	0.30	2.33	2.10	0.40	0.23	5.38
10/11/99 10:50	0.13	0.23	4.05	3.90	0.70	0.40	9.40
10/11/99 11:10	0.13	0.38	3.35	3.28	0.45	0.30	7.88
10/11/99 11:30	0.30	0.65	7.75	8.05	1.48	1.48	19.70
10/11/99 11:50	0.10	0.15	4.93	4.28	0.38	0.50	10.33
10/11/99 12:10	0.05	0.10	3.25	3.10	0.25	0.43	7.18
10/11/99 12:30	0.08	0.13	3.50	3.03	0.48	0.33	7.53
10/11/99 12:50	0.10	0.10	7.63	5.38	0.80	0.68	14.68
10/11/99 21:03	2.30	3.13	36.85	40.95	6.73	7.60	97.55
10/11/99 21:23	1.33	1.25	15.05	15.60	2.48	3.05	38.75
10/11/99 21:43	0.20	0.45	4.30	3.53	0.80	0.48	9.75
10/11/99 22:03	0.58	0.93	6.25	6.58	1.53	1.88	17.73
10/11/99 22:23	0.98	0.73	4.78	6.05	1.05	1.50	15.08
10/11/99 22:43	0.48	0.28	3.55	3.60	0.60	0.73	9.23
10/11/99 23:03	0.45	0.33	2.18	2.93	0.33	0.40	6.60
10/11/99 23:23	0.23	0.25	2.58	2.23	0.40	0.23	5.90
10/11/99 23:43	0.15	0.28	2.03	2.50	0.30	0.43	5.68
10/12/99 0:03	0.30	0.28	2.25	2.60	0.30	0.40	6.13
10/12/99 0:23	0.28	0.43	2.48	2.33	0.55	0.78	6.83
10/12/99 0:43	0.08	0.05	1.75	1.90	0.35	0.25	4.38
10/12/99 1:03	0.38	0.25	1.85	2.30	0.45	0.30	5.53
10/12/99 1:23	0.28	0.18	2.70	2.70	0.35	0.73	6.93
10/12/99 1:43	0.20	0.53	2.30	2.88	0.53	0.58	7.00
10/12/99 2:03	0.00	0.13	1.45	1.53	0.33	0.23	3.65
10/12/99 2:23	0.03	0.23	1.95	1.88	0.43	0.68	5.18
10/12/99 2:43	0.48	0.35	2.10	2.05	0.45	0.40	5.83
10/12/99 3:03	0.08	0.28	1.90	2.53	0.45	0.20	5.43
10/12/99 3:23	0.05	0.08	2.38	2.05	0.50	0.30	5.35
10/12/99 3:43	0.03	0.08	1.88	1.70	0.23	0.15	4.05
10/12/99 4:03	0.08	0.08	1.80	1.60	0.15	0.23	3.93
10/12/99 4:23	0.03	0.15	2.45	1.93	0.35	0.30	5.20
10/12/99 4:43	0.15	0.23	2.60	2.75	0.35	0.30	6.38
10/12/99 5:03	0.13	0.10	2.50	1.90	0.18	0.18	4.98
10/12/99 5:23	0.13	0.25	2.15	2.45	0.35	0.25	5.58
10/12/99 5:43	0.05	0.18	2.45	1.95	0.40	0.38	5.40
10/12/99 6:03	0.03	0.13	1.98	1.58	0.10	0.18	3.98
10/12/99 6:23	0.10	0.08	1.98	1.83	0.18	0.18	4.33
10/12/99 6:43	0.10	0.15	2.95	2.08	0.30	0.08	5.65
10/12/99 7:03	0.03	0.15	2.75	2.25	0.18	0.15	5.50
10/12/99 7:23	0.08	0.38	2.93	1.83	0.40	0.30	5.90
10/12/99 7:43	0.05	0.10	2.55	2.65	0.23	0.18	5.75
10/12/99 8:03	0.05	0.05	2.23	2.08	0.28	0.13	4.80
10/12/99 8:23	0.05	0.08	2.58	1.78	0.13	0.23	4.83

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/12/99 8:43	0.03	0.05	2.15	1.25	0.18	0.10	3.75
10/12/99 9:03	0.03	0.05	2.28	1.70	0.15	0.25	4.45
10/12/99 9:23	0.00	0.08	1.88	1.53	0.38	0.13	3.98
10/12/99 9:43	0.15	0.20	2.50	1.93	0.48	0.53	5.78
10/12/99 10:03	0.18	0.23	1.80	2.20	0.25	0.33	4.98
10/12/99 10:23	0.03	0.10	1.55	1.30	0.15	0.35	3.48
10/12/99 10:43	0.05	0.03	1.10	1.00	0.10	0.20	2.48
10/12/99 11:03	0.03	0.08	2.58	2.13	0.28	0.25	5.33
10/12/99 11:23	0.05	0.05	1.55	0.83	0.08	0.10	2.65
10/12/99 11:43	0.05	0.10	1.55	0.95	0.23	0.28	3.15
10/12/99 12:03	0.23	0.25	2.68	2.90	0.30	0.63	6.98
10/12/99 12:23	0.00	0.10	1.38	1.05	0.18	0.10	2.80
10/12/99 12:43	0.05	0.05	1.33	1.10	0.13	0.10	2.75
10/12/99 13:03	0.05	0.10	1.48	1.03	0.28	0.20	3.13
10/12/99 13:23	0.00	0.05	1.20	0.68	0.05	0.13	2.10
10/12/99 18:40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/12/99 22:47	0.55	0.40	4.18	4.18	0.63	0.83	10.75
10/12/99 23:07	1.50	0.70	4.50	4.98	0.95	1.10	13.73
10/12/99 23:27	1.18	0.60	3.85	3.93	0.75	1.23	11.53
10/12/99 23:47	1.83	0.90	4.80	5.28	1.15	1.05	15.00
10/13/99 0:07	0.40	0.38	4.45	2.93	0.55	0.68	9.38
10/13/99 0:27	1.20	0.58	4.65	5.05	0.90	1.05	13.43
10/13/99 0:47	0.43	0.35	4.93	4.00	0.55	0.48	10.73
10/13/99 1:07	0.45	0.30	5.28	4.70	0.53	0.48	11.73
10/13/99 1:27	1.03	1.00	7.30	7.73	1.43	1.50	19.98
10/13/99 1:47	0.60	0.35	6.60	5.40	0.65	0.80	14.40
10/13/99 2:07	0.33	0.28	6.30	5.20	0.78	0.48	13.35
10/13/99 2:27	0.08	0.20	6.10	5.78	0.48	0.75	13.38
10/13/99 2:47	0.35	0.35	7.70	6.45	0.98	0.68	16.50
10/13/99 3:07	0.18	0.28	7.50	6.23	0.68	0.35	15.20
10/13/99 3:27	0.30	0.33	8.18	6.98	1.23	0.78	17.78
10/13/99 3:47	0.35	0.33	a.75	6.83	0.60	0.68	17.53
10/13/99 4:07	1.00	0.70	9.18	8.45	1.15	1.15	21.63
10/13/99 4:27	0.50	0.48	10.13	7.13	1.15	1.13	20.50
10/13/99 4:47	0.68	0.80	10.00	8.23	1.25	1.53	22.48
10/13/99 5:07	0.15	0.30	8.65	6.15	0.90	0.55	16.70
10/13/99 5:27	0.35	0.45	8.60	6.33	0.68	0.80	17.20
10/13/99 5:47	0.35	0.58	8.80	6.70	1.10	0.63	18.15
10/13/99 6:07	0.35	0.40	8.60	6.15	0.90	0.73	17.13
10/13/99 6:27	0.43	0.48	7.60	6.00	1.00	1.13	16.63
10/13/99 6:47	0.15	0.43	7.00	6.18	0.68	0.33	14.75
10/13/99 7:07	0.30	0.45	7.58	5.38	0.78	0.63	15.10
10/13/99 7:27	0.80	0.73	10.00	8.00	1.25	1.20	21.98
10/13/99 7:47	0.80	0.85	8.65	7.48	1.10	1.45	20.33
10/13/99 8:07	0.25	0.40	7.50	6.03	0.85	0.65	15.68
10/13/99 8:27	3.23	4.45	14.55	19.00	5.43	6.85	53.50
10/13/99 8:47	0.85	1.25	6.70	6.38	1.15	1.40	17.73
10/13/99 9:07	0.48	0.70	5.23	4.80	0.98	1.20	13.38

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/13/99 9:27	0.13	0.15	4.18	3.23	0.48	0.60	8.75
10/13/99 9:47	0.35	0.25	4.23	3.48	0.40	0.73	9.43
10/13/99 10:07	22.00	31.53	210.48	244.98	50.90	60.33	620.20
10/13/99 10:27	0.40	0.53	4.93	4.63	0.73	0.90	12.10
10/13/99 10:47	0.28	0.43	8.03	6.25	1.08	0.90	16.95
10/14/99 16:57	3.88	7.05	77.15	84.10	15.05	15.20	202.43
10/14/99 17:17	3.53	3.68	52.73	52.93	8.40	8.90	130.15
10/14/99 17:37	4.45	8.33	87.73	96.33	17.88	16.63	231.33
10/14/99 17:57	1.60	2.93	46.65	51.03	8.98	8.38	119.55
10/14/99 18:17	1.03	2.25	34.08	31.33	5.63	5.50	79.80
10/14/99 18:37	0.98	1.65	32.03	26.95	4.03	3.83	69.45
10/14/99 18:57	0.63	1.08	24.45	22.15	2.88	2.43	53.60
10/14/99 19:17	0.68	0.85	24.65	20.18	2.33	2.10	50.78
10/14/99 19:37	1.13	2.35	36.50	35.73	6.48	5.45	87.63
10/15/99 18:34	5.65	5.88	22.95	31.78	7.90	11.85	86.00
10/15/99 18:54	0.80	1.03	10.60	11.18	2.38	2.10	28.08
10/15/99 19:14	0.73	1.23	11.30	11.70	2.43	2.18	29.55
10/15/99 19:34	0.55	0.78	11.85	11.63	1.90	1.93	28.63
10/15/99 19:54	3.38	3.53	15.50	16.98	3.80	5.15	48.33
10/15/99 20:14	0.73	1.13	10.68	10.35	1.93	1.88	26.68
10/15/99 20:34	1.00	1.18	8.88	8.75	2.08	1.88	23.75
10/15/99 20:54	4.80	4.45	19.88	28.55	7.13	7.68	72.48
10/15/99 21:14	0.53	0.98	8.93	9.83	1.75	1.63	23.63
10/15/99 21:34	0.35	0.48	8.50	7.78	0.95	1.20	19.25
10/15/99 21:54	0.35	0.40	7.80	6.93	1.25	0.88	17.60
10/15/99 22:14	0.23	0.60	8.20	7.95	1.35	1.20	19.53
10/15/99 22:34	0.35	0.20	7.98	6.28	0.60	0.93	16.33
10/15/99 22:54	0.25	0.25	7.05	5.18	0.85	0.40	13.98
10/15/99 23:14	0.35	0.58	8.08	7.00	0.93	0.73	17.65
10/15/99 23:34	0.13	0.33	7.95	6.40	0.88	0.83	16.50
10/15/99 23:53	0.25	0.20	6.85	5.30	0.33	0.25	13.18
10/16/99 0:13	0.20	0.23	9.60	6.85	0.73	0.60	18.20
10/16/99 0:33	0.55	1.43	10.63	7.95	1.35	1.60	23.50
10/16/99 0:53	0.15	0.23	7.88	5.23	0.60	0.40	14.48
10/16/99 1:13	0.43	0.48	9.65	7.60	0.88	0.95	19.98
10/16/99 1:33	0.20	0.20	9.40	6.23	0.90	0.63	17.55
10/16/99 1:53	0.10	0.23	8.30	5.93	0.58	0.30	15.43
10/16/99 2:13	0.15	0.38	9.60	7.63	0.88	0.55	19.18
10/16/99 2:33	0.08	0.18	9.65	5.30	0.58	0.70	16.48
10/16/99 2:53	0.40	0.28	10.40	7.50	0.85	1.35	20.78
10/16/99 3:13	0.23	0.35	9.48	6.30	0.98	0.75	18.08
10/16/99 3:33	0.23	0.33	11.20	7.38	0.95	0.88	20.95
10/16/99 3:53	0.15	0.45	12.65	9.30	0.65	0.73	23.93
10/16/99 4:13	0.18	0.43	12.23	7.75	0.93	0.78	22.28
10/16/99 4:33	8.60	7.95	20.78	25.33	6.65	9.70	79.00
10/16/99 4:53	0.10	0.28	12.50	6.78	0.85	0.73	21.23
10/16/99 5:13	0.13	0.15	12.48	7.45	0.98	0.60	21.78
10/16/99 5:33	0.90	0.53	13.03	8.63	1.28	1.55	25.90

Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/16/99 5:53	0.15	0.28	13.25	8.18	1.08	1.05	23.98
10/16/99 6:13	0.08	0.10	12.85	8.18	0.75	0.83	22.78
10/20/99 14:44	2.18	3.43	79.83	67.65	9.58	9.35	172.00
10/20/99 15:04	1.23	2.65	58.68	47.90	5.98	5.13	121.55
10/20/99 15:24	3.30	6.50	73.90	74.83	13.60	12.83	184.95
10/20/99 15:44	1.33	1.85	49.33	43.93	6.13	5.63	108.18
10/20/99 16:04	1.40	2.30	47.95	43.15	6.63	5.45	106.88
10/20/99 16:24	1.33	1.53	40.08	39.25	5.20	4.25	91.63
10/20/99 16:44	6.65	11.13	102.68	117.58	22.48	24.88	285.38
10/20/99 17:04	1.50	3.30	44.23	43.03	7.63	6.88	106.55
10/20/99 17:24	0.85	1.73	36.15	35.35	5.08	4.80	83.95
10/20/99 17:44	1.53	2.20	40.98	41.98	7.63	6.13	100.43
10/20/99 18:04	1.63	3.33	39.63	40.63	6.80	5.95	97.95
10/20/99 18:24	1.50	2.23	35.48	35.65	5.05	6.03	85.93
10/20/99 18:44	1.00	1.53	31.95	32.28	5.43	4.60	76.78
10/20/99 19:04	1.48	3.10	36.88	40.90	7.45	6.50	96.30
10/20/99 19:24	3.73	5.38	42.60	46.93	10.55	11.08	120.25
10/20/99 19:44	1.10	1.95	30.80	29.03	4.75	4.95	72.58
10/20/99 20:04	0.93	2.00	33.23	35.98	6.70	7.00	85.83
10/20/99 20:24	71.40	144.55	989.55	1334.03	287.40	300.73	999.00
10/20/99 20:44	6.63	17.20	177.90	210.25	41.68	40.65	494.30
10/20/99 21:04	1.78	4.58	57.80	54.98	9.53	9.28	137.93
10/20/99 21:24	0.00	0.03	1.80	0.30	0.08	0.08	2.28
10/20/99 21:44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/99 22:04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/99 22:24	103.85	89.58	893.33	1198.95	234.75	176.70	999.00
10/20/99 23:16	2.50	2.05	23.25	20.78	3.23	3.90	55.70
10/20/99 23:36	1.65	1.58	20.23	16.25	2.45	2.88	45.03
10/20/99 23:56	2.05	1.33	15.35	14.75	2.38	2.60	38.45
10/21/99 0:16	6.25	4.55	18.18	18.10	4.28	5.95	57.30
10/21/99 0:36	4.80	3.15	18.28	19.33	4.33	4.78	54.65
10/21/99 0:56	11.00	6.70	23.90	30.25	7.00	9.85	88.70
10/21/99 1:16	1.98	2.23	13.40	12.95	2.15	3.53	36.23
10/21/99 1:36	2.58	2.48	18.80	24.05	4.95	5.43	58.28
10/21/99 1:56	1.13	0.88	9.38	8.78	1.60	1.50	23.25
10/21/99 2:16	1.20	1.25	9.80	9.08	1.50	1.70	24.53
10/21/99 2:36	1.08	0.93	10.23	8.50	1.53	1.58	23.83
10/21/99 2:56	0.70	0.90	9.18	8.08	1.35	1.55	21.75
10/21/99 3:16	0.93	0.85	9.70	8.50	1.45	1.55	22.98
10/21/99 3:36	5.28	4.15	14.78	16.48	3.50	5.65	49.83
10/21/99 3:56	2.93	2.65	13.28	13.68	3.00	4.00	39.53
10/21/99 4:16	0.73	0.85	12.15	9.60	1.90	1.80	27.03
10/21/99 4:36	0.78	0.78	15.65	11.93	1.35	1.90	32.38
10/21/99 4:56	2.05	3.88	23.90	26.45	6.15	6.35	68.78
10/21/99 5:16	0.43	0.78	14.38	10.90	1.40	1.55	29.43
10/21/99 5:36	0.25	0.28	14.08	8.90	1.00	0.70	25.20
10/21/99 5:56	1.13	1.38	19.13	16.53	2.78	2.43	43.35
10/21/99 6:16	0.35	0.30	15.55	10.40	1.00	0.75	28.35



Date	>15.0	10.0-15.0µm	2.0-3.0µm	3.0-5.0µm	5.0-7.0µm	7.0-10.0µm	Sum of Particles
10/21/99 6:36	0.60	0.45	14.85	10.10	1.05	1.40	28.45
10/21/99 8:02	1.53	1.65	26.68	21.78	4.20	3.93	59.75
10/21/99 8:22	0.45	0.48	12.85	8.13	1.15	0.85	23.90
10/21/99 8:42	6.95	8.00	42.33	47.70	10.05	14.00	129.03
10/21/99 9:02	3.40	6.10	58.90	55.25	9.60	9.78	143.03
10/21/99 9:22	3.58	4.35	46.00	42.40	7.63	8.35	112.30
10/21/99 9:42	1.55	1.78	20.35	22.73	4.20	4.90	55.50
10/21/99 10:02	1.50	1.48	29.03	30.33	4.90	3.83	71.05
10/21/99 10:22	1.18	1.10	14.15	12.15	2.08	2.85	33.50
10121199 10:42	1.90	2.08	36.95	29.10	4.90	3.68	78.60

Appendix C • Total Organic Carbon Analysis

Date Time	Product Feed Conc. (ppb) (ppm) (ppm)	Date Time	Product Feed Conc. (ppb) (ppm) (ppm)	Date Time	Product Feed Conc. (ppb) (ppm) (ppm)	Date Time	Product Feed Conc. (ppb) (ppm) (ppm)
7/9/99 0:01	115	7/10/99 21:57	4 8 5	7/13/99 8:25	877	7/15/99 10:26	830
7/9/99 1:01	127	7/10/99 22:57	506	7/13/99 9:25	881	7/15/99 11:26	853
7/9/99 2:01	112	7/10/99 23:57	517	7/13/99 10:25	835	7/15/99 12:26	862
7/9/99 3:02	101	7/11/99 10:02	720	7/13/99 11:25	830	7/15/99 13:26	977
7/9/99 16:55	325	7/11/99 11:02	623	7/13/99 12:25	754	7/15/99 14:26	863
7/9/99 17:57	487	7/11/99 12:02	526	7/13/99 13:25	739	7/15/99 15:26	873
7/9/99 18:57	280	7/11/99 13:02	560	7/13/99 14:25	702	7/15/99 16:26	926
7/9/99 19:57	339	7/11/99 14:02	515	7/13/99 15:25	707	7/15/99 17:26	812
7/9/99 20:57	254	7/11/99 15:02	491	7/13/99 16:25	703	7/15/99 18:26	897
7/9/99 21:57	305	7/11/99 16:02	558	7/13/99 17:25	705	7/15/99 19:26	808
7/9/99 22:57	178	7/11/99 17:02	165	7/13/99 18:25	761	7/15/99 20:26	762
7/9/99 23:57	170	7/11/99 18:02	144	7/13/99 19:25	683	7/15/99 21:26	903
7/10/99 0:57	173	7/11/99 19:02	158	7/13/99 20:25	783	7/15/99 22:26	972
7/10/99 1:57	184	7/12/99 12:22	357	7/13/99 21:25	664	7/15/99 23:26	873
7/10/99 2:57	179	7/12/99 13:24	240	7/13/99 22:25	951	7/16/99 0:26	860
7/10/99 3:57	172	7/12/99 14:24	321	7/13/99 23:25	848	7/16/99 1:26	1014
7/10/99 4:57	181	7/12/99 15:24	711	7/14/99 0:25	943	7/16/99 2:26	924
7/10/99 5:57	160	7/12/99 16:24	682	7/14/99 1:25	1026	7/16/99 3:26	967
7/10/99 6:57	182	7/12/99 17:24	675	7/14/99 2:25	1057	7/16/99 4:26	974
7/10/99 7:57	186	7/12/99 18:24	691	7/14/99 2:55	339	7/16/99 5:26	829
7/10/99 8:57	173	7/12/99 19:24	743	7/14/99 3:25	292	7/16/99 6:26	850
7/10/99 9:57	241	7/12/99 20:24	733	7/14/99 4:25	268	7/16/99 7:26	1085
7/10/99 10:57	232	7/12/99 21:24	758	7/14/99 5:25	259	7/16/99 8:26	996
7/10/99 11:57	487	7/12/99 22:24	842	7/14/99 6:25	227	7/16/99 9:26	1004
7/10/99 12:57	661	7/12/99 23:24	838	7/14/99 7:25	265	7/16/99 10:26	931
7/10/99 13:57	551	7/13/99 0:24	880	7/14/99 8:25	1011	7/16/99 11:26	937
7/10/99 14:57	320	7/13/99 1:24	917	7/14/99 9:25	982	7/16/99 12:26	860
7/10/99 15:57	475	7/13/99 2:25	940	7/14/99 10:25	974	7/16/99 13:26	862
7/10/99 16:57	514	7/13/99 3:25	964	7/14/99 12:25	816	7/16/99 14:26	862
7/10/99 17:57	438	7/13/99 4:25	978	7/14/99 13:25	786	7/16/99 15:26	868
7/10/99 18:57	415	7/13/99 5:25	964	7/14/99 14:25	857	7/16/99 16:26	898
7/10/99 19:57	434	7/13/99 6:25	1008	7/14/99 15:25	967	7/16/99 17:26	889
7/10/99 20:57	435	7/13/99 7:25	982	7/15/99 9:24	930	7/16/99 18:27	888

## Appendix C ■ Total Organic Carbon Analysis

Product Feed Conc.			Product Feed Conc.			Product Feed Conc.			Product Feed Conc.		
Date	Time	(ppb) (ppm) (ppm)	Date	Time	(ppb) (ppm) (ppm)	Date	Time	(ppb) (ppm) (ppm)	Date	Time	(ppb) (ppm) (ppm)
7/16/99	19:27	914	7/18/99	9:25	303	7/19/99	21:26	470	7/21/99	7:27	3 1 6
7/16/99	20:27	261	7/18/99	10:25	278	7/19/99	22:26	443	7/21/99	7:57	798
7/16/99	21:27	196	7/18/99	11:25	268	7/19/99	23:26	469	7/21/99	8:27	844
7/16/99	22:27	190	7/18/99	12:25	269	7/20/99	0:26	360	7/21/99	9:27	833
7/16/99	23:27	138	7/18/99	13:25	308	7/20/99	1:26	474	7/21/99	10:27	747
7/17/99	6:27	507	7/18/99	14:25	283	7/20/99	2:26	569	7/21/99	11:27	816
7/17/99	7:27	929	7/18/99	15:25	250	7/20/99	3:26	348	7/21/99	12:27	702
7/17/99	8:27	1054	7/18/99	16:25	238	7/20/99	4:26	305	7/21/99	13:27	736
7/17/99	9:27	1064	7/18/99	17:25	247	7/20/99	5:26	278	7/21/99	14:27	797
7/17/99	10:27	964	7/18/99	18:25	258	7/20/99	6:26	294	7/21/99	15:27	738
7/17/99	11:27	936	7/18/99	19:25	292	7/20/99	7:26	429	7/21/99	16:27	666
7/17/99	12:27	921	7/18/99	20:25	286	7/20/99	8:26	412	7/21/99	17:27	615
7/17/99	13:27	1024	7/18/99	21:25	302	7/20/99	9:26	441	7/21/99	18:27	607
7/17/99	15:25	375	7/18/99	22:25	329	7/20/99	14:26	557	7/21/99	19:27	622
7/17/99	16:25	1374	7/18/99	23:25	377	7/20/99	15:26	553	7/21/99	20:27	733
7/17/99	17:25	915	7/19/99	0:25	958	7/20/99	16:26	617	7/21/99	21:27	721
7/17/99	18:25	141	7/19/99	1:25	301	7/20/99	17:26	552	7/21/99	22:27	755
7/17/99	19:25	246	7/19/99	7:56	701	7/20/99	18:26	648	7/21/99	23:27	862
7/17/99	20:25	94	7/19/99	8:26	746	7/20/99	19:26	811	7/22/99	0:27	809
7/17/99	21:25	191	7/19/99	9:26	600	7/20/99	20:26	876	7/22/99	1:27	784
7/17/99	22:25	68	7/19/99	10:26	561	7/20/99	21:26	860	7/22/99	2:27	829
7/17/99	23:25	185	7/19/99	11:26	529	7/20/99	22:26	877	7/22/99	3:27	912
7/18/99	0:25	131	7/19/99	12:26	608	7/20/99	23:26	1022	7/22/99	4:27	1070
7/18/99	1:25	122	7/19/99	13:26	532	7/21/99	0:26	885	7/22/99	5:27	1028
7/18/99	2:25	322	7/19/99	14:26	480	7/21/99	1:26	955	7/22/99	6:27	1099
7/18/99	3:25	128	7/19/99	15:26	415	7/21/99	2:26	876	7/22/99	7:27	935
7/18/99	4:25	159	7/19/99	16:26	399	7/21/99	3:26	314	7/22/99	8:27	990
7/18/99	5:25	444	7/19/99	17:26	460	7/21/99	4:26	252	7/22/99	9:27	1027
7/18/99	6:25	274	7/19/99	18:26	508	7/21/99	5:27	259	7/22/99	10:27	1092
7/18/99	7:25	298	7/19/99	19:26	492	7/21/99	6:27	260	7/22/99	11:27	1078
7/18/99	8:25	277	7/19/99	20:26	832	7/21/99	6:57	271	7/22/99	12:27	1103

Appendix C - Total Organic Carbon Analysis

Date Time	Product Feed Conc. (ppb) (ppm) (ppm)	Date Time	Product Feed Conc. (ppb) (ppm) (ppm)	Date Time	Product Feed Conc. (ppb) (ppm) (ppm)	Date Time	Product Feed Conc. (ppb) (ppm) (ppm)
7/22/99 13:27	863	7/24/99 8:28	933	7/29/99 5:38	123	7/30/99 20:49	91
7/22/99 14:27	861	7/24/99 9:28	927	7/29/99 8:16	249	7/30/99 21:50	78
7/22/99 15:27	1058	7/28/99 0:19	116	7/29/99 9:31	189	7/30/99 22:50	77
7/22/99 16:27	1031	7/28/99 1:19	116	7/29/99 12:00	137	7/30/99 23:50	74
7/22/99 17:27	1687	7/28/99 2:19	87	7/29/99 14:40	99	7/31/99 0:50	97
7/22/99 18:27	615	7/28/99 3:19	95	7/29/99 15:42	67	7/31/99 2:50	126
7/22/99 19:27	980	7/28/99 4:19	93	7/29/99 16:42	65	7/31/99 4:43	134
7/22/99 20:27	730	7/28/99 5:19	83	7/29/99 17:42	74	7/31/99 5:13	99
7/22/99 21:27	1300	7/28/99 6:19	78	7/29/99 18:42	64	7/31/99 6:47	75
7/23/99 9:28	1160	7/28/99 7:19	79	7/29/99 19:42	82	7/31/99 7:48	82
7/23/99 10:28	1133	7/28/99 8:19	87	7/29/99 20:42	95	7/31/99 9:40	83
7/23/99 12:28	342	7/28/99 9:19	101	7/29/99 21:42	a4	7/31/99 10:45	165
7/23/99 13:28	808	7/28/99 10:19	96	7/29/99 22:42	77	7/31/99 11:47	115
7/23/99 14:28	956	7/28/99 11:19	100	7/29/99 23:42	94	7/31/99 12:47	103
7/23/99 15:28	966	7/28/99 12:19	131	7/30/99 0:42	107	7/31/99 13:47	105
7/23/99 16:28	757	7/28/99 13:19	91	7/30/99 1:42	105	7/31/99 14:47	98
7/23/99 17:28	898	7/28/99 14:38	207	7/30/99 2:42	91	7/31/99 15:47	93
7/23/99 18:28	904	7/28/99 15:38	174	7/30/99 3:42	84	7/31/99 16:47	82
7/23/99 19:28	389	7/28/99 16:38	192	7/30/99 4:43	64	7/31/99 17:47	65
7/23/99 20:28	821	7/28/99 17:38	123	7/30/99 5:43	78	7/31/99 18:47	34
7/23/99 21:28	384	7/28/99 18:38	135	7/30/99 6:43	71	7/31/99 19:47	34
7/23/99 22:28	495	7/28/99 19:38	107	7/30/99 7:43	57	7/31/99 20:47	67
7/23/99 23:28	762	7/28/99 20:38	105	7/30/99 8:43	91	7/31/99 21:47	76
7/24/99 0:28	597	7/28/99 21:38	105	7/30/99 9:43	109	7/31/99 22:47	89
7/24/99 1:28	941	7/28/99 22:38	117	7/30/99 10:43	138	7/31/99 23:47	87
7/24/99 2:28	1092	7/28/99 23:38	124	7/30/99 11:43	82	8/1/99 1:25	29
7/24/99 3:28	204	7/29/99 0:38	122	7/30/99 12:43	61	8/1/99 2:25	52
7/24/99 4:28	181	7/29/99 1:38	109	7/30/99 13:45	126	8/1/99 3:25	82
7/24/99 5:28	186	7/29/99 2:38	125	7/30/99 15:32	132	8/1/99 4:25	67
7/24/99 6:28	177	7/29/99 3:38	106	7/30/99 16:02	114	8/1/99 5:25	99
7/24/99 7:28	177	7/29/99 4:38	88	7/30/99 19:47	118	8/1/99 7:47	46

Appendix C -Total Organic Carbon Analysis

Date Time	Product (ppb)	Feed (ppm)	Conc. (ppm)	Date Time	Product (ppb)	Feed (ppm)	Conc. (ppm)	Date Time	Product (ppb)	Feed (ppm)	Conc. (ppm)	Date Time	Product (ppb)	Feed (ppm)	Conc. (ppm)
8/1/99 8:47		54		8/3/99 0:25		157		8/4/99 9:25			133	8/5/99 12:21			169
8/1/99 9:47		66		8/3/99 1:25		119		8/4/99 10:25			186	8/5/99 13:09			4.5
8/1/99 13:46		50		8/3/99 2:25		145		8/4/99 11:25			170	8/5/99 13:20			4.1
8/1/99 14:46		39		8/3/99 3:25		156		8/4/99 12:25			196	8/5/99 13:31			4
8/1/99 15:46		25		8/3/99 4:25		145		8/4/99 13:25			190	8/5/99 13:42			2.5
8/1/99 16:46		53		8/3/99 5:25		149		8/4/99 14:21		1.3		8/5/99 13:53			4.2
8/1/99 18:49		83		8/3/99 6:25		145		8/4/99 15:12			223	8/5/99 14:37			273
8/1/99 19:49		92		8/3/99 7:25		143		8/4/99 16:12			161	8/5/99 15:37			189
8/1/99 20:49		97		8/3/99 8:25		174		8/4/99 17:12			160	8/5/99 16:37			200
8/1/99 21:49		85		8/3/99 9:25		161		8/4/99 18:12			159	8/5/99 17:37			198
8/1/99 22:49		85		8/3/99 9:55		169		8/4/99 19:12			139	8/5/99 18:37			174
8/1/99 23:49		62		8/3/99 10:25		151		8/4/99 20:12			130	8/5/99 19:37			190
8/2/99 0:49		65		8/3/99 11:25		136		8/4/99 21:12			176	8/5/99 20:38			165
8/2/99 1:49		58		8/3/99 12:25		169		8/4/99 22:12			148	8/5/99 21:38			189
8/2/99 4:00		64		8/3/99 13:25		164		8/4/99 23:12			142	8/5/99 22:38			132
8/2/99 5:00		49		8/3/99 14:25		164		8/5/99 0:12			172	8/5/99 23:38			190
8/2/99 6:00		57		8/3/99 15:25		154		8/5/99 1:12			157	8/5/99 14:37			273
8/2/99 7:00		86		8/3/99 16:25		150		8/5/99 2:12			134	8/5/99 15:37			189
8/2/99 8:00		116		8/3/99 17:25		157		8/5/99 3:12			162	8/5/99 16:37			200
8/2/99 9:00		150		8/3/99 18:25		154		8/5/99 4:12			161	8/5/99 17:37			198
8/2/99 10:00		132		8/3/99 19:25		158		8/5/99 5:12			165	8/5/99 18:37			174
8/2/99 14:22		152		8/3/99 20:25		120		8/5/99 6:12			153	8/5/99 19:37			190
8/2/99 15:24		115		8/3/99 21:25		153		8/5/99 7:12			191	8/5/99 20:38			165
8/2/99 16:24		121		8/3/99 22:25		122		8/5/99 8:12			182	8/5/99 21:38			189
8/2/99 17:24		134		8/3/99 23:25		154		8/5/99 8:51				8/5/99 22:38			132
8/2/99 18:24		147		8/4/99 0:25		151		8/5/99 9:02				8/5/99 23:38			190
8/2/99 19:24		125		8/4/99 1:25		154		8/5/99 9:13			8.1	8/1/99 2:25			52
8/2/99 20:24		149		8/4/99 2:25		151		8/5/99 9:24			7.8	8/1/99 3:25			82
8/2/99 21:24		147		8/4/99 3:25		171		8/5/99 9:35			8.4	8/1/99 4:25			67
8/2/99 22:24		152		8/4/99 7:25		244		8/5/99 10:21			6.5	8/1/99 5:25			99
8/2/99 23:24		154		8/4/99 8:25		177		8/5/99 11:21			228	8/1/99 7:17			28
											191				

Appendix C - Total Organic Carbon Analysis

Date	Time	Product (ppb)	Feed (ppm)	Conc. (ppm)
8/1/99	9:17		57	
8/1/99	10:17		62	
8/1/99	13:13		38	
8/1/99	14:16		40	
8/1/99	15:16		26	
8/1/99	16:16		47	
8/1/99	18:19		66	
8/1/99	19:19		88	
8/1/99	20:19		104	
8/1/99	21:19		92	
8/1/99	22:19		85	
8/1/99	23:19		73	
8/2/99	0:19		73	
8/2/99	1:19		65	
8/2/99	4:00		64	
8/2/99	5:00		49	
8/2/99	6:00		57	
8/2/99	7:00		86	
8/2/99	8:00		116	
8/2/99	9:00		150	
8/2/99	10:00		132	
8/2/99	14:54		120	
8/2/99	15:54		117	
8/2/99	16:54		48	
8/2/99	17:54		139	
8/2/99	18:54		124	
8/2/99	19:54		127	
8/2/99	20:54		134	
8/2/99	21:54		111	
8/2/99	22:54		147	
8/3/99	0:55		119	
8/3/99	1:55		139	
8/3/99	2:55		150	
8/3/99	3:55		155	
8/3/99	4:55		148	
8/3/99	5:55		145	
8/3/99	6:55		149	
8/3/99	7:55		168	
8/3/99	8:55		164	
8/3/99	9:55		169	
8/3/99	10:55		131	
8/3/99	11:55		167	
8/3/99	12:55		131	
8/3/99	13:55		171	
8/3/99	14:55		150	
8/3/99	15:55		163	
8/3/99	16:55		145	
8/3/99	17:55		140	
8/3/99	18:55		160	
8/3/99	19:55		126	
8/3/99	20:55		162	
8/3/99	21:55		124	
8/3/99	22:55		120	
8/3/99	23:55		165	
8/4/99	0:55		154	
8/4/99	1:55		152	
8/4/99	2:55		163	
8/4/99	3:55		165	
8/4/99	7:55		188	
8/4/99	8:55		180	
8/4/99	10:55		195	
8/4/99	11:55		161	
8/4/99	12:55		188	
8/4/99	13:55		176	
8/4/99	14:21	1.3		
8/4/99	15:12		223	
8/4/99	16:12		161	
8/4/99	17:12		160	
8/4/99	18:12		159	
8/4/99	19:12		139	
8/4/99	20:12		130	
8/4/99	21:12		176	
8/4/99	22:12		148	
8/4/99	23:12		142	
8/5/99	0:12		172	
8/5/99	1:12		157	
8/5/99	2:12		134	
8/5/99	3:12		162	
8/5/99	4:12		161	
8/5/99	5:12		165	
8/5/99	6:12		153	
8/5/99	7:12		191	
8/5/99	8:12		182	
8/5/99	8:51	7.9		
8/5/99	9:02	8.1		
8/5/99	9:13	7.8		
8/5/99	9:24	8.4		
8/5/99	9:35	6.5		
8/5/99	10:21		228	
8/5/99	11:21		191	
8/5/99	12:21		169	
8/5/99	13:09			4.5
8/5/99	13:20			4.1
8/5/99	13:31			4
8/5/99	13:42			2.5
8/5/99	13:53			4.2
8/5/99	14:37		273	
8/5/99	15:37		189	
8/5/99	16:37		200	
8/5/99	17:37		198	
8/5/99	18:37		174	
8/5/99	19:37		190	
8/5/99	20:38		165	
8/5/99	21:38		189	
8/5/99	22:38		132	
8/5/99	23:38		190	
8/6/99	0:38		175	
8/6/99	1:38		171	
8/6/99	2:38		183	
8/6/99	3:38		181	
8/6/99	4:38		159	
8/6/99	5:38		185	
8/6/99	6:38		198	
8/6/99	7:38		181	
8/6/99	8:38		167	
8/6/99	9:38		156	
8/6/99	10:38		179	
8/6/99	11:38		148	
8/6/99	12:38		191	
8/6/99	13:38		168	
8/6/99	14:38		180	

## Appendix C • Total Organic Carbon Analysis

Date Time	Product Feed Conc. (ppb) (ppm) (ppm)	Date Time	Product Feed Conc. (ppb) (ppm) (ppm)	Date Time	Product Feed Conc. (ppb) (ppm) (ppm)	Date Time	Product Feed Conc. (ppb) (ppm) (ppm)
8/7/99 8:48	221	8/8/99 15:37	39	8/9/99 18:49	138	9/4/99 12:57	126
8/7/99 9:48	197	8/8/99 16:37	33	8/9/99 19:49	36	9/4/99 13:57	125
81719910:48	175	8/8/99 17:37	39	8/9/99 20:49	45	9/4/99 14:57	128
a1-771911:37	69	8/8/99 18:38	33	8/9/99 21:49	38	9/4/99 15:57	119
8/7/99 12:37	145	8/8/99 19:38	30	8/9/99 22:49	37	9/4/99 16:57	116
a1719913:37	122	8/8/99 20:38	29	8/9/99 23:49	34	9/4/99 17:57	121
8/7/99 14:37	121	8/8/99 21:38	23	8/10/99 0:49	32	9/4/99 18:57	115
8/7/99 15:37	147	8/8/99 22:38	19	8/10/99 1:49	24	91419919:57	112
81719916:37	162	8/8/99 23:38	25	8/10/99 2:49	23	9/4/99 20:57	94
8/7/99 17:37	138	8/9/99 0:38	26	8/10/99 3:49	28	9/4/99 21:57	101
8/7/99 18:37	111	8/9/99 1:38	25	8/10/99 4:49	37	91419922:57	101
8/7/99 19:37	89	8/9/99 2:38	21	8/10/99 5:49	35	91419923:57	99
8/7/99 20:37	116	8/9/99 3:38	27	8/10/99 6:49	20	9/5/99 0:57	91
8/7/99 21:37	158	8/9/99 4:38	17	8/10/99 7:49	32	9/5/99 1:57	114
8/7/99 22:37	162	8/9/99 5:38	24	8/10/99 8:49	58	9/5/99 2:57	104
817199 23:37	145	8/9/99 6:38	24	8/10/99 9:49	159	9/5/99 3:57	102
8/8/99 0:37	168	8/9/99 7:38	23	8/10/99 10:49	156	9/5/99 4:57	101
8/8/99 1:37	185	8/9/99 8:38	17	8/10/99 11:00		915199 5:57	117
8/8/99 2:37	177	8/9/99 9:38	67	8/10/99 11:11		9/5/99 6:57	99
818199 3:37	132	8/9/99 10:38	145	8/10/99 11:22		9151997:57	96
8/8/99 4:37	173	8/9/99 11:38	191	8/10/99 11:33		9/8/99 11:01	452
8/8/99 5:37	172	8/9/99 12:38	160	8/10/99 11:44		91819912:03	137
8/8/99 6:37	171	8/9/99 13:17		8/10/99 13:22	163	9/8/99 13:03	130
8/8/99 7:37	152	8/9/99 13:28		9/2/99 7:56	205	9/8/99 14:03	101
818199 8:37	156	8/9/99 13:39		9/2/99 8:58	144	91819915:03	206
818199 9:37	182	8/9/99 13:50		9/2/99 9:58	125	9/8/99 16:03	73
8/8/99 10:37	170	8/9/99 14:01		9/2/99 10:58	129	9/8/99 17:03	63
8/8/99 11:37	156	8/9/99 14:49	264	9/4/99 8:57	121	9/8/99 18:03	46
8/8/99 12:37	143	8/9/99 15:49	188	9/4/99 9:57	232	9/8/99 19:03	210
8/8/99 13:37	142	8/9/99 16:49	170	9/4/99 10:57	177	918199 20:03	205
8/8/99 14:37	139	8/9/99 17:49	163	9/4/99 11:57	138	9/8/99 21:03	57

Appendix C - Total Organic Carbon Analysis

Date	Time	Product (ppb)	Feed Conc. (ppm)	Date	Time	Product (ppb)	Feed Conc. (ppm)	Date	Time	Product (ppb)	Feed Conc. (ppm)	Date	Time	Product (ppb)	Feed Conc. (ppm)
9/8/99	22:03	48		9/11/99	23:52	64		9/13/99	6:53	63		9/20/99	12:07	424	
9/8/99	23:03	51		9/12/99	0:52	53		9/13/99	7:53	67		9/20/99	13:07	290	
9/9/99	0:03	49		9/12/99	1:52	52		9/13/99	8:53	82		9/20/99	14:07	296	
9/9/99	1:03	140		9/12/99	2:52	55		9/13/99	11:39	407		9/20/99	15:07	313	
9/9/99	2:03	168		9/12/99	3:52	47		9/13/99	13:09			9/20/99	16:07	285	
9/9/99	3:03	214		9/12/99	4:52	52		9/13/99	13:25			9/20/99	17:07	260	
9/9/99	4:03	206		9/12/99	5:52	48		9/13/99	13:36			9/20/99	18:07	235	
9/9/99	5:03	51		9/12/99	6:52	361		9/13/99	13:47			9/20/99	19:07	214	
9/9/99	6:03	32		9/12/99	7:52	432		9/13/99	13:58			9/20/99	20:08	134	
9/9/99	7:03	38		9/12/99	8:52	339		9/14/99	0:33	581		9/20/99	21:08	238	
9/9/99	8:03	244		9/12/99	9:52	417		9/14/99	1:33	455		9/20/99	22:08	251	
9/9/99	9:03	260		9/12/99	10:52	382		9/14/99	2:33	367		9/20/99	23:08	306	
9/9/99	10:03	267		9/12/99	11:52	343		9/14/99	3:33	454		9/21/99	0:08	290	
9/9/99	11:03	259		9/12/99	12:53	208		9/14/99	4:33	331		9/21/99	1:08	236	
9/9/99	12:03	256		9/12/99	13:53	316		9/14/99	5:34	398		9/21/99	2:08	271	
9/9/99	13:03	225		9/12/99	14:53	204		9/14/99	6:34	281		9/21/99	3:08	287	
9/11/99	8:50	350		9/12/99	15:53	175		9/14/99	7:34	275		9/21/99	4:08	267	
9/11/99	9:52	357		9/12/99	16:53	272		9/14/99	8:34	729		9/21/99	5:08	279	
9/11/99	10:52	355		9/12/99	17:53	124		9/14/99	9:34	665		9/21/99	6:08	234	
9/11/99	11:52	326		9/12/99	18:53	150		9/14/99	10:34	142		9/21/99	7:08	285	
9/11/99	12:52	211		9/12/99	19:53	301		9/14/99	10:54	6.3		9/21/99	8:08	484	
9/11/99	13:52	198		9/12/99	20:53	70		9/14/99	11:05	6.3		9/21/99	8:16		
9/11/99	14:52	287		9/12/99	21:53	75		9/14/99	11:16	6.9		9/21/99	8:27		
9/11/99	15:52	187		9/12/99	22:53	74		9/14/99	11:27	6.8		9/21/99	8:38		
9/11/99	16:52	316		9/12/99	23:53	75		9/14/99	11:37	6.6		9/21/99	8:49		
9/11/99	17:52	84		9/13/99	0:53	65		9/20/99	9:25	3.5		9/21/99	9:29	7220	
9/11/99	18:52	68		9/13/99	1:53	65		9/20/99	9:36	6.6		9/21/99	10:29	360	
9/11/99	19:52	83		9/13/99	2:53	65		9/20/99	9:47	7		9/21/99	11:29	111	
9/11/99	20:52	77		9/13/99	3:53	63		9/20/99	9:58	6.9		9/21/99	12:29	64	
9/11/99	21:52	72		9/13/99	4:53	66		9/20/99	10:09	7.3		9/21/99	13:26		6.8
9/11/99	22:52	64		9/13/99	5:53	54		9/20/99	11:07	311		9/21/99	13:37		6.4



Appendix C - Total Organic Carbon Analysis

Product Feed Conc.			Product Feed Conc.			Product Feed Conc.			Product Feed Conc.		
Date	Time	Conc.	Date	Time	Conc.	Date	Time	Conc.	Date	Time	Conc.
(ppb)	(ppm)	(ppm)	(ppb)	(ppm)	(ppm)	(ppb)	(ppm)	(ppm)	(ppb)	(ppm)	(ppm)
9/21/99	13:48	6.6	9123199	2:31	331	9124199	9:32	529	9125199	22:32	372
9/21/99	13:59	7.4	9123199	3:31	338	9/24/99	10:32	318	9125199	23:32	407
9/21/99	14:10	7.4	9/23/99	4:31	329	9/24/99	11:32	475	9/26/99	0:32	457
9121199	15:45	317	9/23/99	5:31	396	9124199	12:32	466	9/26/99	7:32	259
9121199	16:45	472	9/23/99	6:31	349	9124199	13:32	412	9/26/99	8:32	335
9121199	17:45	374	9/23/99	7:31	315	9124199	14:32	409	9/26/99	9:32	296
9/21/99	18:45	302	9/23/99	8:31	363	9124199	15:32	281	9/26/99	10:32	330
9121199	19:45	147	9/23/99	9:31	367	9124199	16:32	409	9126199	11:33	391
9121199	20:45	117	9/23/99	10:31	474	9/24/99	17:32	432	9/26/99	12:33	404
9121199	21:45	116	9/23/99	11:31	378	9/24/99	18:32	394	9/26/99	13:33	381
9/21/99	22:45	111	9/23/99	12:31	343	9/24/99	19:32	375	9/26/99	14:33	321
9121199	23:45	100	9/23/99	13:31	427	9/24/99	20:32	432	9/26/99	15:33	323
9122199	0:45	91	9/23/99	14:31	379	9124199	21:32	557	9/26/99	16:33	286
9122199	1:45	84	9/23/99	15:31	333	9/24/99	22:32	562	9/26/99	17:33	230
9122199	2:45	74	9/23/99	16:31	327	9124199	23:32	22	9/26/99	18:33	330
9/22/99	3:45	70	9/23/99	17:31	347	9/25/99	6:32	535	9/26/99	19:33	271
9/22/99	4:45	76	9/23/99	18:31	319	9/25/99	7:32	802	9/26/99	20:33	308
9/22/99	5:45	65	9/23/99	19:31	320	9/25/99	8:32	468	9/26/99	21:33	354
9122199	6:45	4	9/23/99	20:31	399	9/25/99	9:32	529	9/26/99	22:33	318
9/22/99	14:31	517	9/23/99	21:32	418	9/25/99	10:32	561	9126199	23:33	350
9/22/99	15:31	407	9/23/99	22:32	425	9/25/99	11:32	514	9/27/99	0:33	354
9122199	16:31	351	9/23/99	23:32	426	9/25/99	12:32	539	9/27/99	1:33	379
9/22/99	17:31	324	9/24/99	0:32	412	9/25/99	13:32	516	9/27/99	2:33	430
9/22/99	18:31	302	9/24/99	1:32	545	9/25/99	14:32	414	9/27/99	3:33	414
9122199	19:31	323	9/24/99	2:32	541	9/25/99	15:32	356	9/27/99	4:33	422
9122199	20:31	325	9/24/99	3:32	525	9/25/99	16:32	313	9127199	5:33	507
9122199	21:31	316	9/24/99	4:32	504	9/25/99	17:32	332	9127199	6:33	437
9/22/99	22:31	337	9/24/99	5:32	477	9/25/99	18:32	275	9127199	7:33	489
9/22/99	23:31	351	9/24/99	6:32	554	9/25/99	19:32	320	9/27/99	8:33	462
9123199	0:31	304	9/24/99	7:32	584	9/25/99	20:32	307	9/27/99	9:33	475
9123199	1:31	320	9/24/99	8:32	568	9/25/99	21:32	425	9/27/99	19:33	348

Appendix C - Total Organic Carbon Analysis

Date Time	Product Feed Conc. (ppb)	Product Feed Conc. (ppm)	Product Feed Conc. (ppm)	Date Time	Product Feed Conc. (ppb)	Product Feed Conc. (ppm)	Product Feed Conc. (ppm)	Date Time	Product Feed Conc. (ppb)	Product Feed Conc. (ppm)	Product Feed Conc. (ppm)	Date Time	Product Feed Conc. (ppb)	Product Feed Conc. (ppm)	Product Feed Conc. (ppm)
9/27/99 20:33		<b>356</b>		9/29/99 13:48				9/30/99 16:18		503		10/2/99 19:08		155	
9/27/99 21:33		<b>426</b>		9/29/99 13:59				9/30/99 17:18		<b>530</b>		10/2/99 20:08		140	
<b>912719922133</b>		<b>418</b>		9/29/99 14:10				9/30/99 18:18		<b>491</b>		10/2/99 21:08		148	
<b>912719923133</b>		<b>422</b>		9/29/99 14:21				9/30/99 19:18		478		<b>1012199</b> 22:08		<b>143</b>	
9/28/99 0:33		484		9/29/99 14:32				9/30/99 20:1 a		<b>532</b>		10/2/99 23:08		<b>150</b>	
9/28/99 1:33		<b>440</b>		<b>9129199</b> 15:17		a53		9/30/99 21:18		<b>495</b>		10/3/99 0:08		<b>162</b>	
9/28/99 2:33		<b>419</b>		9/29/99 16:17		<b>613</b>		9/30/99 22:1 a		<b>505</b>		10/3/99 1:08		<b>166</b>	
9/28/99 3:33		<b>455</b>		9/29/99 17:17		<b>644</b>		9/30/99 23:18		<b>535</b>		10/3/99 2:08		<b>157</b>	
9/28/99 4:33		<b>460</b>		<b>9129199</b> 1a:17		<b>621</b>		10/1/99 0:18		<b>559</b>		10/3/99 3:08		<b>169</b>	
9/28/99 5:33		484		9/29/99 19:17		<b>665</b>		10/1/99 1:18		581		<b>1013199</b> 4:08		<b>173</b>	
9/28/99 6:33		488		<b>9129199</b> 20:17		<b>681</b>		<b>1011199</b> 2:18		<b>545</b>		10/3/99 5:08		179	
9/28/99 7:33		<b>433</b>		<b>9129199</b> 21:17		658		<b>1011199</b> 3:18		<b>560</b>		10/3/99 6:08		191	
9/28/99 8:33		<b>466</b>		9/29/99 22:17		<b>709</b>		10/1/99 4:18		<b>611</b>		<b>1013199</b> 7:08		<b>185</b>	
9/29/99 0:25		<b>342</b>		9/29/99 23:17		<b>722</b>		<b>1011199</b> 5:18		487		10/3/99 8:08		192	
9/29/99 1:25		416		<b>9130199</b> 0:17		<b>599</b>		10/1/99 6:18		<b>482</b>		10/3/99 9:08		1062	
9/29/99 2:25		416		<b>9130199</b> 1:17		171		10/1/99 7:18		<b>467</b>		10/3/99 10:08		1250	
9/29/99 3:25		<b>437</b>		<b>9130199</b> 2:17		<b>122</b>		10/1/99 8:18		<b>523</b>		10/3/99 11:08		878	
9/29/99 4:25		418		9/30/99 3:17		<b>135</b>		<b>1011199</b> 9:18		<b>487</b>		10/3/99 12:08		1034	
9/29/99 5:25		<b>153</b>		9/30/99 4:17		<b>149</b>		10/1/99 10:18		<b>466</b>		<b>1013199</b> 13:08		a35	
9/29/99 6:26		114		9/30/99 5:17		<b>129</b>		<b>1012199</b> 7:08		<b>539</b>		<b>1013199</b> 14:08		a79	
9/29/99 7:26		<b>97</b>		9/30/99 8:16			5.7	<b>1012199</b> 8:08		848		10/3/99 15:08		880	
9/29/99 8:26		383		9/30/99 8:27			7	<b>1012199</b> 9:08		846		10/3/99 16:08		157	
9/29/99 8:37			7	<b>9130199</b> 8:38			7.3	10/2/99 10:0a		<b>637</b>		10/3/99 17:08		<b>143</b>	
9/29/99 8:48			7.7	<b>9130199</b> 8:49			7.3	<b>1012199</b> 11:08		791		<b>013199</b> 18:08		<b>140</b>	
9/29/99 8:58			a.3	9/30/99 9:00			a	<b>1012199</b> 12:08		882		10/3/99 19:08		<b>137</b>	
<b>9129199</b> 9:09			8.1	9/30/99 10:1a		<b>662</b>		<b>1012199</b> 13:08		1047		10/3/99 20:08		<b>138</b>	
9/29/99 9:20			a.4	9/30/99 11:1a		<b>590</b>		<b>1012199</b> 14:08		814		<b>1013199</b> 21:08		<b>139</b>	
9/29/99 10:09		<b>713</b>		9/30/99 12:18		<b>587</b>		<b>1012199</b> 15:08		a34		10/3/99 22:08		<b>140</b>	
9/29/99 11:09		<b>504</b>		9/30/99 13:1a		<b>431</b>		<b>1012199</b> 16:08		170		10/3/99 23:08		<b>151</b>	
9/29/99 12:09		<b>415</b>		<b>91130199</b> 14:18		<b>519</b>		<b>1012199</b> 17:08		<b>133</b>		10/4/99 0:08		<b>162</b>	
<b>9129199</b> 13:09		386		<b>91130199</b> 15:18		<b>502</b>		<b>1012199</b> 18:08		<b>134</b>		10/4/99 1:08		<b>159</b>	

**Appendix D - Pseudomonas Aeruginosa Counts**

Values are colony forming units (cfu) per 100 mL of sample.

Date	Feed	Product	Log Reduction
4/20/99	2000	1	3.30
4/23/99	800	22	1.56
4/27/99	68000	5	4.13
5/21/99	96000	30	3.51
5/28/99	30000	100	2.48
6/4/99	2200	31	1.85
6/8/99	29000	40	2.86
6/11/99	24000	1700	1.15
6/15/99	150000	290	2.71
6/18/99	57000	45	3.10
6/22/99	14000	9	3.19
6/25/99	58000	27	3.33
6/29/99	380000	100	3.58
7/2/99	17000	10	3.23
7/6/99	3600	33	2.04
7/9/99	15000	8	3.27
7/13/99	17000	8	3.33
7/16/99	70000	33	3.33
7/20/99	900	7	2.11
7/23/99	49000	7	3.85
7/27/99	280000	33	3.93
7/30/99	580000	42	4.14
8/3/99	74000	8	3.97
8/6/99	13000	67	2.29
8/10/99	110000	130	2.93
8/13/99	2000	67	1.47
8/17/99	32000	92	2.54
8/20/99	40000	50	2.90
9/10/99	84000	380	2.34
9/14/99	33000	420	1.90
9/17/99	120000	50	3.38
9/21/99	310000	360	2.94
9/24/99	33000	83	2.60
9/28/99	86000	17	3.70
10/1/99	17000	17	3.00
10/12/99	910	380	0.38
10/13/99	3400	580	0.77
10/14/99	47000	750	1.8
10/18/99	32000	5800	0.74

Appendix E: Individual Vessel Conductivity and Flow Data

Date	C1	Conductivity (@/cm)						Flow (L/min)					
		C2	C3	C4	C5	C6	F1	F2	F3	F4	F5	F6	
5111199 7:18 AM	39	151	37	146	418	425	4.59	1.38	4.74	1.38	0.28	0.01	
5/19/99 0:00	35	71	36	70	175	337	3.43	2.85	3.38	2.84	2.19	1.6	
5120199 0:00	29	77	30	17	429	437	4.12	3.15	4.09	3.14	0.39	0.01	
5/21/99 0:00	27	27	25	72	483	577	4.82	3.08	4.6	3.33	0.12	0.01	
5/26/99 4:09 PM	35	193	37	71	176	192	6.15	1.02	3.2	1.56	0.38	0.01	
5/27/99 7:56 AM	28	140	31	101	211	416	6.09	1.34	2.58	0.73	0	0	
611199 9:49 AM	31	76	33	75	206	335	3.67	3.02	3.62	2.95	1.76	0.01	
6/4/99 7:50	51	176	53	88	0.612	934	4.31	0.1	4.59	0.009	0.01	0.01	
6118199 8:00 AM	36	74	41	78	One Stage		1.52	1.38	1.61	1.4	One Stage		
6129199 9:30 AM	45	95	53	103	Operation		1.84	1.51	1.37	1.52	Operation		
6130199 2:00 PM	65	112	73	122			1.22	1	1.25	0.99			
7110199 12:00 PM	51	87	55	94	197	314	2.6	2.17	2.58	2.17	1.62	0.9	
7110199 5:30 PM	54	97	58	105	226	350	2.58	2.17	2.64	2.2	1.59	0.9	
7127199 1:16 PM	37	68	45	69	145	248	2.8	2.6	1.83	1.95	2	1.36	
7128199 11:46 AM	44	72	48	80	160	252	2.8	2.4	2.12	2.03	1.82	1.22	
7/29/99 8:40 AM	48	80	54	92	182	280	2.63	2.24	2.2	2.11	1.74	1.2	
7/30/99 8:25 AM	43	73	41	71	160	268	2.52	2.24	2.32	2.12	1.76	1.23	
7/30/99 1:22 PM	37	67	38	69	157	262	2.51	2.2	2.33	2.15	1.73	1.21	
8/2/99 10:30 AM	40	63	43	70	151	246	2.48	2.33	2.38	2.13	1.72	1.23	
8/2/99 2:18 PM	40	68	45	75	162	258	2.54	2.21	2.39	2.14	1.73	1.23	
8/3/99 10:30 AM	47	72	46	72	154	250	2.5	2.17	2.32	2.1	1.74	1.23	
8/3/99 1:17 PM	52	73	46	74	157	253	2.45	2.18	2.33	2.14	1.77	1.22	
814199 10:30 AM	47	70	43	71	151	237	2.48	2.22	2.39	2.15	1.75	1.22	
8/4/99 1:34 PM	56	83	51	84	175	277	2.52	2.22	2.42	2.17	1.77	1.24	
8/5/99 7:37 AM	46	67	42	66	139	224	2.47	2.16	2.35	2.14	1.78	1.27	
8/5/99 1:30 PM	52	77	48	76	157	249	2.5	2.22	2.43	2.12	1.77	1.25	
8/6/99 8:16 AM	45	59	39	60	126	197	2.45	2.15	2.38	2.13	1.76	1.23	
819199 10:37 AM	46	70	44	71	141	207	2.46	2.18	2.41	2.18	1.78	1.18	
8/9/99 3:01 PM	49	74	48	75	154	222	2.53	2.23	2.48	2.12	1.75	1.18	
8110199 9:30 AM	24	44	23	45	111	159	2.66	2.35	2.69	2.31	1.73	0.25	
8110199 1:50 PM	46	69	45	71	141	228	2.4	2.29	2.62	2.25	1.68	0.88	
8/11/99 9:25 AM	45	65	43	63	129	199	2.43	2.15	2.42	2.09	1.73	1.23	

Date	Conductivity ( $\mu\text{S/cm}$ )						Flow (L/min)					
	Cl	c2	c3	c4	C5	C6	F1	F2	F3	F4	F5	F6
8/11/99 1:30 PM	47	71	45	69	144	236	2.42	2.18	2.4	2.14	1.79	1.27
8/12/99 8:02 AM	43	61	40	60	125	198	2.35	2.17	2.39	2.12	1.78	1.27
8/12/99 2:38 PM	28	51	28	53	133	219	2.41	2.17	2.39	2.11	1.79	1.26
8/13/99 8:13 AM	45	58	40	56	112	178	2.31	2.12	2.3	2.11	1.87	1.42
8/13/99 1:15 PM	39	58	38	57	124	200	2.34	2.17	2.34	2.12	1.84	1.34
8/23/99 9:42 AM	49	70	41	63	119	228	2.37	2.22	2.37	2.13	1.89	1.24
8/23/99 1:22 PM	23	39	27	44	88	149	2.37	2.16	2.38	2.18	1.86	1.27
8/24/99 12:00 AM	42	63	42	61	120	179	2.33	2.14	2.36	2.12	1.82	1.37
8/24/99 8:31 AM	40	53	38	51	94	149	2.34	2.16	2.35	2.13	1.87	1.46
8/25/99 9:25 AM	37	54	36	53	106	164	2.33	2.12	2.33	2.11	1.84	1.36
8/25/99 11:30 AM	45	63	43	62	121	184	2.31	2.1	2.32	2.08	1.8	1.36
8/25/99 1:30 PM	49	70	47	62	133	204	2.34	2.14	2.3	2.11	1.83	1.38
8/26/99 2:45 PM	46	66	45	65	124	190	2.38	2.13	2.38	2.1	1.78	1.32
8/27/99 8:20 AM	38	52	38	52	98	145	2.36	2.14	2.39	2.09	1.75	1.31
8/27/99 1:16 PM	43	58	41	56	103	160	2.42	2.15	2.43	2.08	1.73	1.29
8/31/99 8:00 AM	41	59	39	56	118	185	2.3	2.11	2.32	2.06	1.79	1.33
9/12/99 9:36	47	58	36	52	107	174	2.49	2.17	1.65	1.81	1.72	1.23
9/9/99 8:05 AM	45	67	39	60	127	199	2.64	2.34	2.1	2.25	1.9	1.14
9/10/99 8:00 AM	45	66	39	60	122	192	2.62	2.28	2.3	2.21	1.54	1.21
9/10/99 1:11 PM	50	74	44	69	142	231	2.49	2.25	2.22	2.18	1.82	1.24
9/13/99 10:31 AM	55	81	46	74	150	239	2.55	2.27	2.27	2.21	1.85	1.25
9/13/99 1:50 PM	68	110	65	106	237	391	2.53	2.24	2.3	2.2	1.88	1.37
9/14/99 11:16 AM	28	53	28	52	136	210	2.46	2.23	2.27	2.17	1.87	1.25
9/17/99 8:30 AM	63	103	38	62	135	236	2.34	2.16	2.1	2.06	1.82	1.27
9/17/99 1:30 PM	34	58	37	108	150	248	2.34	2.11	2.36	2.13	1.7	1.2
10/13/99 9:53	2.3	39	2.11	59	2.68	233	2.13	61	1.86	1.25	2.6	1792

### Appendix F - UV Analysis Data

Wavelength (nm)	254	455	530	254	455	530	254	455	530	254	455	530
Date	Blank			Permeate			Feed			Concentrate		
8116199 10:24	0.000	0.000	0.000	0.005	0.007	0.010	0.254	0.234	0.272	0.831	0.832	0.956
8/16/99 2:00	0.000	0.000	0.000	0.046	0.003	0.003	0.670	0.250	0.011	2.347	0.105	0.054
8117199 9:50	0.000	0.000	0.000	0.000	0.009	0.009	0.609	0.032	0.018	2.422	0.110	0.051
8117199 13:53	0.000	0.000	0.000	-0.010	-0.006	-0.004	0.620	0.020	0.007	2.489	0.098	0.043
8118199 10:05	0.000	0.000	0.000	-0.023	-0.013	-0.010	0.612	0.012	0.001	2.501	0.092	0.036
8118199 2:15	0.000	0.000	0.000	-0.032	-0.013	-0.011	0.643	0.015	0.001	2.627	0.104	0.042
8119199 10:29	0.000	0.000	0.000	-0.051	-0.017	-0.013	0.572	0.015	-0.002	2.451	0.097	0.039
8120199 10:44	0.000	0.000	0.000	-0.035	-0.017	-0.016	0.679	0.027	0.012	2.822	0.127	0.057
8123199 10:06	0.000	0.000	0.000	0.021	-0.001	0.001	0.674	0.026	0.012	2.664	0.103	0.043
8123199 13:13	0.000	0.000	0.000	0.023	-0.001	0.000	0.657	0.013	0.010	2.694	0.084	0.031
8/24/99 10:53	0.000	0.000	0.000	0.000	-0.002	0.002	0.658	0.028	0.011	2.696	0.125	0.054
8/24/99 14:05	0.000	0.000	0.000	0.004	-0.003	-0.002	0.680	0.026	0.011	2.586	0.110	0.047
8126199 11:04	0.000	0.000	0.000	0.200	0.003	0.003	0.643	0.029	0.015	2.493	0.111	0.053
8/26/99 14:38	0.000	0.000	0.000	0.016	0.000	0.001	0.648	0.026	0.012	2.545	0.110	0.050
8127199 10:00	0.000	0.000	0.000	0.025	0.012	0.012	0.633	0.037	0.023	2.372	0.113	0.059
8127199 1:10	0.000	0.000	0.000	0.019	0.010	0.010	0.608	0.034	0.050	2.313	0.104	0.050
9/2/99 10:54	0.000	0.000	0.000	0.056	0.004	0.004	0.678	0.029	0.015	3.931	0.188	0.087
919199 7:06	0.000	0.000	0.000	0.019	0.000	0.000	0.676	0.027	0.013	2.558	0.111	0.050
919199 10:00	0.000	0.000	0.000	0.053	0.000	0.000	0.659	0.024	0.011	2.579	0.104	0.047
9113199 10:45	0.000	0.000	0.000	0.031	0.001	0.001	0.642	0.024	0.011	2.575	0.111	0.049
9/13/99 14:21	0.000	0.000	0.000	0.014	0.001	0.001	0.603	0.021	0.009	2.530	0.113	0.049
9114199 11:07	0.000	0.000	0.000	0.031	0.002	0.001	0.663	0.028	0.013	2.504	0.101	0.045
Averages	0.000	0.000	0.000	0.019	-0.001	0.000	0.644	0.035	0.013	2.605	0.111	0.049

**Appendix G: Recorded RO Operations Data**

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index	
	Feed	Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage				Conc
4/21/99 23:37	1728	3582	5238	48	7.0	15.2	4.2	1035	902	840	29.0	1.2	105
4/22/99 7:47	1668	3370	4958	45	7.0	14.6	4.6	1042	907	848	28.2	2.0	107
4/22/99 9:47	1654	3413	5012	47	7.1	14.8	4.6	1033	902	a39	28.8	1.9	105
4/22/99 12:47	1676	3752	5579	54	7.1	14.8	3.8	1049	920	a70	29.8	1.5	104
4/22/99 14:47	1699	3903	4952	58	7.1	14.6	3.8	1044	917	866	30.6	2.0	104
4/22/99 17:47	1720	4128	5106	65	7.1	14.2	3.4	1052	939	a93	31.5	1.9	104
4/23/99 18:22	1661	4644	5805	98	7.3	12.3	1.9	1251	1173	1150	31.7	2.0	104
5/9/99 8:27	1516	4618	5904	64	7.3	15.4	4.8	1040	917	862	30.5	0.2	
5/9/99 9:27	1511	4614	5878	65	7.3	15.4	4.8	1039	916	a59	30.6	0.2	
5/11/99 15:00	1648	5723	5748	183	7.0	15.4	3.8	2261	2196	2155	30.0		
5/11/99 0:00	1605	3921	3450	197		15.5	3.8	757	634	572	30.0		
5/18/99 13:57	1469	2502	3434	102	6.3	12.5	11.5	688	484	260	29.3	0.1	143
5/19/99 0:27	1584	2744	3650	102	6.4	12.5	11.5	688	486	262	30.3	0.1	213
5/19/99 1:27	1578	2734	3626	102	6.4	12.5	11.5	686	486	262	30.3	0.1	
5/19/99 14:18	1592	3880	6838	102	6.4	15.4	3.8	751	632	569	31.5	0.1	
5/19/99 15:18	1606	3925	6542	102	6.7	15.4	3.6	756	637	575	31.6	0.1	
5/21/99 8:19	1579	5656	3838	102	6.9	14.6	4.6	1146	1049	1004	30.2	0.1	
5/21/99 9:19	1571	5649	3772	124	6.9	13.9	4.2	1150	1053	1008	30.5	0.1	
5/21/99 10:19	1565	5856	3681	128	6.9	13.5	4.0	1165	1071	1030	30.6	0.1	
5/21/99 11:19	102	5749	3050	99	4.6	16.8	1.7	1288	1198	1178	31.4	0.1	
5/21/99 12:19	1581	8046	2985	182	6.8	13.3	1.5	1330	1263	1243	31.3	0.1	
5/21/99 13:19	1593	7372	2959	185	6.8	12.3	1.3	1357	1300	1282	31.6	0.1	
5/21/99 14:19	1610	6745	2858	185	6.8	11.9	1.5	1376	1328	1309	31.9	0.1	
5/21/99 15:19	1611	6368	1978	186	6.8	11.9	1.7	1443	1397	1377	32.1	0.1	
5/21/99 16:19	1614	6052	1711	184	6.8	11.0	1.5	1452	1410	1389	32.4	0.1	
5/21/99 17:19	1616	5843	1450	183	6.8	10.6	1.7	1459	1419	1399	32.5	0.1	
5/21/99 18:19	1615	5669	1681	176	6.8	10.1	1.7	1464	1426	1405	32.7	0.1	
5/21/99 19:19	1618	5505	1511	176	6.8	9.8	1.9	1472	1433	1414	32.6	0.1	
5/22/99 13:19	1591	4134	815	165	6.9	6.6	2.5	1606	1566	1533	32.6	0.1	
5/22/99 14:19	1602	4417	1015	185	6.9	7.1	3.0	1596	1552	1519	32.9	0.1	
5/22/99 15:19	1611	4600	1047	190	6.9	7.7	3.0	4588	1540	1508	33.1	0.1	
5/22/99 16:19	1615	4702	1124	174	6.9	7.9	3.0	1580	1530	1497	33.3	0.1	
5/22/99 17:19	1616	4813	2132	190	6.9	10.2	3.6	1917	1851	1808	33.6	0.1	
5/22/99 18:19	1617	4742	2312	194	6.9	10.4	3.8	1918	1851	1807	33.6	0.1	
5/22/99 19:19	1613	4617	2539	192	6.8	10.2	3.4	1917	1849	1804	33.6	0.1	
5/22/99 20:19	1606	4466	2809	186	6.9	10.2	3.4	1919	1849	1804	33.3	0.1	
5/22/99 21:19	1605	4315	3019	180	6.8	10.0	3.6	1922	1851	1805	33.0	0.1	

Time	Feed	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index
		Interstage	Conc	Tot	Perm	RO	Feed	Tot	Perm	Conc			
5122199 22:19	1612	4169	3209	194	6.8	10.0	3.8	1925	1854	1807	32.7	0.1	
5/22/99 23:19	1610	4040	3323	191	6.8	9.6	3.6	1930	1859	1811	32.4	0.1	
5123199 0:19	1606	3928	3523	185	6.8	9.4	3.4	1934	1863	1814	32.2	0.1	
5/23/99 1:19	1604	3840	3629	182	6.9	9.1	3.4	1938	1869	1819	32.1	0.1	
5123199 2:19	1596	3760	3661	178	6.9	8.9	3.8	1943	1874	1825	31.9	0.1	
5123199 3:19	1588	3684	3775	175	6.8	8.7	3.6	1948	1880	830	31.8	0.1	
5123199 4:19	1580	3613	3745	192	6.8	8.5	3.4	1952	1885	836	31.8	0.1	
5123199 5:19	1572	3556	3656	192	6.8	8.5	3.4	1956	1890	841	31.7	0.1	
5123199 7:11	1574	3476	3472	193	6.8	7.9	3.4	1962	1898	1850	31.6	0.1	
5123199 8:11	1574	3454	3560	192	6.8	7.9	3.6	1964	1902	1853	31.7	0.1	
5123199 9:11	1565	3443	3494	193	6.8	7.5	3.8	1964	1902	854	31.9	0.1	
5123199 10:11	1558	3423	3424	192	6.8	7.5	3.6	1965	1902	855	32.1	0.1	
5123199 11:11	1549	3433	3507	192	6.7	7.5	3.4	2018	1955	906	32.4	0.1	
5/23/99 12:11	1562	3454	3412	194	6.8	7.7	3.6	2024	1960	912	32.6	0.1	
5123199 3:11	1583	3494	3515	196	6.7	7.5	3.8	2023	1960	1912	32.9	0.1	
5123199 14:11	1596	3529	3670	196	6.7	7.5	3.4	2023	1961	1913	33.2	0.1	
5123199 15:11	1608	3561	3458	195	6.7	7.5	3.4	2023	1960	912	33.5	0.1	
5/23/99 16:11	1613	3587	3790	198	6.6	7.5	3.4	2022	1960	911	33.7	0.1	
5/23/99 7:11	1612	3597	3799	233	6.6	7.5	3.5	2022	1959	910	33.9	0.1	
5123199 8:11	1613	3596	3720	227	6.6	7.5	3.6	2021	1958	909	34.0	0.1	
5/23/99 9:11	1613	3574	3988	223	6.6	7.7	3.4	2023	5960	1910	34.0	0.1	
5/23/99 20:11	1613	3536	3999	219	6.5	7.5	3.6	2023	1959	1909	33.8	0.1	
5123199 21:11	1608	3485	3879	221	6.5	7.5	3.4	2024	1960	1910	33.5	0.1	
5/23/99 22:11	1599	3436	3990	205	6.6	7.3	3.6	2024	1960	1910	33.3	0.1	
5123199 23:11	1593	3383	4009	198	6.6	7.5	3.4	2026	1961	1911	33.0	0.1	
51241990.11	1588	3343	4028	193	6.6	7.5	3.6	2025	1960	1910	32.8	0.1	
5124199 1:11	1580	3298	4132	187	6.6	7.7	3.6	2028	1961	1910	32.5	0.1	
5124199 2:11	1572	3259	3901	184	6.6	7.5	3.4	2027	1961	1911	32.4	0.1	
5124199 3:11	1567	3214	4043	179	6.6	7.3	3.4	2029	1964	1912	32.3	0.1	
5124199 4:11	1559	3178	4054	175	6.6	7.3	3.6	2030	1964	1912	32.2	0.1	
5/24/99 5:11	1552	3143	4072	202	6.6	7.3	3.6	2029	1963	1911	32.1	0.1	
5/24/99 6:11	1545	3112	4051	201	6.6	7.5	3.6	2030	1964	1912	32.0	0.1	
5/24/99 7:42	1556	3095	4049	199	6.6	7.3	3.4	2028	1961	1909	32.0	0.1	
5124199 8:42	1566	3059	4308	198	6.6	7.5	3.8	2026	1958	1901	32.1	0.1	
5124199 9:42	1574	3076	4236	201	6.6	7.3	3.8	2026	1959	1903	32.4	0.1	
5/25/99 18:29	1794	4502	5938	238	6.6	16.2	3.3	808	681	617	32.5	0.1	107
5/25/99 19:29	1790	4498	6280	229	6.8	16.4	3.6	810	682	617	32.4	0.1	108
5125199 20:29	1782	4445	6609	224	6.8	16.4	3.3	814	686	621	32.2	0.1	107
5/25/99 21:29	1767	4432	6322	212	6.8	16.4	3.8	820	693	630	31.9	0.1	106



Time	Conductivity** (uS/cm)				Flow(L/min)			Pressure~ (kPa)			Temp. (degC)	Turbidity	Particle index	
	Feed	Interstage	Conc	Tot. Perm	RO	Feed	Tot Perm	Conc	Feed	Interstage				Conc
5125199 22:29	1748	4431	6022	201		6.8	16.0	3.8	823	700	640	31.7	0.1	106
5125199 23:29	1726	4453	6159	190		6.8	15.8	3.8	826	706	650	31.5	0.1	106
5/26/99 0:29	1705	4481	5520	184		6.8	15.6	4.0	829	712	659	31.3	0.1	105
5126199 1:29	1687	4494	5650	178		6.8	15.4	4.0	832	717	666	31.2	0.1	106
5126199 2:29	1670	4489	4881	174		6.8	15.2	4.0	834	720	671	31.1	0.1	108
5126199 3:29	1653	4467	5306	171		6.8	15.2	4.0	836	723	674	31.0	0.1	106
5/26/99 4:29	1632	4427	4808	168		6.8	15.2	4.0	836	724	676	30.9	0.1	106
5126199 5:29	1611	4378	5355	164		6.8	15.2	4.0	837	726	678	30.8	0.1	107
5/26/99 6:29	1594	4338	4635	161		6.8	25.2	4.0	837	727	679	30.7	0.1	106
5126199 7:27	1592	4365	5039	158		6.8	15.4	4.0	865	750	701	30.7	0.1	111
5/26/99 7:29	1591	4365	4720	158		6.7	15.6	4.0	865	750	701	30.7	0.1	111
5126199 8:27	1588	4369	4381	155		6.8	15.6	4.2	866	750	700	30.8	0.4	108
5126199 8:29	1588	4374	4269	155		6.8	15.6	4.2	865	750	699	30.8	0.4	108
5126199 9:27	1584	4401	4800	154		6.8	15.0	4.2	887	770	720	31.1	0.3	108
5/26/99 9:29	1584	4401	4596	254		6.8	15.2	4.2	887	770	720	31.1	0.3	109
5127199 7:23	1598	5425	3789	140		6.8	14.1	5.0	1445	1366	1316	30.6	0.3	105
5127199 7:52	1595	5432	3810	144		6.7	14.1	5.0	1445	1367	1317	30.7	0.3	105
5127199 8:23	1594	2766	2415	121		6.7	8.9	11.9	886	748	554	30.3	2.0	105
5127199 8:52	1590	5779	4873	161		6.7	15.4	4.6	1464	1380	1336	30.7	0.3	108
5127199 9:23	1587	5861	4585	159		6.8	15.6	4.6	1551	1465	1421	30.8	0.3	105
5127199 11:22	1589	5852	4221	152		6.8	15.4	4.8	1671	1588	1541	31.3	0.3	107
5/28/99 7:26	1574	5590	3694	151		6.8	10.2	2.7	1679	1634	1608	32.0	0.3	105
5/28/99 8:26	1572	5492	3864	145		6.9	15.2	5.0	2116	2037	1987	32.1	0.3	105
5128199 9:26	1570	5381	3652	139		6.9	13.7	5.2	2267	2188	2135	32.4	0.3	108
5129199 7:34	1619	2527	3194	191		6.5	4.8	6.5	331	263	179	31.2	0.1	
5129199 8:34	1623	2509	3172	188		6.6	5.0	6.5	334	266	181	30.9	0.1	105
5130199 7:13	1568	2625	3400	117		6.6	10.4	10.9	612	444	247	31.0	0.1	108
5/30/99 8:13	1590	2673	3471	119		6.6	10.4	10.9	622	450	251	31.1	0.1	106
51301999. 13	1602	2699	3503	115		6.6	10.4	10.9	621	450	249	31.3	0.1	107
5130199 10:13	1612	2753	3568	115		6.6	10.8	10.7	623	452	258	31.5	0.1	208
5130199 11:13	1620	2784	3595	124		6.6	10.8	10.7	622	452	258	31.7	0.1	106
5130199 12:13	1632	2828	3630	127		6.6	10.8	10.7	623	454	260	32.0	0.1	109
5130199 13:13	1645	2860	3643	119		6.6	10.6	10.5	611	445	255	32.2	0.1	106
5130199 14:13	1656	2895	3678	123		6.6	10.6	10.5	610	445	254	32.5	0.1	106
5130199 15:13	1669	2930	3713	142		6.6	10.7	10.5	608	444	254	32.7	0.1	117
5/30/99 16:13	1669	2953	3731	137		6.5	10.6	10.7	609	444	254	32.9	0.1	106
5130199 17:13	1668	2962	3739	140		6.4	10.8	10.5	608	444	253	33.1	0.1	105
5130199 18:13	1658	2948	3721	144		6.5	10.8	10.5	608	443	254	33.1	0.1	106
5130199 19:13	1649	2925	3713	134		6.4	10.8	10.5	607	443	253	33.0	0.1	106

Time	Conductivity (uS/cm)			flow(L/min)			Pressure (kPa)			Temp(degC)	Turbidity	Particle	Index
	Feed	Interstage	Conc	Tot Perm	RO Feed	Tot	Penn	Conc	Feed				
5130199 20:13	1646	2885	3682	139	6.4	10.8	10.5	609	444	254	32.8	0.1	109
5130199 21:13	1633	2846	3647	134	6.5	10.6	10.5	608	443	254	32.6	0.1	107
5/30/99 23:13	1615	2802	3657	121	6.5	10.8	10.7	623	454	260	32.1	0.1	107
5/31/99 0:13	1610	2779	3582	116	6.5	10.8	10.7	624	454	260	31.9	0.1	172
5/31/99 2:13	1611	2752	3559	110	6.6	10.6	10.7	624	455	260	31.7	0.1	140
5/31/99 3:13	1608	2739	3551	121	6.6	10.6	10.7	626	456	262	31.6	0.1	117
5131199 5:13	1598	2712	3511	121	6.6	10.6	10.7	625	456	262	31.4	0.1	130
5/31/99 6:13	1590	2695	3494	118	6.6	10.6	10.7	625	456	262	31.3	0.1	130
5131199 7:42	1601	2704	3512	117	6.6	10.4	10.7	626	457	262	31.3	0.1	125
5131199 9:42	1611	2664	3428	126	6.6	8.9	10.0	546	403	231	31.5	0.4	110
5131199 10:42	1662	2744	3494	142	6.8	8.9	9.9	542	400	230	31.7	0.5	109
5131199 11:42	1632	2757	3516	127	6.6	9.1	9.8	538	395	226	32.0	1.5	115
5/31/99 12:42	1646	2824	3581	156	6.6	9.3	9.8	539	395	226	32.3	2.0	111
5131199 13:42	1653	3099	4161	152	6.6	11.9	9.0	639	480	322	32.6	1.9	117
5131199 15:42	1674	3547	5271	174	6.6	13.9	6.7	707	563	449	33.2	1.1	105
5131199 16:42	1675	3578	5302	175	6.5	13.9	6.7	707	563	450	33.3	1.2	105
5131199 19:42	1678	3565	5284	172	6.5	13.9	6.9	707	563	450	33.3	1.2	105
5/31/99 21:42	1664	3484	5220	165	6.5	13.7	6.9	711	567	454	32.8	1.0	110
5/31/99 22:42	1658	3450	5171	164	6.6	13.7	6.9	714	569	456	32.5	1.0	106
5131199 23:42	1652	3431	5166	159	6.6	13.9	6.9	730	581	465	32.2	1.3	106
6/1/99 0:42	1651	3396	5131	153	6.6	13.7	6.9	731	583	468	32.0	1.5	106
611199 1:42	1647	3369	5100	153	6.6	13.7	6.9	731	584	468	31.8	1.7	106
611199 2:42	1642	3347	5061	151	6.6	13.7	6.9	732	585	469	31.6	1.0	108
6/1/99 3:42	1637	3325	5044	148	6.6	13.7	6.9	735	587	471	31.5	1.4	118
6/1/99 4:42	1631	3303	5016	148	6.6	13.5	6.9	735	588	471	31.4	1.2	107
6/1/99 5:42	1625	3276	4977	144	6.7	13.5	7.1	736	588	472	31.2	0.9	108
6/1/99 7:42	1619	3268	5013	144	6.7	13.9	7.1	751	600	482	31.2	1.5	
6111998142	1629	3281	5000	148	6.7	13.5	6.9	738	590	473	31.3	1.1	106
6/2/99 7:13	1656	4093	4995	144	7.1	14.8	5.4	806	680	606	31.4	1.0	108
612199 8:13	1659	4247	4942	150	7.1	13.9	5.2	783	670	606	31.5	1.0	114
612199 10:13	1646	4563	5369	170	6.8	13.5	4.4	779	681	632	31.7	0.7	110
6/2/99 13:13	1678	4955	5153	181	6.7	13.5	4.4	778	685	638	32.6	1.3	113
6/2/99 16:13	1698	5223	5051	206	6.6	11.6	3.8	698	622	585	33.4	0.8	110
6/3/99 7:18	1711	5212	4626	177	6.7	10.8	4.0	717	651	613	31.2	0.6	107
6/3/99 8:18	1708	5630	4948	190	6.7	10.8	3.4	722	661	630	31.4	0.6	107
6/3/99 12:18	1715	5372	4449	147	6.7	13.5	5.7	976	867	803	32.2	0.1	106
6/3/99 13:15	1734	5457	4479	152	6.7	13.4	5.7	975	867	803	32.4	0.4	105
6/3/99 14:15	1743	5514	4479	155	6.7	13.3	5.7	977	871	806	32.6	0.1	108
6/3/99 17:15	1767	9217	10017	259	6.7	16.4	1.9	1360	1243	1235	33.5	0.1	109

Time	Conductivity (uS/cm)				Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle	Index
	Feed	Interstage	Conc	Tat Perm RO	Feed	Tat Perm	Conc	Feed	Interstage	Conc				
6/3/99 18:15	1770	6976	4553	238	6.6	12.7	1.9	1567	1499	1488	33.8	0.1	110	
613199 21:15	1815	5397	3239	221	6.6	10.4	2.3	1631	2576	1566	33.4	0.1	111	
613199 22:15	1831	5265	3279	223	6.7	102	2.3	1639	1585	1575	33.2	0.1	111	
613199 23:15	1829	5137	3214	223	6.6	98	2.3	1643	1590	1580	32.9	0.1	111	
614199 0:15	1815	5000	3174	217	6.7	9.6	2.3	1647	1595	1585	32.8	0.1	110	
614199 1:15	1795	4868	3044	215	6.7	9.3	2.3	1652	1601	1590	32.6	0.1	111	
6/4/99 4:15	1744	4599	3086	212	6.6	8.9	2.3	165%	1607	1596	32.4	0.1	111	
6/4/99 5:15	1730	4541	2934	207	6.6	8.9	2.5	1661	1610	1600	32.3	0.1	111	
614199 6:15	1723	4515	3036	208	6.6	8.9	2.1	1660	1610	1599	32.3	0.1	111	
614199 7:35	1727	4497	2992	187	6.7	a.5	2.1	1662	1612	1601	32.3	0.1	111	
6/4/99 8:35	1730	4411	2921	199	6.7	8.3	2.1	1658	1607	1598	32.2	0.1	110	
614199 9:35	1725	4462	2927	201	6.7	8.3	2.3	1656	1597	1587	32.6	0.1	110	
614199 10:35	1717	2475	2284	117	6.7	7.9	14.4	1491	1334	1073	32.3	0.3	110	
614199 11:35	1717	2912	2930	116	6.6	8.9	13.4	1276	1127	888	32.3	0.1	110	
6/4/99 12:35	1729	3117	3335	128	6.6	9.8	12.3	1135	966	767	32.4	0.2	111	
614199 13:22	1732	3153	3436	139	6.8	a.9	12.3	967	817	644	32.6	0.2	111	
614199 14:22	1740	3281	3634	136	6.6	10.0	11.5	1012	849	669	32.9	0.2	218	
6/4/99 15:22	1750	3339	3709	142	6.5	10.2	11.5	992	830	652	33.1	0.3	128	
6/5/99 8:59	1778	3352	4282	151	6.6	11.4	9.8	869	703	543	31.5	0.2	103	
615199 9:59	1748	3303	4181	141	6.6	11.2	9.8	874	70%	549	31.6	0.2	104	
6/5/99 10:59	1727	3285	4131	142	6.6	11.2	to.0	875	710	552	31.7	0.2	104	
615199 11:59	1719	3285	4111	143	6.6	11.2	10.0	874	710	552	31.9	0.2	104	
615199 12:22	1722	3298	4102	144	6.7	11.2	10.0	876	712	553	32.0	0.2	105	
615199 13:59	1740	3365	4137	151	6.6	11.2	10.0	873	711	553	32.4	0.2	105	
615199 14:59	1754	3414	4172	153	6.6	11.4	10.0	874	712	553	32.7	0.2	105	
6/5/99 15:59	1759	3450	4198	156	6.6	11.2	10.0	871	710	552	33.0	0.2	105	
615199 16:59	1764	3476	4211	161	6.6	11.4	10.0	871	711	552	33.2	0.2	105	
615199 18:59	1763	3463	4202	154	6.6	11.2	10.0	873	712	554	33.1	0.2	105	
615199 19:59	1762	3423	4163	155	6.6	11.2	to.0	878	716	55%	32.9	0.2	105	
615199 20:59	1749	3365	4106	146	6.6	11.0	10.0	876	715	558	32.6	0.2	105	
615199 21:59	1739	3342	4105	144	6.6	11.2	10.1	901	736	574	32.3	0.2	114	
6/5/99 22:59	1734	3312	4080	143	6.6	11.2	10.0	900	736	574	32.1	0.2	113	
6/6/99 1:59	1727	3249	3996	137	6.6	10.8	10.2	905	742	579	31.7	0.2	112	
6/6/99 2:59	171%	3223	3970	134	6.6	11.0	10.2	908	744	581	31.6	0.2	114	
6/6/99 3:59	1708	3201	3938	134	6.7	11.0	10.2	90%	745	583	31.5	0.2	113	
6/6/99 4:59	1698	3187	3921	127	6.6	11.2	10.4	92%	763	595	31.5	0.2	114	
616199 5:59	1686	3161	3899	126	6.6	11.0	10.2	929	764	596	31.4	0.2	114	
6/6/99 7:15	1679	3143	3877	127	6.7	11.0	10.2	928	763	596	31.3	0.2	114	
616199 9:15	1737	3246	3979	130	6.7	11.0	10.4	931	767	599	31.5	0.2	113	

Time	Conductivity (uS/cm)				Flow (L/min)				Pressure(kPa)			Temp (degC)	Turbidity	Particle	Index
	Feed	Interstage	Conc	Tot	Perm	RO	Feed	Tot	Perm	Conc	Feed				
616199 10:15	1761	3298	4036	135	6.7	10.8	10.4	931	768	600	31.7	0.2	113		
6/6/99 11:15	1762	3325	4035	141	6.7	10.8	10.4	930	767	600	31.9	0.3	112		
6/6/99 12:15	1772	3361	4057	140	6.7	10.8	10.4	932	769	602	32.1	0.3	106		
616199 13:15	1788	3405	4076	144	6.7	10.8	10.4	932	770	603	32.3	0.2	106		
6/6/99 14:15	1793	3427	4088	151	6.7	10.8	10.4	929	768	601	32.6	0.2	106		
6/6/99 15:15	1792	3445	4097	155	6.7	11.0	10.4	927	767	600	32.8	0.2	105		
6/6/99 16:15	1785	3449	4088	158	6.6	11.0	10.4	929	768	601	33.0	0.2	106		
616199 17:15	1783	3454	4083	160	6.6	11.0	10.4	926	766	599	33.1	0.2	106		
6/6/99 18:15	1781	3454	4083	162	6.6	11.0	10.4	927	766	600	33.2	0.2	107		
616199 19:15	1779	3436	4065	157	6.6	11.0	10.4	930	768	602	33.1	0.2	105		
6/6/99 20:15	1769	3388	4031	157	6.5	11.0	10.4	929	767	602	32.9	0.2	105		
6/6/99 21:15	1758	3343	4014	155	6.6	10.8	10.4	932	770	604	32.6	0.2	108		
6/6/99 22:15	1747	3303	3961	143	6.6	10.8	10.4	933	772	606	32.3	0.1	105		
617199 0:15	1730	3241	3904	140	6.6	10.8	10.4	954	790	620	31.8	0.2	114		
617199 1:15	1721	3214	3877	132	6.6	10.8	10.7	959	794	623	31.7	0.2	115		
617199 2:15	1717	3188	3851	129	6.6	10.8	10.7	961	797	626	31.5	0.2	115		
617199 3:15	1713	3169	3833	131	6.6	10.8	10.7	960	796	625	31.4	0.2	113		
617199 4:15	1705	3147	3803	133	6.6	10.6	10.7	962	799	627	31.3	0.2	114		
6/7/99 5:15	1697	3130	3785	128	6.7	10.6	10.7	965	801	629	31.3	0.2	122		
6/7/99 7:12	1682	3090	3737	128	6.6	10.4	10.7	964	801	629	31.2	0.2	114		
617199 8:12	1679	3095	3742	128	6.7	10.4	10.7	964	802	629	31.3	0.2	114		
6/8/99 7:41	1723	3005	3498	110	6.8	9.8	11.9	837	682	464	31.4	0.2	111		
6/8/99 8:41	723	3001	3480	109	7.0	9.7	11.9	838	684	466	31.5	0.2	113		
6/8/99 9:41	718	3010	3484	116	6.8	9.6	11.9	837	683	465	31.7	0.2	112		
6/8/99 10:41	1713	3011	3476	117	6.8	8.3	11.9	a33	666	452	32.0	0.2	113		
6/11/99 7:18	1642	3019	3785	68	7.2	9.3	12.3	644	7	478	31.4	0.3	142		
611199 8:18	1649	3153	3934	70	6.8	10.4	12.9	712	6	527	31.4	0.3	132		
6/11/99 10:18	1653	3206	3948	75	6.8	10.6	12.9	707	7	523	32.0	0.3	160		
6/11/99 11:18	1642	3210	3935	77	6.8	10.6	12.9	709	6	524	32.2	0.3	153		
611199 13:18	1653	3263	3965	80	6.8	10.8	13.2	707	8	523	32.8	0.3	153		
6/11/99 14:18	1662	3304	3978	82	6.8	11.0	13.0	706	9	523	33.1	0.4	130		
6/11/99 15:18	1669	3344	4012	82	6.8	11.0	13.0	707	9	523	33.4	0.4	110		
611199 16:18	1671	3370	4029	81	6.8	11.2	13.0	707	9	523	33.7	0.3	109		
611199 17:18	1662	3375	4028	79	6.8	11.0	13.0	705	9	522	33.8	0.2	142		
6/11/99 18:18	1656	3348	3999	76	6.8	11.2	13.0	705	9	522	33.8	0.2	107		
6/11/99 19:18	1649	3313	3968	73	6.8	11.2	13.0	706	9	523	33.6	0.2	105		
6/11/99 20:18	1644	3272	3937	71	6.8	11.0	13.0	707	a	524	33.3	0.2	105		
611199 21:18	1642	3237	3930	69	6.9	11.0	13.0	710	7	526	33.0	0.2	205		
611199 22:18	1632	3183	3881	67	6.8	11.0	13.2	710	7	527	32.7	0.3	105		

Time	Conductivity (uS/cm)					Flow(L/min)				Pressure (kPa)				
	Feed	Interstage	Conc Tot	Perm	RO	Feed	Tot	Perm	Conc	Feed	Interstage	Conc	Temp(degC)	Turbidity
6/11/99 23:18	1621	3143	3850	65	6.9	11.0	13.0	712	7	528	32.4	0.2	113	
81121990.18	1619	3117	3828	60	7.2	11.0	13.0	716	7	531	32.2	0.3	114	
6112199 1:18	1619	3103	3819	61	7.1	10.8	13.1	715	8	531	32.0	0.3	113	
6112199 2:18	1626	3107	3832	61	7.1	10.8	13.0	715	8	531	31.9	0.2	114	
6/12/99 3:18	1622	3098	3823	60	7.1	10.8	12.9	716	7	532	31.9	0.3	113	
6112199 4:18	1622	3095	3819	60	7.1	10.8	13.1	716	8	532	31.8	0.3	113	
6112199 5:18	1618	3085	3813	60	7.1	10.8	13.1	716	7	532	31.7	0.2	113	
6112199 7:14	1622	3085	3832	60	7.2	10.8	12.9	717	7	533	31.6	0.3	114	
6/12/99 8:14	1613	3088	3807	61	7.2	10.8	13.1	715	7	532	31.8	0.2	113	
6112199 9:46	1610	2605	3239	84	7.2	3.1	8.6	339	6	246	31.7	0.2	113	
6/12/99 10:46	1594	2975	3661	67	7.2	9.1	12.3	639	7	474	32.1	0.3	117	
6/12/99 11:46	1586	2984	3658	68	7.1	9.3	12.3	638	8	474	32.3	0.3	119	
6112199 12:46	1596	3019	3687	70	7.2	9.3	12.3	638	8	474	32.5	0.3	113	
6/12/99 13:46	1602	3088	3731	73	7.2	9.4	12.3	638	8	474	32.8	0.3	112	
6112199 14:46	1611	3108	3748	76	7.1	9.6	12.3	637	8	473	33.1	0.2	113	
6112199 15:46	2612	3135	3766	78	7.1	9.6	12.3	635	9	471	33.4	0.3	112	
6112199 16:46	t614	3157	3781	78	7.1	9.4	12.3	635	9	471	33.6	0.2	112	
6112199 17:46	1617	3153	3770	78	7.1	9.4	12.1	622	9	462	33.7	0.2	113	
6112199 18:46	1615	3143	3761	76	7.1	9.4	12.1	622	9	461	33.7	0.2	113	
6112199 19:46	1611	3120	3748	74	7.1	9.4	12.1	624	9	463	33.5	0.2	114	
6/12/99 20:46	1610	3099	3745	71	7.1	9.7	12.3	637	8	473	33.2	0.2	116	
6/12/99 21:46	1606	3063	3727	68	7.1	9.6	12.3	639	7	474	32.9	0.2	114	
6/12/99 22:46	1599	3024	3693	67	7.1	9.6	12.3	640	8	475	32.6	0.3	114	
6/12/99 23:46	1588	2984	3657	65	7.1	9.8	12.3	639	7	475	32.3	0.2	116	
6113199 0:46	1583	2961	3643	63	7.1	9.6	12.3	643	7	478	32.1	0.2	114	
6113199 1:46	1579	2957	3657	62	7.1	10.0	12.5	656	7	488	31.9	0.2	114	
8113199 2:46	1570	2925	3626	62	7.1	9.8	12.3	646	7	478	31.8	0.3	114	
6113199 3:46	1564	2921	3621	62	7.1	10.0	12.5	657	8	488	31.8	0.3	116	
6/13/99 4:46	1564	2903	3603	62	7.1	9.8	12.3	644	7	479	31.7	0.3	114	
6/13/99 5:46	1562	2894	3594	62	7.1	9.8	12.3	645	6	479	31.6	0.2	115	
6/13/99 6:46	1569	2917	3621	62	7.2	10.0	12.5	656	6	488	31.6	0.3	115	
6113199 7:46	1564	2912	3617	61	7.2	10.0	12.5	658	6	489	31.6	0.2	124	
6114199 14:26	1589	4676	4679	77	7.1	13.7	7.1	877	6	761	32.7	0.2	113	
6114199 14:26	1589	4676	4679	77	7.1	13.7	7.1	877	6	761	32.7	0.2	113	
6114199 16:04	1597	4676	4656	78	7.1	13.3	7.3	902	7	784	33.1	0.2	153	
6/14/99 17:04	1596	4689	4660	75	7.1	13.7	7.5	910	7	788	33.3	0.3	110	
6/14/99 18:04	1591	4640	4607	73	7.1	13.1	7.3	888	7	774	33.3	0.2	106	
6/14/99 19:26	1587	4569	4550	71	7.1	12.3	7.3	890	7	777	33.2	0.2	107	
6114199 20:26	1577	4511	4506	69	7.0	11.9	7.3	892	7	779	33.0	0.2	105	

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp. (degC)	Turbidity	Particle Index	
	Feed	Interstage	Conc	Tot. Perm	RO Feed	Tot. Perm	Conc	Feed	Interstage				Conc
6124199 21:26	1576	4470	4475	68	7.0	11.6	7.3	893	7	780	32.8	0.2	111
6114199 22:26	1582	4453	4475	67	7.1	11.9	7.3	894	7	783	32.7	0.2	105
6/14/99 23:26	1581	4431	4463	67	7.f	11.6	7.3	898	7	786	32.5	0.2	105
6115199 0:26	1579	4395	4440	66	7.1	11.6	7.5	a97	7	786	32.4	0.2	105
6115199 1:26	1575	4364	4427	65	7.1	11.4	7.3	901	7	790	32.3	0.2	105
6115199 2:26	1569	4334	4405	65	7.1	11.2	7.3	a99	7	789	32.2	0.2	105
6115199 3:26	1559	4293	4365	64	7.1	11.4	7.3	899	7	789	32.2	0.2	105
6/15/99 4:26	1553	4267	4343	63	7.1	11.4	7.3	a99	7	790	32.2	0.2	105
6/15/99 5:26	1544	4231	4312	63	7.1	11.2	7.3	900	7	790	32.0	0.2	105
6115199 6:26	1543	4209	4295	62	7.1	11.2	7.5	901	7	792	31.9	0.2	106
6115199 7:16	1557	4227	4321	63	7.1	11.2	7.3	902	7	793	31.8	0.2	114
6115199 8:22	1569	4240	4339	63	7.1	11.6	7.5	903	7	794	31.8	0.2	116
6115199 9:22	1568	4249	4343	64	7.1	11.2	7.5	904	7	795	31.8	0.2	114
6/15/99 11:22	1562	4298	4340	67	7.1	11.4	7.3	900	6	791	32.4	0.2	116
6/15/99 13:22	27	146	137	8	4.6	12.7	6.9	800	6	705	33.0	0.2	149
6/15/99 15:30	1617	3451	3414	68	7.1	11.2	11.1	780	7	643	33.3	0.2	117
6/15/99 17:30	1694	3668	3621	74	7.1	10.8	10.7	757	a	600	33.5	0.2	112
6/15/99 18:30	1695	3587	3568	72	7.1	10.8	10.7	742	a	602	33.1	0.2	113
6/15/99 18:30	1695	3587	3568	72	7.1	10.8	10.7	742	8	602	33.1	0.2	113
6115199 19:30	1684	3539	3537	70	7.1	10.8	10.7	745	7	604	32.8	0.2	112
6/15/99 20:30	1672	3499	3507	68	7.1	10.8	10.7	746	7	606	32.6	0.2	112
6/15/99 21:30	1659	3445	3471	66	7.1	10.6	10.7	745	7	605	32.3	0.2	112
6115199 22:30	1649	3410	3450	65	7.1	10.6	10.7	747	7	607	32.2	0.2	114
6115199 23:30	1642	3384	3433	64	7.1	10.6	10.7	748	7	608	32.0	0.2	112
6116199 0:30	1627	3344	3397	63	7.1	10.6	10.7	747	7	607	31.9	0.2	112
6/16/99 2:30	1586	2558	2618	108	7.0	3.9	7.1	336	7	275	31.7	0.2	112
6/16/99 2:30	1586	2558	2618	108	7.0	3.9	7.1	336	7	275	31.7	0.2	112
6/16/99 4:30	1543	2491	2552	104	7.0	3.9	7.1	337	7	275	31.6	0.2	112
6/16/99 5:30	1520	2452	2516	101	7.0	3.9	7.1	337	7	275	31.5	0.2	112
6/16/99 7:32	1502	2421	2486	98	7.2	4.1	7.1	338	7	275	31.4	0.2	112
6116199 8:30	1497	3095	3156	54	7.1	11.0	10.9	788	6	654	31.7	0.2	200
6/16/99 8:30	1497	3095	3156	54	7.1	11.0	10.9	788	6	654	31.7	0.2	200
6/16/99 8:32	1497	3090	3146	55	7.1	11.2	11.1	797	6	647	31.7	0.2	176
6117199 7:15	1538	2699	2758	100	6.0	5.4	a.2	455	6	372	31.7	0.1	114
6117199 8:15	1545	2708	2763	98	6.1	5.4	8.2	456	6	372	31.7	0.2	120
6/17/99 8:21	1545	2721	2776	102	6.2	5.4	8.2	456	6	372	31.7	0.2	134
6/17/99 8:21	1545	2721	2776	102	6.2	5.4	8.2	456	6	372	31.7	0.2	134
6117199 9:15	1537	2717	2760	98	6.0	5.4	8.2	455	6	372	32.0	0.2	117
6117199 9:21	1538	2721	2772	102	6.2	5.6	8.2	455	6	372	32.0	0.2	117

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp. (degC)	Turbidity	Particle Index	
	Feed	Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage				Conc
6117199 9:21	1538	2721	2772	102	6.2	5.6	8.2	455	6	372	32.0	0.2	117
6177199 10:15	1531	2660	2699	111	6.2	5.0	7.7	413	6	338	32.2	0.2	125
6117199 10:21	1531	2664	2702	109	6.3	4.8	7.7	412	6	336	32.2	0.2	124
6/19/99 7:39	1621	2570	2573	52	6.2	5.0	7.7	374	3	297	31.7	0.2	112
6/19/99 11:39	1586	2546	2555	56	6.2	3.9	7.7	372	3	295	32.6	0.2	112
6/19/99 13:39	1607	2581	2591	62	6.5	5.0	7.7	371	2	295	32.8	0.2	104
6/19/99 15:39	1627	2606	2608	60	6.2	4.8	7.7	371	2	294	32.9	0.2	104
6/19/99 17:39	1632	2615	2618	56	6.5	4.8	7.7	371	2	295	33.0	0.2	104
6119199 19:39	1642	2619	2630	56	6.3	4.6	7.7	367	2	292	32.8	0.3	104
6120199 9:29	1676	2699	2697	72	6.1	3.9	8.0	393	2	312	32.7	0.2	113
6120199 10:29	1662	2650	2657	77	6.4	3.7	8.0	384	2	305	32.8	0.3	427
6120199 12:00	1638	2624	2630	68	7.1	4.1	8.0	384	2	305	32.7	0.2	175
6120199 13:00	1628	2632	2639	70	6.5	4.6	8.0	382	2	304	32.7	0.2	198
6120199 14:00	1628	2612	2622	70	6.4	4.8	8.0	383	2	304	32.5	0.2	146
6/20/99 15:00	1630	2615	2613	69	6.9	4.8	8.0	383	2	304	32.3	0.1	135
6120199 16:00	1634	2624	2622	71	7.0	4.8	8.0	383	2	304	32.2	0.1	128
6/20/99 17:00	1636	2619	2618	72	6.7	4.6	8.0	383	2	304	32.1	0.2	159
6120199 18:29	1638	2624	2622	74	6.1	4.8	8.0	383	2	304	32.0	0.1	121
6/20/99 19:29	1636	2628	2630	74	6.2	4.8	8.0	383	2	304	31.9	0.1	143
6120199 20:29	1625	2605	2604	72	6.1	4.8	8.0	383	2	304	31.8	0.2	119
6120199 21:29	1627	2606	2604	71	6.2	4.8	8.0	384	2	306	31.7	0.1	134
6120199 23:00	1616	2583	2582	66	6.9	4.8	8.0	384	2	306	31.7	0.2	139
6/21/99 0:00	1599	2557	2555	65	6.7	4.8	7.9	383	2	305	31.7	0.1	128
6/21/99 1:00	1594	2570	2573	68	6.5	4.8	8.0	383	2	304	31.7	0.1	123
6121199 2:29	1586	2547	2546	63	7.0	4.8	8.0	383	2	304	31.7	0.1	121
6/21/99 3:00	1582	2538	2538	65	6.4	4.6	8.0	383	2	304	31.7	0.2	137
6/22/99 8:24	1588	2606	2609	55	7.3	5.6	8.4	425	2	338	31.7	0.1	121
6122199 16:01	1694	3210	3215	67	6.2	6.4	6.9	477	3	401	33.1	0.1	262
6122199 17:05	1710	3250	3259	76	6.9	6.2	6.9	476	3	400	33.2	0.1	134
6/22/99 18:02	1709	3249	3264	76	6.9	6.4	6.9	476	3	401	33.3	0.2	108
6122199 19:05	1691	3235	3228	75	6.5	6.6	6.9	475	3	400	33.2	0.2	110
6122199 20:05	1683	3220	3220	79	6.7	6.4	6.9	475	3	400	33.0	0.2	119
6122199 21:10	1667	3179	3185	75	6.8	6.2	6.9	476	2	400	32.8	0.2	106
6122199 22:05	1655	3143	3154	65	6.2	6.4	6.9	477	2	401	32.6	0.1	106
6/22/99 23:05	1653	3143	3155	71	6.9	6.2	6.9	477	2	401	32.4	0.2	119
6123199 0:05	1653	3134	3137	64	6.3	6.2	6.9	477	2	402	32.2	0.1	114
6/23/99 1:05	1650	3152	3154	62	6.2	6.4	6.9	477	2	402	32.0	0.2	134
6123199 2:05	1647	3175	3176	69	6.8	6.4	6.9	477	2	401	31.9	0.2	114
6123199 3:10	1639	3152	3154	68	6.8	6.4	6.9	476	2	400	31.7	0.2	114

Time	Feed	Conductivity (uS/cm)			Flow (L/min)			Pressure(kPa)			Temp(degC)	Turbidity	Particle Index
		Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage	Conc			
6/23/99 4:10	4628	3117	3119	65	6.7	6.4	6.9	477	2	400	31.7	0.2	114
6/23/99 5:10	1615	3089	3092	63	6.7	6.4	6.9	477	2	400	31.6	0.2	118
6/23/99 6:05	1605	3063	3066	59	6.6	6.4	6.9	478	2	402	31.5	0.2	117
6/23/99 6:17	1604	3054	3058	58	6.4	6.2	6.9	477	2	401	31.5	0.2	114
6/23/99 6:42	1604	3085	3088	65	6.8	6.4	6.9	477	2	401	31.5	0.2	114
6/23/99 6:49	1604	3085	3088	65	6.8	6.4	6.9	477	2	401	31.5	0.2	226
6/23/99 7:01	1604	3090	3092	64	6.8	6.4	6.9	476	2	403	31.5	0.2	114
6/23/99 7:10	1606	3062	3066	63	6.7	6.4	6.9	478	2	402	31.5	0.2	115
6/24/99 7:40	1624	2757	2760	57	7.1	5.0	6.5	368	1	306	31.6	0.2	104
6/24/99 12:42	1631	3104	3111	72	7.0	5.6	6.1	412	3	350	32.7	0.2	108
6/24/99 13:42	1647	3165	3172	66	7.0	5.8	5.9	411	3	348	33.1	0.2	104
6/24/99 14:45	1663	3206	3207	75	7.0	5.8	5.9	410	3	348	33.3	0.2	103
6/24/99 15:42	1665	3410	3413	61	6.9	6.6	6.5	475	3	402	33.6	0.2	103
6/25/99 8:42	1615	3268	3275	59	6.9	6.6	6.5	485	2	411	32.4	0.2	104
6/25/99 9:08	1609	3259	3267	61	7.0	6.6	6.5	485	2	411	32.4	0.2	104
6/25/99 9:42	1605	3241	3248	68	6.9	6.6	6.5	476	2	403	32.5	0.2	103
6/25/99 9:45	1603	3241	3252	67	6.9	6.6	6.5	476	2	403	32.5	0.2	104
6/25/99 10:08	1603	3236	3247	61	7.0	6.6	6.3	476	2	403	32.5	0.2	104
6/25/99 10:42	1601	3250	3256	66	7.0	6.6	6.5	480	2	407	32.5	0.2	104
6/25/99 10:45	1598	3248	3256	65	7.0	6.8	6.5	480	2	407	32.5	0.2	104
6/25/99 11:08	1598	3215	3221	68	7.0	6.6	6.5	478	2	404	32.8	0.2	103
6/25/99 12:08	1612	3183	3203	63	6.9	6.4	6.5	463	2	390	32.9	0.2	105
6/25/99 13:08	1620	3237	3244	74	6.9	6.4	6.5	465	2	391	33.2	0.2	105
6/25/99 13:18	1624	3237	3243	73	6.9	6.4	6.5	464	2	391	33.2	0.2	105
6/25/99 13:43	1628	3251	3256	65	6.9	6.6	6.5	464	3	391	33.3	0.2	105
6/25/99 14:43	1665	3124	3127	76	6.8	5.4	6.1	396	3	334	33.5	0.2	104
6/25/99 15:10	1682	3077	3076	75	6.8	5.8	6.1	393	3	345	33.6	0.2	104
6/25/99 14:43	1665	3124	3127	76	6.8	5.4	6.1	396	3	334	33.5	0.2	104
6/25/99 15:10	1682	3077	3076	75	6.8	5.8	6.1	393	3	345	33.6	0.2	104
6/27/99 7:49	1642	3304	3317	62	6.8	6.6	6.5	487	2	414	31.9	0.2	104
6/27/99 8:48	1641	3312	3322	64	6.8	6.6	6.5	488	2	414	32.0	0.2	104
6/27/99 9:48	1637	3299	3313	61	6.8	6.6	6.5	486	2	413	32.3	0.2	104
6/27/99 10:48	1631	3299	3309	64	6.8	6.6	6.5	485	2	412	32.5	0.2	104
6/27/99 11:48	1616	3285	3295	68	6.8	6.6	6.5	485	2	412	32.6	0.2	104
6/27/99 12:48	1608	3263	3268	73	6.8	6.6	6.3	476	2	403	32.8	0.2	104
6/27/99 13:48	1612	3272	3291	68	6.8	6.6	6.5	475	3	403	33.1	0.2	204
6/27/99 14:48	1619	3298	3303	72	6.8	6.6	6.5	474	3	402	33.4	0.2	104
6/27/99 16:48	1632	3317	3320	83	6.7	6.6	6.3	465	3	394	33.8	0.2	104
6/27/99 19:48	1647	3352	3355	82	6.7	6.7	6.3	474	3	401	33.8	0.2	104



Time	Conductivity (uS/cm)			Flow (Umin)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index	
	Feed	Interstage	Conc Tot	Perm	RO	Feed Tot	Perm	Conc Feed	Interstage				Conc
6127199 21:48	1662	3338	3352	73	6.7	6.6	6.3	476	2	404	33.1	0.2	104
6/27/99 23:48	1648	3321	3331	67	6.7	6.6	6.5	485	2	412	32.6	0.2	104
6128199 1:48	1632	3290	3291	68	6.7	6.8	6.5	486	2	413	32.3	0.2	104
6128199 3:48	1620	3263	3273	62	6.8	6.6	6.5	487	2	414	32.0	0.2	104
6128199 5:48	1608	3236	3247	67	6.8	6.6	6.5	487	2	414	31.9	0.2	105
6/28/99 6:48	1606	3227	3238	67	6.8	6.6	6.5	487	2	414	31.8	0.2	105
7/2/99 7:43	1765	2518	2525	83	6.9	3.9	9.8	366	2	268	31.8	0.2	105
7/2/99 7:54	1765	2518	2525	83	6.9	3.9	9.8	365	2	268	31.8	0.2	109
7121998143	1765	2518	2522	84	6.9	4.1	9.8	362	2	265	31.8	0.2	105
712199 8:54	1768	2544	2547	82	6.9	4.1	9.8	372	2	274	31.8	0.2	105
712199 9:43	1769	2526	2529	89	6.9	4.1	9.4	340	2	249	32.2	0.2	103
712199 9:54	1769	2526	2529	89	6.9	3.9	9.2	340	2	249	32.3	0.2	103
7/2/99 10:43	1760	2531	2538	90	6.9	4.3	9.4	342	2	252	32.5	0.2	103
712199 10:54	1756	2531	2538	90	6.9	4.3	9.2	342	2	253	32.5	0.2	103
712199 11:43	1749	2536	2542	92	6.9	4.3	9.2	343	2	253	32.7	0.2	103
7/2/99 11:54	1749	2535	2538	92	6.8	4.3	9.2	342	2	253	32.7	0.2	121
712199 12:43	1753	2535	2538	94	6.8	4.1	9.2	341	2	252	32.9	0.2	512
712199 12:54	1754	2557	2564	91	6.8	4.4	9.4	360	2	265	32.9	0.2	442
712199 13:43	1762	2584	2586	93	6.8	4.4	9.4	358	2	264	33.1	0.2	106
7/2/99 13:54	1763	2588	2590	94	6.8	4.6	9.4	359	2	264	33.1	0.2	108
7/2/99 14:43	1775	2548	2551	103	6.8	4.4	9.0	331	2	243	33.3	0.2	111
712199 15:43	1797	2583	2589	107	6.8	4.3	9.0	331	3	244	33.5	0.2	106
712199 16:43	1804	2602	2612	109	6.7	4.1	9.0	331	3	244	33.7	0.3	105
712199 17:43	1811	2611	2621	109	6.8	4.4	9.0	331	3	244	33.8	0.2	105
712199 18:43	1815	2619	2629	109	6.8	4.4	9.0	331	3	245	33.8	0.2	105
712199 19:43	1820	2624	2623	108	6.8	4.4	9.2	332	3	246	33.7	0.2	108
7/2/99 20:43	1820	2611	2609	107	6.8	4.4	9.0	331	2	244	33.4	0.2	103
7/2/99 21:43	1808	2588	2591	105	6.7	4.2	9.0	331	2	244	33.1	0.2	103
712199 22:43	1800	2583	2586	102	6.8	4.1	9.0	332	2	244	32.9	0.3	103
712199 23:43	1791	2570	2573	98	6.8	4.1	9.0	333	2	247	32.7	0.3	103
713199 0:43	1785	2557	2560	96	6.8	4.1	9.0	332	2	246	32.6	0.2	103
713199 1:43	1783	2544	2547	94	6.8	4.1	9.0	332	2	246	32.4	0.2	103
713199 3:43	1779	2537	2542	94	6.8	4.1	9.0	334	2	247	32.2	0.2	103
7/3/99 4:43	1771	2525	2528	94	6.8	4.1	9.0	334	2	247	32.1	0.2	103
713199 5:43	1767	2522	2525	93	6.8	3.9	9.0	333	2	247	32.0	0.2	103
713199 6:43	1763	2512	2515	94	6.8	3.9	9.0	333	2	246	32.0	0.2	103
713199 7:34	1761	2509	2516	94	6.8	3.9	9.0	332	2	246	32.0	0.2	103
713199 8:34	1756	2504	2508	94	6.8	3.9	9.0	332	2	244	32.1	0.2	103
713199 9:34	1750	2499	2503	95	6.8	3.9	9.0	332	2	244	32.4	0.2	103

Time	Feed.	Conductivity (uS/cm)			Flow (L/min)				Pressure (kPa)			Temp (degC)	Turbidity	Particle	Index
		Interstage	Conc	Tot	Perm	RO	Feed	Tot	Perm	Conc	Feed				
7/3/99 10:34	1750	2490	2494	95	6.8	3.7	9.0	332	2	244	32.4	0.3	103		
713199 11:34	1749	2498	2503	97	6.8	3.7	9.0	332	2	244	32.6	0.2	103		
713199 12:34	1750	2503	2507	95	6.8	3.7	9.0	334	2	246	32.2	0.2	103		
713199 13:34	1769	2522	2526	98	6.8	3.7	9.0	333	2	246	32.2	0.2	103		
713199 14:34	1783	2544	2547	102	6.7	3.7	9.0	332	2	246	32.2	0.2	103		
713199 15:34	1803	2570	2573	105	6.7	3.7	9.0	333	2	246	32.4	0.2	103		
7/3/99 17:34	1817	2597	1596	109	6.7	3.5	9.0	333	2	246	32.5	0.2	103		
713199 18:34	1817	2593	2595	109	6.7	3.5	9.0	335	2	247	32.4	0.2	103		
7/3/99 19:34	1010	2580	2503	108	6.7	3.5	9.0	333	2	246	32.4	0.2	103		
713199 20:34	1797	2561	2564	106	6.7	3.5	9.0	333	2	246	32.2	0.2	103		
713199 21:34	1787	2539	2542	103	6.7	3.4	9.2	333	2	244	32.1	0.2	103		
713199 22:34	1775	2522	2530	101	6.7	3.3	9.2	332	2	244	32.0	0.2	103		
7/3/99 23:34	1765	2513	2512	100	6.7	3.5	9.2	333	2	244	31.9	0.2	103		
714199 0:34	1760	2508	2507	98	6.7	3.5	9.2	333	2	244	31.8	0.2	103		
714199 1:34	1761	2512	2507	97	6.7	3.3	9.2	333	2	246	31.8	0.2	103		
714199 2:34	1758	2509	2502	96	6.7	3.3	9.2	333	2	244	31.7	0.2	103		
714199 3:34	1755	2504	2499	95	6.7	3.3	9.2	333	2	244	31.7	0.2	103		
7/4/99 4:34	1748	2495	2494	94	6.8	3.3	9.2	333	2	244	31.6	0.2	103		
714199 5:34	1738	2481	2485	93	6.8	3.1	9.2	333	2	246	31.6	0.2	103		
7/4/99 6:34	1733	2473	2477	92	6.8	3.1	9.2	333	2	244	31.6	0.2	104		
7/4/99 7:13	1735	2473	2476	92	6.8	3.3	9.2	333	2	244	31.6	0.2	103		
7/4/99 8:13	1733	2473	2477	92	6.8	3.1	9.2	333	2	244	31.5	0.2	103		
714199 10:13	1732	2451	2454	94	6.8	3.1	9.0	324	2	238	31.3	0.2	104		
714199 11:13	1729	2451	2455	95	6.8	3.3	9.0	325	2	238	31.4	0.2	104		
7/4/99 13:13	1740	2455	2464	97	6.7	3.1	9.0	326	2	240	31.1	0.2	103		
7/4/99 16:13	1732	2446	2454	100	6.6	3.1	9.0	327	2	240	31.0	0.2	103		
7/4/99 17:13	1709	2419	2424	99	6.6	2.9	9.0	325	2	239	31.0	0.2	103		
7/4/99 18:13	1670	2370	2375	96	6.5	2.9	9.0	325	2	239	31.1	0.2	103		
7/4/99 19:13	1623	2317	2318	93	6.5	3.1	9.0	325	2	238	31.1	0.2	103		
714199 20:13	1581	2264	2264	89	6.5	3.3	9.0	325	2	238	31.0	0.2	103		
714199 21:13	1545	2211	2217	87	6.4	3.3	9.0	324	2	237	31.0	0.2	103		
714199 22:13	1519	2181	2182	85	6.4	3.1	9.0	323	2	236	31.0	0.2	103		
7/4/99 23:13	1505	2162	2164	83	6.4	3.1	9.0	323	2	236	31.0	0.2	103		
7/5/99 0:13	1504	2158	2160	83	6.4	3.1	9.0	323	2	236	31.1	0.2	103		
715199 1:13	1513	2171	2173	83	6.4	3.1	9.0	323	2	237	31.1	0.2	103		
7/5/99 2:13	1529	2193	2195	84	6.5	3.3	9.0	325	2	237	31.1	0.2	103		
7/5/99 3:13	1547	2216	2218	a5	6.5	3.1	9.0	324	2	237	31.1	0.2	103		
715199 4:13	1564	2238	2243	86	6.5	3.1	9.0	324	2	237	31.1	0.2	103		
7/5/99 5:13	1578	2255	2256	86	6.5	2.9	9.0	324	2	237	31.1	0.2	103		

Time	Conductivity (uS/cm)				Flow (Ymin)				Pressure (kPa)				Temp (degC)	Turbidity	Particle Index
	Feed	Interstage	Conc	Tot Perm	RO	Feed	Tot Perm	Conc	Feed	Interstage	Conc				
715199 6:13	1594	2264	2269	86	6.5	3.0	9.2	324	2	236	31.1	0.2	103		
715199 12:08	1662	2535	2540	79	6.6	4.8	9.0	377	2	286	32.0	0.2	105		
715199 14:08	1700	2571	2574	87	6.6	4.6	8.6	356	2	271	32.4	0.2	211		
715199 16:08	1746	2650	2652	104	6.5	4.8	8.6	357	2	271	31.7	0.2	103		
715199 18:08	1761	2673	2675	78	6.5	4.6	8.6	356	2	270	31.7	0.2	103		
715199 20:08	1764	2663	2666	88	6.6	4.1	8.6	356	2	271	31.9	0.2	103		
7/5/99 21:08	175%	2650	2653	84	6.6	4.3	8.6	357	2	271	32.9	0.2	103		
715199 23:08	1744	2624	2627	93	6.6	4.3	8.6	357	2	273	31.8	0.2	103		
7/6/99 1:08	1729	2601	2604	86	6.7	4.3	8.6	358	2	273	31.6	0.2	103		
7/6/99 2:08	1727	2593	2599	84	6.7	4.3	8.6	35%	2	273	31.5	0.2	104		
7/6/99 3:08	1726	2593	2595	84	6.7	4.4	8.6	358	2	273	31.5	0.2	103		
7/6/99 4:08	1725	2588	2590	83	6.7	4.3	8.6	358	2	273	31.4	0.2	103		
7/6/99 5:08	1722	2583	2586	83	6.7	4.3	8.6	358	2	274	31.4	0.2	103		
7/6/99 6:08	1715	2575	2582	83	6.7	4.6	8.6	35%	2	274	31.3	0.2	103		
7/6/99 9:08	1735	3423	3436	99	6.7	5.0	4.6	373	2	327	31.6	0.2	103		
7/6/99 12:24	1728	3510	3519	79	6.7	6.6	6.3	487	3	414	31.4	0.2	104		
7/6/99 14:24	1768	2454	2462	107	6.9	3.8	9.8	315	3	222	31.1	0.2	103		
7/6/99 16:24	1783	3711	3729	86	6.7	6.6	6.5	534	3	459	31.5	0.2	112		
7/6/99 17:24	1757	3671	3686	85	6.7	6.8	6.5	531	3	457	31.8	0.2	112		
7/6/99 21:24	1617	3400	341%	76	6.7	6.8	6.5	518	3	445	32.2	0.2	108		
7/6/99 22:24	1612	3387	3404	73	6.7	6.8	6.5	518	3	445	32.1	0.2	108		
7/6/99 23:24	1617	3396	3413	72	6.7	6.8	6.5	517	3	444	32.0	0.2	110		
7/7/99 1:24	1635	3418	3435	69	6.8	6.8	6.5	519	3	447	31.8	0.2	122		
7/7/99 2:24	1643	3431	3448	69	6.8	6.8	6.5	520	3	447	31.7	0.2	115		
7/7/99 3:24	1651	3444	3461	68	6.8	6.8	6.5	521	3	448	31.6	0.2	113		
7/7/99 5:24	1657	3444	3462	69	6.8	6.8	6.5	522	3	449	31.4	0.2	111		
7/7/99 6:24	1669	3454	3471	69	6.8	6.6	6.5	521	3	449	31.3	0.2	112		
7/7/99 7:24	1691	3489	3509	70	6.8	6.6	6.5	522	3	450	31.2	0.2	115		
7/7/99 8:24	1698	3396	3400	78	6.8	5.7	6.1	457	3	394	31.3	0.2	104		
7/7/99 10:36	1700	2815	3462	11%	6.9	7.5	7.5	627	526	377	31.9	0.2	133		
7/7/99 11:24	1714	2824	3462	123	6.9	7.3	7.5	626	525	376	32.2	0.2	135		
7/7/99 12:22	1726	2868	3392	91	6.9	11.2	22.2	968	767	465	32.5	0.3	116		
7/7/99 13:45	1750	2921	3476	91	6.9	11.0	13.1	1083	858	528	32.8	0.3	122		
7/7/99 15: 19	1779	2943	3506	107	6.8	10.1	11.0	860	687	429	33.0	0.3	140		
7/7/99 15:45	1790	2961	3514	10%	6.8	10.1	11.0	859	687	429	33.1	0.3	237		
7/7/99 16:45	1811	2979	3545	111	6.8	9.9	11.0	859	686	429	33.4	0.3	141		
7/7/99 17:45	1818	2992	3558	112	6.8	9.9	11.2	857	685	428	33.6	0.3	139		
7/7/99 18:45	1818	2997	3568	III	6.8	9.9	11.2	858	685	429	33.6	0.4	148		
7/7/99 19:45	1811	2988	3554	110	6.8	10.1	11.2	860	687	430	33.6	0.4	124		

Time	Feed	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index
		Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage	Conc			
7/7/99 20:45	I 808	2979	3541	108	6.8	10.3	11.2	861	688	430	33.4	0.3	131
7/7/99 21:45	I 802	2979	3532	105	6.8	10.3	11.2	862	689	431	33.2	0.3	136
7/8/99 2:45	I 798	2952	3510	98	6.9	10.1	11.2	865	691	432	32.1	0.3	188
7/8/99 3:45	1794	2943	3501	98	6.9	10.1	11.2	867	693	433	32.0	0.2	123
7/8/99 4:45	1787	2930	3484	97	6.9	10.1	11.2	867	693	434	31.9	0.3	117
7/8/99 5:45	1777	2912	3467	97	6.9	9.9	11.2	867	693	433	31.8	0.3	124
7/8/99 6:45	1776	2908	3462	97	6.9	9.9	11.2	866	692	433	31.7	0.3	212
7/8/99 I 1:35	1783	3561	5510	145	6.5	10.3	5.1	637	537	459	32.3	0.2	210
7/8/99 I 1:45	1782	3557	5515	144	6.5	10.5	4.9	638	538	460	32.4	0.2	398
7/8/99 12:34	1785	3539	5366	162	6.5	11.2	5.1	636	577	497	32.5	0.2	157
7/8/99 13:15	1792	3410	5018	145	6.5	10.3	5.9	617	509	412	32.7	0.3	385
7/8/99 13:35	1792	3410	5018	145	6.5	10.3	5.9	617	509	412	32.7	0.3	385
7/8/99 13:42	I 800	3356	4745	138	6.5	10.1	6.3	608	498	394	32.8	0.3	167
7/8/99 14:41	I a27	3392	4789	142	6.5	10.3	6.3	606	497	393	33.1	0.4	1605
7/8/99 15:35	fa45	3436	4849	156	6.1	9.8	6.3	596	488	387	33.3	0.4	191
7/8/99 22:33	1851	3720	4573	140	6.9	10.8	4.4	632	533	460	31.9	0.3	301
7/8/99 23:32	I 788	3889	5716	141	6.9	12.1	3.8	690	594	532	31.8	0.3	125
7/9/99 2: 32	1547	3507	5532	112	6.8	11.9	3.6	700	604	547	31.2	0.2	114
7/9/99 4: 32	1462	3334	5215	102	6.8	11.6	4.0	700	604	547	31.0	0.2	118
7/9/99 6: 32	1440	3285	5105	99	6.8	11.6	4.0	700	604	548	30.8	0.2	111
7/9/99 10: 32	1459	3027	4278	106	5.9	10.8	4.4	616	525	455	31.3	0.2	179
7/9/99 16: 36	1703	3423	5143	148	5.5	11.4	4.8	623	521	441	32.7	0.2	116
7/9/99 I 8:20	1812	3596	5393	150	5.6	12.2	4.8	616	519	439	32.8	0.2	111
7/9/99 19:32	1850	3662	5566	165	6.3	11.0	4.8	617	520	440	32.7	0.2	114
7/9/99 20:32	1855	3675	5552	161	6.3	11.0	4.8	617	519	440	32.5	0.2	105
7/9/99 21:32	1848	3680	5564	160	5.7	11.0	5.0	627	527	447	32.3	0.2	111
7/9/99 23:20	1830	3627	5438	134	6.8	11.0	4.8	634	536	455	31.9	0.2	111
7/10/99 1:20	1830	3627	5403	129	6.9	11.0	4.8	638	540	459	31.7	0.2	109
7/10/99 3:20	1823	3617	5350	124	6.9	11.0	4.8	641	543	463	31.5	0.2	121
7/10/99 5:20	1804	3596	5293	122	6.9	11.0	4.8	644	546	466	31.5	0.2	114
7/10/99 8:20	1793	3591	5245	121	7.0	10.8	4.8	644	546	467	32.6	0.2	117
7/10/99 I 1:41	1759	3569	5232	142	5.9	11.2	4.8	636	537	459	32.1	0.2	
7/10/99 12:23	1760	3449	4902	133	5.9	11.2	4.8	636	531	440	32.2	0.2	118
7/10/99 17:23	1812	3538	5064	145	6.1	11.0	5.5	625	524	437	32.9	0.2	111
7/10/99 17:55	1818	3538	5059	147	5.9	11.0	5.5	623	522	436	32.9	0.2	106
7/10/99 19:23	1808	3556	5116	144	6.0	11.0	5.2	631	530	445	32.8	0.2	105
7/10/99 21:23	1794	3529	5076	139	5.9	11.0	5.2	635	533	448	32.4	0.2	108
7/10/99 23:23	1779	3494	5025	136	6.0	11.0	5.2	639	537	451	32.0	0.2	108
7/11/99 0:23	1767	3470	4990	133	5.9	11.0	5.3	640	538	452	32.0	0.2	106

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle	Index
	Feed	Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage				
711199 1:23	1758	3450	4964	131	5.9	11.0	5.2	640	536	451	31.9	0.2	105
711199 2:23	1753	3432	4946	129	5.9	11.0	5.5	642	540	454	31.8	0.2	105
7/11/99 4:23	1742	3405	4836	111	6.9	10.9	5.4	650	547	462	31.7	0.3	114
711199 5:23	1733	3391	4799	110	6.9	10.8	5.5	651	547	463	31.6	0.3	106
711199 8:23	1739	3370	4980	123	6.6	10.8	5.2	631	526	439	31.6	0.2	249
711199 9:23	1734	3378	5010	141	5.7	11.2	5.2	631	525	437	31.8	0.2	121
7/11/99 10:23	1721	3374	5035	140	5.9	11.0	5.0	616	515	433	32.0	0.2	126
7/11/99 11:23	1715	3370	5066	140	5.9	11.0	5.0	618	516	435	32.2	0.2	108
7/12/99 7:25	1723	3392	4895	116	6.9	10.8	5.2	635	536	454	31.4	0.2	106
7112199 8:24	1725	3277	4753	150	6.1	9.1	4.8	516	476	406	31.5	0.2	404
7/12/99 9:24	1718	3401	5032	135	5.9	11.2	5.0	638	535	453	32.0	0.2	108
7/12/99 10:24	1711	3510	5426	138	5.9	11.6	4.6	656	557	482	32.1	0.2	153
7112199 7:25	1723	3392	4895	116	6.9	10.8	5.2	835	536	454	31.4	0.2	106
7/12/99 8:24	1725	3277	4753	150	6.1	9.1	4.8	516	476	406	31.5	0.2	404
7112199 9:24	1718	3401	5032	135	5.9	11.2	5.0	638	535	453	32.0	0.2	108
7112199 10:24	1711	3510	5426	138	5.9	11.6	4.6	656	557	482	32.1	0.2	153
7/12/99 11:24	1710	3529	5441	140	5.9	11.8	4.6	655	554	480	32.3	0.2	109
7112199 12:24	2715	3534	5431	141	6.6	11.6	4.6	649	551	477	32.7	0.2	110
7/12/99 13:24	1724	3530	5361	126	6.9	21.6	4.6	665	564	491	32.4	0.2	125
7112199 14:24	1737	3841	5476	129	6.6	11.8	4.4	672	574	504	32.4	0.2	110
7112199 15:24	1755	3676	5652	147	5.9	11.9	4.8	663	565	496	32.5	0.2	110
7112199 7:25	1723	3392	4895	116	6.9	10.8	5.2	635	536	454	31.4	0.2	106
7112199 8:24	2725	3277	4753	150	6.1	9.1	4.8	516	476	408	31.5	0.2	404
7/12/99 9:24	1718	3401	5032	135	5.9	11.2	5.0	638	535	453	32.0	0.2	108
7112199 10:24	1711	3510	5426	138	5.9	11.8	4.6	656	557	482	32.1	0.2	153
7112199 12:24	1715	3534	5431	141	6.6	11.6	4.6	649	551	477	32.7	0.2	110
7112199 14:24	1737	3641	5476	129	6.6	11.6	4.4	672	574	504	32.4	0.2	110
7/12/99 15:24	1755	3676	5652	147	5.9	11.9	4.6	663	565	496	32.5	0.2	110
7/13/99 7:57	1886	3516	5399	120	5.9	11.8	4.6	685	586	515	31.6	0.2	106
7/13/99 8:45	1684	3512	5389	121	5.9	11.8	4.6	685	586	515	31.7	0.2	115
7113199 8:57	1683	3509	5386	121	5.8	11.8	4.6	884	586	515	31.8	0.2	105
7/13/99 9:45	1677	3499	5371	122	5.9	11.8	4.6	683	584	513	32.0	0.2	104
7/13/99 9:57	1675	3496	5361	122	5.9	11.0	4.4	661	558	490	32.0	0.2	105
7113199 10:57	1667	3489	5349	123	5.9	11.8	4.6	678	579	509	32.1	0.2	107
7113199 11:15	1865	3485	5353	124	5.9	11.8	4.6	679	581	510	32.2	0.2	105
7/13/99 11:45	1666	3485	5353	125	5.9	11.6	4.6	679	582	510	32.2	0.2	105
7/13/99 11:57	1668	3485	5357	525	5.9	21.7	4.6	679	580	509	32.2	0.2	105
7113199 12:15	1672	3498	5370	126	5.9	11.8	4.6	679	581	511	32.3	0.2	106
7113199 12:45	1681	3512	5389	127	5.9	11.9	4.6	679	581	511	32.3	0.2	105

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index	
	Feed	Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage				Conc
7/13/99 12:57	1684	3520	5396	127	5.9	11.8	4.6	679	581	511	32.4	0.2	104
7/13/99 13:15	1689	3529	5400	129	5.9	11.9	4.6	678	580	510	32.5	0.2	108
7/13/99 13:45	1712	3578	5467	132	5.9	11.9	4.6	679	581	511	32.5	0.2	106
7/13/99 13:57	1723	3601	5498	133	5.9	11.6	4.6	678	581	511	32.6	0.2	105
7/13/99 14:15	1744	3645	5536	136	5.9	11.9	4.6	680	582	512	32.6	0.2	105
7/13/99 14:45	1768	3899	5608	139	5.9	11.9	4.6	680	583	512	32.8	0.2	105
7/13/99 14:57	1775	3707	5620	140	5.9	11.9	4.6	677	581	511	32.8	0.2	104
7/13/99 15:15	1782	3738	5655	141	5.9	11.9	4.6	678	582	511	32.9	0.2	105
7/13/99 15:45	1794	3751	5695	142	5.9	11.9	4.6	679	583	513	33.0	0.2	104
7/13/99 16:15	1799	3767	5708	143	5.9	11.9	4.6	678	582	512	33.1	0.2	105
7/13/99 16:45	1799	3770	5708	143	5.9	11.9	4.6	675	580	510	33.2	0.2	106
7/13/99 17:15	1793	3769	5712	142	5.9	11.9	4.6	675	580	510	33.3	0.2	108
7/13/99 17:45	1790	3769	5708	141	5.9	11.6	4.6	674	578	509	33.3	0.2	105
7/13/99 18:15	1787	3764	5700	141	5.9	11.9	4.6	675	580	510	33.4	0.2	105
7/13/99 18:45	1785	3761	5689	139	5.9	11.9	4.6	674	580	510	33.4	0.2	105
7/13/99 19:15	1780	3748	5673	138	5.9	11.9	4.6	674	579	509	33.4	0.2	104
7/13/99 19:45	1777	3738	5659	137	5.9	11.9	4.6	678	583	512	33.3	0.2	107
7/13/99 20:15	1776	3729	5641	136	5.9	11.9	4.6	679	584	514	33.2	0.2	105
7/13/99 20:45	1777	3721	5629	135	5.9	11.9	4.6	680	586	515	33.0	0.2	105
7/13/99 21:15	1775	3720	5607	134	5.9	11.9	4.6	683	587	516	32.9	0.2	108
7/13/99 21:45	1771	3711	5594	132	5.9	11.9	4.6	686	590	520	32.8	0.2	105
7/13/99 22:15	1765	3696	5590	131	5.9	11.9	4.6	686	591	520	32.6	0.2	118
7/13/99 22:45	1759	3680	5573	128	5.9	11.9	4.6	690	593	522	32.5	0.2	104
7/13/99 23:15	1754	3672	5560	125	5.9	11.9	4.6	694	596	526	32.4	0.2	104
7/13/99 23:45	1749	3672	5537	124	5.9	11.8	4.6	693	595	525	32.3	0.2	105
7/14/99 0:15	1744	3658	5518	121	5.9	11.6	4.6	694	597	526	32.2	0.2	104
7/14/99 0:45	1741	3649	5502	118	5.9	11.8	4.6	696	599	528	32.1	0.2	104
7/14/99 1:15	1740	3641	5480	116	5.9	11.8	4.6	696	600	529	32.0	0.2	104
7/14/99 1:45	1739	3632	5476	114	6.0	11.8	4.4	699	601	531	31.9	0.2	104
7/14/99 2:15	1735	3625	5458	112	6.0	11.8	4.6	700	603	532	31.9	0.2	105
7/14/99 2:45	1732	3618	5445	111	6.0	11.6	4.6	700	603	532	31.8	0.2	104
7/14/99 3:15	1730	3583	5320	94	7.0	11.6	4.6	712	615	543	31.8	0.2	105
7/14/99 3:45	1724	3583	5277	93	7.0	11.6	4.6	715	618	547	31.7	0.2	105
7/14/99 4:15	1720	3583	5241	93	7.0	11.6	4.6	716	619	549	31.7	0.2	106
7/14/99 4:45	1714	3578	5216	92	7.0	11.6	4.8	720	623	552	31.6	0.2	105
7/14/99 5:45	1709	3578	5167	92	7.0	11.6	4.8	721	625	554	31.5	0.2	105
7/14/99 6:15	1714	3591	5172	93	7.0	11.6	4.8	722	626	554	31.5	0.2	105
7/14/99 7:15	1718	3596	5167	92	7.0	11.6	4.8	726	630	559	31.2	0.2	105
7/14/99 7:33	1717	3618	5225	93	7.0	11.6	4.6	731	634	564	31.2	0.2	105

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index	
	Feed	Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage				Conc
7114199 8:15	1715	3006	3754	100	6.0	9.1	7.3	595	486	365	31.3	0.2	118
7114199 9:15	1709	3072	3929	103	6.0	9.6	6.9	606	498	385	31.6	0.2	107
7114199 9:33	1707	3552	5136	110	6.0	11.4	4.8	689	592	517	31.7	0.2	114
7/14/99 10:15	1704	3547	5145	112	6.0	11.4	5.0	691	594	520	31.8	0.2	106
7/14/99 10:33	1706	3547	5140	113	6.0	11.4	5.0	691	594	519	31.8	0.2	107
7114199 11:33	1713	3561	5148	115	6.0	11.4	5.0	690	594	520	31.9	0.2	108
7114199 12:33	1731	3592	5288	119	6.0	11.4	5.0	691	595	520	32.0	0.2	105
7114199 13:33	1743	3605	5175	121	6.0	11.4	5.0	690	592	517	32.2	0.2	107
7114199 14:33	1754	3614	5135	123	5.9	11.2	5.0	685	587	511	32.5	0.2	104
7114199 15:33	1764	3636	5162	125	5.9	11.4	5.0	681	584	509	32.7	0.2	106
7114199 16:33	1768	3654	5187	125	5.9	11.4	5.0	680	584	508	32.9	0.2	104
7/14/99 18:33	1767	3641	5183	124	6.0	11.4	5.0	680	584	508	33.2	0.2	105
7114199 19:33	1767	3649	5174	123	5.9	11.4	5.0	684	587	512	33.1	0.2	105
7114199 21:33	1761	3623	5128	118	6.0	11.4	5.0	694	597	520	32.4	0.2	104
7/14/99 23:33	1757	3592	5071	111	6.0	11.2	5.2	704	606	529	31.8	0.2	105
7115199 0:33	1751	3578	5062	109	6.0	11.2	5.2	709	609	532	32.8	0.2	105
7115199 2:33	1744	3578	5035	105	6.0	11.2	5.2	714	615	537	31.4	0.2	105
7115199 5:33	1715	3516	4943	101	6.0	11.2	5.2	717	619	541	31.2	0.2	105
7/15/99 6:33	1721	3520	4955	101	6.0	11.2	5.2	721	622	543	31.1	0.2	105
7/16/99 8:37	1718	3570	4947	103	6.1	11.0	5.2	737	642	565	31.8	0.2	105
7/16/99 9:24	1711	3565	4937	104	6.0	11.0	5.2	737	641	564	31.9	0.2	105
7116199 13:24	1710	3596	4981	116	5.9	11.2	5.0	726	633	559	32.6	0.2	105
7116199 19:24	1753	3693	5082	124	6.0	11.2	5.0	730	637	564	33.2	0.2	107
7117199 2:24	1762	3107	3642	149	7.0	5.0	3.8	365	328	286	31.8	0.2	103
7118199 8:34	1585	3463	4630	102	5.9	11.0	5.2	766	673	594	31.0	0.2	130
7/18/99 9:34	1585	3458	4620	102	5.9	11.1	5.2	770	676	599	31.0	0.2	127
7/18/99 13:34	1604	3503	4638	109	5.9	11.0	5.2	763	671	594	31.8	0.2	108
7118199 16:34	1618	3547	4700	114	5.9	11.2	5.2	757	665	589	32.6	0.2	112
7/18/99 19:34	1633	3587	4734	113	5.9	11.2	5.2	762	672	595	32.6	0.2	121
7/19/99 0:34	1644	3041	3652	177	5.7	5.0	3.6	362	323	280	31.8	0.2	103
7119199 3:34	1630	2979	3607	164	6.1	5.0	3.8	362	325	280	31.6	0.2	103
7119199 9:22	1627	3001	3613	165	5.7	5.2	3.6	362	325	281	31.7	0.2	103
7119199 11:22	1625	2930	3511	110	6.0	8.9	6.9	853	585	476	32.0	0.2	160
7119199 13:22	1653	3307	4123	104	6.0	10.2	6.3	754	659	562	32.4	0.2	105
7/19/99 14:22	1655	3339	4189	106	6.0	10.4	6.3	762	666	570	32.6	0.2	107
7119199 15:22	1669	3352	4193	106	6.0	10.4	6.3	763	668	574	32.5	0.2	125
7/19/99 17:22	1680	3374	4206	103	6.0	10.2	6.3	768	673	578	32.4	0.2	108
7/19/99 18:22	1680	3374	4210	99	6.0	10.2	6.3	772	677	580	32.5	0.2	105
7/19/99 19:22	1684	3383	4211	97	6.1	10.2	6.3	774	679	583	32.5	0.2	105

Time	Conductivity (uS/cm)				Flow (L/min)				Pressure (kPa)			Temp (degC)	Turbidity	Particle	Index
	Feed	Interstage	Conc Tot	Perm RO	Feed	Tot	Perm	Conc	Feed	Interstage	Conc				
7119199 20:22	1683	3369	4197	94	6.1	10.2	6.3	779	684	587	32.4	0.2	106		
7119199 22:22	1670	2792	3216	139	6.1	4.6	4.4	361	320	264	31.9	0.2	103		
7/20/99 0:22	1664	2784	3207	136	6.1	4.8	4.4	360	320	264	31.6	0.2	103		
7120199 1:22	1663	2783	3207	135	6.1	4.6	4.4	360	320	264	31.6	0.2	103		
7120199 3:22	1653	2770	3181	134	6.1	4.8	4.4	361	320	264	31.4	0.2	103		
7120199 4:22	1643	2752	3167	133	6.1	4.8	4.4	362	321	265	31.3	0.2	103		
7120199 6:22	1635	2735	3142	132	6.1	4.6	4.4	361	320	264	31.2	0.2	103		
7120199 7 22	1636	2735	3142	132	6.1	4.8	4.4	361	320	264	31.2	0.2	103		
7120199 9:35	1627	2722	3133	135	6.1	4.6	4.4	359	319	264	31.5	0.2	103		
7120199 10:35	1622	3578	4652	90	6.1	10.6	5.2	753	668	594	31.8	0.2	300		
7120199 11:35	1623	2557	2847	81	6.2	7.3	9.4	576	465	293	31.9	0.2	105		
7120199 12:35	1644	3432	4330	89	5.9	10.8	5.9	746	653	564	32.1	0.2	198		
7120199 13:35	1671	3756	4894	118	8.0	8.3	2.1	639	577	527	32.2	0.2	104		
7120199 14:35	1715	3352	4101	103	6.0	9.1	6.3	715	626	530	32.4	0.2	450		
7120199 16:35	1763	2704	2992	97	6.1	6.9	10.3	578	461	273	32.7	0.3	130		
7120199 17:35	1767	2713	3000	96	6.2	6.9	10.3	579	462	274	32.8	0.3	124		
7120199 18:35	1780	2721	3009	97	6.2	6.9	10.2	579	462	273	32.8	0.3	123		
7120199 20:35	1792	2735	3027	96	6.1	6.8	10.2	586	467	276	32.4	0.3	137		
7/20/99 22:35	1775	2696	2981	92	6.1	6.6	10.2	591	472	280	31.9	0.3	141		
7/20/99 23:35	1758	2664	2947	90	6.1	6.6	10.2	592	473	280	31.7	0.3	150		
7121199 0:35	1742	2646	2925	89	6.1	6.8	10.2	595	478	282	31.6	0.3	141		
7121199 4:35	1702	2539	2815	72	7.0	6.6	10.5	608	488	291	31.2	0.3	127		
7121199 5:35	1689	2526	2793	71	7.0	6.8	10.5	610	488	292	31.1	0.3	119		
7121199 6:35	1690	2526	2793	72	7.0	6.8	10.5	608	488	292	31.1	0.3	112		
7121199 7:35	1690	2593	2895	72	7.0	7.1	10.0	632	514	330	31.1	0.3	134		
7/21/99 8:57	1685	2717	3083	91	6.1	6.8	8.4	602	505	364	31.1	0.3	206		
7/21/99 9:56	1675	2642	2979	91	6.1	6.7	8.8	595	494	340	31.3	0.2	157		
7122199 11:43	1655	2921	3392	99	5.8	8.3	7.7	725	625	497	32.3	0.3	118		
7122199 13:43	1694	3011	3519	105	5.8	8.3	7.7	727	630	504	32.6	0.3	114		
7122199 15:43	1791	3192	3722	115	5.8	8.5	7.8	727	631	506	33.1	0.3	110		
7122199 17:43	1790	4457	4739	111	6.7	10.0	3.4	828	788	749	33.6	0.2	429		
7122199 19:43	1770	3725	4703	128	5.9	9.8	5.3	802	722	644	33.5	0.3	110		
7122199 20:43	1761	3832	4822	148	4.9	10.2	5.2	801	719	640	33.3	0.2	110		
7123199 8:43	1710	2767	9087	1018	6.3	3.9	7.5	328	251	124	31.2	0.3	5410		
7/23/99 10:00	1672	2554	2962	104	6.0	7.1	9.6	488	363	187	31.8	0.3	196		
7/23/99 11:43	1666	2842	3745	96	6.7	9.3	7.1	529	416	290	32.1	0.3	103		
7/23/99 13:28	1700	3323	5082	156	4.7	11.2	5.0	616	511	427	32.5	0.3	422		
7123199 14:28	1703	3304	5039	113	8.0	11.2	5.0	637	533	446	32.8	0.3	199		
7/23/99 16:00	1726	3383	5235	170	4.7	11.2	4.8	611	508	424	33.2	0.4	170		



Time	Feed	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle	Index
		Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage	Conc				
7/23/99 16:27	1731	3396	5103	123	4.8	11.4	5.0	630	524	440	33.3	0.3	150	
7/23/99 17:28	1752	3400	5165	118	5.9	11.2	4.6	636	533	447	33.5	0.3	122	
7/23/99 18:28	1795	3476	5246	125	6.8	11.2	5.0	637	535	448	33.6	0.3	115	
7/23/99 18:43	1801	3494	5297	120	6.1	11.2	5.0	639	536	450	33.6	0.3	190	
7/23/99 19:28	1819	3503	5513	181	6.1	11.2	5.0	623	524	436	33.6	0.2	125	
7/23/99 20:27	1825	3512	5411	155	6.6	11.0	5.0	637	535	448	33.4	0.3	137	
7/23/99 21:27	1823	3636	5495	196	5.4	11.4	5.0	621	519	433	33.1	0.3	131	
7/23/99 22:00	1819	3547	5314	125	4.6	11.2	5.0	647	540	455	33.0	0.3	125	
7/23/99 22:27	1818	3605	5347	153	4.3	11.4	5.0	634	529	444	32.9	0.3	116	
7/23/99 22:43	1818	3583	5435	186	5.7	11.2	5.0	628	526	440	32.8	0.3	111	
7/23/99 23: 27	1809	3486	5251	114	5.8	11.2	5.2	657	551	464	32.6	0.3	111	
7/24/99 0:00	1801	3468	5225	115	6.0	11.2	5.2	659	553	465	32.5	0.3	109	
7/24/99 1:27	1786	3441	5260	149	5.8	11.2	5.0	647	542	454	32.2	0.3	111	
7/24/99 1:28	1786	3423	5229	134	6.0	11.0	5.0	652	549	460	32.2	0.3	124	
7/24/99 1:43	1784	3449	5203	127	5.1	11.2	5.2	657	551	464	32.1	0.3	112	
7/24/99 2:27	1779	3436	5180	126	5.1	11.0	5.0	658	552	464	32.0	0.3	111	
7/24/99 2:28	1779	3458	5198	133	5.0	11.2	5.0	653	546	458	32.0	0.3	to5	
7/24/99 2:43	1778	3428	5248	145	5.5	11.2	5.0	652	546	458	32.0	0.3	111	
7/24/99 3:00	1775	3441	5180	127	5.0	11.2	5.0	658	551	464	31.9	0.3	117	
7/24/99 3:28	1770	3367	5144	102	7.1	11.2	5.2	670	564	475	31.9	0.3	111	
7/24/99 3:43	1767	3391	5159	110	6.9	11.0	5.2	664	558	470	31.9	0.4	114	
7/24/99 4:00	1765	3391	5136	103	7.1	11.0	5.2	667	561	472	31.8	0.4	121	
7/24/99 4:27	1761	3387	5127	103	7.1	11.2	5.2	667	561	472	31.8	0.3	119	
7/24/99 4:28	1759	3387	5127	to3	7.1	11.2	5.2	667	560	472	31.8	0.3	121	
7/24/99 5:00	1753	3378	5113	to2	7.1	11.0	5.2	667	560	471	31.8	0.2	120	
7/24/99 5:28	1749	3369	5100	103	7.1	11.2	5.2	666	558	470	31.7	0.2	111	
7/24/99 5:43	1748	3365	5097	103	7.1	11.0	5.0	664	557	469	31.7	0.2	110	
7/24/99 6:00	1748	3365	5092	103	7.1	11.2	5.2	665	558	470	31.7	0.2	105	
7/24/99 6:28	1749	3365	5092	104	7.t	11.2	5.2	665	559	470	31.6	0.2	112	
7/24/99 7:00	1752	3374	5097	104	7.f	11.2	5.0	664	556	469	31.6	0.2	111	
7/24/99 7:27	1752	3369	5101	104	7.1	11.0	5.2	664	558	469	31.5	0.2	111	
7/24/99 7:28	1753	3374	5100	104	7.1	11.2	5.2	665	558	470	31.5	0.2	113	
7/24/99 8:28	1750	3494	5502	123	5.5	13.5	5.7	783	651	547	31.6	0.3	330	
7/24/99 9:27	1752	3481	5480	121	5.5	13.5	5.7	787	655	549	31.5	0.3	119	
7/24/99 9:28	1752	3481	5480	121	5.5	13.7	5.7	787	655	549	31.5	0.3	188	
7/24/99 9:43	1753	3481	5485	121	5.5	13.5	5.7	787	655	549	31.6	0.3	156	
7/27/99 9:19	1802	2531	2958	66	5.7	6.6	10.9	587	445	238	32.0	0.2	104	
7/27/99 11:19	1782	2846	3771	87	5.7	8.7	7.7	674	550	410	32.6	0.2	105	
7/27/99 12:19	1793	2921	3986	90	5.7	9.3	7.5	685	560	427	32.8	0.2	133	

Time	Conductivity (uS/cm)				Flow(L/min)				Pressure (kPa)			Temp (degC)	Turbidity	Particle Index
	Feed	Interstage	Conc	Tot Perm RO	Feed	Tot	Perm	Conc	Feed	Interstage	Conc			
7127199 13:19	1801	3330	5117	106	5.6	11.4	5.2	740	627	533	33.0	0.2	104	
7127199 14:08	1805	3342	5228	103	5.6	11.2	5.5	731	619	526	33.2	0.2	103	
7127199 15:08	1809	3317	5165	118	5.6	11.2	5.5	753	642	547	33.5	0.2	112	
7127199 16:08	1816	3339	5187	117	5.7	11.2	5.5	751	639	544	33.7	0.3	107	
7127199 17:08	1825	3355	5200	119	5.6	11.2	5.5	745	634	540	33.8	0.3	104	
7127199 18:08	1830	3369	5218	120	5.6	11.2	5.5	743	634	539	33.8	0.3	103	
7127199 19:08	1832	3365	5220	120	5.6	11.2	5.5	745	635	541	33.7	0.2	106	
7127199 20:08	1834	3363	5209	119	5.6	11.0	5.5	745	635	541	33.6	0.2	108	
7127199 21:08	1844	3370	5223	120	5.6	11.2	5.5	749	638	543	33.3	0.2	104	
7128199 0:08	1837	3346	5183	112	5.7	11.2	5.5	763	650	554	32.6	0.2	103	
7128199 1:08	1633	3336	5163	110	5.7	12.0	5.5	763	651	556	32.4	0.2	106	
7128199 2:08	1828	3329	5166	109	5.7	11.0	5.5	763	651	556	32.3	0.2	103	
7128199 3:08	1623	3330	5144	108	5.7	11.0	5.5	764	652	557	32.2	0.2	106	
7128199 4:08	1618	3323	5126	107	5.7	11.0	5.5	768	654	558	32.2	0.2	104	
7128199 5:08	1608	3303	5096	107	5.7	11.0	5.5	767	655	558	32.1	0.2	155	
7128199 6:08	1609	3307	5087	108	5.7	11.0	5.5	768	855	556	32.0	0.2	103	
7128199 9:08	1604	3294	5057	110	5.6	11.0	5.4	767	653	557	32.1	0.2	103	
7128199 9:35	1601	3290	5044	110	5.6	11.0	5.4	760	649	554	32.3	0.2	103	
7128199 10:08	1800	3291	5048	110	5.6	10.8	5.5	760	645	548	32.4	0.2	103	
7128199 10:35	1798	3325	5119	114	5.5	11.0	5.5	733	623	531	32.5	0.2	112	
7128199 11:35	1796	3325	5097	112	5.6	11.2	5.5	733	624	531	32.4	0.2	103	
7128199 12:35	1820	3476	5303	131	5.3	11.2	5.2	699	591	504	33.0	0.2	256	
7128199 13:08	1829	3492	5333	134	5.3	11.2	5.2	700	592	504	33.1	0.2	111	
7128199 13:35	1841	3518	5369	137	5.3	11.2	3.8	695	569	502	33.2	0.2	111	
7128199 14:35	1883	3567	5509	140	5.5	11.2	5.2	700	595	507	33.5	0.2	114	
7128199 15:35	1906	3690	5562	142	5.2	11.2	5.3	693	567	500	33.7	0.2	113	
7128199 16:35	1912	3667	5600	148	5.7	11.2	5.0	690	586	499	33.7	0.2	332	
7128199 17:35	1916	3677	5556	128	5.5	11.2	5.3	700	595	506	33.8	0.2	107	
7128199 18:35	1914	3671	5557	129	5.9	11.2	5.3	699	594	507	33.8	0.3	107	
7128199 18:52	1912	3677	5566	135	5.4	11.2	5.3	696	591	504	33.7	0.2	104	
7128199 19:35	1907	3672	5572	136	5.2	11.2	5.3	696	591	504	33.7	0.2	105	
7128199 19:52	1907	3686	5583	151	4.7	11.2	5.0	686	580	495	33.6	0.2	125	
7128199 20:35	1905	3671	5599	157	4.9	11.2	5.2	688	583	495	33.5	0.2	105	
7128199 20:52	1905	3637	5589	156	5.4	11.2	5.0	690	567	500	33.4	0.2	200	
7128199 21:35	1911	3632	5523	144	5.6	11.2	5.2	701	596	508	33.2	0.2	235	
7128199 21:52	1909	3640	5505	130	5.5	11.0	5.2	706	601	513	33.1	0.2	105	
7128199 22:35	1906	3637	5509	130	5.3	11.2	5.2	711	603	516	33.0	0.2	107	
7128199 22:52	1906	3649	5528	141	4.8	11.2	5.2	705	597	510	32.9	0.2	105	
7128199 23:35	1905	3645	5528	147	4.9	11.2	5.2	703	595	508	32.7	0.2	104	

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp(degC)	Turbidity	Particle	Index
	Feed	Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage				
7/29/99 0:35	1903	3610	5511'	133	5.5	11.0	5.2	710	604	515	32.6	0.3	104
7129199 0:52	1901	3619	5506	128	5.2	11.2	5.2	715	607	518	32.6	0.2	105
7/29/99 1:35	1899	3632	5515	135	5.0	11.0	5.2	714	606	517	32.5	0.2	105
71291992152	1888	3578	5447	125	5.4	11.0	5.2	715	609	520	32.3	0.2	154
7129199 3:52	1875	3587	5457	138	4.8	11.2	5.2	710	601	514	32.2	0.2	108
7/29/99 4:35	1864	3577	5440	149	5.1	11.2	5.2	707	599	511	32.1	0.2	105
7129199 4:52	1861	3516	5390	135	5.7	11.0	5.2	714	608	519	32.1	0.2	104
7129199 5:35	1859	3507	5344	127	5.8	11.0	5.2	719	613	524	32.0	0.2	105
7129199 5:52	1862	3526	5338	115	5.7	11.0	5.2	727	618	529	31.9	0.2	105
7129199 6:35	2865	3522	5338	115	5.6	11.0	5.2	727	619	529	31.8	0.2	104
7129199 7:35	1862	3521	5339	115	5.4	11.0	5.2	728	620	530	31.7	0.2	105
7129199 7:52	1861	3534	5360	124	4.6	11.2	5.2	725	615	526	31.7	0.2	104
7129199 8:35	1843	3513	5339	116	5.2	11.0	4.0	725	616	526	31.8	0.3	104
7/29/99 8:52	1840	3529	5344	128	4.7	11.0	5.2	714	601	514	31.9	0.3	120
7129199 10:52	1848	3474	6242	184	6.6	10.4	4.8	701	595	508	32.3	0.2	854
7129199 12:06	1870	3579	5507	131	6.1	10.8	5.0	707	603	519	32.4	0.2	117
7129199 13:06	1889	3632	5563	121	6.0	11.0	5.0	717	612	527	32.6	0.3	111
7129199 14:06	1905	3668	5615	124	5.7	11.2	5.0	716	607	522	32.9	0.3	110
7129199 14:52	1905	3694	5658	127	5.5	11.2	5.0	712	607	523	33.2	0.2	107
7129199 15:06	1906	3690	5659	126	5.6	11.2	5.0	711	606	522	33.2	0.2	109
7129199 15:52	1907	3703	5680	129	5.4	11.2	5.0	709	603	519	33.5	0.2	110
7129199 12:06	1870	3579	5507	131	6.1	10.8	5.0	707	603	519	32.4	0.2	117
7/29/99 14:52	1905	3694	5658	127	5.5	11.2	5.0	712	607	523	33.2	0.2	107
7129199 15:52	1907	3703	5680	129	5.4	11.2	5.0	709	603	519	33.5	0.2	110
7129199 16:06	1908	3703	5680	128	5.6	11.2	5.0	709	604	520	33.5	0.3	108
7129199 19:06	1929	3720	5702	125	6.6	11.2	5.0	710	607	522	33.8	0.2	124
7129199 20:06	1932	3712	5681	132	6.5	11.2	5.0	712	609	524	33.6	0.2	105
7129199 21:06	1936	3685	5709	152	6.3	11.0	5.0	712	608	523	33.2	0.2	110
7/29/99 23:06	1922	3668	5806	186	5.9	11.0	5.0	707	604	519	32.6	0.2	121
7130199 0:06	1920	3615	5756	176	5.9	10.9	5.0	712	608	523	32.4	0.2	105
7130199 1:06	1919	3596	5705	162	6.0	11.0	5.0	722	619	532	32.2	0.2	137
7130199 2:06	1910	3587	5632	148	6.2	11.0	5.0	730	625	538	32.1	0.2	105
7130199 3:06	1902	3592	5490	228	6.3	11.0	5.2	737	632	546	32.0	0.2	105
7130199 4:06	2899	3591	5516	116	6.3	11.0	5.2	746	639	552	31.9	0.2	104
7130199 5:06	1898	3587	5512	111	6.2	11.0	5.2	752	643	554	31.7	0.2	104
7130199 7:06	1906	3600	5534	108	6.1	11.0	5.2	756	647	557	31.6	0.2	105
7130199 8:06	1898	3600	5525	108	6.0	11.0	5.2	751	644	556	31.6	0.2	105
7130199 9:06	1871	3605	5525	122	5.3	11.2	5.2	732	626	540	31.8	0.2	115
7130199 13:24	1855	3623	5496	136	4.0	11.2	5.0	705	599	515	32.9	0.2	103

Time	Feed	Conductivity (uS/cm)			Flow(L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle	Index
		Interstage	Conc	Tot	Perm RO	Feed	Tot	Perm	Conc	Feed				
7130199 14:24	1870	3725	5558	163	3.7	11.2	4.8	686	583	500	33.1	0.2	104	
7130199 15:24	t877	3745	5611	169	3.5	11.2	4.8	682	578	496	33.4	0.2	103	
7130199 18:24	1938	3812	5741	140	3.7	11.2	5.0	696	591	509	33.8	0.2	159	
7130199 20:24	1975	3845	5821	128	5.1	11.2	5.0	715	611	527	33.5	0.2	103	
7130199 21:24	1979	3832	5792	123	5.4	11.2	5.0	722	629	533	33.2	0.4	104	
7130199 23:24	1954	3756	5721	118	5.6	11.0	5.2	730	626	541	32.7	0.4	103	
7131199 5:24	1910	3626	5669	154	5.7	11.0	5.0	727	624	536	31.8	0.2	104	
7/31/99 6:24	1897	3600	5496	114	6.0	10.8	5.2	745	641	553	35.7	0.2	104	
811199 11:50	1749	3339	5148	102	6.3	11.0	5.2	724	622	535	32.7	0.2	103	
811199 14:50	1774	3400	5209	104	6.5	11.0	5.2	719	618	533	33.4	0.2	103	
811199 16:50	1775	3387	5437	148	6.2	11.0	5.0	701	601	515	33.8	0.2	108	
8/1/99 17:50	1779	3615	5566	204	5.5	11.2	4.8	678	576	493	33.9	0.2	103	
811199 18:50	1779	3635	5362	176	3.3	11.3	4.8	675	572	490	33.8	0.2	106	
811199 19:50	1782	3462	5288	118	3.8	11.2	5.0	704	599	515	33.7	0.2	103	
811199 20:50	1786	3435	5249	104	5.8	11.2	5.0	719	615	529	33.4	0.2	103	
8/1/99 22:50	1780	3392	5212	104	6.6	11.0	5.0	725	621	535	32.8	0.2	104	
811199 23:50	775	3383	5176	113	6.4	11.0	5.0	724	621	534	32.6	0.2	103	
812199 1:50	1777	3359	5219	127	6.3	11.0	5.0	725	621	534	32.3	0.2	103	
812199 5:50	1767	3352	5135	97	6.0	11.0	5.2	743	638	549	32.0	0.2	104	
812199 6:50	763	3356	5133	98	5.7	11.0	5.2	742	634	546	31.9	0.2	103	
812199 8:04	1754	3361	5145	104	5.2	11.0	5.2	741	631	543	31.9	0.2	104	
8/2/99 9:04	1751	3383	5158	117	4.3	11.2	5.0	726	619	534	32.1	0.2	103	
8/2/99 10:04	1750	3413	5216	145	4.4	11.2	5.0	710	603	518	32.2	0.2	104	
812199 11:04	1750	3322	5224	134	5.7	11.0	5.0	721	617	529	32.2	0.2	103	
8/2/99 12:04	1762	3356	5171	103	6.1	11.0	5.2	733	629	542	32.7	0.2	103	
8/2/99 13:04	1772	3397	5197	101	5.8	11.2	3.4	732	627	540	33.0	0.2	103	
812199 14:04	1790	3441	5254	106	5.5	21.0	5.0	724	619	533	33.3	0.2	103	
812199 15:04	1813	3503	5354	115	5.2	11.2	5.0	720	615	529	33.5	0.2	103	
8/2/99 16:04	1818	3542	5425	124	4.7	11.2	5.0	715	611	526	33.8	0.2	103	
812199 17:04	1832	3627	5525	151	4.1	11.4	5.0	695	592	509	33.8	0.2	103	
812199 18:04	1857	3610	5547	158	5.1	11.2	5.0	704	600	515	33.6	0.2	103	
8/2/99 19:04	1883	3610	5514	123	5.6	11.0	5.0	725	621	535	33.5	0.2	103	
8/2/99 20:04	1889	3658	5565	133	4.8	11.2	5.0	717	614	529	33.4	0.2	103	
812199 22:04	1910	3672	5624	131	4.9	11.2	5.0	727	623	537	33.0	0.2	103	
813199 0:04	1899	3658	5572	122	5.1	11.2	5.2	740	634	547	32.6	0.2	103	
813199 1:04	1896	3631	5536	118	5.2	11.0	5.2	741	636	548	32.5	0.2	103	
813199 3:04	1878	3587	5470	113	5.3	11.0	5.0	745	639	552	32.4	0.2	107	
813199 5:04	1852	3529	5400	111	5.3	11.0	5.2	746	640	552	32.3	0.2	103	
813199 6:04	1853	3538	5400	112	5.4	11.0	5.2	746	641	553	32.2	0.2	104	

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp(degC)	Turbidity	Particle	Index
	Feed	Interstage	Conc	Tot Perm	RO Feed	TotPerm	Conc	Feed	Interstage				
813199 11:43	1811	3477	5339	118	5.1	11.2	5.0	735	630	543	32.8	0.2	103
8/3/99 12:43	1819	3494	5370	121	5.0	11.2	5.0	728	624	537	32.9	0.4	103
8/3/99 13:43	1828	3512	5386	119	5.1	11.2	5.0	730	626	538	33.1	0.2	104
813199 14:43	1836	3521	5399	123	5.2	11.2	5.0	722	619	532	33.4	0.2	103
8/3/99 15:43	1841	3547	5425	123	5.0	11.2	5.0	721	617	531	33.6	0.2	105
8/3/99 16:43	1844	3546	5447	123	5.2	11.4	5.0	721	617	531	33.8	0.2	103
813199 18:43	1852	3552	5438	120	5.2	11.2	5.0	722	618	532	33.8	0.2	103
8/3/99 19:43	1857	3578	5470	124	5.2	11.4	5.0	721	617	531	33.7	0.2	103
8/3/99 20:43	1863	3579	5457	121	5.1	11.2	5.0	725	620	534	33.5	0.2	104
813199 23:43	1863	3574	5457	114	5.3	11.4	5.2	741	636	548	32.8	0.2	103
814199 0:43	1861	3556	5429	112	5.4	11.2	5.2	743	637	549	32.6	0.2	103
814199 2:43	1847	3520	5378	109	5.4	11.2	5.0	746	640	553	32.4	0.2	103
814199 3:43	1836	3010	3955	141	6.9	4.8	3.4	361	318	269	32.2	0.2	103
at4199 4:43	1822	2992	4360	210	6.4	4.8	3.6	359	314	265	32.1	0.2	103
8/4/99 6:43	1806	3134	3991	174	3.1	5.2	3.6	356	311	264	32.0	0.2	102
8/4/99 7:43	1795	3458	5309	111	5.5	11.2	5.0	736	629	542	32.0	0.2	114
8/2/99 8:04	2754	3361	5145	104	5.2	21.0	5.2	741	631	543	31.9	0.2	104
812199 9:04	1751	3383	5158	117	4.3	11.2	5.0	726	619	534	32.1	0.2	103
814199 9:12	1779	3423	5242	112	5.4	11.2	5.0	730	623	537	32.3	0.2	103
8/4/99 9:43	1777	3419	5238	113	5.3	11.2	5.0	728	621	534	32.4	0.2	103
812199 10:04	1750	3413	5216	145	4.4	11.2	5.0	710	603	518	32.2	0.2	104
814199 10:43	1773	3410	5225	113	5.3	11.2	5.0	727	622	536	32.5	0.2	104
814199 11:12	1771	3410	5220	112	5.3	11.2	3.2	726	620	534	32.4	0.2	108
814199 12:12	1793	3476	5315	121	5.1	11.4	5.0	720	615	529	32.9	0.2	104
814199 13:12	1806	3503	5378	128	5.0	11.4	5.0	715	610	525	33.2	0.2	103
8/4/99 14:12	1836	3552	5422	122	5.1	11.4	5.0	719	615	529	33.5	0.2	105
814199 15:12	1854	3587	5527	136	5.3	11.4	5.0	711	607	523	33.7	0.2	103
8/4/99 17:12	1852	3583	5531	135	5.5	11.2	5.0	705	603	519	34.2	0.2	103
814199 18:12	1847	3605	5525	127	4.9	11.4	5.0	709	605	521	34.3	0.2	104
814199 20:12	1837	3583	5491	129	5.0	11.4	5.0	709	606	521	34.1	0.2	105
8/4/99 22:12	1834	3542	5417	123	5.2	11.4	5.0	719	615	530	33.6	0.2	103
814199 23:12	1828	3525	5404	120	5.2	11.2	5.0	722	619	533	33.3	0.2	105
815199 0:12	1815	3498	5364	117	5.3	11.2	5.0	727	622	536	33.1	0.2	103
815199 1:12	1801	3476	5315	114	5.2	11.2	5.2	728	623	537	32.9	0.2	105
815199 2:12	1790	3436	5264	111	5.3	21.2	5.0	729	625	538	32.8	0.3	118
8/5/99 4:12	1755	3369	5158	108	5.3	11.2	5.0	730	625	538	32.6	0.2	104
8/5/99 5:12	1739	3338	5109	107	5.3	11.2	5.2	731	626	540	32.5	0.3	105
815199 6:12	1729	3316	5084	105	5.3	11.2	5.2	736	629	543	32.3	0.3	103
815199 7:12	1728	3316	5082	105	5.3	11.4	5.2	740	634	546	32.2	0.3	104

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index	
	Feed	Interstage	Conc	Tot	Perm	RO	Feed	Tot	Perm				
8/5/99 8:18	1717	3290	5044	105	5.3	11.2	5.2	737	631	543	32.2	0.3	103
8/5/99 9:18	1706	3268	5019	107	5.2	11.4	5.2	726	622	535	32.4	0.3	103
8/5/99 10:18	1701	3263	5006	108	5.2	11.4	5.2	726	622	535	32.7	0.3	104
8/5/99 13:18	1704	3255	4986	117	5.0	10.8	5.0	677	594	512	33.3	0.3	105
8/5/99 14:18	1715	3317	5095	117	5.2	11.4	5.0	710	607	522	33.6	0.3	103
8/5/99 16:28	1727	3370	5200	122	5.1	11.4	5.0	703	600	515	34.2	0.2	108
8/5/99 19:28	1735	3388	5204	120	5.0	11.4	5.0	700	598	514	34.4	0.2	104
8/5/99 20:28	1741	3391	5209	118	5.1	11.4	5.0	707	605	520	34.2	0.2	104
8/5/99 21:28	1750	3392	5200	116	5.1	11.4	5.0	712	608	524	33.9	0.2	105
8/5/99 22:28	1740	3365	5148	III	5.3	11.2	5.0	719	615	529	33.6	0.2	104
8/5/99 23:28	1726	3334	5118	107	5.4	11.4	5.0	725	620	534	33.4	0.2	103
8/6/99 0:28	1712	3312	5065	103	5.5	11.2	5.0	726	621	535	33.1	0.2	104
8/6/99 1:28	1706	3285	5017	101	5.5	11.4	5.0	728	624	537	33.0	0.2	105
8/6/99 4:28	1658	3192	4654	96	5.5	11.2	5.0	731	626	540	32.5	0.2	105
an09 5:28	1642	3160	4797	94	5.5	11.2	5.2	732	626	540	32.4	0.2	104
8/6/99 7:41	1636	3139	4765	91	5.6	11.2	5.2	737	631	543	32.3	0.2	105
8/6/99 8:28	1630	3126	4745	91	5.6	11.2	5.2	736	630	543	32.3	0.3	105
8/6/99 9:41	1630	3130	4749	93	5.5	11.3	5.0	735	628	542	32.6	0.2	115
8/6/99 10:41	1628	3130	4749	93	5.5	11.4	5.2	731	626	540	32.7	0.2	104
8/6/99 11:41	1641	3175	4806	99	5.4	11.4	5.2	721	617	531	33.1	0.2	105
8/6/99 13:41	1668	3236	4898	106	5.2	15.4	4.8	715	612	527	33.5	0.3	103
8/7/99 8:20	1587	3102	4849	104	5.1	11.2	5.1	727	624	540	32.5	0.2	146
8/7/99 9:20	1598	3085	4833	107	5.0	11.4	5.0	725	621	537	32.7	0.2	133
8/7/99 10:20	1583	3076	4830	107	5.1	11.4	5.0	721	616	534	32.9	0.2	104
8/7/99 12:20	1580	3094	4861	115	4.9	11.4	5.0	714	609	527	33.3	0.2	103
8/7/99 14:20	1609	3339	5016	139	5.3	11.4	4.8	698	595	514	33.7	0.2	105
8/7/99 15:20	1626	3214	5042	144	4.9	11.6	4.8	691	588	508	34.0	0.2	168
8/7/99 16:20	1673	3249	5068	115	6.0	11.4	4.8	715	613	531	34.2	0.2	105
8/7/99 18:20	1707	3355	5210	112	5.1	11.6	4.8	712	609	528	34.4	0.2	111
8/7/99 20:20	1698	3378	5217	143	4.4	11.6	4.8	691	588	509	34.1	0.2	207
8/7/99 21:20	1688	3281	5245	147	5.5	11.2	4.8	700	597	517	33.9	0.2	104
8/7/99 22:20	1674	3236	5055	110	5.9	11.2	4.8	722	619	537	33.6	0.2	105
8/8/99 0:20	1641	3201	5005	119	5.1	11.4	5.0	717	614	532	33.1	0.2	106
8/8/99 1:20	1625	3174	4926	120	5.0	11.4	5.0	726	620	537	33.0	0.2	103
8/8/99 2:20	1607	3133	4897	108	5.1	11.4	5.0	727	621	538	32.8	0.2	104
8/8/99 3:20	1587	3094	4850	105	5.1	11.4	5.0	730	624	541	32.8	0.2	103
8/8/99 4:20	1570	3062	4800	103	5.2	11.4	5.0	731	625	542	32.7	0.2	291
8/8/99 6:20	1565	3045	4775	101	5.2	11.4	5.0	733	627	543	32.6	0.2	105
8/8/99 7:20	1557	3031	4761	99	5.3	11.4	5.0	736	629	546	32.5	0.2	104

Time	Feed	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp. (degC)	Turbidity	Particle Index
		Interstage	Conc Tot	Perm RO	Feed Tot	Perm	Conc	Feed	Interstage	Conc			
8/8/99 7:59	1547	3014	4743	98	5.3	11.4	5.0	737	630	547	32.5	0.2	104
8/8/99 9:59	1523	2974	4663	100	5.2	11.4	5.0	725	619	536	32.9	0.2	105
8/8/99 11:59	1525	2974	4678	105	5.1	11.4	4.8	716	611	529	33.2	0.2	104
818199 12:59	1529	2992	4716	106	5.0	11.4	5.0	716	612	530	33.4	0.2	113
8/8/99 14:59	1540	3023	4729	107	5.1	11.6	4.8	711	607	525	33.9	0.2	107
818199 16:59	1563	3072	4755	89	6.8	11.7	4.6	712	608	528	34.3	0.4	119
8/8/99 18:59	1572	3138	4706	90	6.8	11.4	4.8	711	611	533	34.3	0.2	159
8/8/99 19:59	1568	3147	4640	89	6.8	11.4	4.8	715	614	538	34.1	0.2	131
8/8/99 21:59	1558	3178	4540	85	6.8	11.2	4.8	727	627	552	33.6	0.2	111
818199 22:59	1550	3178	4482	82	6.9	11.2	4.8	733	633	558	33.4	0.2	113
8/9/99 1:59	1533	3182	4359	76	6.9	11.2	5.0	746	647	574	32.9	0.2	111
819199 2:59	1524	3174	4323	75	6.9	11.2	5.0	748	649	575	32.8	0.2	117
819199 3:59	1515	3165	4280	74	6.9	11.2	5.0	751	651	578	32.7	0.2	110
819199 4:59	1505	3152	4240	73	6.9	11.2	5.0	749	649	576	32.7	0.2	121
819199 5:59	1501	3152	4228	73	6.9	11.2	5.0	751	652	579	32.7	0.2	111
819199 6:59	1499	3156	4227	72	6.9	11.2	5.0	756	656	583	32.6	0.2	112
819199 8:01	1499	3165	4228	71	6.9	11.2	4.9	759	660	586	32.6	0.2	211
8/9/99 9:01	1502	3183	4202	72	6.9	11.2	5.0	757	658	585	32.8	0.2	117
8/9/99 10:01	1503	3001	4650	106	5.0	11.4	4.8	704	600	521	32.9	0.2	117
819199 12:01	1528	2966	4510	105	5.0	11.2	5.2	691	586	501	33.3	0.2	128
819199 13:01	1532	2970	4540	109	5.1	11.2	5.2	683	579	495	33.4	0.2	119
8/9/99 14:01	1540	2996	4549	105	5.2	11.2	5.2	686	583	498	33.7	0.2	108
8/9/99 16:01	1549	3001	4540	111	5.1	11.2	5.2	680	576	490	34.2	0.2	117
819199 17:01	1558	3018	4570	109	5.2	11.2	5.2	68f	576	491	34.5	0.2	114
8/9/99 18:01	1566	3037	4604	109	5.1	11.2	5.2	679	574	489	34.6	0.2	140
819199 19:01	1572	3054	4614	109	5.1	11.2	5.2	682	578	492	34.6	0.3	123
8/9/99 20:01	1570	3040	4521	83	6.8	11.2	5.0	690	587	503	34.3	0.3	123
8/9/99 21:01	1569	3068	4461	81	6.9	11.2	5.0	696	594	510	34.0	0.3	127
8/9/99 22:01	1562	3080	4355	79	6.9	11.0	5.2	707	605	523	33.6	0.3	132
819199 23:01	1557	3103	4258	76	6.9	11.0	5.2	716	614	534	33.2	0.3	130
8110199 0:01	1545	3107	4170	73	6.9	11.0	5.2	722	620	541	33.0	0.3	134
8110199 1:01	1538	3107	4104	70	6.9	11.0	5.2	727	625	545	32.9	0.3	127
8110199 6:01	1474	3032	3864	62	6.9	10.8	5.4	735	633	556	32.6	0.3	154
8110199 7:01	1461	3011	3818	61	6.9	10.8	5.4	736	635	558	32.5	0.3	133
8/10/99 7:58	1452	3001	3801	60	6.9	10.8	5.4	740	635	558	32.5	0.3	127
8110199 8:58	1448	2842	3099	73	5.6	10.8	5.0	684	625	554	32.6	0.3	412
8110199 9:58	1444	2983	4369	89	5.5	11.4	5.0	712	611	534	32.8	0.3	127
8110199 10:58	1444	2969	4365	91	5.4	11.4	5.0	709	607	530	33.0	0.3	127
8110199 11:58	1449	2979	4369	93	5.4	11.4	5.0	706	605	528	33.1	0.3	153

Time	Conductivity (uS/cm)			Flow(L/min)			Pressure (kPa)			Temp(degC)	Turbidity	Particle	Index
	Feed	Interstage	Conc	Tot	Perm	RO	Feed	Tot	Perm				
8110199 12:58	1462	3010	4417	97	5.3	11.4	5.0	705	604	527	33.3	0.3	145
0110199 7:58	1452	3001	3801	60	6.9	10.8	5.4	740	635	558	32.5	0.3	127
8110199 8:58	1448	2642	3099	73	5.6	10.8	5.0	684	625	554	32.6	0.3	412
8110199 9:58	1444	2983	4369	89	5.5	11.4	5.0	712	611	534	32.8	0.3	127
8/10/99 10:58	1444	2969	4365	91	5.4	11.4	5.0	709	607	530	33.0	0.3	127
8/10/99 11:58	1449	2979	4369	93	5.4	11.4	5.0	706	605	528	33.1	0.3	153
8110199 12:58	1462	3010	4417	97	5.3	11.4	5.0	705	604	527	33.3	0.3	145
8110199 13:58	1473	3032	4475	98	5.3	11.4	5.0	704	603	527	33.6	0.3	120
8110199 17:58	1514	3223	4891	109	5.3	11.1	4.4	681	589	526	34.4	0.3	129
8110199 18:58	1523	3242	4896	108	5.3	11.0	4.4	683	594	529	34.4	0.3	135
8/10/99 19:58	1531	3272	4913	106	5.3	11.2	4.4	690	599	535	34.3	0.3	138
8/10/99 20:58	1540	3285	4927	104	5.3	11.0	4.4	696	606	542	33.9	0.3	138
8110199 21:58	1548	3294	4906	102	5.4	11.0	4.4	700	608	545	33.6	0.3	140
8110199 22:58	1550	3303	4902	99	5.5	11.0	4.6	711	619	554	33.2	0.3	152
8110199 23:58	1547	3294	4675	97	5.5	11.0	4.6	714	623	558	33.0	0.3	153
8111199 7:42	1499	3028	4885	99	5.6	11.0	4.4	691	535	525	32.3	0.4	632
8/11/99 8:42	1489	3005	4854	99	5.5	11.2	4.4	691	596	525	32.4	0.4	306
8111199 11:42	1491	3010	4979	104	5.4	11.2	2.3	689	594	524	33.1	0.4	188
8111199 12:42	1482	2988	4933	107	5.3	11.2	4.2	680	583	515	33.3	0.4	208
8111199 15:42	1545	3126	5170	118	5.1	11.2	4.2	674	580	512	34.1	0.4	126
8111199 17:42	1560	3147	5183	117	5.3	11.3	4.2	678	583	513	34.3	0.4	159
8/11/99 18:42	1573	3170	5222	117	5.2	11.2	3.4	678	584	515	34.3	0.3	142
8/11/99 19:42	1581	3180	5241	116	5.2	11.2	4.2	683	589	520	34.2	0.3	149
8111199 20:42	1590	3198	5246	115	5.3	11.2	4.2	688	594	524	33.9	0.3	140
8111199 21:42	1590	3178	5229	214	5.3	11.2	4.2	693	598	528	33.6	0.3	129
8111199 23:42	1569	3147	5163	108	5.4	11.2	4.2	701	606	536	33.0	0.2	122
8112199 0:42	1566	3133	5132	106	5.4	11.2	4.4	704	608	538	32.8	0.2	121
8/12/99 1:42	1559	3120	5110	104	5.4	11.2	4.2	707	612	541	32.7	0.2	143
8112199 2:42	1551	3094	5061	103	5.4	11.2	4.4	706	611	541	32.6	0.3	124
8/12/99 3:42	1534	3062	5009	101	5.5	11.0	4.4	704	608	537	32.5	0.2	121
8112199 4:42	1515	3018	4933	99	5.5	11.2	4.4	707	610	540	32.5	0.3	124
8/12/99 5:42	1499	2988	4881	97	5.5	11.2	4.4	705	609	538	32.4	0.3	115
8112199 6:42	1497	2979	4859	97	5.5	11.2	4.4	706	611	541	32.4	0.4	117
8112199 7:35	1493	2970	4851	96	5.5	11.2	4.4	707	611	541	32.3	0.4	117
8112199 8:35	1485	2957	4816	95	5.5	11.2	4.4	710	613	542	32.3	0.3	118
8/12/99 9:35	1480	2947	4797	96	5.5	11.0	4.4	699	605	535	32.4	0.3	113
8112199 12:35	1529	3178	5211	124	3.7	11.2	4.2	696	601	531	32.8	2.0	110
8/12/99 13:35	1551	3170	5189	119	3.9	11.4	4.2	686	591	522	33.0	1.0	121
8112199 15:35	1570	3289	5491	126	3.7	11.2	4.0	705	611	543	33.8	0.5	127



Time	Feed	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp(degC)	Turbidity	Particle	Index
		Interstage	Conc	TotPerm	RO	Feed	TotPerm	Conc	Feed	Interstage				
8112199 16:35	1583	<b>3326</b>	<b>5521</b>	<b>119</b>	3.6	11.2	4.0	721	627	559	34.2	0.5	134	
8112199 17:35	1598	3325	5526	115	3.7	11.2	4.0	733	640	570	34.4	0.4	120	
8112199 18:35	1605	<b>3330</b>	<b>5508</b>	111	3.7	11.2	4.0	745	650	580	34.3	0.4	132	
8112199 19:35	1601	<b>3290</b>	<b>5448</b>	110	3.9	21.2	4.2	748	654	585	34.2	0.4	114	
8/12/99 20:35	1599	3207	5356	106	4.3	11.2	4.2	761	665	594	33.9	0.3	114	
8112199 22:35	1567	<b>3203</b>	<b>5145</b>	99	4.6	11.2	4.2	774	678	607	33.2	0.3	118	
8112199 23:35	1541	3050	5071	97	4.9	11.1	4.2	767	670	599	33.0	0.3	115	
8/13/99 2:35	1491	<b>2939</b>	<b>4938</b>	93	5.2	11.2	4.2	754	657	585	32.5	0.3	117	
8/13/99 3:35	1474	2908	4903	92	5.2	11.2	4.2	753	656	584	32.4	0.3	135	
8/13/99 5:35	1452	2868	4833	92	5.1	11.2	4.2	748	651	580	32.3	0.3	115	
8113199 6:35	1451	2863	4829	91	5.2	11.2	4.2	752	654	583	32.2	0.4	114	
8/13/99 8:35	1449	2854	4815	90	5.2	11.0	4.2	757	659	586	31.9	0.3	125	
8113199 9:35	1434	2832	4789	92	5.1	11.2	4.2	745	646	575	32.4	0.3	112	
8113199 10:35	1429	2855	4754	82	5.8	11.0	4.2	745	647	576	32.5	0.3	114	
8113199 11:35	1430	2850	4819	87	5.8	11.2	4.2	740	641	570	32.7	0.3	128	
8113199 13:35	1479	2943	4972	93	5.8	11.2	4.2	731	634	564	33.1	0.3	145	
8113199 14:35	1497	2988	5047	97	5.7	11.4	4.2	726	630	561	33.4	0.3	112	
8113199 15:35	1497	3001	5087	99	5.6	11.2	4.2	715	620	551	33.8	0.3	108	
8113199 16:35	1496	3001	5086	100	5.6	11.4	4.2	711	617	549	34.1	0.3	111	
8/13/99 17:35	1488	2983	5042	99	5.6	11.4	4.2	706	613	545	34.2	0.3	114	
8/13/99 19:35	1481	2970	5033	98	5.7	11.4	4.2	712	618	549	34.1	0.3	114	
8/13/99 20:35	1490	2970	5019	97	5.6	11.4	4.2	716	621	554	33.8	0.3	115	
8113199 22:35	1480	2939	4982	92	5.7	11.4	4.2	726	628	559	33.2	0.3	122	
8113199 23:35	1469	2921	4935	90	5.7	11.2	4.2	727	629	561	33.0	0.3	125	
8/14/99 0:35	1464	2904	4908	89	5.7	11.2	4.2	727	632	563	32.8	0.3	123	
8/14/99 1:35	1468	2908	4916	a9	5.7	11.2	4.2	731	635	565	32.7	0.3	123	
8/14/99 2:35	1470	2903	4907	a9	5.7	11.2	4.2	732	637	568	32.6	0.3	122	
8/14/99 3:35	1466	2894	4894	88	5.7	11.2	4.2	736	639	569	32.5	0.3	121	
8/14/99 4:35	1461	2876	4871	88	5.7	11.2	4.2	735	639	569	32.4	0.3	132	
8114199 5:35	1461	2876	4872	87	5.7	11.2	4.2	735	638	568	32.4	0.3	118	
8114199 8:40	1459	2899	4894	98	5.1	11.4	4.2	732	636	565	32.3	0.3	117	
8/14/99 9:40	1447	2885	4839	99	5.2	11.2	4.2	725	630	561	32.5	0.3	111	
8114199 10:40	1444	2885	4877	102	5.1	11.2	4.2	722	627	558	32.8	0.3	109	
8114199 11:40	1433	<b>2868</b>	<b>4846</b>	104	5.0	11.4	4.2	719	623	554	33.0	0.3	112	
8114199 12:40	1441	2898	4876	108	4.9	11.2	4.2	714	619	551	33.1	0.3	112	
8/14/99 13:40	1458	2939	4932	112	4.8	11.2	4.0	710	615	547	33.3	0.3	111	
8/14/99 14:40	1473	2992	5020	115	4.7	12.4	4.0	711	616	548	33.6	0.3	112	
8114199 15:40	1476	3032	5082	221	4.5	11.4	4.0	701	608	540	34.0	0.3	114	
8114199 16:40	2484	3045	5094	115	3.9	11.4	4.0	712	619	551	34.2	0.3	116	

Time'	Conductivity (uS/cm)				Flow (L/min)				Pressure (kPa)				Turbidity	Particle Index
	Feed	Interstage	Conc Tot	Perm RO	Feed Tot	Perm Conc	Feed	Interstage	Conc Temp (degC)					
8/14/99 18:40	1502	3059	5147	111	4.4	11.4	4.0	724	631	562	34.5	0.3	117	
8114199 19:40	1502	3046	5125	116	4.7	11.2	4.0	716	623	554	34.4	0.3	120	
8114199 23:40	1476	2925	4920	94	5.1	11.2	4.2	752	656	585	33.1	0.3	121	
8/15/99 0:40	1466	2908	4882	92	5.2	11.2	4.2	754	658	587	32.9	0.3	121	
8115199 1:40	1460	2894	4871	90	5.4	11.2	4.2	753	657	586	32.7	0.3	118	
8115199 2:40	1458	2881	4819	68	7.0	11.2	4.2	752	655	585	32.5	0.3	124	
8115199 3:40	1452	2925	4762	69	7.0	11.2	4.2	738	644	576	32.4	0.3	121	
8115199 4:40	1447	3005	4615	67	7.0	11.2	4.2	747	655	591	32.3	0.3	119	
8115199 5:40	1453	3098	4519	66	7.0	11.2	4.2	761	669	608	32.1	0.3	121	
8115199 7:26	1455	2996	4951	96	5.2	11.4	4.2	725	629	563	32.0	0.3	114	
8115199 9:26	1439	2952	4850	96	5.1	11.4	4.2	726	630	563	32.1	0.3	113	
8115199 10:26	1435	2938	4849	98	5.0	12.2	4.2	725	630	563	32.4	0.3	112	
8/15/99 11:26	1430	2934	4855	101	5.0	11.4	4.2	721	626	558	32.6	0.3	111	
8115199 14:26	1449	2992	4999	117	4.3	11.4	4.0	707	610	543	33.5	0.3	112	
8/15/99 15:26	1451	3054	5078	117	3.5	11.4	4.0	717	625	557	33.8	0.3	112	
8/15/99 16:26	1452	3095	5171	122	3.5	11.2	4.0	717	623	556	34.1	0.3	112	
8/15/99 18:26	1449	3117	5148	114	3.3	11.2	4.0	743	649	579	34.4	0.3	113	
8/15/99 19:26	1453	3114	5143	111	3.3	11.2	4.0	751	656	586	34.4	0.3	118	
8/15/99 22:26	1458	2988	4982	97	3.6	11.2	4.2	778	681	610	33.6	0.3	124	
8/15/99 23:26	1453	2960	4876	93	3.9	11.0	4.2	784	688	615	33.4	0.3	129	
8116199 0:26	1449	2908	4890	99	4.1	11.0	4.2	757	660	590	33.2	0.3	126	
8116199 3:26	1438	2841	4750	92	4.8	11.2	4.2	770	673	601	32.8	0.3	128	
8116199 4:26	1427	2810	4714	89	5.0	11.2	4.4	773	676	603	32.7	0.3	118	
8/16/99 5:26	1420	2788	4678	89	5.0	11.2	4.2	773	673	601	32.6	0.2	123	
8116199 6:26	1427	2796	4700	89	5.0	11.2	4.2	772	676	603	32.5	0.3	117	
8116199 7:30	1432	2810	4718	90	5.1	11.2	4.4	766	668	596	32.4	0.3	140	
8/16/99 9:30	1438	2831	4779	92	5.0	11.2	4.2	768	670	597	32.7	0.3	114	
8116199 11:30	1438	2837	4950	121	6.8	10.8	4.4	769	672	599	33.1	0.7	486	
8116199 12:30	1442	2877	4828	77	6.9	11.0	4.0	727	633	565	33.1	0.2	127	
8/16/99 13:30	1466	2695	4230	110	6.8	5.0	2.7	334	294	260	33.1	0.2	108	
8/16/99 14:30	1499	3032	5061	96	6.7	11.0	4.0	707	614	548	33.6	0.3	128	
8116199 18:30	1507	3134	5218	112	3.5	11.0	4.0	742	649	579	34.3	0.2	114	
8116199 22:30	1517	3054	4938	89	5.0	11.0	4.2	749	653	584	33.5	0.2	127	
8/17/99 0:30	1499	2966	4961	98	5.1	11.2	1.5	752	655	585	33.2	0.2	184	
8117199 1:30	1497	2961	4947	96	5.2	11.2	1.7	757	660	588	33.1	0.3	130	
8/17/99 2:30	1492	2950	4934	95	5.2	11.2	1.7	754	658	587	33.0	0.2	126	
8/17/99 4:30	1469	2908	4872	92	5.2	11.0	1.7	756	659	589	32.8	2.0	123	
8117199 5:30	1459	2881	4833	92	5.2	11.0	1.5	757	659	589	32.7	0.3	123	
8/17/99 6:30	1465	2885	4840	93	5.2	11.2	1.1	759	663	591	32.6	2.0	121	

Time	Conductivity (uS/cm)				Flow (L/min)				Pressure (kPa)			Temp (degC)	Turbidity	Particle Index
	Feed	Interstage	Conc	Tot Perm	RO	Feed Tot	Perm	Conc	Feed	Interstage	Conc			
8/17/99 8:58	1461	2872	4841	93	5.2	11.0	4.2	762	664	592	32.3	0.6	117	
8/17/99 10:58	1439	2824	4762	94	5.2	11.0	4.2	757	660	589	32.5	0.5	119	
8/17/99 12:58	1457	2868	4851	100	5.1	11.0	4.2	747	650	579	32.9	0.7	108	
8/17/99 14:58	1517	3027	5096	112	4.9	12.2	4.2	729	631	563	33.6	0.6	117	
8/17/99 15:58	1526	3014	5090	103	5.7	11.2	4.2	733	640	569	33.9	0.6	110	
8/17/99 16:58	1526	3027	5090	95	5.6	11.2	4.2	737	643	574	34.0	0.9	112	
8/17/99 19:58	1526	2997	5026	102	6.0	11.2	4.2	737	645	575	33.5	2.6	125	
8/17/99 21:58	1517	2988	5017	94	5.6	11.2	4.2	747	652	581	33.1	2.0	134	
8/17/99 22:58	1504	2988	5011	100	5.0	11.2	4.2	743	647	576	33.0	2.0	139	
8/17/99 23:58	1490	2952	4982	103	5.3	11.2	4.2	743	648	577	32.8	0.7	128	
8/18/99 0:58	1478	2943	4925	99	5.0	11.2	4.2	751	654	584	32.6	1.9	130	
8/18/99 2:58	1460	2876	4841	96	5.1	11.0	4.2	752	655	584	32.4	2.0	126	
8/18/99 4:58	1434	2823	4762	93	5.1	11.2	4.2	753	657	585	32.3	0.7	121	
8/18/99 5:58	1421	2788	4714	92	5.1	11.0	4.2	756	660	587	32.3	2.0	127	
8/18/99 6:58	1421	2788	4724	92	5.1	21.2	4.2	758	662	589	32.2	0.4	132	
8/18/99 12:32	1452	2859	4765	92	5.1	11.2	4.2	756	660	587	33.2	1.2	116	
8/18/99 13:32	1471	2934	4880	103	4.7	11.2	4.2	745	647	576	33.2	2.0	125	
8/18/99 16:32	1558	3077	5135	109	5.1	11.2	4.2	749	655	584	33.5	1.0	111	
8/18/99 17:32	1574	3107	5219	111	5.4	11.2	4.2	752	656	585	33.7	2.0	114	
8/18/99 19:32	1555	3076	5157	106	5.2	11.2	4.2	753	659	587	33.8	1.7	124	
8/18/99 20:32	1544	3050	5117	103	5.3	11.2	4.2	752	657	586	33.7	0.5	123	
8/18/99 21:32	1534	3014	5009	76	6.9	11.2	4.2	767	671	600	33.5	0.8	126	
8/18/99 22:32	1517	3024	4936	75	7.0	11.2	4.2	756	660	591	33.3	1.1	135	
8/18/99 23:32	1501	3050	4797	72	7.0	11.0	4.2	758	665	599	33.1	1.5	134	
8/19/99 0:32	1491	3089	4686	68	7.0	11.0	4.2	768	675	610	32.9	2.0	133	
8/19/99 1:32	1480	3138	4575	65	7.0	11.0	4.2	775	684	622	32.8	2.7	134	
8/19/99 2:32	1467	3160	4439	62	7.0	10.8	4.2	779	691	631	32.7	2.0	151	
8/19/99 4:32	1435	3282	4210	58	7.0	10.8	4.4	782	696	639	32.5	2.0	131	
8/19/99 5:32	1424	3201	4129	56	7.0	10.6	4.4	785	700	644	32.4	0.9	134	
8/19/99 9:36	1423	3010	4708	85	5.6	11.2	4.4	757	664	599	32.2	1.1	118	
8/19/99 10:36	1406	2832	4755	97	5.4	10.6	1.0	707	613	546	32.9	0.3	685	
8/19/99 11:36	1408	2824	4726	99	5.4	11.0	2.7	706	613	546	33.1	1.5	134	
8/19/99 12:36	1422	2855	4788	101	5.3	11.2	4.0	712	618	551	33.1	0.4	209	
8/19/99 14:36	1471	2962	4968	107	5.2	11.2	4.2	715	622	554	33.6	0.3	114	
8/19/99 18:36	1523	3068	5064	86	6.9	11.0	4.0	720	627	559	34.1	0.3	108	
8/19/99 19:36	1523	3086	5024	86	6.9	11.0	4.0	719	626	559	34.0	0.3	110	
8/19/99 21:36	1512	3156	4845	80	7.0	11.2	4.2	733	643	580	33.6	0.3	110	
8/19/99 22:36	1501	3191	4711	76	7.0	11.2	4.2	746	656	595	33.5	0.3	112	
8/19/99 23:36	1484	3232	4567	71	7.0	11.0	4.2	757	668	610	33.4	0.3	119	

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index	
	Feed	Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage				Conc
8120199 0:36	1471	<b>3276</b>	<b>4435</b>	<b>68</b>	7.0	10.9	4.2	769	<b>682</b>	<b>625</b>	33.2	0.3	124
8120199 3:36	1429	<b>3373</b>	<b>4131</b>	59	7.0	<b>10.8</b>	4.4	792	709	<b>654</b>	32.9	0.3	135
8/20/99 5:36	1409	3391	3977	57	7.0	<b>10.6</b>	4.4	795	714	<b>681</b>	32.7	0.3	137
8/20/99 6:36	1408	3236	<b>4589</b>	88	5.6	10.8	4.4	<b>768</b>	<b>880</b>	<b>623</b>	32.6	0.3	147
8120199 7:33	1411	3094	<b>4540</b>	63	7.0	<b>11.0</b>	4.4	776	<b>688</b>	<b>626</b>	32.5	0.3	131
8120199 8:33	1411	3276	<b>4378</b>	62	<b>7.0</b>	10.6	4.4	790	707	<b>650</b>	32.3	0.3	125
8120199 13:16	1450	3085	<b>5069</b>	98	5.4	11.4	<b>4.0</b>	738	<b>648</b>	<b>587</b>	33.1	0.2	140
8120199 13:33	1454	3097	<b>5091</b>	99	<b>5.4</b>	<b>11.2</b>	4.0	736	<b>645</b>	<b>585</b>	33.1	0.2	118
8120199 14:16	1457	3090	<b>5007</b>	100	<b>5.4</b>	t1.2	4.0	737	<b>646</b>	<b>584</b>	33.2	0.3	130
8120199 14:33	1457	3098	<b>5087</b>	100	5.4	t1.4	4.0	735	<b>644</b>	<b>584</b>	33.4	0.3	115
8120199 11:33	1424	3023	<b>4715</b>	94	5.4	11.2	4.0	733	<b>644</b>	<b>583</b>	32.8	0.2	148
8120199 16:33	1485	<b>3165</b>	<b>5156</b>	105	5.3	11.2	4.0	730	<b>640</b>	<b>579</b>	34.1	0.2	118
8120199 17:33	1493	3191	<b>5191</b>	106	5.3	11.4	4.0	728	<b>640</b>	<b>579</b>	34.2	0.2	146
8120199 18:33	1497	<b>3196</b>	<b>5191</b>	105	5.3	11.4	4.0	<b>733</b>	<b>644</b>	<b>583</b>	34.3	0.3	116
8120199 20:33	1478	3157	<b>5218</b>	99	5.4	11.4	4.0	741	<b>651</b>	<b>590</b>	34.0	0.3	150
8120199 21:33	1471	<b>3143</b>	<b>5083</b>	96	5.4	11.4	4.2	<b>748</b>	<b>658</b>	<b>597</b>	33.8	0.3	139
8120199 22:33	1466	<b>3139</b>	<b>5048</b>	93	5.5	11.2	4.0	752	<b>662</b>	<b>601</b>	33.6	0.3	121
8120199 23:33	1462	3121	<b>4997</b>	90	5.5	11.4	4.2	<b>758</b>	<b>668</b>	<b>607</b>	33.4	0.3	123
8/21/99 0:33	1452	3107	<b>4959</b>	88	5.6	11.3	4.2	761	<b>672</b>	<b>610</b>	33.2	0.3	128
8/21/99 3:33	1427	3054	<b>4887</b>	a3	5.6	11.2	4.2	768	<b>678</b>	<b>617</b>	33.0	0.3	127
8121199 4:33	1413	<b>3014</b>	<b>4818</b>	81	5.7	11.2	4.2	773	<b>682</b>	<b>621</b>	32.9	0.3	132
8121199 6:33	1401	<b>2996</b>	<b>4807</b>	a4	5.4	t1.4	4.2	775	<b>685</b>	<b>623</b>	32.7	0.3	143
8121199 7:23	1400	<b>2992</b>	<b>4801</b>	85	5.4	11.4	4.2	773	<b>682</b>	<b>621</b>	32.6	0.3	457
8121199 8:23	1391	<b>2979</b>	<b>4766</b>	89	5.2	11.4	4.2	<b>768</b>	<b>677</b>	<b>616</b>	32.7	0.3	118
8121199 10:23	1384	<b>2956</b>	<b>4730</b>	90	5.1	11.2	4.2	764	<b>672</b>	<b>611</b>	32.8	0.3	126
8/21/99 12:23	1392	<b>2980</b>	<b>4753</b>	92	5.2	11.4	4.2	764	<b>674</b>	<b>613</b>	33.1	0.3	131
8121199 14:23	1412	3041	<b>4840</b>	96	5.1	11.4	4.2	756	<b>666</b>	<b>605</b>	33.7	0.3	125
8121199 16:23	1438	3085	<b>4933</b>	103	5.0	11.4	4.2	752	<b>662</b>	<b>601</b>	33.5	0.3	127
8121199 19:23	1439	<b>3120</b>	<b>4905</b>	97	5.1	11.4	4.0	753	<b>684</b>	<b>603</b>	33.2	0.2	124
8/21/99 22:23	1419	3046	<b>4864</b>	92	5.2	11.2	4.2	761	<b>670</b>	<b>610</b>	32.9	0.3	135
8121199 23:23	408	<b>3019</b>	<b>4819</b>	89	5.3	11.2	4.2	766	<b>671</b>	<b>611</b>	32.9	0.2	124
8122199 1:23	392	3005	<b>4744</b>	82	5.4	11.4	4.2	771	<b>681</b>	<b>620</b>	32.8	0.2	132
8122199 5:23	374	<b>2983</b>	<b>4656</b>	79	5.5	11.2	4.2	779	<b>689</b>	<b>628</b>	32.7	0.3	131
8122199 6:23	1385	<b>3005</b>	<b>4682</b>	80	5.5	11.2	4.2	<b>780</b>	<b>690</b>	<b>630</b>	32.7	0.2	128
8123199 8:40	1344	2761	<b>4533</b>	81	5.1	11.0	4.2	792	<b>698</b>	<b>631</b>	30.0	0.2	119
8123199 9:28	1326	2708	<b>4463</b>	79	5.3	11.0	4.2	790	<b>697</b>	<b>629</b>	30.0	0.2	117
8123199 9:29	1326	<b>2708</b>	<b>4457</b>	79	5.2	11.0	4.2	790	<b>697</b>	<b>630</b>	30.0	0.2	117
8123199 10:28	1305	2731	<b>4440</b>	84	4.7	11.2	1.7	782	<b>687</b>	<b>621</b>	30.0	0.2	134
8/23/99 11:29	1277	<b>2703</b>	<b>4399</b>	85	3.7	11.4	4.0	774	<b>675</b>	<b>610</b>	30.3	0.2	131

Time	Feed	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index
		Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage	Conc			
8123199 12:28	1248	2544	4210	58	5.9	11.2	4.0	785	691	624	30.7	0.2	120
8123199 13:29	1233	2486	4246	64	6.6	11.2	4.2	776	681	611	31.0	0.2	117
8123199 14:29	1229	2451	4189	78	6.4	11.2	3.8	756	662	592	31.2	0.2	125
8123199 15: 19	1235	2679	4366	107	3.1	fl.6	4.0	721	623	560	31.3	0.2	118
8124199 8:13	t229	2482	4334	75	5.3	11.4	4.2	774	676	606	30.8	0.2	127
8124199 9: 13	1212	2420	4215	56	6.9	11.4	4.0	779	682	611	30.9	0.2	142
8124199 10:13	1200	2411	4167	57	6.9	11.4	4.0	762	666	599	31.2	0.2	139
8124199 11:13	1198	2447	4105	57	6.9	11.2	3.8	761	666	600	31.4	0.2	145
8124199 12:13	1215	2540	4110	60	6.9	11.2	4.0	769	676	613	31.7	0.2	151
8124199 13:13	1232	2638	4070	61	6.8	11.4	4.0	772	680	621	31.9	0.2	162
8124199 14:13	1263	2513	4233	101	5.5	11.0	4.0	701	607	537	32.2	0.2	179
8124199 15:13	1294	2584	4360	94	5.1	11.2	4.2	713	617	547	32.4	0.2	153
8124199 16:13	1319	2624	4430	95	5.2	11.2	4.2	716	618	548	32.6	0.2	146
8124199 17:13	1332	2651	4475	94	5.3	12.2	4.2	716	620	549	32.8	0.2	150
8124199 18:13	1346	2682	4514	93	5.3	11.4	4.2	720	624	553	32.9	0.2	173
8124199 19:13	1352	2691	4527	91	5.5	11.2	4.2	721	625	554	32.9	0.2	162
8/24/99 20:13	1362	2708	4541	89	5.5	11.2	4.2	725	628	557	32.8	0.2	173
8124199 21: 13	1370	2722	4559	87	5.6	11.2	4.2	727	630	560	32.6	0.2	173
8124199 22: 13	1378	2735	4585	85	5.7	11.2	4.2	732	634	584	32.5	0.2	164
8124199 23:13	1384	2744	4589	84	5.7	11.2	4.2	735	638	567	32.4	0.2	162
8125199 0:13	1383	2744	4585	81	5.8	11.2	4.2	737	640	569	32.3	0.2	157
8125199 1: 13	1380	2731	4578	80	5.8	11.1	4.2	738	641	569	32.2	0.2	150
8125199 2 13	1374	2721	4559	78	5.9	11.2	4.2	740	643	570	32.2	0.2	150
8125199 4 13	1353	2677	4492	77	5.9	11.2	4.2	738	641	569	32.2	0.2	152
8125199 6: 13	1345	2659	4462	76	5.9	11.2	4.2	737	641	569	32.2	0.2	141
8125199 7:32	1348	2655	4476	76	5.9	11.2	4.2	741	644	572	32.1	0.2	136
8/25/99 9:32	1339	2673	4498	81	5.8	11.2	4.2	722	627	556	32.1	0.2	111
8125199 10:32	1339	2668	4497	83	5.7	11.2	4.2	721	625	554	32.0	0.2	111
8125199 11:32	1353	2708	4546	92	5.4	11.2	4.2	713	618	548	32.2	0.2	110
8125199 12:32	1371	2739	4607	100	5.1	11.2	4.2	709	613	543	32.5	0.2	112
8125199 14:32	1391	2779	4665	98	5.2	11.2	4.2	714	618	548	33.0	0.2	113
8125199 15:32	1406	2806	4739	106	5.2	11.2	4.2	715	619	549	33.1	0.2	111
8125199 16:32	1399	2793	4691	to2	5.2	11.2	4.2	716	621	551	33.1	0.2	122
8125199 17:32	1396	2779	4674	99	5.2	11.2	4.2	720	624	554	33.0	0.2	111
8125199 18:32	1404	2792	4682	97	5.3	11.2	4.2	724	627	557	32.9	0.2	129
8125199 19:32	1418	2820	4713	96	5.4	11.2	4.2	726	630	559	32.9	0.2	123
8125199 20:32	1456	2885	4810	96	5.5	11.0	4.2	730	634	563	32.8	0.2	125
8125199 21:32	1585	3129	5184	102	5.5	11.0	4.2	740	643	573	32.7	0.2	129
8/25/99 22:32	1710	3388	5550	108	5.6	11.2	4.4	752	657	585	32.6	0.2	130

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index	
	Feed	Interstage	Conc	TotPerm	RO Feed	TotPerm	Conc	Feed	Interstage				Conc
8125199 23:32	2804	3583	5844	113	5.6	11.2	4.4	761	665	594	32.5	0.2	130
8126199 0:32	1826	3618	5911	113	5.6	11.2	4.4	763	669	596	32.5	0.2	128
8126199 1:32	1812	3592	5875	109	5.7	11.0	4.4	763	669	596	32.4	0.2	219
8126199 2:32	1760	3489	5721	104	5.7	11.0	4.4	763	668	596	32.4	0.2	208
8126199 3:32	1704	3374	5550	100	5.7	11.0	4.4	761	665	594	32.3	0.2	140
8126199 4:32	1639	3245	5356	97	5.7	11.1	4.4	756	660	587	32.2	0.2	142
8126199 5:32	1584	3130	5189	93	5.7	11.2	4.4	753	658	585	32.2	0.2	148
8/26/99 6:32	1550	3063	5079	91	5.7	11.2	4.4	751	653	581	32.1	0.2	151
8126199 7:48	1517	2992	4987	89	5.7	11.2	4.4	753	657	584	32.1	0.2	237
8126199 8:48	1486	2926	4881	89	5.7	11.2	4.2	747	651	579	32.2	0.2	129
8126199 9:48	1462	2876	4797	89	5.7	11.2	4.2	742	646	574	32.3	0.2	130
8126199 10:48	1445	2850	4757	89	5.6	11.2	4.2	740	644	573	32.5	0.2	130
8/26/99 11:48	1436	2828	4731	91	5.5	11.2	4.2	737	641	569	32.7	0.2	131
8/26/99 14:48	1469	2895	4819	99	5.4	11.2	4.2	728	633	563	33.3	0.2	131
8127199 14:33	1398	2718	4457	85	5.6	11.2	4.4	731	637	564	33.4	0.2	151
8/27/99 15:33	1411	2748	4497	86	5.6	12.2	4.4	731	636	565	33.6	0.2	134
8/27/99 17:33	1428	2793	4575	86	5.7	11.2	4.4	731	636	565	34.0	0.2	133
8/27/99 18:33	1440	2806	4578	85	5.8	11.0	4.4	730	636	566	34.0	0.2	130
8127199 20:33	1457	2833	4590	82	5.8	11.0	4.4	741	646	575	33.6	0.2	132
812719921133	1453	2819	4572	80	5.9	11.2	4.4	746	651	580	33.3	0.2	130
8127199 23:33	1440	2783	4519	78	5.9	11.0	4.4	753	659	586	32.9	0.2	134
8/28/99 0:33	1434	2770	4492	76	5.9	11.0	4.4	756	661	589	32.7	0.2	130
8/28/99 1:33	1434	2779	4483	76	5.9	11.0	4.6	758	664	591	32.5	0.2	128
8128199 2:33	1448	2788	4501	76	5.9	11.0	4.4	762	667	595	32.4	0.2	133
8/28/99 4:33	1457	2809	4518	76	5.9	11.0	4.6	767	670	597	32.3	0.2	135
8128199 6:33	1445	2790	4488	75	5.9	11.0	4.6	768	672	599	32.2	0.2	124
8129199 6:22	1401	2708	4298	71	5.9	11.0	4.6	780	687	613	32.4	0.2	121
8128199 12:22	1402	2712	4378	75	5.9	11.0	4.4	756	661	588	33.0	0.2	124
8128199 13:22	1418	2744	4427	76	5.9	11.0	4.4	758	663	590	33.1	0.2	122
8128199 16:22	1459	2846	4562	80	5.9	11.2	4.4	749	657	585	33.9	0.2	130
8128199 17:22	1473	2873	4606	80	5.9	11.2	4.4	752	658	586	33.9	0.2	134
8128199 18:22	1480	2890	4624	80	5.9	11.2	4.4	752	659	586	34.0	0.2	132
8128199 19:22	1478	2882	4611	80	5.9	11.0	4.4	753	660	589	33.9	0.2	135
8128199 20:22	1483	2882	4594	80	5.9	11.0	4.4	757	664	592	33.7	0.2	135
8128199 21:22	1478	2868	4562	78	5.9	11.0	4.6	762	668	596	33.4	0.2	128
8/28/99 23:22	1469	2846	4537	76	5.9	11.0	4.6	768	674	601	33.0	0.2	129
8129199 0:22	1462	2854	4545	76	5.9	11.0	4.6	771	678	606	32.8	0.2	127
8129199 2:22	1441	2801	4444	74	5.9	11.0	4.6	777	683	610	32.6	0.2	136
8129199 7:22	1399	2712	4294	70	5.9	10.8	4.6	783	689	616	32.3	0.2	122

Time'	Feed	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index
		Interstage	Conc	Tot Perm	RO	Feed Tot Perm	Conc	Feed	Interstage	Conc			
8129199 8:22	1389	2695	4263	70	6.0	11.0	4.6	784	689	615	32.2	0.2	121
8/29/99 10:21	1363	2673	4254	80	5.5	11.0	4.6	763	670	599	32.8	0.2	123
8129199 12:21	1354	2686	4237	85	5.2	11.0	4.4	751	657	586	33.3	0.2	123
8129199 14:21	1381	2775	4364	92	5.1	11.2	4.4	745	651	561	33.7	0.2	129
8129199 16:21	1395	2713	4096	61	6.9	11.0	4.4	778	688	618	34.1	0.2	135
8129199 18:21	1395	2783	3967	61	7.0	11.0	4.4	783	697	631	34.4	0.2	142
8129199 20:21	1393	2824	3822	60	7.0	10.4	4.4	789	706	644	34.1	0.2	150
8129199 21:21	1402	2855	3765	60	7.0	10.2	4.4	790	709	648	33.8	0.2	142
8130199 0:2 1	1400	2885	3642	58	7.0	9.8	4.6	799	723	663	33.0	0.2	134
8130199 1:2 1	1398	2885	3607	58	7.0	9.6	4.6	800	725	666	32.9	0.2	134
8130199 2:21	1400	2902	3585	57	7.0	9.6	4.8	802	726	668	32.7	0.2	131
8130199 3:21	1398	2898	3568	57	7.0	9.6	4.8	801	727	668	32.7	0.2	137
8/30/99 4:21	1394	2898	3550	58	7.0	9.3	4.8	803	728	669	32.6	0.2	130
8130199 5:21	1389	2889	3532	57	7.0	9.3	4.8	803	729	671	32.6	0.2	128
8130199 6:21	1395	2894	3532	57	7.0	9.3	4.8	803	728	670	32.5	0.2	139
8130199 7:34	1412	2920	3555	58	7.0	9.3	4.8	802	729	671	32.4	0.2	130
911199 13:08	1590	3100	5643	141	4.6	11.2	4.0	918	809	741	32.9	0.3	126
911199 15:08	1602	3383	5755	205	3.0	10.8	4.2	881	810	738	33.8	0.4	110
911199 17:08	1596	3195	5257	146	3.3	9.1	4.0	603	719	656	34.2	0.5	120
911199 20:08	1547	2898	4897	97	6.9	9.8	4.0	798	711	648	33.9	0.3	120
911199 21:08	1535	2902	4927	113	5.5	9.9	4.0	798	710	646	33.6	0.3	116
911199 22:08	1525	2885	4871	106	5.6	9.8	4.0	798	710	646	33.4	0.3	121
912199 0:08	1502	2837	4797	95	5.9	9.8	4.2	799	712	648	33.0	0.3	115
912199 1:08	1494	2811	4762	90	6.0	9.6	4.2	799	713	649	32.9	0.3	121
9/2/99 2:08	1482	2796	4722	86	6.1	9.8	4.2	801	715	651	32.7	0.3	114
9/2/99 3:08	1466	2763	4682	a5	6.1	9.6	4.2	803	715	651	32.7	0.3	121
9/2/99 4:08	1452	2731	4631	84	6.1	9.6	4.2	800	714	650	32.6	0.3	114
9/2/99 5:08	1434	2699	4576	83	6.0	9.6	4.2	803	715	651	32.5	0.3	119
912199 6:08	1429	2677	4546	a3	6.0	9.6	4.2	800	713	649	32.4	0.3	114
9/2/99 7:08	1429	2690	4546	a4	6.0	9.6	4.2	603	715	650	32.3	0.3	118
912199 7:35	1439	2708	4572	a4	6.0	9.6	4.2	801	715	651	32.2	0.3	112
912199 8:09	1434	2696	4568	a5	6.0	9.6	4.2	803	716	652	32.2	0.3	116
912199 8:35	1432	2632	4290	81	6.0	9.6	4.6	796	705	633	32.2	0.3	115
912199 9:08	1430	2613	4282	82	6.0	9.8	4.6	795	703	632	32.3	0.3	114
912199 9:35	1426	2610	4277	82	6.0	9.6	4.6	795	703	632	32.5	0.3	115
912199 11:08	1421	3382	7729	104	6.1	13.3	2.5	953	861	820	33.0	0.3	114
912199 11:35	1412	3362	7713	104	6.0	13.5	2.5	957	864	823	33.1	0.3	114
912199 12:35	1420	3388	7765	106	6.0	13.5	2.5	958	864	822	33.3	0.3	114
9/2/99 13:35	1436	2269	2876	76	6.0	8.9	9.0	609	474	315	33.2	0.3	112

Time	Conductivity (uS/cm)				Flow (L/min)			Pressure(kPa)			Temp(degC)	Turbidity	Particle Index
	Feed	Interstage	Conc	Tot	Perm	RO Feed	Tot Perm	Conc	Feed	Interstage			
9/2/99 14:35	1452	2309	2947	78	6.0	8.9	8.8	609	476	320	33.5	0.3	127
918199 8:58	1438	3185	4189	99	5.7	11.4	1.9	782	698	654	31.4	0.2	1339
9/8/99 9:42	1432	2177	2672	67	5.8	7.3	8.8	556	436	286	31.4	0.2	2274
919199 9:54	1451	3000	5040	99	5.0	11.2	4.0	738	643	581	32.2	0.2	160
919199 10:54	2472	3029	5137	111	4.7	11.4	4.0	736	640	577	32.4	0.2	230
919199 11:54	1489	3073	5209	122	4.1	11.2	3.8	733	638	575	32.6	0.2	124
919199 12:54	1499	3153	5322	121	3.6	11.2	3.8	752	656	591	32.8	0.2	121
9/9/99 13:54	1519	3220	5419	121	3.3	11.4	4.0	770	674	608	33.0	0.2	120
919199 14:54	1537	3007	5084	120	4.9	11.2	4.2	740	643	575	33.1	0.2	132
919199 15:54	1545	3056	5129	108	5.1	11.2	4.2	743	645	576	33.3	0.2	156
9/9/99 16:54	1548	3064	5150	107	5.1	11.2	4.2	745	647	579	33.3	0.2	126
919199 17:54	1559	3082	5167	106	5.1	11.2	4.2	745	647	578	33.4	0.2	252
919199 18:54	1573	3095	5165	85	6.8	11.2	4.2	752	655	586	33.3	0.2	130
919199 19:54	1581	3149	5157	86	6.9	11.4	4.2	746	647	581	33.2	0.2	124
919199 20:54	1584	3253	4944	82	6.9	11.2	4.2	758	665	602	33.0	0.2	132
919199 21:54	1580	3371	4710	76	6.9	21.2	4.2	778	687	627	32.9	0.2	146
919199 22:54	1574	3486	4450	70	6.9	10.8	4.4	786	699	644	32.7	0.2	137
919199 23:54	1563	3601	4234	65	6.9	10.4	4.4	792	708	655	32.6	0.2	129
9/10/99 0:54	1552	3687	4067	61	6.9	10.2	4.4	794	714	662	32.5	0.2	130
9110199 1:54	1547	3744	3970	60	6.9	10.0	4.4	799	720	869	32.3	0.2	127
9110199 2:54	1541	3770	3899	60	6.9	9.8	4.6	800	723	672	32.2	0.2	128
9110199 3:54	1530	3770	3838	59	6.9	9.8	4.4	801	725	674	32.1	0.2	126
9/10/99 4:54	1519	3255	4956	87	5.6	11.0	4.4	772	676	614	32.0	0.2	129
9110199 5:54	1509	3139	4969	87	5.6	11.0	4.4	782	667	601	31.9	0.2	140
9/10/99 6:54	1511	3120	4987	86	5.6	11.0	4.2	781	666	600	31.8	0.2	121
9110199 7:31	1510	3115	4992	85	5.6	11.0	4.4	764	668	601	31.7	0.2	117
9110199 7:54	1509	3123	4983	85	5.5	11.0	4.4	766	670	603	31.7	0.2	121
9110199 8:54	1510	3131	5036	92	5.3	11.2	4.2	752	657	591	31.7	0.2	118
9/10/99 9:58	1509	3140	5032	99	5.0	11.2	4.2	737	643	578	32.2	0.2	117
9110199 10:58	1503	2992	5048	110	5.0	11.2	4.2	731	635	565	33.3	2.0	109
9/10/99 11:58	1523	3069	5142	98	5.6	11.2	4.2	726	630	565	32.6	0.2	146
9110199 12:58	1534	3100	5173	103	5.5	11.0	4.0	716	622	558	32.7	0.2	124
9110199 13:58	1541	3117	5248	111	5.2	11.2	4.2	709	615	550	32.8	0.2	214
9110199 14:58	1594	3211	5362	109	5.5	11.2	4.2	718	623	559	33.1	0.2	135
9110199 15:57	1637	3304	5508	122	5.1	11.2	4.2	711	617	553	33.2	0.2	127
9/10/99 16:57	1656	3357	5440	99	6.8	11.0	4.0	726	633	570	33.4	0.2	213
9110199 17:58	1663	3451	5268	98	6.8	11.0	4.0	732	643	582	33.5	0.2	159
9110199 18:58	1659	3615	4978	91	6.8	10.8	4.0	752	665	610	33.6	0.2	164
9110199 19:58	1662	3867	4718	83	6.8	10.8	4.2	788	702	650	33.5	0.2	150



Time	Conductivity (uS/cm)			Flow (L/min)			Pressure(kPa)			Temp (degC)	Turbidity	Particle Index	
	Feed	Interstage	Conc	Tot Perm	RO Feed	TotPerm	Conc	Feed	Interstage				Conc
9110199 20:57	1661	4094	4525	76	6.6	10.6	4.4	619	736	665	33.3	0.2	162
9110199 21:58	1657	4245	4360	70	6.8	10.4	4.6	843	763	712	33.1	0.2	162
9/10/99 22:57	1652	4364	4186	66	6.8	10.6	4.6	872	793	742	32.9	0.2	169
9111199 0:57	1631	4427	3838	59	6.8	10.2	4.8	941	865	811	32.5	0.2	156
9111199 1:57	1627	4388	3736	59	6.0	10.0	5.0	963	868	834	32.4	0.2	159
9/11/99 3:57	1619	4337	3652	59	6.8	10.0	5.0	985	910	855	32.2	0.2	180
9111199 5:57	1620	4316	3639	59	6.8	10.0	5.2	991	916	660	32.1	0.2	195
9111199 7:29	1625	432t	3661	61	6.8	10.0	5.2	998	923	667	32.0	0.2	165
9111199 7:58	1623	3437	5520	113	4.6	11.0	4.2	748	654	591	31.7	0.2	163
9111199 8:57	1622	3265	5401	101	5.3	11.0	4.2	741	646	580	31.8	0.2	158
9111199 9:29	1620	3317	5595	108	5.2	11.3	4.0	742	648	585	31.9	0.2	146
9111199 9:57	1618	3331	5556	108	4.9	11.4	4.0	736	645	581	32.1	0.2	150
9111199 10:29	1614	3317	5565	109	5.0	11.4	4.0	737	642	579	32.1	0.2	164
9/11/99 10:58	1611	3329	5557	109	5.0	11.4	4.0	740	646	584	32.2	0.2	143
9/11/99 11:29	1606	3304	5566	110	4.9	11.4	4.0	737	643	579	32.3	0.2	143
9111199 11:57	2605	3304	5529	108	5.2	11.4	4.0	737	644	580	32.3	0.2	144
9111199 12:29	1609	3278	5490	103	5.0	11.4	4.0	743	650	586	32.4	0.2	140
9111199 12:57	1614	3278	5557	110	5.6	11.4	4.0	740	646	583	32.5	0.2	146
9/11/99 13:29	1619	3267	5534	108	5.8	11.2	4.0	743	651	587	32.5	0.2	136
9111199 13:57	1626	3389	5689	122	4.8	11.6	4.0	727	633	572	32.6	0.2	142
9111199 14:29	1627	3420	5533	109	4.4	11.4	4.0	731	633	573	32.8	0.2	140
9/11/99 15:29	1639	3429	5569	110	4.5	11.4	4.0	729	627	568	33.1	0.2	136
9/11/99 16:29	1648	3362	5569	96	5.2	11.4	4.0	740	647	585	33.3	0.2	179
9111199 17:29	1655	3394	5612	93	6.8	11.4	4.0	740	648	586	33.5	0.2	157
9111199 18:29	1659	3508	5462	93	6.8	11.2	4.0	746	656	597	33.6	0.2	146
9111199 19:29	1656	3716	5070	88	6.8	11.2	4.2	774	688	634	33.6	0.2	145
9111/99 20:29	1660	3952	4780	82	6.8	11.0	4.2	806	720	673	33.4	0.2	146
9/11/99 21:29	1659	4165	4617	77	6.8	11.0	4.4	834	752	704	33.2	0.2	151
9111199 22:29	1656	4369	4472	72	6.8	10.8	4.4	864	764	735	32.9	0.2	143
9111199 23:29	1662	4547	4331	68	6.8	10.8	4.6	899	821	771	32.7	0.2	142
9112199 0:29	1662	4631	4195	65	6.8	10.6	4.6	938	663	812	32.6	0.2	140
9112199 1:29	1659	4610	4089	63	6.8	10.8	4.8	962	886	635	32.4	0.2	141
9/12/99 2:29	1659	4591	4031	64	6.9	10.6	4.8	972	899	647	32.3	0.2	137
9112199 3:29	1653	4565	3992	64	6.8	10.4	4.8	981	906	854	32.3	0.2	138
9112199 4:29	1649	4546	3969	63	6.6	10.4	5.0	985	911	656	32.2	0.2	134
9112199 5:29	1645	4529	3948	64	6.8	10.4	5.0	987	913	660	32.1	0.2	135
9112199 6:29	1656	4798	3951	90	5.1	10.6	4.8	959	864	832	32.0	0.2	161
9112199 8:06	1662	3459	5696	112	4.9	11.4	4.0	754	660	597	31.7	0.2	124
9112199 9:06	1660	3397	5626	103	5.3	11.2	4.0	761	667	602	31.9	0.2	120

Time'	Conductivity (uS/cm)				Flow (L/min)			Pressure (kPa)			Turbidity	Particle tndex	
	Feed	Interstage	Cortc	Tot Perm	RO	Feed	Jot Perm	Conc	Feed	Interstage			Conc Jemp (degC)
9/12/99 10:06	1658	<b>3424</b>	<b>5743</b>	115	4.7	11.2	4.0	747	652	591	32.1	0.2	117
9/12/99 11:06	1657	<b>3372</b>	<b>5724</b>	118	5.7	11.2	4.0	747	654	591	32.3	0.2	117
9/12/99 12:06	1664	3423	<b>5689</b>	113	5.3	11.4	4.2	748	655	592	32.4	0.2	115
9112199 13:06	1676	3477	5591	103	4.2	11.4	4.2	752	655	594	32.6	0.2	118
9112199 14:06	1684	3695	5962	155	3.3	11.4	4.0	716	623	564	32.8	0.2	117
9/12/99 15:06	1706	3413	<b>5844</b>	124	6.4	11.2	4.0	746	655	590	33.0	0.2	114
9/12/99 16:06	1722	3445	5713	115	6.4	11.2	4.0	745	651	587	33.2	0.2	123
9/12/99 17:06	1738	3574	<b>6036</b>	140	4.8	11.4	4.0	726	634	573	33.4	0.2	137
9112199 18:06	1751	3530	<b>5853</b>	104	5.6	11.2	4.0	747	653	591	33.6	0.2	121
9112199 19:06	1756	<b>3530</b>	<b>5822</b>	106	6.2	11.2	4.0	749	657	594	33.6	0.2	122
9/12/99 20:06	1760	3753	<b>6030</b>	247	4.7	11.4	4.0	716	621	562	33.3	0.2	119
9/12/99 21:06	1761	<b>3543</b>	<b>5956</b>	97	6.9	11.2	4.0	756	662	600	33.2	0.2	130
9112199 22:06	1755	3557	<b>5939</b>	96	6.9	11.2	4.0	753	659	597	33.0	0.2	128
9112199 23:06	1751	<b>3566</b>	<b>5095</b>	93	6.9	11.2	4.2	757	664	602	32.8	0.2	133
9113199 0:06	1745	<b>3587</b>	<b>5833</b>	89	6.9	11.2	4.2	764	671	611	32.6	0.2	130
9113199 1:06	1738	<b>3606</b>	<b>5749</b>	86	6.9	11.2	4.2	769	677	617	32.5	0.2	134
9/13/99 2:06	1735	3632	5661	84	6.9	11.2	4.2	778	684	626	32.4	0.2	130
9113199 3:06	1731	<b>3645</b>	<b>5573</b>	83	6.9	11.2	4.2	779	688	630	32.3	0.2	133
9/13/99 4:06	1725	<b>3658</b>	<b>5502</b>	82	6.9	11.0	4.2	783	692	635	32.2	0.2	133
9113199 5:06	1722	<b>3672</b>	<b>5445</b>	82	6.9	11.0	4.2	788	697	640	32.1	0.2	133
9113199 6:06	1714	<b>3694</b>	<b>5388</b>	81	6.9	11.0	4.2	794	703	646	32.0	0.2	134
9113199 7:06	1704	3699	5305	79	6.9	11.0	4.2	798	707	651	31.9	0.2	135
9/13/99 7:25	1705	<b>3705</b>	<b>5270</b>	78	6.9	11.0	1.3	803	711	655	31.9	0.2	153
9113199 8:25	1691	3721	5194	76	6.9	11.0	4.2	808	717	662	31.8	0.2	132
9113199 9:25	1681	<b>3767</b>	<b>5089</b>	75	6.9	11.0	4.2	813	722	669	32.0	0.2	124
9113199 10:25	1679	3472	<b>5669</b>	117	5.0	11.3	4.0	752	649	592	32.0	0.2	123
9113199 11:25	1687	3401	<b>5666</b>	92	5.9	11.2	4.2	764	669	606	32.3	0.2	118
9113199 12:25	1704	<b>3486</b>	<b>5724</b>	99	3.9	11.6	4.2	753	657	596	32.6	0.2	115
9113199 13:25	1713	3384	<b>6062</b>	151	6.1	11.2	4.0	736	644	581	32.8	0.2	112
9/13/99 14:18	1724	3393	<b>6252</b>	149	6.2	11.2	4.0	740	648	584	32.9	0.2	111
9113199 15:18	1754	3478	<b>5995</b>	124	6.4	11.2	4.0	756	662	599	33.0	0.2	111
9113199 16:18	1779	3649	<b>5969</b>	112	3.3	11.4	4.0	746	643	581	33.1	0.2	111
9113199 17:18	1797	<b>3928</b>	<b>6537</b>	193	6.0	11.2	4.0	727	634	572	33.2	0.2	107
9113199 18:18	1810	3632	<b>6036</b>	102	4.0	11.2	4.2	768	673	610	33.0	0.2	126
9113199 19:18	1821	3830	<b>6661</b>	181	6.2	11.2	4.0	742	651	586	32.9	0.2	105
9113199 21:18	2829	<b>3866</b>	<b>6439</b>	167	5.6	11.4	4.0	742	649	585	32.6	0.2	106
9113199 23:18	1825	3713	<b>6050</b>	109	4.4	11.2	4.2	769	668	606	32.4	0.2	111
9114199 1:18	1816	3758	<b>6062</b>	118	4.3	11.2	4.2	761	662	599	32.2	0.2	117
9114199 3:18	1795	3651	<b>5930</b>	103	4.3	11.2	4.2	773	673	610	32.1	0.2	118

Time'	Feed	Conductivity (uS/cm)			Flow (L/min)			Pressure(kPa)			Temp (degC)	Turbidity	Particle Index
		Interstage	Conc	Tot	Perm RO	Feed	Tot	Perm	Conc	Feed			
9114199 5:18	1782	3597	5895	99	3.8	11.2	4.2	782	682	817	31.9	0.2	114
9114199 6:18	1775	3561	5892	95	4.4	11.2	4.2	765	688	623	31.9	0.2	112
9114199 7:27	1777	3535	5895	91	5.5	11.2	4.2	800	703	636	31.8	0.2	113
9114199 8:17	1779	3592	5899	98	4.6	11.2	4.2	789	687	622	31.7	0.2	112
91141998118	1779	3592	5899	98	4.6	11.2	4.2	789	687	622	31.7	0.2	111
9114199 8:27	1779	3610	6089	134	4.4	11.2	4.2	766	669	603	31.7	0.2	114
91141999.17	1779	3588	6014	116	4.8	11.4	4.2	789	692	627	31.8	0.2	110
9114199 9:18	1779	3588	6014	116	4.8	11.4	4.2	789	692	627	31.8	0.2	110
9114199 9:27	1779	3552	6071	120	4.8	11.2	4.2	784	689	622	31.8	0.2	106
9114199 10:17	1784	3091	4291	130	6.9	4.6	3.1	373	337	303	31.9	0.2	98
9114199 10:18	1784	3091	4291	130	6.9	4.6	3.1	373	337	303	31.9	0.2	98
9114199 10:27	1783	3095	4300	132	6.9	4.8	2.9	372	335	302	31.9	0.2	99
9114199 11:17	1773	3535	5846	92	6.9	11.2	1.7	784	689	623	32.1	0.2	452
9114199 11:18	1773	3535	5846	92	6.9	11.2	1.7	784	689	623	32.1	0.2	452
9114199 11:27	1773	3543	5849	92	6.9	11.2	2.7	788	692	626	32.2	0.2	120
9114199 12:17	1782	4716	6344	433	2.4	4.8	2.9	369	332	298	32.2	0.2	100
9114199 12:18	1782	4716	6344	433	2.4	4.8	2.9	389	332	298	32.2	0.2	100
9/14/99 12:27	1783	4707	6371	433	2.4	4.6	2.9	370	333	300	32.2	0.2	100
9114199 13: 17	1789	4467	6023	374	2.4	3.7	2.9	372	335	302	32.4	0.2	133
9114199 13:18	1789	4467	6023	374	2.4	3.7	2.9	372	335	302	32.4	0.2	133
9/14/99 13:27	1783	3557	6046	115	5.1	11.4	4.0	759	664	597	32.5	0.2	140
9/16/99 15:03	1032	1835	3228	58	2.4	12.7	3.4	707	598	528	30.1	0.2	229
9116199 16:03	1935	3788	6635	222	6.1	11.0	4.4	752	661	586	31.5	0.2	185
9116199 17:03	2014	3814	6382	180	6.1	10.8	4.3	762	668	596	32.4	0.2	119
9/16/99 18:03	2014	3823	6839	220	5.9	10.8	4.4	753	650	587	32.7	0.2	106
9116199 20:03	1967	4434	6134	256	2.6	11.2	4.4	730	632	564	32.4	0.2	124
9/16/99 21:03	1936	4444	6818	308	3.1	11.2	4.2	732	636	567	32.1	0.2	117
9116199 22:03	1908	3623	6370	163	6.2	11.0	4.4	788	672	600	31.8	0.2	108
9117199 1:03	1846	3966	6368	218	5.5	12.2	4.2	735	637	568	31.3	0.2	108
9/17/99 2:03	1827	3555	5718	101	3.1	11.2	4.4	766	658	589	31.3	0.2	111
9117199 3:03	1808	3419	6141	156	6.3	11.0	4.4	758	663	591	31.2	0.2	134
9/17/99 6:03	1770	3734	5955	174	5.2	11.2	4.4	735	636	567	30.9	0.2	111
9/17/99 8:43	1759	3397	5495	90	4.3	11.2	4.6	780	679	606	30.8	0.2	549
9117199 10:03	1753	3346	5827	128	6.4	11.0	4.4	762	667	594	31.2	0.2	121
9117199 10:43	1757	3463	5525	100	3.6	12.4	1.7	752	648	578	31.5	0.2	104
9117199 11:43	1756	3332	5921	149	6.4	11.0	4.4	740	645	575	31.7	0.2	103
9/17/99 12:03	1760	3388	5445	106	6.5	11.0	4.4	754	659	587	31.8	0.2	104
9117199 13:03	1775	3620	5560	131	3.1	11.2	4.2	720	621	553	32.1	0.2	111
9117199 13:43	1796	3612	6075	178	6.2	11.0	4.2	724	632	562	32.1	0.2	102

Time	Conductivity (uS/cm)		Flow (L/min)		Pressure (kPa)		Temp (degC)	Turbidity	Particle Index				
	Feed	Interstage	Tot Perm	RO Feed	Feed	Interstage				Conc			
9/17/99 14:03	1799	3452	5859	131	6.4	11.2	4.4	748	654	583	32.2	0.2	104
9/17/99 14:43	1801	3639	5675	129	3.1	11.4	4.3	722	622	556	32.4	0.2	103
9/17/99 17:43	1810	3459	6113	143	6.4	11.2	4.2	733	642	572	32.8	0.2	103
9/17/99 18:43	1813	3677	5731	126	3.6	11.2	4.4	716	618	552	32.8	0.2	104
9/17/99 20:43	1809	3494	5975	139	6.3	11.0	4.4	731	639	570	32.4	0.2	104
9/17/99 21:43	1807	3516	5765	115	5.9	11.0	4.4	742	647	578	32.2	0.2	106
9/17/99 22:43	1799	3526	5740	117	5.2	11.2	4.4	742	646	576	32.0	0.2	106
9/17/99 23:43	1792	3499	5674	106	5.5	11.0	4.4	751	654	584	31.8	0.2	110
9/18/99 0:43	1782	3486	5657	109	5.3	11.0	4.4	749	653	583	31.7	0.2	106
9/18/99 1:43	1775	3490	5660	109	5.2	11.0	4.4	752	654	584	31.6	0.2	107
9/18/99 2:43	1772	3486	5665	107	5.5	11.0	4.4	753	657	586	31.5	0.2	119
9/18/99 6:43	1750	3423	5569	96	5.7	11.0	4.6	774	676	603	31.1	0.2	103
9/17/99 7:43	1765	3650	5918	171	5.8	11.2	4.4	741	642	572	30.7	0.2	108
9/18/99 8:36	1727	3378	5529	99	5.6	10.8	4.4	768	669	597	31.1	0.2	101
9/18/99 9:36	1719	3365	5485	99	5.5	10.8	4.4	762	665	594	31.2	0.2	103
9/18/99 10:36	1731	3383	5511	102	5.5	10.8	4.4	756	659	589	31.5	0.2	101
9/18/99 11:36	1743	3441	5529	109	5.2	10.8	4.4	748	651	581	31.8	0.2	101
9/18/99 12:36	1758	3468	5595	114	5.3	10.8	4.4	742	646	576	32.1	0.2	102
9/18/99 13:36	1787	3530	5675	119	5.0	10.8	4.4	740	644	575	32.2	0.2	101
9/18/99 16:36	1819	3579	5806	119	5.4	10.8	4.4	737	641	573	32.9	0.2	115
9/18/99 17:36	1819	3640	5882	136	5.1	11.0	4.4	717	621	554	33.0	0.2	105
9/18/99 18:36	1819	3678	5735	120	4.7	11.0	4.4	720	623	557	33.1	0.2	108
9/18/99 19:36	1817	3619	5898	129	5.5	10.8	4.4	724	633	565	32.9	0.2	110
9/18/99 20:36	1804	3579	5835	117	5.6	10.6	4.4	735	639	570	32.6	0.2	108
9/18/99 21:36	1790	3553	5718	112	5.1	10.8	4.4	737	642	573	32.3	0.2	105
9/18/99 22:36	1783	3516	5657	105	5.3	10.8	4.4	746	649	580	32.0	0.2	137
9/18/99 23:36	1780	3499	5643	102	5.4	10.8	4.4	753	657	586	31.8	0.2	104
9/19/99 0:36	1787	3508	5644	100	5.5	10.8	4.4	759	663	592	31.6	0.2	103
9/19/99 1:36	1786	3516	5665	100	5.5	10.8	4.4	763	666	596	31.5	0.2	104
9/19/99 2:36	1779	3496	5619	98	5.5	10.6	4.4	766	668	597	31.4	0.2	105
9/19/99 3:36	1765	3463	5586	96	5.6	10.6	4.6	769	671	600	31.2	0.2	101
9/19/99 5:36	1741	3397	5471	90	5.7	10.6	4.5	774	677	605	31.0	0.2	101
9/19/99 6:36	1735	3383	5440	89	5.7	10.8	4.6	775	679	606	30.9	0.2	101
9/19/99 7:43	1733	3375	5436	87	5.8	10.6	4.6	782	684	611	30.7	0.2	107
9/19/99 8:43	1736	3375	5428	87	5.8	10.6	4.6	777	679	607	30.8	0.2	102
9/19/99 9:43	1743	3400	5470	88	5.8	10.8	4.6	780	682	610	31.1	0.2	103
9/19/99 10:43	1743	3397	5454	88	5.9	10.8	4.6	773	677	605	31.4	0.2	103
9/19/99 11:43	1735	3379	5415	90	5.9	11.0	4.4	764	668	597	31.6	0.2	115
9/19/99 13:43	1745	3402	5458	95	5.8	10.9	4.4	757	661	590	32.1	0.2	105

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp(degC)	Turbidity	Particle	Index
	Feed	Interstage	Conc	TotPerm	RO Feed	Tot Perm	Conc	Feed	Interstage				
9/19/99 15:43	1784	3494	5590	103	5.7	11.0	4.4	749	653	584	32.7	0.2	108
9119199 16:43	1788	3462	5467	92	6.8	11.0	4.4	753	659	591	32.9	0.2	111
9119199 17:43	1788	3481	5431	91	6.8	11.2	4.4	748	654	586	33.2	0.2	217
9119199 18:43	1782	3482	5386	90	6.8	11.0	4.4	747	655	587	33.3	0.2	117
9119199 19:43	1777	3491	5290	89	6.8	11.0	4.2	752	659	591	33.1	0.2	115
9119199 20:43	1769	3509	5199	86	6.8	11.0	4.4	764	672	605	32.8	0.2	116
9119199 21:43	1758	3534	5074	82	6.8	10.8	4.4	773	681	616	32.5	0.2	116
9/19/99 22:43	1753	3548	4969	79	6.8	10.8	4.4	783	691	627	32.2	0.2	111
9119199 23:43	1753	3570	4894	77	6.8	10.8	4.6	793	701	638	32.0	0.2	114
9/20/99 1:43	1750	3610	4824	74	6.8	10.8	4.6	808	716	654	31.6	0.2	118
9120199 2:43	1748	3627	4820	73	6.8	10.8	4.6	810	719	657	31.5	0.2	110
9120199 4:43	1738	3619	4780	71	6.8	10.8	4.6	815	724	662	31.3	0.2	122
9/20/99 5:43	1732	3685	5088	84	5.7	10.8	4.6	800	709	647	31.2	0.2	116
9120199 6:43	1728	3583	5299	85	5.7	11.0	4.6	788	694	629	31.1	0.2	107
9120199 8:00	1738	3680	5477	86	5.8	11.8	4.4	883	742	679	31.0	0.2	577
9121199 9:11	1741	3694	5481	83	5.7	11.0	4.4	832	740	678	30.9	0.2	104
9121199 10:11	1730	3677	5454	84	5.7	11.0	4.4	824	733	672	32.2	0.2	104
9121199 11:11	1724	3663	5441	85	5.6	11.2	4.4	819	728	667	31.4	0.2	104
9121199 12:11	1722	3375	5644	110	6.2	10.8	4.6	792	701	633	31.7	0.2	105
9121199 13:11	1718	3272	4692	93	6.6	12.7	4.4	879	729	652	32.4	0.2	282
9121199 14:11	1754	3313	5908	111	6.4	11.0	4.4	779	683	611	32.1	0.2	111
9/21/99 15:07	2790	3973	5887	140	2.8	11.2	4.2	738	640	572	32.4	0.2	218
9121199 16:07	1820	3984	5970	137	2.9	11.2	4.4	745	646	577	32.7	0.2	105
9/21/99 17:07	2829	3948	5907	131	2.9	11.2	4.4	743	644	576	32.9	0.2	103
9/21/99 19:07	1844	3553	5811	92	6.9	11.0	4.4	773	676	606	33.0	0.2	115
9121199 20:07	1857	3593	5856	94	6.9	11.0	4.4	777	678	608	32.9	0.2	112
9/21/99 22:07	1854	3651	5570	89	6.9	11.0	4.4	790	693	626	32.5	0.2	109
9121199 23:07	1846	3744	5107	83	6.9	10.8	4.4	810	715	652	32.3	0.2	108
9122199 0:07	1835	3867	4746	78	6.9	10.6	4.6	832	739	679	32.1	0.2	115
9122199 3:07	1807	4009	4376	71	6.9	10.6	4.8	865	775	717	31.8	0.2	114
9122199 5:07	1787	3974	4345	70	6.9	10.4	4.8	870	779	721	31.4	0.2	111
9122199 6:07	1771	3938	4327	69	6.9	10.6	4.8	876	786	727	31.1	0.2	107
9122199 8:07	47	-1	695	1	5.1	0.0	0.0	8					
9122199 14:11	1760	3376	4291	97	5.1	9.8	4.2	711	622	558	30.7	0.2	191
9122199 15:12	1777	3464	5391	106	5.5	11.2	4.4	787	688	617	30.9	0.2	134
91231997146	1718	3734	7421	91	5.8	22.5	3.3	933	836	781	29.6	0.2	102
9123199 8:46	1708	3685	7425	94	5.7	12.7	3.3	913	816	761	29.7	0.2	101
9123199 9:46	1698	3664	7409	95	5.7	12.9	0.4	906	808	753	30.0	0.2	100
9123199 10:46	5693	3686	7287	92	3.8	12.9	3.1	897	796	743	30.3	0.2	115

Time	Conductivity (uS/cm)				Flow (L/min)			Pressure (kPa)			Temp. (degC)	Turbidity	Particle	Index
	Feed	Interstage	Conc	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage	Conc				
9123199 11:46	1697	3557	8274	137	6.3	12.7	3.1	879	787	731	30.6	1.5	99	
9/23/99 12:46	1710	3686	7270	91	5.7	12.7	3.1	896	803	749	30.9	0.3	97	
9/23/99 13:46	1728	3765	7438	95	2.8	12.9	3.1	877	774	722	31.2	0.3	101	
9123199 14:46	1743	4482	8689	205	2.8	12.7	2.9	839	744	692	31.4	0.3	101	
9123199 15:46	1764	3713	8811	162	6.3	12.7	3.1	866	779	722	31.7	0.3		
9/23/99 16:46	1776	3929	7600	112	2.9	12.9	3.1	857	751	701	32.0	0.3		
9123199 17:46	1778	4298	8468	176	5.5	12.7	2.9	829	734	684	32.1	0.3	101	
9/23/99 18:46	1779	3773	8477	135	6.3	12.7	3.1	868	776	723	32.2	0.3	100	
9123199 19:46	1791	3864	7572	96	6.1	12.5	3.1	884	790	737	32.1	0.3	99	
9123199 20:46	1793	3895	7610	92	5.6	12.7	3.1	893	799	746	31.8	1.6	98	
9123199 21:46	1791	3877	7607	92	5.9	12.5	3.1	899	804	750	31.5	0.3	98	
9123199 23:46	1774	3770	7981	116	6.3	12.7	3.1	898	806	751	30.8	0.3	99	
9124199 0:46	1765	4046	7821	129	4.8	12.7	3.1	861	765	713	30.6	0.3	101	
9124199 1:46	1758	3948	7482	107	4.2	12.7	3.1	885	785	734	30.4	2.0	100	
9124199 2:46	1744	3796	7438	99	5.2	12.7	3.4	909	813	758	30.3	2.0	97	
9/24/99 3:46	1725	3769	7499	108	4.9	12.7	3.1	901	803	749	30.2	0.7	98	
9124199 4:46	1707	3716	7437	107	5.3	12.7	3.2	903	806	751	30.1	2.0		
9124199 5:46	1690	3672	7316	103	5.1	12.7	3.4	906	809	754	30.1	2.0	98	
9124199 6:46	1679	3628	7284	100	5.3	12.7	3.4	912	819	763	30.0	0.6	97	
9124199 9:40	1675	3632	7308	102	5.0	12.7	3.4	907	810	754	30.2	2.0	97	
9124199 11:40	1682	3705	7395	113	4.7	12.9	2.9	866	769	717	30.8	0.4	101	
9124199 13:40	1730	3713	7449	102	6.5	12.7	3.2	891	797	743	31.4	2.0	96	
9124199 14:40	1746	4045	7609	139	4.2	12.9	3.2	836	739	688	31.7	0.5	103	
9124199 15:40	1747	3803	7541	95	5.5	12.7	3.2	889	794	740	32.1	0.4	96	
9124199 16:40	1749	3783	7683	119	6.3	22.7	3.2	869	778	723	32.3	0.4	101	
9124199 19:40	1739	3783	7549	97	6.1	12.7	3.2	873	780	727	32.4	2.0	99	
9124199 20:40	1735	3788	7649	111	5.4	12.7	3.2	864	770	718	32.2	2.0	100	
9124199 21:40	1741	3814	7620	111	5.2	12.7	3.2	868	773	721	31.9	2.0	98	
9/24/99 22:40	1737	3792	7583	108	5.2	12.7	3.1	878	783	730	31.6	0.6	101	
9124199 23:40	1730	3783	7551	106	5.4	12.9	3.4	886	793	739	31.3	2.0	99	
9125199 0:40	1727	3255	4917	134	4.8	5.0	2.1	381	351	328	31.0	0.4	95	
9125199 1:40	1724	3490	4917	157	2.5	5.2	2.1	378	347	324	30.8	0.4	94	
9125199 3:40	1704	3439	6807	289	6.4	5.0	1.9	379	348	324	30.7	1.0	94	
9125199 4:40	1690	3165	5269	180	6.7	5.0	1.9	380	349	326	30.6	1.5	94	
9125199 5:40	1678	3175	4860	131	4.6	5.0	2.1	381	351	327	30.6	0.5	94	
9125199 6:40	1683	3714	7485	113	5.4	12.7	3.2	873	777	723	30.7	0.9	230	
9125199 7:40	1687	3698	7448	109	5.2	12.7	3.2	883	787	733	30.7	1.3	110	
9125199 7:48	1679	10004	10019	1009	1.8	14.6	3.6	1114	1022	958	30.9	0.4	108	
9125199 8:48	1678	3690	7455	104	5.4	12.7	3.2	884	789	736	30.8	0.5	98	

Time	Conductivity (uS/cm)		Flow (L/min)		Pressure (kPa)		Temp (degC)	Turbidity	Particle Index				
	Feed	Interstage	Tot Perm	RO Feed	Feed	Interstage				Conc			
9/25/99 9:48	1674	3675	7442	106	5.3	12.7	3.2	878	783	730	31.1	1.1	97
9/25/99 10:48	1670	3672	7424	108	5.2	12.7	3.2	876	780	727	31.3	0.5	108
9/25/99 11:48	1675	3690	7446	110	5.3	12.7	3.2	868	772	720	31.5	0.4	97
9/25/99 12:48	1696	3721	7535	115	5.1	12.9	3.2	866	771	720	31.7	1.2	97
9/25/99 13:48	1712	3765	7586	118	5.1	12.7	3.2	862	768	717	32.0	0.5	97
9/25/99 14:48	1717	3832	7637	120	5.1	12.9	3.2	857	763	712	32.3	0.8	96
9/25/99 16:48	1723	3743	7678	111	6.4	12.7	3.2	858	767	716	32.7	1.0	95
9/25/99 18:48	1718	3875	7872	149	6.0	12.7	2.9	821	737	687	32.7	0.7	95
9/25/99 19:48	1714	3779	7556	96	4.8	12.9	3.2	865	771	720	32.5	0.4	96
9/25/99 20:48	1707	3696	8019	151	6.3	12.7	2.9	842	757	705	32.2	0.4	96
9/25/99 21:48	1695	3777	7451	98	4.2	12.9	3.2	863	766	716	32.0	2.0	96
9/25/99 22:48	1692	3650	7600	130	6.1	12.7	3.2	846	756	704	31.7	1.1	97
9/25/99 23:48	1687	3681	7411	92	5.4	12.9	3.2	883	788	736	31.5	1.1	96
9/26/99 1:48	1631	3253	5373	40	1.5	0.0	0.4	104	136	124	31.0	0.5	147
9/26/99 2:48	1678	251	110	1	5.9	0.0	0.0	24	13	7	27.0	0.6	93
9/26/99 3:48	1655	9	1889	1	5.7	0.0	0.0	24	13	7	26.3	0.5	96
9/26/99 4:48	1628	29	14	1	6.2	0.0	0.0	24	13	7	26.1	0.4	92
9/26/99 5:48	1642	29	317	1	6.5	0.0	0.0	23	13	7	25.7	0.4	93
9/26/99 6:48	1630	12	246	1	6.5	0.0	0.0	23	12	7	25.1	0.4	96
9/26/99 9:54	1683	4129	6564	163	6.5	12.3	2.7	835	756	698	31.2	0.3	118
9/26/99 10:54	1684	3627	6473	105	6.6	11.8	2.9	873	779	726	31.3	0.3	101
9/26/99 11:54	1693	3690	7041	90	5.0	11.4	3.1	871	776	725	31.5	0.3	246
9/26/99 12:54	1705	3677	7352	108	6.6	11.4	3.1	866	773	721	31.8	0.3	112
9/26/99 15:54	1731	3850	8018	172	6.2	12.1	2.9	825	736	685	32.5	0.4	98
9/26/99 16:54	1735	4085	7609	152	3.5	12.3	2.9	808	713	665	32.6	0.5	96
9/26/99 17:54	1733	3796	7484	104	6.1	12.5	3.2	857	764	713	32.6	1.6	95
9/26/99 19:54	1719	4015	7529	145	3.3	12.9	3.0	816	720	672	32.3	1.3	95
9/26/99 20:54	1708	3721	7331	104	6.4	12.7	3.2	865	772	721	32.1	2.0	94
9/26/99 21:54	1705	3811	7926	166	6.2	12.5	2.9	835	745	694	31.8	0.8	94
9/26/99 22:54	1696	3713	7366	98	4.9	12.7	3.2	868	770	719	31.6	0.8	96
9/27/99 0:54	1675	3636	7243	92	5.9	12.5	3.2	881	787	735	31.3	0.7	94
9/27/99 1:54	1673	3773	7358	116	4.5	12.7	3.2	847	751	700	31.2	2.0	98
9/27/99 2:54	1675	3756	7547	135	4.8	12.7	2.9	839	745	694	31.1	0.4	94
9/27/99 3:54	1670	3619	7342	103	5.6	12.7	3.2	874	779	727	31.0	0.6	94
9/27/99 5:54	1657	3672	7405	117	5.0	12.7	3.2	859	762	710	31.0	2.0	94
9/27/99 6:54	1660	3649	7327	110	5.1	12.7	3.2	871	776	724	31.0	1.0	94
9/27/99 7:54	1679	3699	7433	111	4.9	12.7	3.2	875	780	728	30.9	2.0	98
9/27/99 8:42	1681	3694	7412	115	5.0	12.7	3.2	871	776	723	30.9	2.0	94
9/27/99 9:42	1679	3668	7403	111	4.9	12.7	3.2	869	775	723	31.2	0.4	191

Time	Conductivity (uS/cm)		Flow (L/min)		Pressure (kPa)		Temp (degC)	Turbidity	Particle Index				
	Feed	Interstage Conc	Tot Perm	RO Feed	Tot Perm	Conc				Feed	Interstage Conc		
9/27/99 10:42	1680	3696	7150	112	5.3	12.5	3.2	886	791	738	31.2	0.5	182
9/27/99 11:42	1701	3729	7618	136	5.0	12.7	2.9	838	741	691	31.6	2.0	95
9/27/99 12:42	1716	3717	7613	121	6.3	12.7	3.2	865	774	722	31.8	2.0	94
9/27/99 13:17	1702	3681	7468	112	6.4	12.5	2.9	868	776	723	31.9	0.4	94
9/27/99 14:00	1719	3850	7643	134	5.6	12.5	3.2	839	746	695	32.1	0.5	97
9/27/99 16:00	1759	3917	7772	127	5.1	12.7	3.0	843	751	699	32.6	2.0	115
9/27/99 17:00	1767	3898	7886	127	5.1	12.7	3.0	847	754	703	32.8	0.9	105
9/27/99 18:00	1759	3881	7933	130	5.5	12.5	3.0	838	746	695	33.0	0.5	97
9/27/99 19:00	1770	3921	7871	133	5.4	12.7	3.0	837	746	695	32.9	2.0	95
9/27/99 20:00	1782	3952	7841	128	5.2	12.7	3.0	845	754	703	32.8	0.6	96
9/27/99 23:00	1777	3930	7777	115	5.4	12.7	3.2	871	777	726	32.0	1.3	94
9/28/99 0:00	1770	3890	7713	110	5.4	12.7	3.2	878	784	733	31.9	1.9	94
9/28/99 1:00	1760	3872	7662	106	5.5	12.7	3.2	880	786	735	31.8	2.0	94
9/28/99 2:00	1748	3854	7594	104	5.5	12.7	3.2	883	788	737	31.7	2.0	95
9/28/99 4:00	1719	3778	7468	101	5.5	12.7	3.2	882	787	735	31.6	2.0	98
9/28/99 5:00	1708	3729	7441	99	5.4	12.7	3.2	883	789	737	31.5	2.0	95
9/28/99 6:00	1702	3716	7392	99	5.4	12.7	3.2	881	786	734	31.5	2.0	94
9/28/99 7:00	1704	3735	7377	99	5.4	12.7	3.2	884	789	737	31.4	2.0	94
9/28/99 9:00	1708	3539	6338	95	5.4	12.3	3.8	849	750	688	31.2	2.0	95
9/28/99 10:00	1696	3522	6358	94	5.4	12.3	3.8	849	751	690	31.3	0.8	95
9/29/99 7:43	1750	3957	5869	65	6.9	12.3	3.6	909	818	770	32.0	1.3	96
9/29/99 8:43	1735	3837	5638	90	5.6	12.5	3.6	865	772	719	31.9	0.8	95
9/29/99 9:43	1717	3770	6487	87	5.6	12.5	3.6	873	779	725	31.5	2.0	94
9/29/99 10:43	1713	3743	6464	84	5.5	12.3	3.8	885	790	736	30.8	2.0	95
9/29/99 11:43	1729	3761	6468	84	5.5	12.3	3.8	906	809	754	30.0	0.6	94
9/29/99 12:43	1750	3793	6521	86	5.3	12.3	3.8	912	816	760	29.6	2.0	94
9/29/99 13:43	1769	3810	6487	84	5.4	11.0	3.8	917	824	768	29.2	2.0	94
9/29/99 14:43	1793	3925	6812	85	5.5	12.3	3.8	939	844	789	29.1	0.5	94
9/29/99 15:43	1797	3965	6843	86	5.4	12.5	3.8	938	842	787	28.9	2.0	94
9/29/99 16:43	1789	3929	6752	84	5.4	12.3	3.8	940	844	790	28.8	2.0	93
9/29/99 20:43	1798	3961	6755	80	5.5	12.3	3.8	949	853	799	28.7	2.0	94
9/29/99 22:43	1808	3987	6729	77	5.6	12.3	3.8	954	858	805	28.8	1.7	92
9/29/99 23:43	1811	4000	6713	76	5.7	12.3	3.8	957	861	808	28.8	2.0	92
9/30/99 0:43	1802	4000	6667	75	5.7	12.3	3.8	956	861	808	28.9	2.0	92
9/30/99 4:43	1808	4120	6015	62	6.9	12.1	3.6	987	896	848	29.3	1.8	95
9/30/99 5:43	1808	4156	5957	62	6.9	12.3	3.8	992	901	854	29.3	2.0	94
9/30/99 9:43	1821	4338	6852	80	5.7	12.5	3.6	977	886	840	29.2	2.0	98
9/30/99 10:43	1807	4285	6773	80	5.7	12.3	3.3	973	882	836	29.2	0.5	101
9/30/99 11:43	1824	4334	6870	82	5.6	12.5	3.6	973	882	837	29.2	2.0	95



Time	Conductivity (uS/cm)		Flow (L/min)		Pressure (kPa)		Temp (degC)	Turbidity	Particle Index				
	Feed	Interstage	Tot Perm	RO Feed	Tot Perm	Conc				Feed	Interstage	Conc	
9/30/99 14:43	1851	4395	6992	85	5.6	12.5	3.6	963	872	828	30.1	2.0	95
9/30/99 16:43	1868	4480	7076	86	5.7	12.5	3.6	955	865	821	30.7	1.2	93
9/30/99 18:43	1859	4467	7023	84	5.7	12.5	3.6	942	854	811	31.1	2.0	94
9/30/99 19:43	1850	4450	6979	82	5.7	12.5	3.6	949	861	817	31.0	2.0	95
9/30/99 20:43	1843	4431	6922	79	5.7	12.5	3.6	956	868	824	30.8	2.0	96
9/30/99 21:43	1840	4418	6860	78	5.8	12.5	3.6	964	875	832	30.5	0.7	94
9/30/99 22:43	1840	4400	6808	76	5.8	12.5	3.8	970	882	838	30.3	2.0	93
9/30/99 23:43	1835	4387	6763	75	5.8	12.5	3.6	976	887	843	30.2	1.7	105
10/1/99 0:43	1830	4382	6710	74	5.8	12.3	3.6	980	891	847	30.1	2.0	94
10/1/99 1:43	1825	4364	6683	74	5.8	12.3	3.6	978	889	846	30.0	2.0	94
10/1/99 2:43	1817	4351	6653	74	5.8	12.3	3.6	984	895	851	30.0	2.0	94
10/1/99 4:43	1791	4308	6578	72	5.8	12.5	3.6	988	899	855	29.9	0.5	93
10/1/99 5:43	1779	4279	6526	71	5.8	12.3	3.6	991	901	857	29.8	2.0	93
10/1/99 6:43	1784	4289	6555	71	5.8	12.3	3.8	992	903	858	29.7	2.0	92
10/1/99 7:42	1800	4337	6640	71	5.8	12.5	3.8	1004	915	870	29.5	2.0	93
10/1/99 8:42	1800	4324	6622	69	5.8	12.3	3.8	1013	923	878	29.2	1.0	93
10/6/99 13:02	1748	2310	2586	232	6.9	3.3	6.6	349	280	180	28.5	0.2	375
10/6/99 14:02	1778	3604	6883	136	6.1	11.4	3.5	825	729	669	30.3	0.1	140
10/6/99 16:02	1784	3700	7745	161	6.1	11.4	3.3	836	747	692	31.2	0.1	88
10/6/99 18:02	1767	3739	7193	122	6.3	11.2	3.1	846	752	698	31.4	0.1	88
10/6/99 19:02	1790	3828	7307	108	3.9	11.4	3.4	847	752	698	31.4	0.1	88
10/6/99 20:02	1808	4046	7382	160	3.5	11.4	3.2	813	717	667	31.1	0.1	92
10/6/99 22:02	1785	3832	7443	154	5.2	11.9	3.2	822	728	676	30.5	0.1	92
10/6/99 23:02	1767	3735	7280	123	5.0	11.8	3.4	851	757	704	30.3	0.1	89
10/7/99 0:02	1748	3711	7176	117	5.2	11.8	3.4	856	761	708	30.1	0.1	123
10/7/99 2:02	1712	3597	6974	95	6.2	12.1	3.4	876	781	726	30.0	0.1	89
10/7/99 3:02	1693	3570	6918	96	6.0	12.1	3.4	871	776	721	29.9	0.1	93
10/7/99 6:02	1639	3451	6712	89	6.3	12.1	3.4	874	778	723	29.6	0.1	88
10/7/99 7:02	1625	3420	6650	87	6.3	12.1	3.4	876	779	724	29.5	0.2	88
10/7/99 8:02	1634	3518	7012	103	5.5	12.5	3.4	876	781	729	29.4	1.3	89
10/7/99 9:00	1634	3544	7012	100	5.7	11.6	1.5	869	776	723	29.4	0.3	88
10/7/99 10:00	1634	3539	7041	102	5.7	11.6	3.2	861	769	717	29.8	0.3	88
10/7/99 11:00	1634	3575	7179	105	5.6	11.6	2.9	858	766	715	30.1	2.0	89
10/7/99 12:00	1643	3593	7227	104	5.8	11.5	3.2	859	768	719	30.6	0.3	103
10/7/99 15:35	1683	3658	7275	111	6.1	11.5	2.9	827	749	700	31.8	0.5	105
10/7/99 16:55	1702	3668	5688	113	6.0	12.3	3.2	824	727	671	32.1	1.5	109
10/7/99 17:55	1702	3708	6281	116	5.9	12.3	3.2	824	729	675	32.2	1.1	92
10/7/99 18:55	1707	3708	6874	109	6.2	12.3	3.4	830	735	682	32.1	1.4	90
10/7/99 19:55	1708	3703	7070	114	5.9	12.1	3.4	830	734	681	31.8	1.6	96

Time	Conductivity (uS/cm)		Flow (L/min)		Pressure (kPa)		Temp (degC)	Turbidity	Particle Index				
	Feed	Interstage	Tot Perm	RO Feed	Flow	Conc				Feed	Interstage	Conc	
10/7/99 20:55	1707	3686	7090	105	6.3	11.4	3.4	845	754	699	31.5	1.7	90
10/7/99 21:55	1699	3659	7060	104	6.2	11.4	3.4	850	753	699	31.1	1.8	92
10/7/99 23:55	1668	3592	6934	102	6.0	11.6	3.4	857	760	705	30.5	1.8	90
10/8/99 0:54	1659	3574	6892	104	5.8	11.6	3.3	857	760	705	30.3	1.8	88
10/8/99 1:55	1651	3529	6795	87	7.0	11.4	3.4	876	779	723	30.2	1.8	91
10/8/99 2:55	1639	3601	6613	84	7.0	11.8	3.3	887	792	739	30.1	1.8	89
10/8/99 3:55	1626	3721	6327	80	7.0	11.8	3.6	912	819	771	30.0	1.8	91
10/8/99 4:55	1613	3850	6077	77	7.0	11.8	3.6	934	843	799	30.0	1.9	91
10/8/99 5:55	1600	3973	5857	74	7.0	11.8	3.6	953	864	822	30.0	1.9	92
10/8/99 6:55	1587	4085	5676	71	7.0	11.8	3.6	973	886	845	29.9	2.0	90
10/8/99 7:55	1575	4209	5746	84	5.9	12.1	3.8	973	886	847	29.7	2.0	90
10/8/99 8:19	1575	3916	6222	92	5.8	11.8	3.6	952	858	816	29.6	2.0	89
10/9/99 22:01	1620	3638	7385	124	5.2	12.1	2.7	839	745	705	31.6	1.5	93
10/9/99 23:01	1614	3619	7346	121	5.1	12.1	2.9	847	753	712	31.3	1.5	91
10/10/99 0:01	1608	3597	7314	118	5.3	12.1	2.9	852	758	714	31.1	1.4	91
10/10/99 2:01	1587	3516	7186	105	5.6	11.2	2.9	870	774	730	30.6	1.4	91
10/10/99 3:01	1579	3498	7165	103	5.7	11.4	3.2	872	776	732	30.5	1.3	90
10/10/99 4:01	1567	3471	7114	101	5.7	11.6	3.2	875	779	735	30.3	1.3	90
10/10/99 5:01	1558	3462	7076	100	5.7	11.4	3.2	876	779	734	30.2	1.3	90
10/10/99 6:01	1548	3436	7024	99	5.8	11.8	3.2	878	782	738	30.0	1.3	91
10/10/99 7:01	1524	3378	6900	97	5.8	11.4	3.2	873	777	733	29.9	1.5	91
10/10/99 8:01	1511	3362	6847	96	5.8	12.1	3.2	879	783	738	29.8	1.6	90
10/10/99 10:01	1493	3317	6808	93	5.8	11.8	3.2	873	778	732	30.1	1.5	90
10/10/99 11:01	1487	42	4242	1	4.3	0.0	0.0	1	2	1	26.1	1.5	90
10/10/99 16:29	1541	3543	7504	128	5.4	12.5	2.5	814	725	685	32.0	1.4	99
10/10/99 17:29	1539	3530	7535	124	5.5	12.1	2.5	814	725	685	32.1	1.5	95
10/10/99 18:59	1549	3552	7552	124	5.4	11.6	2.5	819	729	689	32.1	1.7	139
10/10/99 19:59	1554	3552	7511	125	5.4	11.0	2.5	821	731	692	32.0	1.7	93
10/10/99 20:59	1553	3526	7520	122	5.4	11.1	2.5	831	739	700	31.7	1.7	92
10/10/99 21:59	1538	3747	7877	185	3.4	12.3	2.3	800	710	671	31.5	1.7	92
10/10/99 23:12	1530	3476	7418	119	5.1	12.3	2.3	839	748	707	31.3	1.6	95
10/11/99 0:12	1526	3494	7504	124	5.1	12.1	2.3	837	746	704	31.2	1.6	96
10/11/99 1:12	1518	3449	7415	116	5.2	11.4	2.3	847	755	714	31.1	1.6	92
10/11/99 2:12	1513	3414	7355	121	5.1	11.2	2.3	843	752	710	31.0	1.6	92
10/11/99 5:12	1542	3520	7475	121	5.0	11.4	2.5	850	759	717	30.9	1.6	91
10/11/99 6:12	1561	3556	7519	115	5.1	11.4	2.5	862	771	729	30.8	1.6	92
10/11/99 7:12	1574	3583	7575	119	5.2	11.6	2.5	859	768	726	30.9	1.6	92
10/11/99 10:12	1577	3707	8364	126	5.3	11.4	1.9	884	795	757	30.8	1.8	92
10/11/99 11:12	1581	3743	8338	127	5.0	11.6	1.9	883	793	756	30.9	1.7	91

Time	Conductivity (uS/cm)		Flow (L/min)		Pressure (kPa)		Temp (degC)	Turbidity	Particle Index				
	Feed	Interstage Conc	Tot Perm	RO Feed	Tot Perm	Conc				Feed	Interstage Conc	Conc	
10/11/99 12:40	1577	3648	8040	128	5.2	11.4	2.1	863	773	734	31.3	1.9	101
10/11/99 13:36	1713	333	6641	1	4.4	0.0	0.0	36	33	1	26.4	1.8	90
10/11/99 20:38	1664	3486	6490	132	5.0	12.1	3.4	787	693	642	31.7	1.6	101
10/11/99 21:38	1677	3648	7720	125	5.1	12.5	2.1	848	757	713	31.5	1.6	116
10/11/99 22:38	1683	3765	7753	125	5.2	12.3	2.5	857	766	723	31.4	1.6	97
10/11/99 23:38	1673	3756	7701	125	5.1	12.3	2.5	858	767	724	31.3	1.7	93
10/12/99 0:38	1656	3712	7632	121	5.1	12.1	2.7	859	738	725	31.3	1.7	91
10/12/99 1:38	1633	3657	7527	118	5.1	12.1	2.7	860	769	725	31.3	1.7	108
10/12/99 2:38	1619	3627	7441	115	5.4	11.4	2.7	861	770	726	31.2	1.7	94
10/12/99 3:38	1610	3592	7414	114	5.4	11.4	2.7	860	769	726	31.2	1.7	91
10/12/99 4:36	1599	3574	7370	112	5.3	11.2	2.7	864	773	729	31.1	1.8	92
10/12/99 5:36	1593	3548	7333	110	5.4	11.4	2.7	863	772	729	31.0	1.8	92
10/12/99 6:36	1579	3512	7281	108	5.4	11.4	2.7	865	774	730	31.0	1.8	91
10/12/99 7:38	1564	3481	7209	108	5.3	11.6	2.9	862	771	727	30.9	1.8	92
10/12/99 8:38	1552	3455	7169	107	5.4	11.8	2.9	867	776	731	30.7	1.8	92
10/12/99 9:36	1546	3440	7128	106	5.2	12.1	2.9	864	772	728	30.9	1.7	90
10/12/99 13:34	1601	3579	7362	117	5.1	12.1	2.8	846	754	711	31.6	1.7	91
10/12/99 15:34	1592	3555	7271	118	5.1	11.6	2.7	836	747	705	32.0	1.8	93
10/12/99 19:36	2631	24	-2	1	6.2	0.0	0.0	6	62	3	21.6	2.0	91
10/12/99 20:36	2793	25	7	1	5.9	0.0	0.0	6	2	3	21.2	2.0	90
10/12/99 21:36	2829	21	13	1	6.0	0.0	0.0	6	2	3	20.9	2.0	98
10/12/99 22:36	1584	3210	5975	631	5.4	12.5	1.9	778	682	632	31.4	2.0	112
10/12/99 23:36	1571	3188	6027	621	5.2	12.5	2.1	780	684	633	31.3	2.0	136
10/13/99 0:36	1562	3178	5979	625	5.1	12.5	2.1	784	687	636	31.2	2.0	94
10/13/99 1:36	1550	3153	5920	603	5.0	12.5	2.1	785	690	638	31.1	2.0	97
10/13/99 2:36	1536	3108	5873	616	5.0	12.5	2.3	787	689	638	31.0	2.0	103
10/13/99 3:36	1519	3076	5850	614	4.9	12.3	2.3	788	691	639	30.9	2.0	105
10/13/99 5:36	1519	3076	5798	606	5.1	11.4	2.3	796	699	646	30.7	2.0	98
10/13/99 6:34	1517	3057	5782	609	5.1	11.4	2.3	798	698	646	30.6	2.0	94
10/13/99 7:36	1513	3082	5984	617	5.2	11.6	2.1	813	714	664	30.4	2.0	93
10/13/99 8:36	1503	3068	5943	613	5.3	11.6	2.1	814	716	666	30.4	2.0	107
10/13/99 9:36	1500	3055	5921	614	5.3	11.4	2.1	811	713	662	30.5	2.0	96
10/13/99 12:14	1523	3153	6107	602	5.6	12.1	1.9	799	703	654	31.4	2.0	100
10/14/99 14:02	1566	2496	3587	1018	6.7	11.8	0.0	599	493	417	31.8	2.0	478
10/14/99 16:35	1571	3776	8229	119	6.7	11.4	1.9	847	761	727	32.4	2.0	217
10/14/99 17:35	1569	3791	6739	106	6.8	11.0	2.5	839	752	717	32.3	2.0	133
10/14/99 19:40	1572	4965	5705	94	6.8	11.2	2.3	940	865	844	32.3	2.0	159
10/15/99 9:17	1428	4746	5428	87	6.9	12.1	2.3	989	912	890	31.1	2.0	398
10/15/99 16:25	1567	1032	6974	156	3.9	12.5	2.3	858	781	716	32.6	1.9	420

Time	Conductivity (uS/cm)			Flow (L/min)			Pressure (kPa)			Temp (degC)	Turbidity	Particle Index	
	Feed	Interstage	Tot Perm	RO Feed	Tot Perm	Conc	Feed	Interstage	Conc				
10/15/99 18:10	1599	1569	7020	110	6.0	12.1	2.7	907	828	760	32.8	2.0	156
10/15/99 19:10	1600	1914	7003	109	6.0	11.9	3.0	909	830	762	32.7	1.8	101
10/15/99 20:10	1599	2206	6999	107	6.0	11.6	3.2	919	840	772	32.5	1.8	100
10/15/99 21:10	1584	2405	7373	106	6.1	11.9	3.0	940	862	798	32.2	1.8	313
10/15/99 22:10	1571	2398	7292	103	6.1	11.2	3.0	946	868	803	31.9	1.9	101
10/15/99 23:10	1559	2380	7246	100	6.0	11.4	2.9	953	874	809	31.6	1.8	115
10/16/99 0:10	1546	2353	7147	98	6.1	11.2	3.0	953	874	810	31.4	1.8	97
10/16/99 1:10	1536	2335	7095	96	6.1	11.4	3.0	960	881	816	31.3	1.8	95
10/16/99 2:10	1525	2317	7044	94	6.1	11.2	3.0	963	884	819	31.1	1.8	93
10/16/99 3:10	1511	2300	6974	92	6.1	11.2	3.0	967	888	822	31.0	1.8	92
10/16/99 5:10	1493	2273	6876	90	6.2	11.6	3.0	972	892	826	30.8	1.9	94
10/16/99 6:10	1488	2260	6850	91	6.1	11.9	2.9	971	892	826	30.8	1.9	95
10/16/99 7:44	1488	2273	6880	101	5.5	12.3	3.0	959	879	814	30.8	1.9	98
10/16/99 8:44	1497	2300	6933	102	5.4	12.1	3.0	966	886	820	30.7	1.9	94
10/16/99 9:44	1500	2296	6943	101	5.5	12.3	3.0	965	885	820	30.8	1.9	98
10/16/99 10:44	1516	2318	6987	101	5.5	12.3	3.0	963	884	819	31.0	1.9	93
10/16/99 11:44	1525	2340	7071	103	5.4	12.3	3.0	961	882	817	31.3	1.9	94
10/16/99 12:44	1527	2349	7100	105	5.5	12.5	3.0	953	874	810	31.7	1.9	95
10/16/99 13:44	1519	2336	7020	106	5.5	12.7	3.0	951	874	810	31.9	1.9	92
10/16/99 14:44	1517	2327	7039	109	5.3	12.5	3.0	942	863	801	32.2	1.9	92
10/16/99 16:44	1526	2347	7087	109	5.6	12.5	3.0	934	857	794	32.8	1.9	93
10/16/99 17:44	1513	2344	7095	109	5.5	12.5	3.0	918	844	779	33.0	2.0	95
10/16/99 18:44	1504	2348	7080	106	5.5	12.5	3.0	920	845	781	33.0	2.0	102
10/16/99 19:44	1506	2348	7071	103	5.6	12.5	3.0	929	856	792	32.8	2.0	94
10/16/99 20:44	1502	2338	7058	103	5.6	12.5	3.0	937	863	797	32.4	2.0	93
10/16/99 21:44	1496	2330	7008	101	5.4	12.5	3.0	942	869	802	32.1	2.0	99
10/16/99 22:44	1493	2316	6933	98	5.4	12.5	3.0	949	874	807	31.9	2.0	99
10/16/99 23:44	1483	2299	6896	96	5.6	12.5	3.0	952	882	815	31.7	2.0	92
10/17/99 0:44	1472	2277	6827	92	5.6	12.5	3.0	958	881	815	31.6	2.0	97
10/17/99 1:44	1460	2255	6744	89	5.7	12.5	3.0	962	888	821	31.5	2.0	92
10/17/99 3:44	1429	2210	6626	85	5.7	12.5	3.0	968	899	830	31.3	2.0	99
10/17/99 4:44	1431	2219	6626	84	5.8	12.5	3.0	971	894	828	31.2	2.0	93
10/17/99 5:44	1430	2219	6617	83	5.8	12.5	3.0	972	894	828	31.2	2.0	96
10/17/99 8:31	1407	2187	6491	82	5.9	12.5	3.0	979	902	837	31.1	2.0	92
10/17/99 11:59	1439	2250	6606	84	6.0	12.5	3.0	983	907	842	31.4	2.0	90
10/17/99 12:59	1445	2255	6569	84	6.0	12.3	3.0	985	919	844	31.4	2.0	91
10/17/99 13:59	1457	2276	6594	85	6.0	12.5	3.0	985	910	845	31.5	2.0	92
10/17/99 14:59	1462	2293	6645	88	5.9	12.5	3.0	985	908	844	31.6	2.0	92
10/17/99 15:59	1471	2307	6705	90	5.9	12.5	3.0	982	906	842	31.7	2.0	92

Time	Conductivity (uS/cm)		Flow (L/min)		Pressure (kPa)		Temp (degC)	Turbidity	Particle Index				
	Feed	Interstage	Tot Perm	RO Perm	RO Feed	Tot Perm				Feed	Interstage	Conc	
10/17/99 16:59	1474	2316	6704	90	5.7	12.3	3.0	984	907	843	31.5	2.0	103
10/17/99 17:59	1480	2312	6663	86	5.8	12.5	3.0	1008	932	866	30.8	2.0	92
10/17/99 18:59	1468	2290	6584	85	5.8	12.3	3.2	1019	941	877	30.4	2.0	92
10/17/99 19:59	1467	2281	6545	84	5.8	12.3	3.2	1025	947	883	30.1	2.0	93
10/17/99 20:59	1457	2268	6510	82	5.8	12.3	3.2	1037	958	894	29.7	2.0	93
10/17/99 21:59	1441	2228	6357	71	6.6	12.3	3.2	1061	983	917	29.5	2.0	92
10/17/99 22:59	1423	2228	6163	68	6.6	12.3	3.0	1087	1008	945	29.2	2.0	109
10/17/99 23:59	1404	2219	6001	64	6.6	12.3	3.2	1109	1031	970	28.9	2.0	94
10/18/99 0:59	1373	2179	5864	62	6.6	12.3	3.2	1127	1048	988	28.6	2.0	93
10/18/99 1:59	1344	2144	5711	59	6.5	12.1	3.2	1136	1056	997	28.3	2.0	94
10/18/99 2:59	1328	2113	5602	57	6.4	12.3	3.1	1156	1076	1017	28.0	2.0	98
10/18/99 3:59	1316	2090	5513	55	6.6	12.1	3.4	1164	1085	1026	27.6	2.0	93
10/18/99 4:59	1314	2095	5492	54	6.6	12.1	3.4	1178	1097	1040	27.4	2.0	95
10/18/99 5:59	1331	2122	5531	54	6.6	12.1	3.4	1190	1108	1051	27.1	2.0	94
10/18/99 6:59	1345	2149	5564	54	6.6	12.1	3.4	1200	1119	1062	27.0	2.0	93
10/18/99 7:59	1351	2162	5560	54	6.6	12.1	3.4	1206	1125	1068	26.9	2.0	92
10/18/99 8:59	1343	2162	5512	53	6.7	12.1	3.4	1206	1126	1069	27.1	2.0	94
10/18/99 9:59	1343	2167	5467	53	6.8	12.1	3.4	1216	1136	1080	27.0	2.0	93
10/18/99 10:59	1133	1847	4675	41	6.8	12.1	3.4	1213	1133	1078	26.4	2.0	106
10/20/99 14:05	1425	2078	2477	58	6.1	5.4	7.7	498	381	263	26.2	2.0	259
10/20/99 15:05	1430	3165	6621	82	5.3	12.3	2.7	934	837	790	26.7	2.0	105
10/20/99 16:05	1432	3201	6708	84	5.4	12.3	2.3	923	828	782	27.0	1.9	111
10/20/99 17:05	1429	3201	6764	84	5.4	12.3	2.5	913	817	772	27.3	1.7	130
10/20/99 18:05	1430	3223	6791	83	5.5	12.5	2.3	909	814	769	27.5	1.7	132
10/20/99 20:12	1444	3259	6876	83	5.6	12.3	2.5	911	815	771	27.6	1.8	117
10/20/99 22:55	1474	3325	7239	88	5.9	12.5	1.7	943	843	803	27.0	1.8	304
10/20/99 23:55	1469	3330	7383	84	6.1	12.5	2.1	950	851	810	26.9	1.8	159
10/21/99 0:55	1468	3320	7361	80	6.2	12.7	2.1	954	856	815	26.7	1.8	318
10/21/99 2:55	1451	3276	7266	76	6.2	12.3	2.3	964	864	823	26.4	1.8	98
10/21/99 3:55	1442	3249	7205	74	6.3	12.3	2.3	969	868	826	26.3	1.8	224
10/21/99 4:55	1431	3205	7093	67	6.9	12.3	2.3	977	877	835	26.2	1.8	126
10/21/99 5:55	1429	3232	7070	66	6.9	12.5	2.3	979	880	840	26.1	1.8	108
10/21/99 8:57	1428	3317	6892	68	7.0	12.0	0.0	909	817	785	25.9	1.8	169
10/21/99 10:13	1440	3436	7116	68	7.0	12.3	1.7	963	868	833	26.3	1.8	94
10/21/99 10:49	1445	3552	7086	67	7.0	12.5	1.7	974	881	847	26.3	1.8	99

Appendix H - Calculated RO Performance Data

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
4/21/99 11:37 PM	3.5	13.6	133	61	79	0.93	97.4
4/22/99 7:47 AM	3.3	12.7	135	58	76	1.03	97.4
4/22/99 9:47 AM	3.3	12.8	130	63	77	1.06	97.3
4/22/99 12:47 PM	3.3	12.7	128	50	77	0.84	97.0
4/22/99 2:47 PM	3.2	12.4	127	50	75	0.85	96.8
4/22/99 5:47 PM	3.1	11.8	112	46	76	0.75	96.5
4/23/99 6:22 PM	2.1	8.2	78	23	83	0.45	94.4
5/9/99 7:27 AM	3.2	12.4	123	56	75	1.38	96.1
5/9/99 8:27 AM	3.2	12.2	123	55	74	1.38	96.0
5/9/99 9:27 AM	3.2	12.2	123	56	75	1.43	95.9
5/11/99 3:00 PM	1.2	4.5	65	41	78	1.00	89.4
5/17/99 12:00 AM	6.0	22.9	123	62	81	5.85	88.3
5/18/99 1:57 PM	5.9	22.6	203	224	55	13.64	93.4
5/19/99 12:27 AM	5.8	22.4	202	224	55	12.19	93.9
5/19/99 1:27 AM	5.8	22.4	201	224	55	12.23	93.9
5/19/99 2:18 PM	5.8	22.1	119	63	81	2.81	94.0
5/19/99 3:18 PM	5.8	22.4	119	62	81	2.57	94.0
5/21/99 8:19 AM	2.6	9.9	96	45	76	1.80	93.9
5/21/99 9:19 AM	2.5	9.5	96	45	73	1.80	92.5
5/21/99 10:19 AM	2.4	9.1	93	42	70	1.64	92.3
5/21/99 11:19 AM	2.1	8.1	90	20	81	3.78	2.7
5/21/99 12:19 PM	2.4	9.3	67	20	76	0.49	89.0
5/21/99 1:19 PM	2.2	8.5	57	18	76	0.39	88.9
5/21/99 2:19 PM	1.8	7.1	48	19	80	0.50	89.1
5/21/99 3:19 PM	1.6	6.2	46	20	81	0.57	89.0
5/21/99 4:19 PM	1.5	5.8	42	21	79	0.45	89.1
5/21/99 5:19 PM	1.4	5.3	41	20	79	0.55	89.2
5/21/99 6:19 PM	1.3	5.0	38	21	77	0.51	89.6
5/21/99 7:19 PM	1.2	4.6	38	20	77	0.61	89.6
5/22/99 1:19 PM	0.7	2.6	39	33	64	0.74	90.1
5/22/99 2:19 PM	0.7	2.7	44	33	65	1.03	89.0
5/22/99 3:19 PM	0.8	3.0	48	32	67	1.05	88.8
5/22/99 4:19 PM	0.8	3.1	49	33	66	0.93	89.8
5/22/99 5:19 PM	0.8	3.2	66	42	71	1.03	88.8
5/22/99 6:19 PM	0.8	3.3	67	44	71	1.14	88.6
5/22/99 7:19 PM	0.8	3.2	68	44	70	0.94	88.6
5/22/99 8:19 PM	0.8	3.2	70	44	71	0.94	89.0
5/22/99 9:19 PM	0.8	3.2	71	45	70	1.01	89.3
5/22/99 10:19 PM	0.8	3.2	71	47	70	1.21	88.5
5/22/99 11:19 PM	0.8	3.1	71	47	69	1.11	88.7
5/23/99 12:19 AM	0.8	3.0	71	48	69	1.00	89.0
5/23/99 1:19 AM	0.8	3.0	70	49	68	0.98	89.2
5/23/99 2:19 AM	0.7	2.9	70	48	68	1.16	89.4
5/23/99 3:19 AM	0.7	2.8	68	49	67	1.06	89.5
5/23/99 4:19 AM	0.7	2.7	67	48	67	1.06	88.4
5/23/99 5:19 AM	0.7	2.7	66	48	68	1.09	88.3
5/23/99 7:11 AM	0.7	2.5	64	47	65	1.07	88.3
5/23/99 8:11 AM	0.6	2.5	62	49	66	1.18	88.4
5/23/99 9:11 AM	0.6	2.3	62	48	63	1.22	88.2
5/23/99 10:11 AM	0.6	2.3	62	47	63	1.12	88.2
5/23/99 11:11 AM	0.6	2.3	63	49	62	0.94	88.2

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
5/23/99 12:11 PM	0.6	2.3	64	48	63	1.05	88.2
5/23/99 1:11 PM	0.6	2.2	62	48	63	1.12	88.2
5/23/99 2:11 PM	0.6	2.2	62	48	63	0.92	88.3
5/23/99 3:11 PM	0.6	2.2	63	48	63	0.89	88.5
5/23/99 4:11 PM	0.6	2.2	62	49	63	0.89	88.3
5/23/99 5:11 PM	0.6	2.2	63	49	63	1.09	86.2
5/23/99 6:11 PM	0.6	2.2	63	49	62	1.08	86.5
5/23/99 7:11 PM	0.6	2.2	63	50	63	1.00	86.8
5/23/99 8:11 PM	0.6	2.2	64	50	62	1.06	87.1
5/23/99 9:11 PM	0.6	2.2	64	50	63	0.97	87.5
5/23/99 10:11 PM	0.6	2.1	64	50	61	1.02	87.8
5/23/99 11:11 PM	0.6	2.2	65	50	63	0.94	88.2
5/24/99 12:11 AM	0.6	2.2	64	50	63	1.02	88.4
5/24/99 1:11 AM	0.6	2.3	64	51	64	1.04	88.7
5/24/99 2:11 AM	0.6	2.2	65	50	64	0.94	88.9
5/24/99 3:11 AM	0.6	2.2	65	52	62	0.90	89.1
5/24/99 4:11 AM	0.6	2.2	66	51	62	0.97	89.3
5/24/99 5:11 AM	0.6	2.2	67	51	62	1.14	87.6
5/24/99 6:11 AM	0.6	2.3	66	52	64	1.17	87.6
5/24/99 7:42 AM	0.6	2.2	67	53	62	1.03	87.8
5/24/99 8:42 AM	0.6	2.3	68	56	63	1.20	88.0
5/24/99 9:42 AM	0.6	2.2	67	55	61	1.16	87.8
5/25/99 6:29 PM	6.0	23.2	127	63	81	4.47	87.4
5/25/99 7:29 PM	6.0	22.9	128	65	80	4.58	87.9
5/25/99 8:29 PM	6.1	23.4	128	65	81	4.27	88.0
5/25/99 9:29 PM	5.6	21.5	127	63	81	4.59	88.6
5/25/99 10:29 PM	5.4	20.6	123	60	80	4.29	89.1
5/25/99 11:29 PM	5.2	19.8	120	56	81	4.12	89.5
5/26/99 12:29 AM	4.9	18.7	117	53	80	4.27	89.8
5/26/99 1:29 AM	4.8	18.2	115	51	79	4.10	90.0
5/26/99 2:29 AM	4.6	17.7	114	49	79	4.01	90.1
5/26/99 3:29 AM	4.6	17.6	113	49	79	3.96	90.2
5/26/99 4:29 AM	4.6	17.5	112	48	79	3.96	90.2
5/26/99 5:29 AM	4.5	17.3	111	48	80	3.95	90.3
5/26/99 6:29 AM	4.5	17.3	110	48	80	3.90	90.4
5/26/99 7:27 AM	4.4	16.9	115	49	78	3.57	90.5
5/26/99 7:29 AM	4.5	17.1	115	49	79	3.61	90.6
5/26/99 8:27 AM	4.4	16.8	116	50	79	3.77	90.7
5/26/99 8:29 AM	4.4	16.8	115	51	79	3.77	90.7
5/26/99 9:27 AM	4.0	15.3	117	50	76	3.42	90.8
5/26/99 9:29 AM	4.1	15.6	117	50	77	3.42	90.8
5/27/99 7:23 AM	1.8	6.8	80	50	74	1.96	91.7
5/27/99 7:52 AM	1.8	6.8	79	50	75	2.04	91.4
5/27/99 8:23 AM	2.3	8.7	138	194	46	7.18	92.8
5/27/99 8:52 AM	1.9	7.4	84	44	78	2.03	90.4
5/27/99 9:23 AM	1.8	7.0	85	45	77	1.80	90.5
5/27/99 11:22 AM	1.6	6.2	83	47	76	1.50	90.9
5/28/99 7:26 AM	1.0	4.0	44	26	74	0.76	90.9
5/28/99 8:26 AM	1.2	4.4	79	50	76	1.19	91.2
5/28/99 9:26 AM	1.0	3.7	79	53	68	1.00	91.6
5/29/99 7:34 AM	6.7	25.7	68	84	43	30.68	88.8
5/29/99 8:34 AM	6.8	26.1	68	85	46	31.77	88.9

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
5/30/99 7:13 AM	5.4	20.9	168	197	52	14.18	92.9
5/30/99 8:13 AM	5.3	20.5	171	200	51	13.53	92.9
5/30/99 9:13 AM	5.3	20.5	171	200	51	13.15	93.2
5/30/99 10:13 AM	5.5	21.1	170	195	53	12.77	93.3
5/30/99 11:13 AM	5.5	21.0	169	195	53	13.67	92.7
5/30/99 12:13 PM	5.4	20.7	168	194	53	13.50	92.7
5/30/99 1:13 PM	5.5	21.0	165	190	53	12.64	93.2
5/30/99 2:13 PM	5.5	20.9	165	190	52	12.70	93.0
5/30/99 3:13 PM	5.5	21.2	164	190	53	14.63	92.0
5/30/99 4:13 PM	5.4	20.7	165	190	52	14.18	92.2
5/30/99 5:13 PM	5.5	21.1	164	190	53	14.31	92.0
5/30/99 6:13 PM	5.5	21.1	165	189	53	14.74	91.8
5/30/99 7:13 PM	5.5	21.2	164	189	53	13.85	92.3
5/30/99 8:13 PM	5.5	21.2	165	190	53	14.57	92.0
5/30/99 9:13 PM	5.4	20.8	165	189	53	14.19	92.2
5/30/99 11:13 PM	5.4	20.6	169	194	53	13.10	92.9
5/31/99 12:13 AM	5.4	20.6	169	194	53	12.69	93.2
5/31/99 2:13 AM	5.3	20.4	168	195	52	11.77	93.5
5/31/99 3:13 AM	5.3	20.2	169	195	52	13.11	92.9
5/31/99 5:13 AM	5.3	20.3	168	195	53	13.47	92.8
5/31/99 6:13 AM	5.3	20.3	168	195	53	13.25	93.0
5/31/99 7:42 AM	5.2	19.9	168	196	52	12.86	93.1
5/31/99 9:42 AM	5.4	20.9	143	172	50	15.25	92.6
5/31/99 10:42 AM	5.6	21.3	142	170	50	16.60	91.9
5/31/99 11:42 AM	5.8	22.1	143	169	50	15.16	92.6
5/31/99 12:42 PM	5.8	22.3	144	169	51	18.61	91.0
5/31/99 1:42 PM	5.4	20.7	158	158	58	12.69	91.3
5/31/99 3:42 PM	5.1	19.7	144	115	69	8.83	90.1
5/31/99 4:42 PM	5.1	19.7	144	113	69	8.83	90.1
5/31/99 7:42 PM	5.1	19.5	144	113	69	8.97	90.3
5/31/99 9:42 PM	5.0	19.2	144	113	68	8.70	90.6
5/31/99 10:42 PM	5.0	19.2	144	113	68	8.84	90.6
5/31/99 11:42 PM	5.0	19.1	148	116	68	8.38	90.9
6/1/99 12:42 AM	4.9	18.8	148	116	67	7.98	91.2
6/1/99 1:42 AM	4.9	18.8	147	116	68	8.18	91.2
6/1/99 2:42 AM	4.9	18.9	147	116	68	8.17	91.3
6/1/99 3:42 AM	4.9	18.8	148	116	68	8.01	91.4
6/1/99 4:42 AM	4.8	18.5	147	117	67	8.05	91.4
6/1/99 5:42 AM	4.8	18.4	147	117	67	8.24	91.6
6/1/99 7:42 AM	4.8	18.5	151	118	68	8.06	91.5
6/1/99 8:42 AM	4.8	18.5	148	117	67	7.92	91.4
6/2/99 7:13 AM	4.5	17.2	126	74	74	4.97	91.7
6/2/99 8:13 AM	4.3	16.5	113	64	73	5.07	91.4
6/2/99 10:13 AM	4.2	15.9	98	49	76	4.74	90.2
6/2/99 1:13 PM	4.0	15.5	93	47	77	4.81	89.7
6/2/99 4:13 PM	4.1	15.6	75	37	74	4.98	88.5
6/3/99 7:18 AM	3.6	13.8	66	38	75	4.96	90.2
6/3/99 8:18 AM	3.6	14.0	61	31	77	4.30	89.4
6/3/99 12:18 PM	2.9	11.1	109	64	67	3.22	91.9
6/3/99 1:15 PM	2.8	10.9	108	64	67	3.29	91.7
6/3/99 2:15 PM	2.8	10.7	106	65	66	3.27	91.6
6/3/99 5:15 PM	2.8	10.8	117	8	82	0.84	86.0



Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
6/3/99 6:15 PM	1.6	6.0	68	10	74	0.56	87.2
6/3/99 9:15 PM	1.1	4.2	54	10	79	0.80	88.4
6/3/99 10:15 PM	1.1	4.1	54	10	80	0.83	88.4
6/3/99 11:15 PM	1.0	3.9	53	10	78	0.83	88.4
6/4/99 12:15 AM	1.0	3.8	52	10	79	0.84	88.6
6/4/99 1:15 AM	1.0	3.7	51	11	77	0.82	88.6
6/4/99 4:15 AM	0.9	3.5	51	11	76	0.84	88.4
6/4/99 5:15 AM	0.9	3.5	51	10	78	0.97	88.6
6/4/99 6:15 AM	0.9	3.6	49	11	78	0.75	88.5
6/4/99 7:35 AM	0.9	3.4	49	11	75	0.65	89.7
6/4/99 8:35 AM	0.9	3.3	51	11	72	0.67	89.1
6/4/99 9:35 AM	0.9	3.3	58	10	72	0.77	88.9
6/4/99 10:35 AM	0.9	3.6	158	261	38	2.97	93.5
6/4/99 11:35 AM	1.3	5.0	150	238	43	3.70	93.6
6/4/99 12:35 PM	1.7	6.5	169	199	47	4.76	93.0
6/4/99 1:22 PM	1.9	7.3	150	173	47	5.70	92.4
6/4/99 2:22 PM	2.0	7.7	163	180	49	5.51	92.6
6/4/99 3:22 PM	2.1	8.0	162	178	50	5.88	92.4
6/5/99 9:22 AM	3.0	11.6	167	159	56	7.65	92.2
6/5/99 10:22 AM	3.0	11.3	165	159	56	7.26	92.2
6/5/99 11:22 AM	2.9	11.2	164	158	55	7.30	92.2
6/5/99 12:22 PM	2.9	11.1	164	159	55	7.31	92.1
6/5/99 1:59 PM	2.9	11.0	162	158	55	7.45	91.8
6/5/99 2:59 PM	2.9	11.2	162	159	56	7.44	91.7
6/5/99 3:59 PM	2.8	10.9	161	158	55	7.43	91.6
6/5/99 4:59 PM	2.9	11.1	160	159	56	7.59	91.3
6/5/99 6:59 PM	2.8	10.9	161	158	55	7.22	91.7
6/5/99 7:59 PM	2.8	10.8	162	158	55	7.32	91.6
6/5/99 8:59 PM	2.8	10.7	161	157	55	7.00	92.1
6/5/99 9:59 PM	2.8	10.6	165	161	55	6.79	92.2
6/5/99 10:59 PM	2.8	10.7	164	161	55	6.76	92.2
6/6/99 1:59 AM	2.7	10.2	163	163	54	6.67	92.5
6/6/99 2:59 AM	2.7	10.4	164	162	55	6.68	92.6
6/6/99 3:59 AM	2.7	10.4	163	162	54	6.66	92.6
6/6/99 4:59 AM	2.7	10.3	165	168	55	6.37	92.9
6/6/99 5:59 AM	2.6	10.1	165	168	54	6.19	92.9
6/6/99 7:15 AM	2.6	10.1	165	166	54	6.31	92.8
6/6/99 9:15 AM	2.6	10.1	164	168	54	6.32	92.9
6/6/99 10:15 AM	2.6	9.8	163	168	53	6.28	92.7
6/6/99 11:15 AM	2.6	9.8	163	166	53	6.52	92.4
6/6/99 12:15 PM	2.5	9.7	163	166	53	6.33	92.5
6/6/99 1:15 PM	2.5	9.7	162	167	53	6.37	92.4
6/6/99 2:15 PM	2.5	9.6	161	166	53	6.60	92.0
6/6/99 3:15 PM	2.5	9.8	160	166	54	6.85	91.8
6/6/99 4:15 PM	2.5	9.7	161	166	54	6.81	91.6
6/6/99 5:15 PM	2.5	9.7	160	166	54	6.90	91.5
6/6/99 6:15 PM	2.5	9.7	161	165	54	7.02	91.4
6/6/99 7:15 PM	2.5	9.7	162	165	54	6.74	91.7
6/6/99 8:15 PM	2.5	9.7	162	164	54	6.95	91.6
6/6/99 9:15 PM	2.5	9.5	162	166	53	6.84	91.7
6/6/99 10:15 PM	2.5	9.6	161	165	53	6.43	92.3
6/7/99 12:15 AM	2.5	9.4	164	170	53	6.30	92.3

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
6/7/99 1:15 AM	2.4	9.4	165	171	53	6.17	92.7
6/7/99 2:15 AM	2.4	9.4	164	170	53	6.08	92.9
6/7/99 3:15 AM	2.5	9.4	164	171	53	6.25	92.7
6/7/99 4:15 AM	2.4	9.2	163	171	52	6.25	92.6
6/7/99 5:15 AM	2.4	9.2	164	172	52	6.00	92.9
6/7/99 7:12 AM	2.3	9.0	163	171	51	5.98	92.8
6/7/99 8:12 AM	2.3	9.0	162	173	51	5.95	92.8
6/8/99 7:41 AM	2.8	10.7	155	218	48	6.80	93.9
6/8/99 8:41 AM	2.8	10.6	154	218	48	6.65	94.0
6/8/99 9:41 AM	2.7	10.3	155	218	47	6.86	93.6
6/8/99 10:41 AM	2.4	3.5	167	214	41	2.40	93.5
6/11/99 7:18 AM	6.1	9.1	637		46	3.19	96.1
6/11/99 8:18 AM	5.8	8.7	706		47	2.95	96.0
6/11/99 10:18 AM	5.9	8.8	701		48	3.15	95.7
6/11/99 11:18 AM	5.9	8.7	702		48	3.19	95.6
6/11/99 1:18 PM	5.9	8.7	699		49	3.34	95.4
6/11/99 2:18 PM	6.0	8.9	697		49	3.31	95.4
6/11/99 3:18 PM	5.9	8.8	698		50	3.28	95.4
6/11/99 4:18 PM	6.0	8.9	698		51	3.25	95.4
6/11/99 5:18 PM	5.9	8.7	696		50	3.10	95.5
6/11/99 6:18 PM	6.0	8.9	696		50	3.02	95.7
6/11/99 7:18 PM	6.0	8.9	697		50	2.96	95.8
6/11/99 8:18 PM	5.9	8.8	699		50	2.90	95.9
6/11/99 9:18 PM	5.9	8.8	702		50	2.85	96.0
6/11/99 10:18 PM	5.9	8.8	703		50	2.85	96.1
6/11/99 11:18 PM	6.0	8.8	705		50	2.78	96.2
6/12/99 12:18 AM	5.9	8.8	708		50	2.61	96.5
6/12/99 1:18 AM	5.8	8.7	708		49	2.64	96.5
6/12/99 2:18 AM	5.9	8.8	707		49	2.62	96.5
6/12/99 3:18 AM	5.9	8.7	709		49	2.59	96.5
6/12/99 4:18 AM	5.9	8.7	709		49	2.65	96.5
6/12/99 5:18 AM	5.9	8.7	709		49	2.66	96.5
6/12/99 7:14 AM	5.9	8.8	710		50	2.65	96.5
6/12/99 8:14 AM	5.9	8.7	708		49	2.66	96.5
6/12/99 9:17 AM	5.9	8.7	709		49	2.68	96.4
6/12/99 10:17 AM	5.9	8.7	644		46	2.95	96.1
6/12/99 11:46 AM	6.0	8.9	630		47	3.16	96.0
6/12/99 12:17 PM	6.0	8.9	631		46	3.14	95.9
6/12/99 1:17 PM	5.9	8.8	631		46	3.22	95.8
6/12/99 2:17 PM	6.0	9.0	629		47	3.33	95.6
6/12/99 3:17 PM	5.9	8.7	628		46	3.34	95.5
6/12/99 4:17 PM	6.0	8.9	624		47	3.43	95.4
6/12/99 5:17 PM	6.1	9.1	611		47	3.45	95.4
6/12/99 6:17 PM	6.1	9.0	613		47	3.37	95.5
6/12/99 7:17 PM	6.0	9.0	614		47	3.27	95.6
6/12/99 8:17 PM	5.9	8.8	626		46	3.03	95.8
6/12/99 9:17 PM	6.2	9.2	630		48	3.16	95.9
6/12/99 10:17 PM	6.2	9.2	630		48	3.16	96.0
6/12/99 11:17 PM	6.1	9.0	633		47	3.05	96.1
6/13/99 12:17 AM	6.1	9.0	634		47	3.02	96.2
6/13/99 1:17 AM	6.2	9.2	634		49	3.11	96.2
6/13/99 2:17 AM	6.2	9.3	635		48	3.09	96.2

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
6/13/99 3:17 AM	6.2	9.2	647		49	3.03	96.3
6/13/99 4:17 AM	6.2	9.3	634		49	3.14	96.2
6/13/99 5:17 AM	6.1	9.1	651		49	3.00	96.3
6/13/99 6:17 AM	6.2	9.2	650		49	3.02	96.3
6/13/99 7:17 AM	6.1	9.1	651		49	3.04	96.3
6/13/99 8:17 AM	6.2	9.2	650		49	3.01	96.3
6/14/99 2:26 PM	5.5	8.2	871		68	1.34	95.4
6/14/99 3:26 PM	4.6	6.8	894		60	1.13	95.4
6/14/99 4:26 PM	5.0	7.5	912		66	1.19	95.5
6/14/99 5:26 PM	5.0	7.5	900		67	1.16	95.7
6/14/99 6:26 PM	4.8	7.2	882		63	1.11	95.7
6/14/99 7:26 PM	4.7	6.9	883		62	1.08	95.8
6/14/99 8:26 PM	4.5	6.7	885		60	1.03	95.9
6/14/99 9:26 PM	4.4	6.6	886		59	1.01	95.9
6/14/99 10:26 PM	4.5	6.7	887		60	1.03	96.0
6/14/99 11:26 PM	4.4	6.6	891		60	1.01	96.0
6/15/99 12:26 AM	4.4	6.6	890		60	1.01	96.1
6/15/99 1:26 AM	4.3	6.4	894		59	0.98	96.1
6/15/99 2:26 AM	4.3	6.3	892		58	0.96	96.1
6/15/99 3:26 AM	4.3	6.4	892		59	0.98	96.1
6/15/99 4:26 AM	4.3	6.4	892		60	0.98	96.2
6/15/99 5:26 AM	4.2	6.3	893		58	0.96	96.2
6/15/99 6:26 AM	4.2	6.3	894		58	0.96	96.2
6/15/99 5:30 PM	5.3	7.9	749		53	1.85	95.9
6/15/99 6:30 PM	5.5	8.1	734		54	1.90	96.0
6/15/99 7:30 PM	5.5	8.1	737		54	1.88	96.1
6/15/99 8:30 PM	5.5	8.1	739		54	1.86	96.2
6/15/99 9:30 PM	5.4	8.0	738		54	1.82	96.3
6/15/99 10:30 PM	5.4	8.0	740		54	1.80	96.3
6/15/99 11:30 PM	5.4	8.0	741		54	1.78	96.4
6/16/99 12:30 AM	5.4	8.0	740		55	1.78	96.4
6/16/99 1:30 AM	11.6	17.3	330		38	9.64	93.5
6/16/99 2:30 AM	11.5	17.1	329		39	9.47	93.5
6/16/99 3:30 AM	11.1	16.5	330		38	9.08	93.6
6/16/99 4:30 AM	10.9	16.1	330		38	8.82	93.6
6/16/99 5:30 AM	10.6	15.8	330		38	8.56	93.7
6/16/99 6:30 AM	10.5	15.7	329		38	8.49	93.7
6/16/99 8:30 AM	4.9	7.3	782		54	1.54	96.6
6/17/99 7:15 AM	6.4	9.6	449		42	4.51	93.9
6/17/99 8:15 AM	6.4	9.6	450		42	4.43	94.0
6/17/99 9:15 AM	6.4	9.5	449		42	4.35	94.0
6/17/99 10:15 AM	7.3	10.9	407		42	5.81	93.1
6/19/99 7:39 AM	10.7	16.0	371		43	4.38	97.0
6/19/99 9:39 AM	11.0	16.4	371		44	4.37	97.0
6/19/99 10:39 AM	11.0	16.4	370		44	4.50	96.8
6/19/99 11:39 AM	8.3	12.4	369		34	3.58	96.6
6/19/99 12:39 PM	10.7	15.9	368		42	4.60	96.6
6/19/99 1:39 PM	10.8	16.0	369		42	4.96	96.4
6/19/99 2:39 PM	10.3	15.3	370		40	4.48	96.6
6/19/99 3:39 PM	10.5	15.6	369		41	4.63	96.6
6/19/99 4:39 PM	10.6	15.7	368		41	4.54	96.6
6/19/99 5:39 PM	10.5	15.7	369		41	4.31	96.8

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
6/19/99 6:39 PM	10.8	16.0	367		41	4.58	96.7
6/19/99 7:39 PM	10.6	15.7	365		40	4.36	96.8
6/20/99 9:29 AM	7.4	11.0	391		32	3.83	96.0
6/20/99 10:29 AM	7.4	11.0	382		31	4.15	95.6
6/20/99 12:29 PM	9.0	13.4	382		38	4.60	96.0
6/20/99 1:29 PM	9.1	13.5	380		38	4.61	96.0
6/20/99 2:29 PM	8.3	12.3	381		34	4.35	95.9
6/20/99 3:29 PM	9.5	14.1	381		40	5.11	95.9
6/20/99 4:29 PM	9.1	13.5	381		38	4.94	95.8
6/20/99 5:29 PM	9.6	14.2	381		40	5.21	95.8
6/20/99 6:29 PM	9.6	14.2	381		40	5.39	95.7
6/20/99 7:29 PM	9.6	14.3	381		40	5.37	95.7
6/20/99 8:29 PM	9.5	14.2	381		40	5.27	95.8
6/20/99 9:29 PM	9.5	14.1	382		40	5.19	95.9
6/20/99 10:29 PM	9.9	14.7	382		41	5.16	96.1
6/20/99 11:29 PM	9.4	14.0	382		40	4.92	96.0
6/21/99 12:29 AM	9.4	14.0	381		40	4.97	96.0
6/21/99 2:29 AM	9.3	13.8	381		39	4.63	96.2
6/21/99 3:29 AM	9.2	13.6	382		39	4.50	96.3
6/21/99 4:29 AM	8.7	13.0	383		38	4.47	96.1
6/21/99 5:29 AM	9.4	14.0	383		41	4.52	96.4
6/22/99 7:24 AM	8.2	12.1	424		44	3.34	96.8
6/22/99 8:24 AM	8.2	12.2	423		43	3.43	96.8
6/22/99 9:24 AM	7.9	11.7	424		42	3.32	96.7
6/22/99 10:24 AM	8.2	12.2	416		42	3.60	96.6
6/22/99 3:34 PM	8.4	12.5	415		42	4.36	95.8
6/22/99 4:34 PM	7.5	11.1	473		50	2.90	96.1
6/22/99 5:34 PM	7.5	11.1	473		50	3.05	95.9
6/22/99 6:34 PM	7.5	11.1	473		50	3.10	95.8
6/22/99 7:34 PM	7.4	11.0	471		50	3.11	95.8
6/22/99 8:34 PM	7.4	11.0	474		50	3.00	96.0
6/22/99 9:34 PM	7.2	10.6	474		49	2.75	96.2
6/22/99 10:34 PM	7.1	10.6	475		49	2.97	95.9
6/22/99 11:34 PM	7.1	10.6	484		50	2.95	95.9
6/23/99 12:34 AM	6.9	10.2	484		48	2.52	96.5
6/23/99 1:34 AM	7.5	11.2	474		50	2.89	96.3
6/23/99 2:34 AM	7.6	11.2	474		50	3.11	96.0
6/23/99 3:34 AM	7.5	11.2	474		50	2.97	96.2
6/23/99 4:34 AM	7.5	11.1	475		50	2.91	96.3
6/23/99 5:34 AM	7.4	11.0	475		50	2.86	96.3
6/23/99 6:34 AM	7.4	11.0	474		50	2.96	96.2
6/24/99 7:39 AM	11.5	17.1	366		48	4.70	96.7
6/24/99 8:05 AM	11.7	17.4	366		50	4.49	96.6
6/24/99 12:45 PM	9.8	14.6	407		51	4.09	95.9
6/24/99 1:45 PM	9.8	14.6	408		51	3.64	96.3
6/24/99 2:45 PM	9.9	14.8	407		51	4.18	95.7
6/25/99 8:45 AM	7.6	11.2	482		51	2.42	96.6
6/25/99 9:45 AM	7.7	11.4	474		51	2.84	96.1
6/25/99 10:45 AM	7.7	11.5	478		53	2.77	96.2
6/25/99 12:08 PM	7.9	11.7	460		50	2.76	96.3
6/25/99 1:43 PM	8.1	12.0	460		52	2.85	96.2
6/25/99 2:43 PM	10.1	15.1	393		48	4.45	95.7

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
6/25/99 2:43 PM	10.1	15.1	393		48	4.45	95.7
6/27/99 7:49 AM	7.5	11.1	485		52	2.57	96.4
6/27/99 8:48 AM	7.5	11.1	486		52	2.63	96.3
6/27/99 9:48 AM	7.5	11.1	484		51	2.48	96.5
6/27/99 10:48 AM	7.4	11.0	483		51	2.58	96.3
6/27/99 11:48 AM	7.4	10.9	483		51	2.70	96.1
6/27/99 12:48 PM	7.6	11.3	474		52	3.04	95.7
6/27/99 1:48 PM	7.6	11.3	471		51	2.77	96.0
6/27/99 2:48 PM	7.6	11.3	470		52	2.92	95.8
6/27/99 3:48 PM	7.6	11.3	470		51	3.13	95.4
6/27/99 4:48 PM	8.0	11.8	462		52	3.43	95.2
6/27/99 5:48 PM	7.7	11.4	463		50	2.96	95.7
6/27/99 7:48 PM	7.7	11.5	470		51	3.26	95.3
6/27/99 8:48 PM	7.8	11.5	471		52	3.39	95.2
6/27/99 9:48 PM	7.8	11.5	474		52	3.01	95.8
6/27/99 10:48 PM	7.7	11.5	474		51	3.17	95.6
6/27/99 11:48 PM	7.5	11.1	483		51	2.69	96.2
6/28/99 12:48 AM	7.4	10.9	485		51	3.00	95.7
6/28/99 1:48 AM	7.6	11.3	484		53	2.85	96.1
6/28/99 2:48 AM	7.4	11.0	484		52	3.00	95.8
6/28/99 3:48 AM	7.4	11.0	485		52	2.54	96.4
6/28/99 4:48 AM	7.3	10.9	486		52	2.90	95.9
6/28/99 5:48 AM	7.3	10.9	485		51	2.75	96.1
6/28/99 6:48 AM	7.3	10.9	485		51	2.79	96.1
7/2/99 7:54 AM	10.8	16.1	363		30	7.34	95.6
7/2/99 8:54 AM	10.6	15.8	370		32	7.05	95.6
7/2/99 9:54 AM	15.0	22.2	338		32	10.65	95.3
7/2/99 10:54 AM	15.7	23.3	340		35	11.21	95.2
7/2/99 11:54 AM	15.5	23.1	340		35	11.24	95.0
7/2/99 12:54 PM	12.4	18.4	358		34	8.73	95.1
7/2/99 1:54 PM	13.3	19.8	357		36	9.46	95.0
7/5/99 12:08 PM	10.6	15.7	375		37	6.62	95.5
7/5/99 1:08 PM	9.1	13.5	354		27	6.02	95.3
7/5/99 2:08 PM	12.7	18.9	354		38	8.57	95.2
7/5/99 3:08 PM	13.7	20.4	354		39	10.94	94.4
7/5/99 4:08 PM	14.0	20.8	355		39	11.17	94.4
7/5/99 5:08 PM	13.1	19.4	355		35	9.30	95.0
7/5/99 6:08 PM	14.2	21.1	354		38	8.33	95.9
7/5/99 7:08 PM	13.3	19.8	354		36	9.39	95.0
7/5/99 8:08 PM	12.6	18.7	354		34	8.39	95.3
7/5/99 9:08 PM	13.1	19.4	355		36	8.32	95.5
7/5/99 11:08 PM	12.6	18.7	355		36	9.02	95.0
7/6/99 1:08 AM	12.4	18.4	356		36	8.32	95.3
7/6/99 2:08 AM	12.5	18.5	356		36	8.27	95.4
7/6/99 3:08 AM	12.5	18.6	356		36	8.24	95.4
7/6/99 4:08 AM	12.4	18.5	356		36	8.18	95.5
7/6/99 5:08 AM	12.3	18.3	356		36	8.08	95.5
7/6/99 6:08 AM	12.8	19.1	356		38	8.51	95.4
7/6/99 8:08 AM	15.1	22.4	337		38	10.78	95.2
7/6/99 9:08 AM	13.2	19.6	371		55	7.07	94.6
7/6/99 12:24 PM	8.0	11.8	484		53	3.29	95.7
7/6/99 1:32 PM	5.5	8.2	664		38	2.30	96.8

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
7/6/99 3:24 PM	6.7	9.9	539		52	2.65	95.5
7/6/99 4:24 PM	6.5	9.7	530		51	2.75	95.4
7/6/99 5:24 PM	6.7	9.9	527		51	2.77	95.4
7/6/99 6:24 PM	6.6	9.8	516		51	2.75	95.4
7/6/99 8:24 PM	6.7	9.9	514		53	2.70	95.5
7/6/99 9:24 PM	6.5	9.7	514		52	2.58	95.6
7/6/99 10:24 PM	6.6	9.8	514		53	2.54	95.7
7/6/99 11:24 PM	6.6	9.8	513		52	2.51	95.8
7/7/99 1:24 AM	6.6	9.8	515		52	2.41	96.0
7/7/99 2:24 AM	6.6	9.9	516		53	2.39	96.1
7/7/99 3:24 AM	6.6	9.9	517		52	2.37	96.1
7/7/99 5:24 AM	6.7	9.9	518		53	2.41	96.1
7/7/99 6:24 AM	6.5	9.7	517		52	2.39	96.1
7/7/99 7:24 AM	6.6	9.8	518		52	2.40	96.1
7/7/99 8:24 AM	7.7	11.5	454		50	3.29	95.7
7/7/99 10:36 AM	3.2	12.1	100	149	51	6.23	93.4
7/7/99 11:24 AM	3.1	11.7	100	149	50	6.28	93.2
7/7/99 12:22 PM	2.8	10.6	201	302	49	4.30	95.0
7/7/99 1:45 PM	2.3	8.9	225	330	45	3.46	95.1
7/7/99 3:45 PM	2.9	11.0	172	258	49	5.00	94.3
7/7/99 4:45 PM	2.8	10.8	173	257	48	4.95	94.2
7/7/99 5:45 PM	2.8	10.7	172	257	48	4.94	94.2
7/7/99 6:45 PM	2.8	10.7	173	256	48	4.88	94.2
7/7/99 7:45 PM	2.8	10.9	173	257	48	4.90	94.3
7/7/99 8:45 PM	2.9	11.1	173	258	50	4.97	94.4
7/7/99 9:45 PM	2.9	11.1	173	258	50	4.90	94.5
7/7/99 10:45 PM	2.9	11.2	173	258	50	4.85	94.6
7/7/99 11:45 PM	2.9	11.1	173	259	49	4.76	94.7
7/8/99 12:45 AM	2.9	11.1	173	259	49	4.73	94.8
7/8/99 1:45 AM	2.9	11.1	174	259	49	4.74	94.8
7/8/99 2:45 AM	2.9	11.2	174	259	49	4.79	94.8
7/8/99 3:45 AM	2.9	11.2	174	260	49	4.77	94.9
7/8/99 4:45 AM	2.9	11.2	174	259	49	4.79	94.9
7/8/99 5:45 AM	2.9	11.0	174	260	49	4.74	94.9
7/8/99 6:45 AM	2.9	11.1	174	259	49	4.78	94.9
7/8/99 11:45 AM	4.6	17.5	99	79	65	5.47	92.3
7/8/99 12:34 PM	4.5	17.1	58	80	65	6.25	91.4
7/8/99 1:35 PM	4.8	18.3	108	97	62	6.64	92.4
7/8/99 3:35 PM	4.8	18.3	107	101	59	7.51	92.0
7/8/99 10:33 PM	4.5	17.4	98	74	70	7.32	92.8
7/8/99 11:32 PM	4.6	17.5	96	63	76	5.14	92.5
7/9/99 12:32 AM	4.7	17.9	96	59	76	4.32	92.8
7/9/99 2:32 AM	4.3	16.5	96	58	74	3.78	93.2
7/9/99 3:32 AM	4.3	16.3	97	58	75	3.67	93.3
7/9/99 4:32 AM	4.2	15.9	96	58	72	3.57	93.4
7/9/99 5:32 AM	4.1	15.9	96	58	72	3.57	93.4
7/9/99 6:32 AM	4.1	15.9	96	57	72	3.59	93.4
7/9/99 7:32 AM	4.1	15.9	96	57	73	3.63	93.4
7/9/99 8:32 AM	4.0	15.3	91	47	74	2.91	92.9
7/9/99 10:32 AM	4.5	17.4	91	70	70	5.56	93.1
7/9/99 2:32 PM	5.0	19.2	95	65	76	5.29	91.1
7/9/99 3:32 PM	5.0	19.1	103	83	71	5.84	92.6

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
7/9/99 4:36 PM	5.0	19.4	101	80	70	6.74	91.7
7/9/99 5:32 PM	5.1	19.8	97	80	71	6.92	91.6
7/9/99 6:32 PM	5.2	20.0	97	80	71	7.16	91.6
7/9/99 7:32 PM	5.1	19.7	97	80	69	7.02	91.6
7/9/99 8:32 PM	5.2	19.8	97	79	70	6.98	91.8
7/9/99 9:32 PM	5.0	19.4	99	80	69	6.76	91.8
7/9/99 10:20 PM	5.2	19.8	98	80	71	6.85	92.0
7/9/99 11:20 PM	4.9	18.9	98	81	69	5.76	93.1
7/10/99 12:20 AM	4.9	18.9	98	80	70	5.73	93.2
7/10/99 1:20 AM	4.9	18.7	98	81	69	5.61	93.3
7/10/99 2:20 AM	4.8	18.6	98	80	70	5.50	93.5
7/10/99 3:20 AM	4.8	18.6	97	81	70	5.44	93.6
7/10/99 4:20 AM	4.7	18.2	97	79	69	5.32	93.6
7/10/99 5:20 AM	4.8	18.2	98	80	69	5.29	93.6
7/10/99 8:20 AM	4.6	17.8	97	79	68	5.17	93.7
7/10/99 11:30 AM	4.8	18.6	98	78	71	6.20	92.4
7/10/99 12:20 PM	4.8	18.4	109	90	63	6.50	92.8
7/10/99 2:23 PM	4.9	18.7	107	91	69	6.78	92.5
7/10/99 5:23 PM	4.8	18.6	101	87	68	6.66	92.4
7/10/99 6:23 PM	4.8	18.5	101	85	68	6.54	92.4
7/10/99 7:23 PM	4.8	18.3	101	85	68	6.43	92.5
7/10/99 8:23 PM	4.8	18.4	101	85	68	6.42	92.5
7/10/99 9:23 PM	4.8	18.2	101	86	68	6.30	92.7
7/10/99 10:23 PM	4.7	18.1	101	86	68	6.20	92.8
7/10/99 11:23 PM	4.7	18.1	101	86	68	6.26	92.8
7/11/99 12:23 AM	4.7	18.0	101	86	68	6.14	92.9
7/11/99 1:23 AM	4.7	18.1	103	85	68	6.13	92.9
7/11/99 2:23 AM	4.7	18.0	102	86	68	6.02	93.0
7/11/99 3:23 AM	4.5	17.2	102	85	67	5.15	93.9
7/11/99 4:23 AM	4.5	17.3	102	85	68	5.18	94.0
7/11/99 5:23 AM	4.5	17.1	103	84	67	5.12	94.0
7/11/99 6:23 AM	4.4	17.0	102	85	66	5.12	94.0
7/11/99 7:23 AM	4.5	17.2	102	84	68	5.19	94.0
7/11/99 8:23 AM	4.8	18.5	104	87	67	5.84	93.3
7/11/99 9:23 AM	5.0	19.2	105	88	69	6.86	92.3
7/11/99 10:23 AM	5.0	19.3	100	83	69	6.74	92.3
7/11/99 11:23 AM	5.0	19.1	101	81	69	6.53	92.3
7/12/99 7:25 AM	4.7	17.9	99	82	68	5.51	93.6
7/12/99 8:24 AM	5.0	19.3	40	70	64	8.00	91.8
7/12/99 9:24 AM	4.8	18.4	102	83	69	6.19	92.6
7/12/99 10:24 AM	4.8	18.3	99	75	72	5.52	92.4
7/12/99 11:24 AM	4.9	18.7	100	75	73	5.66	92.2
7/12/99 12:24 PM	4.8	18.4	98	74	73	5.58	92.2
7/12/99 1:24 PM	4.6	17.7	100	74	72	4.94	93.1
7/12/99 2:24 PM	4.5	17.3	97	71	72	4.81	93.0
7/12/99 3:24 PM	4.8	18.3	97	70	74	5.53	92.1
7/12/99 7:25 AM	4.7	17.9	99	82	68	5.51	93.6
7/12/99 8:24 AM	5.0	19.3	40	70	64	8.00	91.8
7/12/99 9:24 AM	4.8	18.4	102	83	69	6.19	92.6
7/12/99 10:24 AM	4.8	18.3	99	75	72	5.52	92.4
7/12/99 11:24 AM	4.9	18.7	100	75	73	5.66	92.2
7/12/99 12:24 PM	4.8	18.4	98	74	73	5.58	92.2

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
7/12/99 1:24 PM	4.6	17.7	100	74	72	4.94	93.1
7/12/99 2:24 PM	4.5	17.3	97	71	72	4.81	93.0
7/12/99 3:24 PM	4.8	18.3	97	70	74	5.53	92.1
7/13/99 7:57 AM	4.5	17.3	98	72	74	4.61	93.3
7/13/99 8:57 AM	4.5	17.2	98	72	74	4.61	93.2
7/13/99 9:57 AM	4.4	17.0	102	69	69	4.57	93.1
7/13/99 10:57 AM	4.5	17.3	98	71	74	4.71	93.0
7/13/99 11:57 AM	4.4	17.0	98	72	73	4.67	92.9
7/13/99 12:57 PM	4.5	17.1	97	71	73	4.73	92.8
7/13/99 1:57 PM	4.4	16.9	96	71	72	4.78	92.7
7/13/99 2:57 PM	4.5	17.3	95	71	74	5.02	92.6
7/13/99 3:45 PM	4.5	17.3	95	70	74	4.98	92.5
7/13/99 4:45 PM	4.5	17.3	95	71	74	5.00	92.5
7/13/99 5:45 PM	4.4	17.1	95	69	72	4.82	92.5
7/13/99 6:45 PM	4.5	17.2	94	71	74	4.80	92.6
7/13/99 7:45 PM	4.5	17.1	95	71	74	4.75	92.7
7/13/99 8:45 PM	4.4	17.1	94	72	74	4.74	92.8
7/13/99 9:45 PM	4.4	16.9	95	71	74	4.64	93.0
7/13/99 10:45 PM	4.4	16.9	96	72	74	4.55	93.1
7/13/99 11:45 PM	4.4	16.8	97	71	74	4.42	93.3
7/14/99 12:45 AM	4.3	16.7	97	72	74	4.24	93.6
7/14/99 1:45 AM	4.3	16.6	97	70	74	4.13	93.8
7/14/99 2:45 AM	4.2	16.3	96	72	72	3.99	94.0
7/14/99 3:45 AM	4.1	15.6	97	72	72	3.37	94.9
7/14/99 4:45 AM	4.0	15.4	96	72	72	3.34	94.9
7/14/99 5:45 AM	4.0	15.3	96	71	72	3.39	94.9
7/14/99 6:15 AM	4.0	15.3	96	72	72	3.39	94.9
7/14/99 7:15 AM	4.0	15.2	96	71	72	3.42	94.9
7/14/99 8:15 AM	4.4	16.9	109	120	57	6.68	94.5
7/14/99 9:15 AM	4.4	16.9	108	112	59	6.39	94.3
7/14/99 10:33 AM	4.2	16.1	97	76	71	4.35	93.8
7/14/99 11:33 AM	4.2	16.1	96	75	71	4.43	93.7
7/14/99 12:33 PM	4.2	16.0	96	76	71	4.52	93.5
7/14/99 1:33 PM	4.2	16.1	97	75	71	4.62	93.5
7/14/99 2:33 PM	4.1	15.8	97	77	70	4.66	93.4
7/14/99 3:33 PM	4.2	16.2	96	76	71	4.80	93.3
7/14/99 4:33 PM	4.2	16.2	95	77	71	4.74	93.3
7/14/99 5:33 PM	4.2	16.1	95	77	71	4.71	93.3
7/14/99 6:33 PM	4.2	16.0	95	77	71	4.62	93.4
7/14/99 7:33 PM	4.1	15.9	96	75	71	4.56	93.5
7/14/99 8:33 PM	4.1	15.8	96	77	71	4.56	93.5
7/14/99 9:33 PM	4.1	15.8	96	78	71	4.50	93.7
7/14/99 10:33 PM	4.0	15.4	97	77	70	4.35	93.9
7/14/99 11:33 PM	4.0	15.3	97	78	70	4.25	94.0
7/15/99 12:33 AM	4.0	15.2	99	78	70	4.16	94.1
7/15/99 2:33 AM	3.9	15.1	98	78	70	4.01	94.3
7/15/99 3:33 AM	3.9	15.1	98	78	70	3.99	94.4
7/15/99 4:33 AM	3.9	15.0	99	78	70	3.95	94.4
7/15/99 5:33 AM	3.9	14.9	98	79	70	3.92	94.5
7/15/99 6:33 AM	3.9	14.9	99	79	70	3.93	94.4
7/16/99 7:24 AM	3.5	13.6	99	77	67	3.62	94.4
7/16/99 8:24 AM	3.6	13.7	95	76	68	3.62	94.3



Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
7/16/99 9:24 AM	3.6	13.6	95	77	68	3.63	94.3
7/16/99 10:24 AM	3.6	13.7	96	77	68	3.66	94.2
7/16/99 1:24 PM	3.6	13.9	93	74	70	3.98	93.6
7/16/99 2:24 PM	3.6	13.8	94	74	70	3.99	93.5
7/16/99 4:24 PM	3.6	13.8	93	74	70	4.01	93.4
7/16/99 7:24 PM	3.6	13.7	93	74	70	4.04	93.3
7/16/99 8:24 PM	3.4	13.0	93	74	70	3.56	94.2
7/18/99 9:34 AM	3.3	12.7	94	78	69	3.63	93.9
7/18/99 10:34 AM	3.4	12.9	93	79	70	3.75	93.8
7/18/99 11:34 AM	3.4	12.9	92	78	70	3.79	93.7
7/18/99 12:34 PM	3.3	12.8	92	78	70	3.82	93.6
7/18/99 1:34 PM	3.3	12.6	92	78	68	3.76	93.6
7/18/99 2:34 PM	3.3	12.7	91	77	70	3.83	93.5
7/18/99 3:34 PM	3.3	12.7	91	77	70	3.82	93.4
7/18/99 4:34 PM	3.3	12.7	91	76	70	3.83	93.3
7/18/99 5:34 PM	3.4	12.9	90	77	71	3.88	93.3
7/18/99 6:34 PM	3.3	12.7	91	76	70	3.78	93.4
7/18/99 7:34 PM	3.3	12.6	90	77	70	3.71	93.5
7/18/99 10:34 PM	3.2	12.5	90	78	70	3.58	93.8
7/18/99 11:34 PM	3.2	12.4	90	78	70	3.52	93.9
7/19/99 10:22 AM	3.4	12.9	112	155	49	5.81	94.8
7/19/99 11:22 AM	3.2	12.1	67	110	57	5.58	93.6
7/19/99 1:22 PM	3.0	11.6	95	98	63	3.95	94.1
7/19/99 2:22 PM	3.0	11.6	95	96	65	3.90	94.0
7/19/99 3:22 PM	3.0	11.6	95	95	65	3.93	94.0
7/19/99 4:22 PM	3.0	11.5	96	96	65	3.84	94.1
7/19/99 5:22 PM	2.9	11.3	95	96	63	3.72	94.2
7/19/99 6:22 PM	2.9	11.2	95	97	63	3.55	94.4
7/19/99 7:22 PM	2.9	11.1	95	97	63	3.46	94.6
7/19/99 8:22 PM	2.9	11.0	95	97	63	3.33	94.8
7/20/99 10:35 AM	3.2	12.2	85	74	69	3.01	94.8
7/20/99 11:35 AM	3.6	13.9	111	171	45	6.33	95.3
7/20/99 12:35 PM	3.3	12.7	92	90	66	3.44	94.9
7/20/99 1:35 PM	3.1	12.0	61	51	65	3.59	93.3
7/20/99 2:35 PM	2.9	11.3	88	97	60	3.90	94.3
7/20/99 4:35 PM	3.5	13.5	117	188	43	6.87	94.8
7/20/99 5:35 PM	3.5	13.4	117	188	42	6.76	94.9
7/20/99 6:35 PM	3.5	13.4	117	189	0	6.79	94.9
7/20/99 7:35 PM	3.5	13.4	118	189	0	6.77	94.9
7/20/99 8:35 PM	3.5	13.3	118	191	0	6.76	94.9
7/20/99 10:35 PM	3.3	12.8	119	192	0	6.41	95.1
7/20/99 11:35 PM	3.3	12.8	119	192	0	6.38	95.2
7/21/99 12:35 AM	3.4	13.1	119	193	0	6.50	95.2
7/21/99 3:35 AM	3.2	12.4	119	196	0	5.27	96.0
7/21/99 4:35 AM	3.2	12.2	120	196	0	5.20	96.0
7/21/99 5:35 AM	3.3	12.5	121	196	0	5.34	96.0
7/21/99 6:35 AM	3.3	12.6	120	195	0	5.38	96.0
7/21/99 7:35 AM	3.1	11.9	117	184	44	4.89	96.0
7/21/99 8:57 AM	3.1	11.7	96	141	47	5.60	94.9
7/21/99 9:56 AM	3.1	11.8	101	154	45	5.84	94.9
7/21/99 11:56 AM	2.8	10.6	99	132	51	4.52	94.7
7/22/99 11:43 AM	2.6	10.0	99	128	53	4.36	94.4

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
7/22/99 12:43 PM	2.6	10.0	97	127	54	4.37	94.2
7/22/99 1:43 PM	2.6	9.9	97	127	53	4.35	94.1
7/22/99 2:43 PM	2.6	9.9	96	126	53	4.43	94.0
7/22/99 3:43 PM	2.6	10.2	96	126	54	4.54	93.9
7/22/99 4:43 PM	2.6	10.1	96	126	54	4.50	93.9
7/22/99 5:43 PM	2.3	8.8	40	39	75	2.60	94.2
7/22/99 6:43 PM	2.5	9.5	77	77	64	3.07	93.6
7/22/99 7:43 PM	2.5	9.8	80	78	66	3.36	93.2
7/22/99 8:43 PM	2.7	10.3	82	79	67	3.98	92.0
7/22/99 9:43 PM	2.8	10.6	240	381	50	3.66	96.1
7/23/99 9:43 AM	6.0	23.1	122	169	45	18.77	91.2
7/23/99 10:43 AM	5.5	21.0	123	163	48	11.16	94.1
7/23/99 11:43 AM	5.8	22.1	113	125	58	8.12	94.6
7/23/99 1:28 PM	5.1	19.6	104	85	69	7.36	91.3
7/23/99 2:28 PM	4.8	18.3	103	88	70	4.97	93.7
7/23/99 3:00 PM	5.0	19.1	101	86	68	7.55	90.3
7/23/99 4:00 PM	5.2	19.8	102	84	70	7.64	90.6
7/23/99 5:28 PM	4.7	18.2	102	86	70	4.93	93.7
7/23/99 6:00 PM	5.0	19.2	100	86	70	7.61	90.3
7/23/99 7:28 PM	5.0	19.3	99	87	70	7.41	90.6
7/23/99 8:00 PM	5.0	19.2	98	87	70	7.57	90.4
7/23/99 9:00 PM	5.2	19.9	103	84	71	7.68	90.9
7/23/99 10:00 PM	4.7	18.2	106	85	70	5.20	93.5
7/23/99 11:00 PM	4.6	17.5	104	89	69	4.73	94.0
7/24/99 12:00 AM	4.6	17.7	105	89	70	4.81	94.0
7/24/99 1:00 AM	4.7	18.2	105	88	70	5.71	93.0
7/24/99 2:27 AM	4.6	17.5	105	89	68	5.34	93.3
7/24/99 3:00 AM	4.7	17.9	106	88	70	5.52	93.2
7/24/99 4:00 AM	4.5	17.1	105	89	68	4.33	94.5
7/24/99 5:00 AM	4.5	17.1	106	89	68	4.31	94.5
7/24/99 6:00 AM	4.6	17.6	106	89	70	4.49	94.4
7/24/99 7:00 AM	4.6	17.7	105	90	70	4.57	94.4
7/24/99 7:28 AM	4.6	17.7	106	89	70	4.58	94.4
7/24/99 8:28 AM	4.4	16.9	132	105	71	4.56	93.4
7/24/99 9:27 AM	4.4	16.8	132	106	71	4.53	93.5
7/24/99 9:28 AM	4.4	17.0	132	106	73	4.56	93.5
7/27/99 9:19 AM	3.7	14.1	141	208	41	5.08	96.6
7/27/99 11:19 AM	3.4	12.9	124	140	54	4.33	95.4
7/27/99 12:19 PM	3.5	13.5	124	133	58	4.30	95.3
7/27/99 1:19 PM	3.8	14.4	113	95	71	3.69	94.4
7/27/99 2:08 PM	3.8	14.5	111	94	70	3.47	94.6
7/27/99 3:08 PM	3.5	13.5	111	96	70	3.75	93.9
7/27/99 4:08 PM	3.5	13.6	111	95	70	3.68	93.9
7/27/99 5:08 PM	3.6	13.7	110	95	70	3.79	93.8
7/27/99 6:08 PM	3.6	13.8	109	95	70	3.82	93.8
7/27/99 7:08 PM	3.6	13.8	110	95	70	3.81	93.8
7/27/99 8:08 PM	3.5	13.5	110	95	68	3.75	93.9
7/27/99 9:08 PM	3.6	13.8	111	95	70	3.86	93.9
7/28/99 12:08 AM	3.6	13.6	113	96	70	3.69	94.2
7/28/99 1:08 AM	3.5	13.4	112	96	68	3.58	94.3
7/28/99 2:08 AM	3.5	13.5	112	96	68	3.57	94.4
7/28/99 3:08 AM	3.5	13.4	112	96	68	3.58	94.4

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
7/28/99 4:08 AM	3.5	13.4	113	96	68	3.53	94.4
7/28/99 5:08 AM	3.5	13.4	112	97	68	3.55	94.4
7/28/99 6:08 AM	3.5	13.4	112	97	68	3.60	94.4
7/28/99 9:08 AM	3.5	13.4	113	96	68	3.68	94.3
7/28/99 10:08 AM	3.4	13.2	115	97	67	3.65	94.2
7/28/99 10:35 AM	3.7	14.2	110	93	68	3.94	94.0
7/28/99 11:35 AM	3.8	14.5	109	94	70	3.99	94.1
7/28/99 12:35 PM	4.1	15.7	107	88	70	4.71	93.2
7/28/99 1:35 PM	4.1	15.8	106	88	70	4.86	93.0
7/28/99 2:35 PM	4.1	15.6	104	89	70	4.72	93.0
7/28/99 3:35 PM	4.2	15.9	105	88	70	4.83	93.0
7/28/99 4:35 PM	4.2	16.1	103	88	70	5.02	92.7
7/28/99 5:35 PM	4.1	15.6	104	88	70	4.28	93.7
7/28/99 6:35 PM	4.1	15.6	104	88	70	4.30	93.7
7/28/99 7:35 PM	4.1	15.8	105	88	70	4.57	93.3
7/28/99 8:35 PM	4.2	16.3	105	88	70	5.43	92.2
7/28/99 9:35 PM	4.1	15.7	105	89	70	4.95	92.9
7/28/99 10:35 PM	4.0	15.5	107	88	70	4.44	93.6
7/28/99 11:35 PM	4.2	15.9	107	88	70	5.20	92.7
7/29/99 12:35 AM	4.0	15.4	106	90	68	4.57	93.4
7/29/99 1:35 AM	4.0	15.3	107	90	68	4.60	93.3
7/29/99 2:35 AM	4.0	15.4	106	90	69	4.75	93.2
7/29/99 3:35 AM	3.9	15.2	108	89	68	4.35	93.7
7/29/99 4:35 AM	4.1	15.9	108	89	70	5.42	92.4
7/29/99 5:35 AM	3.9	15.1	105	90	68	4.51	93.5
7/29/99 6:35 AM	3.9	14.9	107	91	68	4.05	94.2
7/29/99 7:35 AM	3.9	14.9	108	91	68	4.08	94.2
7/29/99 8:35 AM	3.9	15.0	108	91	68	4.10	94.1
7/29/99 12:06 PM	3.9	15.1	104	85	68	4.40	93.4
7/29/99 1:06 PM	3.9	15.1	105	85	68	3.99	94.0
7/29/99 2:06 PM	4.0	15.4	108	86	70	4.10	93.9
7/29/99 3:06 PM	4.0	15.4	105	85	70	4.09	93.8
7/29/99 4:06 PM	4.0	15.4	104	85	70	4.09	93.7
7/29/99 12:06 PM	3.9	15.1	104	85	68	4.40	93.4
7/29/99 1:06 PM	3.9	15.1	105	85	68	3.99	94.0
7/29/99 2:06 PM	4.0	15.4	108	86	70	4.10	93.9
7/29/99 3:06 PM	4.0	15.4	105	85	70	4.09	93.8
7/29/99 4:06 PM	4.0	15.4	104	85	70	4.09	93.7
7/29/99 6:06 PM	4.0	15.2	104	85	70	3.85	94.0
7/29/99 7:06 PM	4.0	15.3	103	86	70	3.92	93.9
7/29/99 8:06 PM	4.0	15.2	103	86	70	4.17	93.6
7/29/99 9:06 PM	3.9	15.1	103	86	68	4.83	92.6
7/29/99 11:06 PM	4.1	15.6	103	86	68	5.99	90.9
7/30/99 12:06 AM	4.0	15.2	104	86	67	5.65	91.3
7/30/99 1:06 AM	3.9	15.1	103	87	69	5.23	92.0
7/30/99 2:06 AM	3.9	14.8	104	88	68	4.80	92.7
7/30/99 3:06 AM	3.8	14.5	105	86	68	4.22	93.7
7/30/99 4:06 AM	3.7	14.3	107	88	68	3.75	94.3
7/30/99 5:06 AM	3.7	14.2	108	89	68	3.59	94.5
7/30/99 7:06 AM	3.7	14.2	108	90	68	3.48	94.7
7/30/99 8:06 AM	3.7	14.3	107	89	68	3.52	94.6
7/30/99 9:06 AM	3.9	15.1	106	87	70	4.13	93.9

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
7/30/99 1:24 PM	4.1	15.6	105	85	70	4.64	93.1
7/30/99 2:24 PM	4.2	16.3	104	83	69	5.73	91.7
7/30/99 3:24 PM	4.3	16.4	103	83	70	5.85	91.5
7/30/99 6:24 PM	4.1	15.9	104	83	70	4.55	93.2
7/30/99 8:24 PM	4.0	15.4	103	85	70	3.98	93.9
7/30/99 9:24 PM	4.0	15.2	103	86	70	3.85	94.2
7/30/99 11:24 PM	3.8	14.7	104	86	68	3.67	94.3
7/31/99 5:24 AM	3.9	15.0	103	89	68	5.07	92.4
7/31/99 6:24 AM	3.7	14.1	104	89	67	3.68	94.3
8/1/99 11:50 AM	3.7	14.2	101	88	68	3.45	94.5
8/1/99 2:50 PM	3.7	14.2	100	86	68	3.40	94.5
8/1/99 4:50 PM	3.9	14.8	99	87	68	4.65	92.1
8/1/99 5:50 PM	4.2	16.1	101	84	70	6.74	89.1
8/1/99 6:50 PM	4.2	16.2	103	83	70	6.22	90.6
8/1/99 7:50 PM	3.9	15.1	104	85	69	3.94	93.8
8/1/99 8:50 PM	3.8	14.6	103	87	69	3.44	94.5
8/1/99 10:50 PM	3.7	14.3	103	87	68	3.48	94.5
8/1/99 11:50 PM	3.7	14.3	102	88	68	3.83	94.0
8/2/99 1:50 AM	3.8	14.5	103	88	68	4.33	93.3
8/2/99 5:50 AM	3.6	13.9	105	89	68	3.30	94.8
8/2/99 6:50 AM	3.7	14.1	108	89	68	3.37	94.8
8/2/99 8:04 AM	3.7	14.1	109	88	68	3.57	94.4
8/2/99 9:04 AM	3.8	14.7	107	86	70	4.16	93.7
8/2/99 10:04 AM	4.0	15.3	106	86	70	5.26	92.1
8/2/99 11:04 AM	3.8	14.6	104	89	69	4.60	92.8
8/2/99 12:04 PM	3.6	14.0	104	88	68	3.41	94.5
8/2/99 1:04 PM	3.7	14.2	104	88	70	3.35	94.6
8/2/99 2:04 PM	3.7	14.2	104	86	68	3.43	94.4
8/2/99 3:04 PM	3.8	14.6	104	87	70	3.74	94.0
8/2/99 4:04 PM	3.8	14.7	103	86	70	3.95	93.5
8/2/99 5:04 PM	4.1	15.8	103	84	70	5.04	92.2
8/2/99 6:04 PM	4.0	15.3	103	86	70	5.08	92.1
8/2/99 7:04 PM	3.7	14.3	103	87	68	3.80	93.9
8/2/99 8:04 PM	3.9	14.9	103	86	70	4.26	93.4
8/2/99 10:04 PM	3.9	14.8	104	86	70	4.15	93.5
8/3/99 12:04 AM	3.8	14.5	105	88	70	3.87	94.0
8/3/99 1:04 AM	3.7	14.2	105	88	68	3.70	94.2
8/3/99 3:04 AM	3.7	14.1	105	88	68	3.59	94.3
8/3/99 5:04 AM	3.7	14.0	105	89	68	3.56	94.3
8/3/99 6:04 AM	3.7	14.0	105	89	68	3.59	94.3
8/3/99 11:43 AM	3.7	14.3	105	88	70	3.83	93.9
8/3/99 12:43 PM	3.8	14.6	104	88	70	3.96	93.7
8/3/99 1:43 PM	3.8	14.4	104	88	70	3.82	93.9
8/3/99 2:43 PM	3.8	14.6	103	87	70	3.97	93.7
8/3/99 3:43 PM	3.8	14.6	103	87	70	3.93	93.7
8/3/99 4:43 PM	3.9	14.8	103	87	71	3.92	93.7
8/3/99 6:43 PM	3.8	14.5	104	86	70	3.77	93.9
8/3/99 7:43 PM	3.9	14.9	103	87	71	3.98	93.7
8/3/99 8:43 PM	3.8	14.6	104	87	70	3.85	93.9
8/3/99 11:43 PM	3.8	14.5	105	88	71	3.70	94.2
8/4/99 12:43 AM	3.7	14.3	106	88	70	3.61	94.3
8/4/99 2:43 AM	3.7	14.2	106	88	70	3.53	94.5

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
8/4/99 7:43 AM	3.8	14.6	106	88	70	3.80	94.2
8/2/99 8:04 AM	3.7	14.1	109	88	68	3.57	94.4
8/2/99 9:04 AM	3.8	14.7	107	86	70	4.16	93.7
8/2/99 10:04 AM	4.0	15.3	106	86	70	5.26	92.1
8/4/99 11:12 AM	3.8	14.7	105	87	70	3.88	94.0
8/4/99 12:12 PM	3.9	15.1	104	87	71	4.15	93.6
8/4/99 1:12 PM	4.0	15.2	104	86	70	4.31	93.3
8/4/99 2:12 PM	3.9	15.0	103	86	71	4.01	93.7
8/4/99 3:12 PM	4.0	15.2	103	85	71	4.40	93.1
8/4/99 5:12 PM	3.9	15.0	102	85	70	4.23	93.1
8/4/99 6:12 PM	3.9	15.1	103	85	71	4.01	93.5
8/4/99 8:12 PM	4.0	15.2	102	86	71	4.11	93.4
8/4/99 10:12 PM	3.9	14.9	103	86	71	4.00	93.7
8/4/99 11:12 PM	3.8	14.6	103	86	70	3.87	93.8
8/5/99 12:12 AM	3.8	14.5	104	87	70	3.79	93.9
8/5/99 1:12 AM	3.8	14.5	105	86	70	3.75	94.0
8/5/99 2:12 AM	3.8	14.4	104	88	70	3.71	94.1
8/5/99 4:12 AM	3.8	14.4	105	87	70	3.69	94.2
8/5/99 5:12 AM	3.7	14.3	105	87	70	3.68	94.2
8/5/99 6:12 AM	3.7	14.3	106	86	70	3.65	94.2
8/5/99 7:12 AM	3.8	14.4	105	89	70	3.70	94.2
8/5/99 7:18 AM	3.7	14.2	106	89	70	3.63	94.2
8/5/99 7:18 AM	3.7	14.2	106	89	70	3.63	94.2
8/5/99 8:18 AM	3.7	14.2	106	88	70	3.67	94.2
8/5/99 8:18 AM	3.7	14.2	106	88	70	3.67	94.2
8/5/99 8:18 AM	3.7	14.2	106	88	70	3.67	94.2
8/5/99 9:18 AM	3.8	14.7	104	88	71	3.84	94.1
8/5/99 9:18 AM	3.8	14.7	104	88	71	3.84	94.1
8/5/99 9:18 AM	3.8	14.7	104	88	71	3.84	94.1
8/5/99 10:18 AM	3.8	14.6	104	88	71	3.83	94.0
8/5/99 10:18 AM	3.8	14.6	104	88	71	3.83	94.0
8/5/99 10:18 AM	3.8	14.6	104	88	71	3.83	94.0
8/5/99 1:18 PM	3.8	14.7	82	83	69	4.15	93.5
8/5/99 1:18 PM	3.8	14.7	82	83	69	4.15	93.5
8/5/99 1:18 PM	3.8	14.7	82	83	69	4.15	93.5
8/5/99 2:18 PM	3.9	14.8	103	86	71	4.04	93.5
8/5/99 2:18 PM	3.9	14.8	103	86	71	4.04	93.5
8/5/99 2:18 PM	3.9	14.8	103	86	71	4.04	93.5
8/5/99 2:28 PM	3.9	14.9	103	86	70	4.13	93.4
8/5/99 4:28 PM	3.9	15.0	102	86	71	4.05	93.3
8/5/99 7:28 PM	3.9	15.0	102	85	71	3.97	93.5
8/5/99 8:28 PM	3.9	14.8	102	86	71	3.87	93.6
8/5/99 9:28 PM	3.9	14.8	104	85	71	3.88	93.7
8/5/99 10:28 PM	3.7	14.4	103	86	70	3.68	94.0
8/5/99 11:28 PM	3.8	14.5	104	87	71	3.59	94.2
8/6/99 12:28 AM	3.7	14.2	104	87	70	3.49	94.3
8/6/99 1:28 AM	3.8	14.4	104	87	71	3.51	94.4
8/6/99 4:28 AM	3.7	14.1	105	87	70	3.41	94.6
8/6/99 5:28 AM	3.7	14.0	105	87	70	3.41	94.6
8/6/99 7:41 AM	3.6	13.9	105	88	70	3.32	94.7
8/6/99 8:28 AM	3.6	13.9	105	88	70	3.33	94.7
8/6/99 9:28 AM	3.6	14.0	105	87	70	3.40	94.6

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
8/6/99 9:41 AM	3.6	13.9	106	86	70	3.37	94.6
8/6/99 10:28 AM	3.7	14.1	106	88	71	3.39	94.6
8/6/99 10:41 AM	3.7	14.2	105	87	71	3.42	94.6
8/6/99 11:28 AM	3.6	14.0	105	86	70	3.43	94.4
8/6/99 11:41 AM	3.7	14.4	104	87	71	3.58	94.3
8/6/99 12:28 PM	3.7	14.1	103	87	70	3.56	94.2
8/6/99 1:28 PM	3.8	14.5	103	86	71	3.75	94.0
8/6/99 1:41 PM	3.8	14.5	103	86	71	3.73	94.0
8/7/99 8:20 AM	3.7	14.1	103	84	70	3.64	93.8
8/7/99 9:20 AM	3.7	14.3	103	85	71	3.81	93.7
8/7/99 10:20 AM	3.8	14.4	104	83	71	3.81	93.6
8/7/99 12:20 PM	3.8	14.5	104	83	71	4.02	93.1
8/7/99 2:20 PM	3.9	15.0	102	82	71	4.81	91.8
8/7/99 3:20 PM	4.0	15.4	103	80	72	5.06	91.6
8/7/99 4:20 PM	3.7	14.3	101	83	71	3.74	93.5
8/7/99 6:20 PM	3.8	14.7	102	82	72	3.60	93.8
8/7/99 8:20 PM	4.1	15.6	103	79	72	4.93	92.0
8/7/99 9:20 PM	3.9	14.8	102	80	70	4.78	91.7
8/7/99 10:20 PM	3.7	14.0	103	83	70	3.60	93.8
8/8/99 12:20 AM	3.8	14.6	103	83	71	4.12	93.1
8/8/99 1:20 AM	3.7	14.3	105	83	71	3.81	93.6
8/8/99 2:20 AM	3.7	14.3	105	83	71	3.79	93.6
8/8/99 3:20 AM	3.7	14.2	105	84	71	3.68	93.7
8/8/99 4:20 AM	3.7	14.1	105	84	71	3.65	93.8
8/8/99 6:20 AM	3.7	14.1	106	84	71	3.57	93.9
8/8/99 7:20 AM	3.7	14.0	106	84	70	3.53	94.0
8/8/99 7:59 AM	3.6	14.0	106	84	71	3.47	94.0
8/8/99 9:59 AM	3.7	14.1	105	84	71	3.62	93.8
8/8/99 11:59 AM	3.7	14.3	104	83	71	3.78	93.5
8/8/99 12:59 PM	3.7	14.2	104	83	71	3.74	93.4
8/8/99 2:59 PM	3.8	14.4	103	83	72	3.76	93.4
8/8/99 4:59 PM	3.7	14.3	103	80	72	3.09	94.6
8/8/99 6:59 PM	3.6	13.9	100	79	71	3.09	94.6
8/8/99 7:59 PM	3.6	13.8	100	77	71	3.11	94.7
8/8/99 9:59 PM	3.5	13.3	100	76	70	2.97	94.9
8/8/99 10:59 PM	3.4	13.1	100	76	70	2.91	95.0
8/9/99 1:59 AM	3.3	12.8	99	74	70	2.79	95.3
8/9/99 2:59 AM	3.3	12.7	99	74	70	2.77	95.3
8/9/99 3:59 AM	3.3	12.7	99	74	70	2.75	95.4
8/9/99 4:59 AM	3.3	12.7	100	73	70	2.75	95.4
8/9/99 5:59 AM	3.3	12.6	99	73	70	2.73	95.4
8/9/99 6:59 AM	3.3	12.5	99	74	70	2.69	95.5
8/9/99 8:01 AM	3.2	12.4	99	74	70	2.63	95.5
8/9/99 9:01 AM	3.2	12.4	98	73	70	2.67	95.5
8/9/99 10:01 AM	3.8	14.7	103	80	71	3.98	93.3
8/9/99 12:01 PM	3.8	14.8	105	86	70	4.13	93.5
8/9/99 1:01 PM	3.9	15.0	103	85	70	4.35	93.2
8/9/99 2:01 PM	3.9	14.8	104	85	70	4.06	93.6
8/9/99 4:01 PM	3.9	14.8	104	87	70	4.29	93.2
8/9/99 5:01 PM	3.8	14.8	104	86	70	4.13	93.4
8/9/99 6:01 PM	3.9	14.8	104	86	70	4.10	93.4
8/9/99 7:01 PM	3.8	14.7	104	86	70	4.06	93.4

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
8/9/99 8:01 PM	3.7	14.4	103	84	70	3.14	95.0
8/9/99 9:01 PM	3.7	14.3	103	84	70	3.14	95.1
8/9/99 10:01 PM	3.6	13.6	102	83	68	3.04	95.2
8/9/99 11:01 PM	3.5	13.4	102	81	0	3.00	95.4
8/10/99 12:01 AM	3.4	13.2	102	80	0	2.95	95.5
8/10/99 1:01 AM	3.4	13.0	102	81	0	2.88	95.7
8/10/99 6:01 AM	3.2	12.5	101	78	0	2.63	96.0
8/10/99 7:01 AM	3.2	12.4	100	78	0	2.61	96.1
8/10/99 7:58 AM	3.2	12.4	104	78	0	2.57	96.1
8/10/99 8:58 AM	3.2	12.5	58	71	0	4.27	95.2
8/10/99 9:58 AM	3.7	14.1	100	78	71	3.47	94.2
8/10/99 10:58 AM	3.7	14.2	101	78	71	3.55	94.0
8/10/99 11:58 AM	3.7	14.2	101	78	0	3.64	93.9
8/10/99 1:58 PM	3.7	14.2	100	77	71	3.68	93.7
8/10/99 5:58 PM	3.7	14.2	91	64	72	3.52	93.2
8/11/99 7:42 AM	3.9	14.8	96	71	72	3.51	93.7
8/11/99 3:42 PM	4.0	15.2	94	69	74	3.79	92.8
8/11/99 5:42 PM	4.0	15.2	94	70	73	3.76	92.9
8/11/99 11:42 PM	3.8	14.7	95	71	74	3.49	93.5
8/12/99 12:42 AM	3.8	14.7	95	71	74	3.47	93.6
8/12/99 1:42 AM	3.8	14.6	95	72	74	3.41	93.7
8/12/99 2:42 AM	3.8	14.6	95	71	74	3.42	93.7
8/12/99 3:42 AM	3.8	14.4	95	72	72	3.37	93.8
8/12/99 4:42 AM	3.8	14.5	97	71	73	3.37	93.8
8/12/99 5:42 AM	3.8	14.5	95	72	74	3.38	93.8
8/12/99 6:42 AM	3.8	14.4	95	71	74	3.36	93.9
8/12/99 7:35 AM	3.8	14.4	96	71	74	3.33	93.9
8/12/99 8:35 AM	3.7	14.4	96	72	74	3.33	93.9
8/12/99 9:35 AM	3.7	14.3	93	71	72	3.34	93.9
8/12/99 12:35 PM	3.9	15.0	94	71	74	3.97	92.3
8/12/99 3:35 PM	3.8	14.5	93	68	74	3.56	92.4
8/12/99 5:35 PM	3.5	13.3	93	70	74	2.93	93.2
8/12/99 7:35 PM	3.4	12.9	94	70	74	2.79	93.5
8/12/99 11:35 PM	3.2	12.5	97	71	73	2.72	94.0
8/13/99 2:35 AM	3.4	13.0	97	72	74	2.81	94.1
8/13/99 3:35 AM	3.4	13.0	97	72	74	2.82	94.1
8/13/99 5:35 AM	3.4	13.1	97	71	74	2.87	94.0
8/13/99 6:35 AM	3.4	13.1	98	72	74	2.86	94.0
8/13/99 8:35 AM	3.3	12.8	98	73	72	2.81	94.1
8/13/99 9:35 AM	3.4	13.2	98	72	74	2.92	93.9
8/13/99 10:35 AM	3.4	12.9	97	71	72	2.56	94.5
8/13/99 11:35 AM	3.5	13.2	98	71	74	2.72	94.2
8/13/99 1:35 PM	3.5	13.5	96	70	74	2.83	94.0
8/13/99 2:35 PM	3.6	13.8	95	70	75	2.94	93.9
8/13/99 3:35 PM	3.6	13.8	94	70	73	2.94	93.7
8/13/99 4:35 PM	3.7	14.0	94	69	75	2.98	93.7
8/13/99 5:35 PM	3.7	14.1	93	69	75	3.00	93.7
8/13/99 7:35 PM	3.6	13.9	93	69	75	2.94	93.7
8/13/99 8:35 PM	3.6	13.9	95	68	75	2.94	93.8
8/13/99 10:35 PM	3.6	13.8	97	69	75	2.87	94.1
8/13/99 11:35 PM	3.5	13.6	97	69	74	2.80	94.2
8/14/99 12:35 AM	3.5	13.6	95	70	74	2.79	94.2

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
8/14/99 1:35 AM	3.5	13.5	95	70	74	2.77	94.3
8/14/99 2:35 AM	3.5	13.5	95	70	74	2.78	94.3
8/14/99 3:35 AM	3.5	13.5	96	70	73	2.77	94.3
8/14/99 4:35 AM	3.5	13.5	95	70	74	2.79	94.3
8/14/99 5:35 AM	3.5	13.5	96	70	74	2.78	94.3
8/14/99 8:40 AM	3.6	13.9	95	71	75	3.20	93.6
8/14/99 9:40 AM	3.6	13.7	95	70	74	3.21	93.5
8/14/99 10:40 AM	3.6	13.7	95	69	74	3.22	93.3
8/14/99 11:40 AM	3.6	14.0	95	70	75	3.36	93.1
8/14/99 12:40 PM	3.6	13.8	94	69	74	3.42	92.9
8/14/99 1:40 PM	3.6	14.0	94	69	74	3.52	92.7
8/14/99 2:40 PM	3.7	14.1	94	69	74	3.55	92.6
8/14/99 3:40 PM	3.7	14.3	93	69	75	3.68	92.2
8/14/99 4:40 PM	3.6	13.9	93	69	75	3.37	92.6
8/14/99 6:40 PM	3.5	13.5	92	70	74	3.09	93.0
8/14/99 7:40 PM	3.5	13.5	93	69	74	3.27	92.7
8/14/99 11:40 PM	3.3	12.8	95	71	74	2.76	93.9
8/15/99 12:40 AM	3.3	12.8	96	71	74	2.73	94.0
8/15/99 1:40 AM	3.3	12.8	96	71	73	2.71	94.1
8/15/99 2:40 AM	3.4	13.0	96	70	74	2.10	95.6
8/15/99 3:40 AM	3.5	13.3	94	68	74	2.23	95.5
8/15/99 4:40 AM	3.4	12.9	92	64	74	2.21	95.6
8/15/99 5:40 AM	3.3	12.5	91	61	74	2.19	95.7
8/15/99 7:26 AM	3.7	14.2	95	67	75	3.18	93.7
8/15/99 9:26 AM	3.7	14.1	95	67	75	3.22	93.6
8/15/99 10:26 AM	3.6	13.7	94	68	74	3.16	93.5
8/15/99 11:26 AM	3.7	14.0	95	68	75	3.30	93.3
8/15/99 2:26 PM	3.7	14.3	96	67	74	3.66	92.3
8/15/99 3:26 PM	3.6	13.8	92	69	74	3.43	92.3
8/15/99 4:26 PM	3.5	13.6	94	68	74	3.37	92.0
8/15/99 6:26 PM	3.3	12.7	94	71	73	2.93	92.5
8/15/99 7:26 PM	3.3	12.5	94	71	74	2.82	92.7
8/15/99 10:26 PM	3.1	12.0	97	72	74	2.56	93.7
8/15/99 11:26 PM	3.0	11.6	96	73	72	2.47	93.9
8/16/99 12:26 AM	3.2	12.3	97	70	73	2.80	93.5
8/16/99 3:26 AM	3.2	12.3	97	72	73	2.74	93.9
8/16/99 4:26 AM	3.2	12.2	97	73	74	2.66	94.1
8/16/99 5:26 AM	3.2	12.3	99	72	74	2.68	94.1
8/16/99 6:26 AM	3.2	12.3	96	73	74	2.69	94.1
8/16/99 7:30 AM	3.3	12.5	97	72	74	2.78	94.0
8/16/99 8:30 AM	3.2	12.4	98	72	74	2.72	94.1
8/16/99 9:30 AM	3.2	12.4	98	73	74	2.75	93.9
8/16/99 11:30 AM	3.1	11.9	97	73	71	3.20	92.0
8/16/99 12:30 PM	3.4	13.1	94	69	72	2.37	94.9
8/16/99 2:30 PM	3.6	13.8	93	67	72	2.89	93.9
8/16/99 6:30 PM	3.3	12.6	93	70	72	2.85	93.0
8/16/99 10:30 PM	3.3	12.5	96	69	71	2.56	94.4
8/17/99 12:30 AM	3.3	12.8	96	71	74	2.86	93.8
8/17/99 1:30 AM	3.3	12.7	96	72	74	2.78	93.9
8/17/99 2:30 AM	3.3	12.8	96	71	74	2.78	94.0
8/17/99 4:30 AM	3.3	12.5	96	71	72	2.71	94.0
8/17/99 5:30 AM	3.3	12.5	97	71	72	2.74	94.0



Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
8/17/99 6:30 AM	3.3	12.7	96	72	74	2.79	94.0
8/17/99 8:58 AM	3.3	12.5	98	72	72	2.80	93.9
8/17/99 10:58 AM	3.3	12.5	97	72	72	2.86	93.8
8/17/99 12:58 PM	3.3	12.7	97	71	72	2.99	93.5
8/17/99 2:58 PM	3.5	13.5	97	69	74	3.26	93.0
8/17/99 3:58 PM	3.4	13.2	93	71	74	2.92	93.6
8/17/99 4:58 PM	3.4	13.0	94	70	74	2.67	94.1
8/17/99 7:58 PM	3.4	13.1	92	70	74	2.98	93.7
8/17/99 9:58 PM	3.4	13.0	94	71	74	2.76	94.1
8/17/99 10:58 PM	3.4	13.2	95	71	74	2.98	93.7
8/17/99 11:58 PM	3.4	13.2	95	71	74	3.09	93.4
8/18/99 12:58 AM	3.4	13.0	96	71	74	2.98	93.7
8/18/99 2:58 AM	3.3	12.8	96	72	72	2.93	93.7
8/18/99 4:58 AM	3.4	12.9	96	72	74	2.93	93.8
8/18/99 5:58 AM	3.3	12.6	95	73	71	2.85	93.8
8/18/99 6:58 AM	3.3	12.8	96	73	74	2.90	93.9
8/18/99 12:32 PM	3.3	12.5	95	73	73	2.76	94.0
8/18/99 1:32 PM	3.4	13.0	97	71	74	3.08	93.4
8/18/99 3:32 PM	3.3	12.8	96	70	74	2.98	93.6
8/18/99 4:32 PM	3.4	12.9	94	71	74	3.05	93.4
8/18/99 5:32 PM	3.3	12.8	95	71	74	3.03	93.3
8/18/99 7:32 PM	3.3	12.7	94	72	74	2.88	93.5
8/18/99 8:32 PM	3.3	12.7	94	71	74	2.84	93.7
8/18/99 9:32 PM	3.2	12.4	95	71	74	2.11	95.3
8/18/99 10:32 PM	3.3	12.7	95	69	74	2.17	95.3
8/18/99 11:32 PM	3.2	12.2	93	66	72	2.12	95.5
8/19/99 12:32 AM	3.1	12.0	93	65	71	2.05	95.7
8/19/99 1:32 AM	3.1	11.7	91	62	72	1.99	95.8
8/19/99 2:32 AM	2.9	11.3	88	60	71	1.91	96.0
8/19/99 4:32 AM	2.9	11.1	86	57	72	1.88	96.2
8/19/99 5:32 AM	2.8	10.8	85	56	70	1.84	96.3
8/19/99 9:36 AM	3.3	12.7	92	65	74	2.66	94.3
8/19/99 10:36 AM	3.4	13.2	94	68	69	3.04	93.4
8/19/99 11:36 AM	3.6	13.6	93	68	72	3.23	93.3
8/19/99 12:36 PM	3.6	13.7	93	68	73	3.24	93.3
8/19/99 2:36 PM	3.6	13.7	93	69	74	3.25	93.1
8/19/99 6:36 PM	3.4	13.2	92	68	72	2.46	94.6
8/19/99 7:36 PM	3.5	13.2	92	67	72	2.49	94.7
8/19/99 9:36 PM	3.4	13.0	90	63	73	2.42	95.0
8/19/99 10:36 PM	3.3	12.5	89	61	74	2.33	95.2
8/19/99 11:36 PM	3.1	11.9	88	59	72	2.18	95.5
8/20/99 12:36 AM	3.0	11.4	87	57	71	2.08	95.6
8/20/99 3:36 AM	2.8	10.7	83	55	71	1.88	96.1
8/20/99 5:36 AM	2.7	10.3	81	53	70	1.86	96.2
8/20/99 6:36 AM	3.0	11.6	88	57	71	2.57	94.1
8/20/99 7:33 AM	3.0	11.7	88	62	72	1.91	95.7
8/20/99 8:33 AM	2.8	10.8	83	57	70	1.85	95.8
8/20/99 1:16 PM	3.5	13.3	90	61	74	2.81	93.6
8/20/99 1:33 PM	3.4	13.2	90	61	74	2.80	93.5
8/20/99 2:16 PM	3.4	13.1	90	62	73	2.86	93.5
8/20/99 2:33 PM	3.5	13.3	90	61	75	2.84	93.5
8/20/99 11:33 AM	3.4	13.0	89	62	74	2.96	93.8

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
8/20/99 4:33 PM	3.4	13.0	89	61	74	2.85	93.3
8/20/99 5:33 PM	3.5	13.3	88	62	75	2.88	93.3
8/20/99 6:33 PM	3.4	13.1	89	62	75	2.83	93.3
8/20/99 7:16 PM	3.4	13.1	89	61	75	2.76	93.4
8/20/99 8:16 PM	3.4	12.9	89	61	75	2.69	93.6
8/20/99 8:33 PM	3.4	13.0	89	61	75	2.69	93.6
8/20/99 9:16 PM	3.3	12.8	91	61	75	2.62	93.8
8/20/99 9:33 PM	3.3	12.8	90	61	75	2.61	93.8
8/20/99 10:16 PM	3.3	12.5	89	61	74	2.53	93.9
8/20/99 10:33 PM	3.3	12.5	90	61	74	2.50	94.0
8/20/99 11:16 PM	3.2	12.4	90	61	74	2.45	94.1
8/20/99 11:33 PM	3.3	12.6	90	61	75	2.50	94.1
8/21/99 12:16 AM	3.2	12.3	90	61	74	2.40	94.3
8/21/99 12:33 AM	3.2	12.4	89	62	74	2.43	94.3
8/21/99 2:16 AM	3.2	12.1	90	61	74	2.33	94.4
8/21/99 3:33 AM	3.2	12.1	90	61	74	2.30	94.5
8/21/99 4:16 AM	3.1	12.1	90	61	74	2.28	94.6
8/21/99 4:33 AM	3.1	12.0	90	61	74	2.26	94.6
8/21/99 6:33 AM	3.2	12.2	90	62	74	2.41	94.3
8/21/99 7:23 AM	3.2	12.3	90	61	75	2.47	94.2
8/21/99 8:16 AM	3.2	12.2	91	61	74	2.52	94.0
8/21/99 8:23 AM	3.2	12.4	91	61	75	2.58	94.0
8/21/99 9:16 AM	3.2	12.4	90	61	75	2.60	93.9
8/21/99 10:23 AM	3.2	12.2	92	61	74	2.60	93.8
8/21/99 11:16 AM	3.2	12.2	90	61	74	2.62	93.8
8/21/99 12:23 PM	3.2	12.3	90	61	75	2.65	93.7
8/21/99 2:23 PM	3.2	12.4	89	61	75	2.70	93.5
8/21/99 3:23 PM	3.1	12.1	88	61	75	2.21	94.7
8/21/99 4:23 PM	3.3	12.6	90	61	75	2.91	93.2
8/21/99 5:23 PM	3.2	12.4	91	61	75	2.73	93.6
8/21/99 7:23 PM	3.3	12.7	89	61	74	2.78	93.6
8/21/99 8:23 PM	3.3	12.6	91	60	74	2.82	93.4
8/21/99 10:23 PM	3.2	12.3	91	61	74	2.61	93.8
8/21/99 11:23 PM	3.2	12.3	94	60	74	2.53	94.0
8/22/99 1:23 AM	3.2	12.3	90	61	75	2.39	94.4
8/22/99 5:23 AM	3.1	11.8	90	61	74	2.27	94.5
8/22/99 6:23 AM	3.1	11.8	90	60	74	2.28	94.5
8/23/99 8:40 AM	3.2	12.2	94	67	73	2.68	94.3
8/23/99 9:28 AM	3.2	12.2	93	68	74	2.67	94.3
8/23/99 10:28 AM	3.3	12.6	94	67	74	2.93	93.9
8/23/99 11:29 AM	3.4	12.9	99	65	75	3.03	93.6
8/23/99 12:28 PM	3.2	12.1	94	67	75	2.02	95.6
8/23/99 1:29 PM	3.2	12.3	95	70	74	2.18	95.1
8/23/99 2:29 PM	3.3	12.7	94	70	74	2.78	94.0
8/23/99 3:19 PM	3.7	14.3	97	64	76	4.03	91.8
8/24/99 8:13 AM	3.3	12.7	98	70	75	2.60	94.2
8/24/99 9:13 AM	3.3	12.5	97	71	75	1.94	95.6
8/24/99 10:13 AM	3.3	12.8	96	68	75	2.03	95.5
8/24/99 11:13 AM	3.2	12.4	94	66	74	2.04	95.4
8/24/99 12:13 PM	3.1	12.1	93	63	74	2.05	95.3
8/24/99 1:13 PM	3.2	12.1	92	60	75	2.16	95.3
8/24/99 2:13 PM	3.6	13.7	94	71	72	3.80	92.4

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
8/24/99 3:13 PM	3.6	13.7	95	71	74	3.39	93.1
8/24/99 4:13 PM	3.5	13.6	97	71	73	3.33	93.2
8/24/99 5:13 PM	3.5	13.6	95	71	74	3.25	93.3
8/24/99 6:13 PM	3.6	13.7	95	71	75	3.20	93.4
8/24/99 7:13 PM	3.5	13.4	95	71	74	3.05	93.6
8/24/99 8:13 PM	3.5	13.4	96	72	74	2.98	93.8
8/24/99 9:13 PM	3.5	13.4	96	71	74	2.95	93.9
8/24/99 10:13 PM	3.5	13.3	98	71	74	2.84	94.1
8/24/99 11:13 PM	3.5	13.3	96	72	74	2.80	94.3
8/25/99 12:13 AM	3.5	13.3	96	72	74	2.73	94.4
8/25/99 1:13 AM	3.4	13.0	97	72	72	2.64	94.5
8/25/99 2:13 AM	3.4	13.2	96	73	73	2.64	94.6
8/25/99 3:13 AM	3.4	13.2	96	72	74	2.62	94.6
8/25/99 4:13 AM	3.4	13.2	97	72	74	2.62	94.6
8/25/99 5:13 AM	3.4	13.0	97	72	72	2.57	94.6
8/25/99 6:13 AM	3.4	13.2	96	73	74	2.62	94.6
8/25/99 7:13 AM	3.4	13.2	96	75	73	2.62	94.6
8/25/99 8:32 AM	3.5	13.5	96	72	74	2.65	94.6
8/25/99 9:32 AM	3.6	13.6	95	72	74	2.84	94.3
8/25/99 10:32 AM	3.6	13.7	96	71	74	2.96	94.1
8/25/99 11:32 AM	3.6	13.9	94	71	74	3.27	93.5
8/25/99 12:32 PM	3.6	14.0	95	70	73	3.48	93.1
8/25/99 1:32 PM	3.6	14.0	96	70	74	3.52	92.8
8/25/99 2:32 PM	3.6	13.7	95	70	74	3.27	93.3
8/25/99 3:32 PM	3.6	13.7	95	71	74	3.44	92.9
8/25/99 4:32 PM	3.5	13.6	95	71	74	3.34	93.1
8/25/99 5:32 PM	3.5	13.5	95	71	74	3.25	93.3
8/25/99 6:32 PM	3.5	13.5	96	71	74	3.18	93.4
8/25/99 7:32 PM	3.5	13.4	96	71	73	3.10	93.6
8/25/99 8:32 PM	3.4	13.2	95	72	72	3.00	93.8
8/25/99 9:32 PM	3.5	13.3	96	71	72	3.00	93.9
8/25/99 10:32 PM	3.5	13.6	95	72	74	3.05	94.0
8/25/99 11:32 PM	3.6	13.6	95	72	73	3.05	94.1
8/26/99 12:32 AM	3.5	13.5	93	73	73	2.97	94.2
8/26/99 1:32 AM	3.5	13.3	94	73	71	2.87	94.3
8/26/99 2:32 AM	3.4	13.2	95	72	71	2.78	94.4
8/26/99 3:32 AM	3.4	13.2	96	72	72	2.75	94.5
8/26/99 4:32 AM	3.5	13.3	95	73	73	2.80	94.4
8/26/99 5:32 AM	3.5	13.3	95	73	74	2.79	94.4
8/26/99 6:32 AM	3.5	13.4	97	72	73	2.81	94.4
8/26/99 7:48 AM	3.4	13.2	96	73	74	2.75	94.4
8/26/99 8:48 AM	3.5	13.3	95	73	74	2.83	94.3
8/26/99 9:48 AM	3.5	13.3	96	72	74	2.87	94.2
8/26/99 10:48 AM	3.4	13.2	95	72	74	2.88	94.1
8/26/99 11:48 AM	3.4	13.2	95	72	74	2.93	94.0
8/26/99 12:48 PM	3.4	13.2	95	71	74	3.01	93.8
8/26/99 1:48 PM	3.5	13.3	95	71	74	3.04	93.7
8/26/99 2:48 PM	3.5	13.3	95	71	74	3.09	93.6
8/26/99 3:48 PM	3.5	13.5	94	72	74	3.18	93.7
8/27/99 7:33 AM	3.3	12.8	96	74	74	2.60	94.9
8/27/99 12:33 PM	3.4	12.9	94	73	74	2.77	94.4
8/27/99 2:33 PM	3.4	12.9	94	73	74	2.84	94.2

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
8/27/99 3:33 PM	3.4	12.9	94	72	74	2.83	94.2
8/27/99 6:33 PM	3.3	12.6	93	70	72	2.64	94.4
8/27/99 9:33 PM	3.3	12.6	94	72	74	2.58	94.8
8/28/99 12:33 AM	3.2	12.3	94	73	72	2.48	95.0
8/28/99 2:33 AM	3.2	12.2	95	73	72	2.47	95.1
8/28/99 6:33 AM	3.2	12.2	95	74	72	2.47	95.1
8/28/99 12:22 PM	3.2	12.1	94	73	72	2.46	94.9
8/28/99 4:22 PM	3.2	12.3	92	73	74	2.47	94.8
8/28/99 5:22 PM	3.2	12.3	93	72	74	2.44	94.9
8/28/99 6:22 PM	3.2	12.3	92	73	74	2.42	94.9
8/28/99 8:22 PM	3.1	12.0	93	72	72	2.41	94.9
8/28/99 11:22 PM	3.1	11.9	94	73	72	2.37	95.1
8/29/99 2:22 AM	3.1	11.8	94	73	72	2.33	95.2
8/29/99 4:22 AM	3.1	11.7	95	73	0	2.34	95.2
8/29/99 7:22 AM	3.0	11.4	94	73	71	2.27	95.2
8/29/99 8:22 AM	3.0	11.6	94	74	72	2.33	95.2
8/29/99 10:21 AM	3.1	11.8	93	72	72	2.65	94.4
8/29/99 11:21 AM	3.0	11.4	93	73	71	2.07	95.6
8/29/99 12:21 PM	3.1	12.0	93	71	72	2.83	94.0
8/29/99 1:21 PM	3.2	12.1	93	71	73	2.85	94.0
8/29/99 2:21 PM	3.2	12.3	93	70	74	2.99	93.7
8/29/99 3:21 PM	3.2	12.2	92	71	74	2.89	93.8
8/29/99 4:21 PM	2.9	11.0	90	70	72	1.95	95.8
8/29/99 5:21 PM	2.8	10.8	89	68	72	1.96	95.8
8/29/99 6:21 PM	2.8	10.6	86	66	72	1.97	95.8
8/29/99 8:21 PM	2.6	9.9	83	62	70	1.92	95.9
8/29/99 9:21 PM	2.5	9.7	81	61	70	1.94	96.0
8/30/99 12:21 AM	2.4	9.2	76	60	68	1.91	96.1
8/30/99 1:21 AM	2.3	9.0	75	59	67	1.90	96.1
8/30/99 2:21 AM	2.3	9.0	76	58	67	1.91	96.1
8/30/99 3:21 AM	2.3	9.0	74	59	67	1.93	96.1
8/30/99 4:21 AM	2.3	8.8	75	59	66	1.91	96.1
8/30/99 5:21 AM	2.3	8.8	74	58	66	1.91	96.1
8/30/99 6:21 AM	2.3	8.8	75	58	67	1.93	96.1
8/30/99 7:34 AM	2.3	8.8	73	58	67	1.95	96.1
9/1/99 1:08 PM	2.6	9.9	109	68	74	2.53	91.6
9/1/99 3:08 PM	2.5	9.4	71	72	72	3.55	87.8
9/1/99 5:08 PM	2.4	9.1	83	63	68	2.77	91.3
9/1/99 8:08 PM	2.5	9.7	87	63	71	2.19	94.1
9/1/99 9:08 PM	2.6	10.0	87	64	71	2.61	93.0
9/1/99 10:08 PM	2.6	9.9	87	64	71	2.46	93.4
9/2/99 12:08 AM	2.6	9.9	87	64	71	2.27	94.0
9/2/99 1:08 AM	2.5	9.7	86	64	69	2.12	94.3
9/2/99 2:08 AM	2.6	9.9	86	64	71	2.12	94.5
9/2/99 3:08 AM	2.5	9.6	87	64	69	2.05	94.5
9/2/99 4:08 AM	2.5	9.7	86	64	69	2.06	94.5
9/2/99 5:08 AM	2.5	9.6	87	64	69	2.06	94.5
9/2/99 6:08 AM	2.5	9.7	87	64	69	2.09	94.5
9/2/99 7:08 AM	2.5	9.7	87	65	69	2.12	94.5
9/2/99 8:09 AM	2.5	9.7	87	64	69	2.14	94.4
9/2/99 9:08 AM	2.6	10.0	92	71	69	2.35	94.6
9/2/99 11:08 AM	3.0	11.5	92	41	84	1.22	93.1

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
9/2/99 12:35 PM	3.0	11.6	94	42	84	1.23	92.9
9/2/99 1:35 PM	3.9	15.1	135	158	53	5.87	95.0
9/2/99 2:35 PM	3.9	15.0	133	155	52	5.76	94.9
9/8/99 8:58 AM	3.1	11.9	83	44	80	3.62	93.5
9/9/99 9:54 AM	3.5	13.5	95	62	74	3.00	93.5
9/9/99 10:54 AM	3.6	13.8	95	64	74	3.35	92.8
9/9/99 11:54 AM	3.6	13.6	95	64	74	3.54	92.2
9/9/99 12:54 PM	3.4	13.1	95	65	74	3.25	92.3
9/9/99 1:54 PM	3.3	12.8	96	66	75	3.10	92.4
9/9/99 2:54 PM	3.5	13.3	96	69	74	3.54	92.6
9/9/99 3:54 PM	3.4	13.2	97	69	74	3.11	93.4
9/9/99 4:54 PM	3.4	13.1	97	69	74	3.06	93.5
9/9/99 5:54 PM	3.4	13.1	97	70	74	3.00	93.6
9/9/99 6:54 PM	3.4	13.0	96	69	74	2.39	94.9
9/9/99 7:54 PM	3.5	13.4	98	66	75	2.54	94.9
9/9/99 8:54 PM	3.3	12.6	93	63	73	2.45	95.1
9/9/99 9:54 PM	3.1	11.9	91	60	74	2.34	95.4
9/9/99 10:54 PM	2.9	11.1	88	55	72	2.18	95.8
9/9/99 11:54 PM	2.7	10.4	83	53	70	2.06	96.1
9/10/99 12:54 AM	2.6	10.1	80	52	70	2.00	96.3
9/10/99 1:54 AM	2.5	9.8	78	51	69	1.98	96.3
9/10/99 2:54 AM	2.5	9.5	77	51	69	1.97	96.3
9/10/99 3:54 AM	2.5	9.5	76	51	69	1.99	96.4
9/10/99 4:54 AM	3.2	12.4	96	62	72	2.55	94.6
9/10/99 5:54 AM	3.3	12.7	94	66	72	2.61	94.5
9/10/99 6:54 AM	3.3	12.8	94	67	72	2.58	94.6
9/10/99 7:54 AM	3.3	12.7	95	67	72	2.55	94.7
9/10/99 8:54 AM	3.5	13.3	94	67	74	2.84	94.2
9/10/99 8:54 AM	3.5	13.3	94	67	74	2.84	94.2
9/10/99 9:58 AM	3.5	13.6	94	66	74	3.09	93.7
9/10/99 10:58 AM	3.5	13.4	95	70	73	3.25	93.1
9/10/99 11:58 AM	3.6	13.9	95	66	74	2.98	93.9
9/10/99 12:58 PM	3.6	13.9	93	65	72	3.13	93.6
9/10/99 1:58 PM	3.8	14.5	94	65	74	3.43	93.1
9/10/99 2:58 PM	3.7	14.2	94	65	74	3.22	93.5
9/10/99 3:57 PM	3.8	14.5	93	65	74	3.58	92.9
9/10/99 4:57 PM	3.5	13.6	92	64	72	2.77	94.4
9/10/99 5:58 PM	3.4	13.1	89	62	72	2.80	94.4
9/10/99 6:58 PM	3.1	12.0	87	56	71	2.58	94.8
9/10/99 7:58 PM	2.9	11.0	85	52	71	2.34	95.3
9/10/99 8:57 PM	2.6	10.1	82	51	70	2.12	95.7
9/10/99 9:58 PM	2.5	9.4	80	51	68	1.94	96.0
9/10/99 10:57 PM	2.4	9.1	79	51	70	1.89	96.3
9/10/99 11:57 PM	2.2	8.3	77	52	67	1.74	96.4
9/11/99 12:57 AM	2.0	7.8	76	54	67	1.68	96.6
9/11/99 1:57 AM	1.9	7.4	75	54	65	1.64	96.6
9/11/99 2:57 AM	1.9	7.4	74	55	66	1.63	96.7
9/11/99 3:57 AM	1.9	7.2	75	55	65	1.65	96.6
9/11/99 4:57 AM	1.9	7.2	74	56	65	1.67	96.6
9/11/99 5:57 AM	1.9	7.2	75	56	65	1.67	96.6
9/11/99 6:57 AM	1.9	7.2	76	56	65	1.71	96.5
9/11/99 8:57 AM	3.6	13.7	94	67	72	2.98	94.1

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
9/11/99 9:57 AM	3.7	14.3	93	64	75	3.14	93.7
9/11/99 10:58 AM	3.7	14.2	93	63	75	3.13	93.6
9/11/99 11:57 AM	3.7	14.2	93	64	75	3.12	93.6
9/11/99 12:57 PM	3.7	14.1	93	64	75	3.11	93.5
9/11/99 1:57 PM	3.9	14.8	93	62	76	3.50	92.9
9/11/99 3:29 PM	3.7	14.4	101	60	75	3.13	93.7
9/11/99 4:29 PM	3.6	13.8	92	63	75	2.62	94.5
9/11/99 5:29 PM	3.6	13.7	91	63	75	2.48	94.7
9/11/99 6:29 PM	3.4	13.1	89	59	74	2.47	94.7
9/11/99 7:29 PM	3.1	11.9	86	54	74	2.42	95.0
9/11/99 8:29 PM	2.8	10.8	88	47	72	2.25	95.3
9/11/99 9:29 PM	2.7	10.2	82	48	72	2.10	95.7
9/11/99 10:29 PM	2.5	9.5	80	49	71	1.95	95.9
9/11/99 11:29 PM	2.3	9.0	78	50	71	1.83	96.2
9/12/99 12:29 AM	2.2	8.3	75	51	69	1.69	96.3
9/12/99 1:29 AM	2.1	8.0	76	51	69	1.68	96.4
9/12/99 2:29 AM	2.0	7.9	73	52	69	1.70	96.4
9/12/99 3:29 AM	2.0	7.6	75	52	68	1.67	96.4
9/12/99 4:29 AM	2.0	7.6	74	53	68	1.67	96.4
9/12/99 5:29 AM	2.0	7.6	74	53	68	1.71	96.3
9/12/99 6:29 AM	2.1	8.1	75	52	69	2.56	94.9
9/12/99 8:06 AM	3.6	14.0	94	64	75	3.12	93.7
9/12/99 9:06 AM	3.5	13.5	93	65	74	2.82	94.1
9/12/99 10:06 AM	3.6	13.9	94	62	74	3.13	93.4
9/12/99 11:06 AM	3.6	13.8	93	64	74	3.18	93.3
9/12/99 12:06 PM	3.6	13.9	93	63	75	3.11	93.6
9/12/99 1:06 PM	3.6	13.8	96	62	75	2.88	94.2
9/12/99 2:06 PM	3.9	15.1	92	60	75	4.26	91.3
9/12/99 3:06 PM	3.6	13.7	90	65	74	3.18	93.2
9/12/99 4:06 PM	3.5	13.6	93	64	74	3.05	93.7
9/12/99 5:06 PM	3.8	14.6	91	62	75	3.65	92.4
9/12/99 6:06 PM	3.5	13.5	93	63	74	2.64	94.4
9/12/99 7:06 PM	3.5	13.4	92	64	74	2.69	94.3
9/12/99 8:06 PM	3.9	15.1	94	60	75	4.02	92.1
9/12/99 9:06 PM	3.5	13.5	93	63	74	2.42	94.8
9/12/99 10:06 PM	3.6	13.6	94	63	74	2.42	94.9
9/12/99 11:06 PM	3.5	13.5	92	63	73	2.36	95.0
9/13/99 12:06 AM	3.5	13.3	93	61	74	2.28	95.2
9/13/99 1:06 AM	3.4	13.1	92	60	74	2.22	95.4
9/13/99 2:06 AM	3.3	12.8	93	58	74	2.18	95.5
9/13/99 3:06 AM	3.3	12.7	91	58	75	2.20	95.5
9/13/99 4:06 AM	3.2	12.4	91	57	72	2.17	95.5
9/13/99 5:06 AM	3.2	12.2	90	57	72	2.18	95.5
9/13/99 6:06 AM	3.1	12.1	91	57	72	2.15	95.6
9/13/99 7:06 AM	3.1	11.9	91	56	72	2.12	95.7
9/13/99 7:25 AM	3.1	11.8	92	56	71	2.10	95.7
9/13/99 8:25 AM	3.0	11.7	90	55	72	2.07	95.8
9/13/99 9:25 AM	3.0	11.4	90	53	72	2.05	95.8
9/13/99 10:25 AM	3.7	14.1	103	57	74	3.15	93.4
9/13/99 11:25 AM	3.5	13.3	95	64	74	2.44	94.9
9/13/99 12:25 PM	3.7	14.1	96	62	76	2.76	94.5
9/13/99 1:25 PM	3.7	14.2	91	63	75	3.85	91.6

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
9/13/99 2:18 PM	3.7	14.2	91	65	74	3.62	91.8
9/13/99 3:18 PM	3.5	13.6	93	64	74	3.08	93.3
9/13/99 4:18 PM	3.7	14.3	102	62	75	2.97	94.1
9/13/99 5:18 PM	3.9	14.9	93	63	74	4.63	89.8
9/13/99 6:18 PM	3.5	13.3	94	64	74	2.51	94.7
9/13/99 7:18 PM	3.8	14.6	90	65	75	4.17	90.6
9/13/99 9:18 PM	3.9	14.8	92	64	75	4.17	91.4
9/13/99 11:18 PM	3.5	13.6	101	63	74	2.77	94.4
9/14/99 1:18 AM	3.6	13.9	98	64	74	3.08	93.9
9/14/99 3:18 AM	3.5	13.5	100	64	74	2.70	94.6
9/14/99 5:18 AM	3.5	13.3	99	65	74	2.57	94.8
9/14/99 6:18 AM	3.4	13.1	97	65	74	2.44	95.0
9/14/99 7:27 AM	3.3	12.7	97	67	74	2.28	95.2
9/14/99 8:27 AM	3.6	13.9	96	66	74	3.47	92.9
9/14/99 9:27 AM	3.5	13.3	95	67	74	2.98	93.6
9/14/99 11:27 AM	3.4	12.9	95	66	74	2.32	95.1
9/14/99 1:27 PM	3.7	14.0	95	67	75	2.97	93.9
9/16/99 3:03 PM	4.1	15.8	108	70	79	3.71	94.6
9/16/99 4:03 PM	3.8	14.6	91	75	72	5.59	89.1
9/16/99 5:03 PM	3.5	13.6	93	73	71	4.46	91.6
9/16/99 6:03 PM	3.7	14.1	92	73	71	5.03	89.7
9/16/99 8:03 PM	3.9	14.9	97	69	74	7.41	87.6
9/16/99 9:03 PM	4.0	15.5	95	70	74	7.77	84.8
9/16/99 10:03 PM	3.6	13.8	96	73	73	4.07	92.0
9/17/99 1:03 AM	4.0	15.4	97	70	74	6.06	88.8
9/17/99 2:03 AM	3.7	14.1	107	70	73	3.03	94.8
9/17/99 3:03 AM	3.7	14.1	95	73	72	4.16	91.8
9/17/99 6:03 AM	4.0	15.2	98	70	74	5.26	90.7
9/17/99 8:43 AM	3.5	13.5	101	73	74	2.75	95.2
9/17/99 10:43 AM	3.8	14.5	103	71	75	3.16	94.6
9/17/99 11:43 AM	3.7	14.3	94	71	73	4.15	92.0
9/17/99 12:43 PM	3.7	14.1	100	69	74	3.03	94.6
9/17/99 1:43 PM	3.9	14.8	92	70	73	4.93	90.6
9/17/99 2:43 PM	3.9	15.2	99	67	75	4.06	93.2
9/17/99 5:43 PM	3.8	14.5	92	70	74	3.79	92.5
9/17/99 6:43 PM	3.9	15.0	97	67	74	3.83	93.4
9/17/99 8:43 PM	3.7	14.4	92	70	73	3.81	92.8
9/17/99 9:43 PM	3.6	14.0	94	70	72	3.27	94.0
9/17/99 10:43 PM	3.7	14.3	95	71	74	3.46	93.8
9/17/99 11:43 PM	3.6	13.8	96	71	72	3.07	94.4
9/18/99 12:43 AM	3.6	13.9	96	71	72	3.20	94.2
9/18/99 1:43 AM	3.6	13.9	97	71	72	3.19	94.2
9/18/99 2:43 AM	3.6	13.8	96	71	72	3.13	94.3
9/18/99 6:43 AM	3.5	13.3	98	73	72	2.79	94.8
9/17/99 7:43 AM	3.9	15.0	98	71	74	5.17	90.8
9/18/99 8:36 AM	3.4	13.2	98	72	71	2.87	94.6
9/18/99 9:36 AM	3.5	13.3	96	72	71	2.91	94.5
9/18/99 10:36 AM	3.5	13.4	96	71	71	2.97	94.4
9/18/99 11:36 AM	3.5	13.5	97	70	71	3.19	94.1
9/18/99 12:36 PM	3.5	13.6	96	70	71	3.27	93.9
9/18/99 1:36 PM	3.6	13.7	95	70	71	3.40	93.7
9/18/99 4:36 PM	3.6	13.6	95	69	71	3.22	93.8

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
9/18/99 5:36 PM	3.8	14.7	95	68	72	3.87	92.9
9/18/99 6:36 PM	3.8	14.4	96	67	72	3.47	93.8
9/18/99 7:36 PM	3.7	14.1	90	69	71	3.51	93.3
9/18/99 8:36 PM	3.6	13.6	95	69	70	3.14	93.9
9/18/99 9:36 PM	3.6	13.8	96	69	71	3.16	94.1
9/18/99 10:36 PM	3.6	13.6	96	70	71	3.00	94.4
9/18/99 11:36 PM	3.5	13.4	96	71	71	2.90	94.6
9/19/99 12:36 AM	3.5	13.3	96	71	71	2.82	94.7
9/19/99 1:36 AM	3.5	13.3	96	71	71	2.81	94.7
9/19/99 2:36 AM	3.4	13.0	97	71	70	2.73	94.8
9/19/99 3:36 AM	3.4	12.9	98	71	70	2.69	94.9
9/19/99 5:36 AM	3.3	12.7	97	72	69	2.56	95.1
9/19/99 6:36 AM	3.4	12.9	96	73	71	2.60	95.2
9/19/99 7:43 AM	3.3	12.6	97	73	70	2.51	95.3
9/19/99 8:43 AM	3.3	12.7	97	72	69	2.53	95.3
9/19/99 9:43 AM	3.3	12.8	98	73	71	2.52	95.2
9/19/99 10:43 AM	3.4	12.9	95	72	72	2.52	95.2
9/19/99 11:43 AM	3.5	13.3	96	71	72	2.66	95.1
9/19/99 1:43 PM	3.4	13.2	95	71	72	2.74	94.9
9/19/99 3:43 PM	3.5	13.5	95	70	72	2.91	94.5
9/19/99 4:43 PM	3.4	13.1	94	69	72	2.59	95.2
9/19/99 5:43 PM	3.5	13.4	94	69	74	2.64	95.2
9/19/99 6:43 PM	3.4	13.1	92	68	72	2.55	95.3
9/19/99 7:43 PM	3.4	12.9	93	68	72	2.59	95.3
9/19/99 8:43 PM	3.3	12.6	92	67	72	2.51	95.4
9/19/99 9:43 PM	3.2	12.1	92	65	71	2.43	95.6
9/19/99 10:43 PM	3.1	11.9	91	64	71	2.39	95.7
9/19/99 11:43 PM	3.0	11.7	92	63	71	2.33	95.9
9/20/99 1:43 AM	3.0	11.4	92	62	71	2.26	96.0
9/20/99 2:43 AM	3.0	11.4	91	62	71	2.24	96.1
9/20/99 4:43 AM	2.9	11.3	91	62	71	2.20	96.2
9/20/99 5:43 AM	3.1	11.8	91	62	71	2.47	95.4
9/20/99 6:43 AM	3.3	12.6	93	65	72	2.51	95.4
9/20/99 8:00 AM	3.1	12.1	141	63	76	2.33	95.3
9/21/99 9:11 AM	3.0	11.6	92	62	71	2.16	95.5
9/21/99 10:11 AM	3.0	11.7	91	61	72	2.18	95.4
9/21/99 11:11 AM	3.1	11.9	91	61	74	2.26	95.3
9/21/99 12:11 PM	3.2	12.2	90	68	71	2.80	94.0
9/21/99 1:11 PM	3.2	12.3	150	77	75	3.14	94.9
9/21/99 2:11 PM	3.4	13.0	96	73	72	2.77	94.0
9/21/99 3:07 PM	3.8	14.4	98	69	74	3.94	92.6
9/21/99 4:07 PM	3.7	14.2	98	69	74	3.71	92.9
9/21/99 5:07 PM	3.7	14.2	99	68	74	3.57	93.3
9/21/99 7:07 PM	3.4	12.9	97	71	72	2.35	95.3
9/21/99 8:07 PM	3.4	12.9	98	70	72	2.38	95.2
9/21/99 10:07 PM	3.2	12.4	97	67	72	2.38	95.5
9/21/99 11:07 PM	3.0	11.4	95	63	71	2.36	95.8
9/22/99 12:07 AM	2.8	10.6	93	60	70	2.31	96.0
9/22/99 3:07 AM	2.5	9.8	90	58	69	2.21	96.3
9/22/99 5:07 AM	2.5	9.6	91	58	68	2.16	96.3
9/22/99 6:07 AM	2.5	9.8	90	59	69	2.19	96.3
9/22/99 2:11 PM	3.3	12.6	88	65	70	4.07	94.8



Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
9/22/99 3:12 PM	3.4	13.2	98	72	74	3.26	94.4
9/23/99 7:46 AM	3.2	12.4	97	55	80	1.55	95.0
9/23/99 8:46 AM	3.4	13.0	97	55	81	1.68	94.8
9/23/99 9:46 AM	3.5	13.3	98	55	82	1.72	94.7
9/23/99 10:46 AM	3.5	13.4	101	53	82	1.70	94.9
9/23/99 11:46 AM	3.7	14.0	92	56	82	2.11	92.4
9/23/99 12:46 PM	3.4	12.9	93	54	81	1.60	95.0
9/23/99 1:46 PM	3.6	13.7	103	52	82	1.72	94.8
9/23/99 2:46 PM	4.0	15.2	95	52	81	3.14	88.8
9/23/99 3:46 PM	3.7	14.3	87	57	81	2.27	91.3
9/23/99 4:46 PM	3.7	14.1	106	50	82	2.00	94.1
9/23/99 5:46 PM	3.9	15.1	94	50	81	2.78	90.6
9/23/99 6:46 PM	3.6	13.9	92	53	82	1.95	92.8
9/23/99 7:46 PM	3.3	12.8	94	53	80	1.55	95.0
9/23/99 8:46 PM	3.4	12.9	94	53	81	1.51	95.2
9/23/99 9:46 PM	3.3	12.6	95	54	80	1.49	95.2
9/23/99 11:46 PM	3.5	13.3	92	55	81	1.86	93.8
9/24/99 12:46 AM	3.7	14.3	96	52	81	2.29	93.1
9/24/99 1:46 AM	3.5	13.6	100	51	80	1.97	94.2
9/24/99 2:46 AM	3.4	12.9	96	55	81	1.74	94.6
9/24/99 3:46 AM	3.4	13.2	98	54	81	1.91	94.1
9/24/99 4:46 AM	3.4	13.1	97	55	81	1.89	94.1
9/24/99 5:46 AM	3.4	13.0	97	55	81	1.85	94.2
9/24/99 6:46 AM	3.3	12.8	94	56	81	1.78	94.4
9/24/99 9:40 AM	3.4	12.9	97	56	81	1.80	94.3
9/24/99 11:40 AM	3.6	14.0	97	52	82	2.09	93.6
9/24/99 1:40 PM	3.4	12.9	94	54	81	1.73	94.4
9/24/99 2:40 PM	3.8	14.7	97	51	82	2.57	92.5
9/24/99 3:40 PM	3.3	12.8	95	54	81	1.54	94.9
9/24/99 4:40 PM	3.5	13.3	91	55	82	1.92	93.6
9/24/99 7:40 PM	3.4	13.1	93	53	81	1.59	94.7
9/24/99 8:40 PM	3.5	13.5	93	52	82	1.82	94.0
9/24/99 9:40 PM	3.5	13.4	95	52	0	1.86	94.0
9/24/99 10:40 PM	3.5	13.3	95	53	0	1.82	94.1
9/24/99 11:40 PM	3.5	13.4	93	54	0	1.81	94.2
9/25/99 6:40 AM	3.6	13.7	96	54	81	2.01	93.6
9/25/99 7:40 AM	3.5	13.4	96	54	81	1.91	93.9
9/25/99 8:48 AM	3.5	13.3	95	53	81	1.80	94.1
9/25/99 9:48 AM	3.5	13.3	95	53	81	1.83	94.0
9/25/99 10:48 AM	3.5	13.3	95	53	81	1.85	93.9
9/25/99 11:48 AM	3.5	13.5	96	52	81	1.88	93.8
9/25/99 12:48 PM	3.6	13.7	95	51	82	1.98	93.6
9/25/99 1:48 PM	3.5	13.5	94	51	81	1.97	93.5
9/25/99 2:48 PM	3.6	13.8	94	51	82	2.01	93.4
9/25/99 4:48 PM	3.5	13.4	91	51	81	1.77	93.9
9/25/99 6:48 PM	3.8	14.4	84	50	82	2.46	91.8
9/25/99 7:48 PM	3.5	13.5	94	51	82	1.58	94.7
9/25/99 8:48 PM	3.7	14.1	85	52	81	2.37	91.6
9/25/99 9:48 PM	3.6	13.7	97	50	82	1.69	94.6
9/25/99 10:48 PM	3.6	14.0	90	52	81	2.24	92.8
9/25/99 11:48 PM	3.5	13.3	95	52	82	1.57	94.9
9/26/99 9:54 AM	3.4	13.1	79	58	79	3.45	90.8

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
9/26/99 10:54 AM	3.1	11.9	94	53	76	2.05	94.1
9/26/99 11:54 AM	3.1	11.8	95	51	73	1.51	95.0
9/26/99 12:54 PM	3.1	12.0	93	52	73	1.69	94.0
9/26/99 3:54 PM	3.6	13.9	89	51	77	2.66	90.6
9/26/99 4:54 PM	3.8	14.5	95	48	79	2.68	91.7
9/26/99 5:54 PM	3.4	13.1	93	51	80	1.71	94.3
9/26/99 7:54 PM	3.9	14.9	96	48	82	2.70	92.0
9/26/99 8:54 PM	3.4	13.2	93	51	81	1.80	94.2
9/26/99 9:54 PM	3.7	14.2	90	51	80	2.72	90.8
9/26/99 10:54 PM	3.5	13.4	98	51	81	1.72	94.6
9/27/99 12:54 AM	3.3	12.8	94	52	80	1.59	94.8
9/27/99 1:54 AM	3.7	14.1	96	51	81	2.14	93.5
9/27/99 2:54 AM	3.8	14.4	94	51	81	2.45	92.4
9/27/99 3:54 AM	3.5	13.4	95	52	81	1.83	94.2
9/27/99 5:54 AM	3.6	13.9	97	52	81	2.11	93.3
9/27/99 6:54 AM	3.5	13.5	95	52	81	1.95	93.8
9/27/99 7:42 AM	3.5	13.6	95	52	81	2.01	93.6
9/27/99 7:54 AM	3.5	13.5	95	52	81	1.96	93.7
9/27/99 8:42 AM	3.5	13.6	95	53	81	2.04	93.6
9/27/99 9:42 AM	3.5	13.5	94	52	81	1.95	93.7
9/27/99 10:42 AM	3.3	12.7	95	53	81	1.97	93.7
9/27/99 11:42 AM	3.7	14.4	97	50	81	2.43	92.4
9/27/99 12:42 PM	3.5	13.5	91	52	81	2.02	93.3
9/27/99 1:17 PM	3.4	13.1	92	53	80	1.87	93.8
9/27/99 2:00 PM	3.6	13.9	93	51	80	2.28	92.6
9/27/99 4:00 PM	3.6	13.9	92	52	81	2.11	93.2
9/27/99 5:00 PM	3.6	13.9	93	51	81	2.03	93.2
9/27/99 6:00 PM	3.6	13.8	92	51	80	2.04	93.0
9/27/99 7:00 PM	3.7	14.1	91	51	81	2.16	92.9
9/27/99 8:00 PM	3.6	13.8	91	51	81	2.08	93.2
9/27/99 11:00 PM	3.5	13.4	94	51	81	1.88	93.9
9/28/99 12:00 AM	3.5	13.2	94	51	81	1.79	94.2
9/28/99 1:00 AM	3.4	13.2	94	51	81	1.74	94.3
9/28/99 2:00 AM	3.4	13.1	95	51	81	1.72	94.4
9/28/99 4:00 AM	3.4	13.1	95	52	81	1.70	94.5
9/28/99 5:00 AM	3.4	13.1	94	52	81	1.67	94.6
9/28/99 6:00 AM	3.4	13.1	95	52	81	1.69	94.5
9/28/99 7:00 AM	3.4	13.1	95	52	81	1.70	94.5
9/28/99 7:35 AM	3.4	13.0	102	64	77	2.05	94.6
9/28/99 9:00 AM	3.4	13.1	99	62	78	2.15	94.7
9/28/99 10:00 AM	3.4	13.0	98	61	78	2.09	94.8
9/29/99 7:43 AM	2.9	11.1	91	48	78	1.40	96.5
9/29/99 8:43 AM	3.3	12.6	93	53	80	1.83	95.1
9/29/99 9:43 AM	3.3	12.5	94	54	80	1.79	95.2
9/29/99 10:43 AM	3.2	12.3	95	54	79	1.74	95.4
9/29/99 11:43 AM	3.2	12.2	97	55	78	1.76	95.4
9/29/99 12:43 PM	3.2	12.2	96	56	78	1.82	95.4
9/29/99 1:43 PM	2.8	10.9	93	56	70	1.65	95.5
9/29/99 2:43 PM	3.1	12.0	95	55	78	1.70	95.5
9/29/99 3:43 PM	3.2	12.3	96	55	80	1.76	95.5
9/29/99 4:43 PM	3.1	12.0	96	54	77	1.71	95.6
9/29/99 8:43 PM	3.1	11.9	96	54	78	1.64	95.8

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
9/29/99 10:43 PM	3.1	11.7	96	53	78	1.56	96.0
9/29/99 11:43 PM	3.0	11.7	96	53	78	1.53	96.1
9/30/99 12:43 AM	3.0	11.6	95	53	78	1.51	96.1
9/30/99 4:43 AM	2.7	10.4	91	48	77	1.33	96.8
9/30/99 5:43 AM	2.7	10.5	91	47	78	1.36	96.8
9/30/99 9:43 AM	3.0	11.3	91	46	80	1.51	95.9
9/30/99 10:43 AM	2.9	11.2	91	46	78	1.51	95.8
9/30/99 11:43 AM	3.0	11.4	91	45	80	1.54	95.8
9/30/99 2:43 PM	3.0	11.4	91	44	80	1.53	95.7
9/30/99 4:43 PM	3.0	11.4	90	44	80	1.49	95.7
9/30/99 6:43 PM	3.0	11.4	88	43	80	1.47	95.8
9/30/99 7:43 PM	2.9	11.3	88	44	80	1.42	95.9
9/30/99 8:43 PM	2.9	11.2	88	44	80	1.40	96.0
9/30/99 9:43 PM	2.9	11.1	89	43	80	1.40	96.0
9/30/99 10:43 PM	2.9	11.1	88	44	80	1.38	96.1
9/30/99 11:43 PM	2.9	11.0	89	44	80	1.37	96.1
10/1/99 12:43 AM	2.8	10.7	89	44	78	1.34	96.2
10/1/99 1:43 AM	2.8	10.8	89	43	78	1.36	96.2
10/1/99 2:43 AM	2.8	10.7	89	44	78	1.34	96.2
10/1/99 4:43 AM	2.8	10.8	89	44	80	1.33	96.2
10/1/99 5:43 AM	2.8	10.6	90	44	78	1.30	96.3
10/1/99 6:43 AM	2.8	10.6	89	44	79	1.31	96.3
10/1/99 7:42 AM	2.8	10.7	89	44	80	1.30	96.3
10/1/99 7:42 AM	2.8	10.7	89	44	80	1.30	96.3
10/1/99 8:42 AM	2.7	10.4	90	45	78	1.26	96.4
10/1/99 8:42 AM	2.7	10.4	90	45	78	1.26	96.4
10/6/99 2:02 PM	3.5	13.4	96	60	76	2.88	92.8
10/6/99 4:02 PM	3.4	13.2	89	55	75	2.67	91.5
10/6/99 6:02 PM	3.2	12.3	93	54	74	2.12	93.5
10/6/99 7:02 PM	3.3	12.7	95	54	75	1.90	94.3
10/6/99 8:02 PM	3.6	13.7	95	50	75	3.04	91.6
10/6/99 10:02 PM	3.7	14.2	94	52	78	3.00	91.9
10/6/99 11:02 PM	3.5	13.3	94	53	78	2.35	93.4
10/7/99 12:02 AM	3.4	13.2	95	53	78	2.26	93.7
10/7/99 2:02 AM	3.4	12.9	95	55	79	1.85	94.8
10/7/99 3:02 AM	3.4	13.0	95	55	79	1.91	94.7
10/7/99 6:02 AM	3.4	12.9	96	55	79	1.83	94.9
10/7/99 7:02 AM	3.3	12.8	97	55	79	1.80	94.9
10/7/99 8:02 AM	3.5	13.5	95	52	82	2.06	94.0
10/7/99 9:00 AM	3.3	12.7	93	53	76	1.89	94.2
10/7/99 9:02 AM	3.3	12.8	94	51	76	1.89	94.2
10/7/99 10:00 AM	3.3	12.8	92	52	76	1.89	94.1
10/7/99 10:02 AM	3.3	12.8	93	51	77	1.87	94.1
10/7/99 11:00 AM	3.3	12.8	92	51	76	1.88	93.9
10/7/99 11:02 AM	3.3	12.8	92	51	76	1.86	93.9
10/7/99 12:00 PM	3.3	12.5	91	49	75	1.77	94.0
10/7/99 12:02 PM	3.3	12.7	92	49	76	1.79	94.0
10/7/99 3:34 PM	3.6	13.7	26	46	79	2.05	93.7
10/7/99 3:35 PM	3.3	12.7	78	49	76	1.86	93.8
10/7/99 4:55 PM	3.4	12.9	96	56	78	2.92	93.7
10/7/99 5:54 PM	3.4	13.1	94	54	78	2.67	93.6
10/7/99 5:54 PM	3.4	13.1	94	54	78	2.67	93.6

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
10/7/99 5:55 PM	3.4	13.2	94	54	78	2.59	93.6
10/7/99 6:55 PM	3.5	13.4	95	53	78	2.15	93.9
10/7/99 7:54 PM	3.5	13.5	95	53	77	2.14	93.7
10/7/99 7:54 PM	3.5	13.5	95	53	77	2.14	93.7
10/7/99 7:55 PM	3.5	13.5	95	53	77	2.15	93.7
10/7/99 8:54 PM	3.3	12.8	96	54	74	1.89	94.2
10/7/99 8:54 PM	3.3	12.8	96	54	74	1.89	94.2
10/7/99 8:55 PM	3.2	12.4	90	55	73	1.85	94.2
10/7/99 9:54 PM	3.3	12.7	96	54	74	1.91	94.2
10/7/99 9:54 PM	3.3	12.7	96	54	74	1.91	94.2
10/7/99 9:55 PM	3.3	12.5	97	54	73	1.86	94.2
10/7/99 11:54 PM	3.2	12.5	97	55	73	1.88	94.3
10/7/99 11:54 PM	3.2	12.5	97	55	73	1.88	94.3
10/7/99 11:55 PM	3.3	12.6	97	55	74	1.91	94.2
10/8/99 12:54 AM	3.3	12.7	97	55	74	1.99	94.1
10/8/99 12:54 AM	3.3	12.7	97	55	74	1.99	94.1
10/8/99 1:54 AM	3.1	11.8	97	56	72	1.58	95.0
10/8/99 1:54 AM	3.1	11.8	97	56	72	1.58	95.0
10/8/99 1:55 AM	3.1	12.0	97	56	73	1.61	95.0
10/8/99 2:54 AM	3.1	11.9	96	53	74	1.61	95.2
10/8/99 2:54 AM	3.1	11.9	96	53	74	1.61	95.2
10/8/99 2:55 AM	3.2	12.1	95	53	76	1.63	95.2
10/8/99 3:54 AM	2.9	11.3	95	47	74	1.56	95.4
10/8/99 3:54 AM	2.9	11.3	95	47	74	1.56	95.4
10/8/99 3:55 AM	3.0	11.4	93	48	76	1.58	95.3
10/8/99 4:54 AM	2.9	11.0	92	44	77	1.56	95.5
10/8/99 4:54 AM	2.9	11.0	92	44	77	1.56	95.5
10/8/99 4:55 AM	2.8	10.8	91	44	76	1.53	95.5
10/8/99 5:54 AM	2.7	10.3	88	42	76	1.49	95.6
10/8/99 5:54 AM	2.7	10.3	88	42	76	1.49	95.6
10/8/99 5:55 AM	2.7	10.4	89	42	76	1.50	95.7
10/8/99 6:54 AM	2.7	10.2	88	40	77	1.50	95.7
10/8/99 6:54 AM	2.7	10.2	88	40	77	1.50	95.7
10/8/99 6:55 AM	2.6	10.0	87	41	76	1.46	95.8
10/8/99 7:54 AM	2.6	10.1	88	39	77	1.71	95.0
10/8/99 7:54 AM	2.6	10.1	88	39	77	1.71	95.0
10/8/99 8:19 AM	2.8	10.7	94	42	75	1.74	94.5
10/9/99 10:01 PM	3.5	13.3	94	40	79	2.09	92.7
10/9/99 11:01 PM	3.4	13.2	94	41	79	2.04	92.9
10/10/99 12:01 AM	3.4	13.1	94	44	79	2.00	93.1
10/10/99 2:01 AM	3.1	11.9	96	44	74	1.68	93.7
10/10/99 3:01 AM	3.2	12.1	96	44	75	1.68	93.8
10/10/99 4:01 AM	3.2	12.3	96	44	76	1.70	93.9
10/10/99 5:01 AM	3.1	12.1	97	45	75	1.66	93.9
10/10/99 6:01 AM	3.2	12.5	96	44	78	1.72	94.0
10/10/99 7:01 AM	3.2	12.1	96	44	75	1.69	94.0
10/10/99 8:01 AM	3.3	12.6	96	45	79	1.75	94.0
10/10/99 9:51 AM	3.3	12.7	93	45	79	1.73	94.1
10/10/99 10:01 AM	3.2	12.4	95	46	78	1.66	94.1
10/10/99 10:04 AM	3.2	12.2	96	45	76	1.64	94.1
10/10/99 10:19 AM	3.3	12.8	97	44	80	1.71	94.1
10/10/99 4:29 PM	3.7	14.3	89	40	82	2.14	92.1

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
10/10/99 4:58 PM	3.7	14.0	89	40	80	2.04	92.3
10/10/99 4:59 PM	3.6	14.0	88	40	80	2.00	92.3
10/10/99 5:29 PM	3.6	13.8	89	40	79	1.99	92.3
10/10/99 5:58 PM	3.5	13.4	88	40	78	1.94	92.3
10/10/99 5:59 PM	3.6	13.7	88	41	79	1.94	92.4
10/10/99 7:29 PM	3.3	12.7	90	39	74	1.86	92.4
10/10/99 7:58 PM	3.3	12.7	90	40	74	1.86	92.4
10/10/99 7:59 PM	3.2	12.4	90	39	73	1.83	92.4
10/10/99 8:29 PM	3.3	12.8	91	40	75	1.87	92.4
10/10/99 8:58 PM	3.3	12.6	92	39	74	1.82	92.5
10/10/99 8:59 PM	3.2	12.4	92	39	73	1.79	92.6
10/10/99 9:29 PM	3.2	12.4	92	40	74	1.78	92.6
10/10/99 9:52 PM	4.1	15.6	90	39	82	3.54	87.6
10/10/99 9:58 PM	3.9	15.0	91	39	80	3.09	88.2
10/10/99 9:59 PM	3.9	14.9	90	39	80	3.01	88.5
10/10/99 10:12 PM	3.5	13.5	91	41	80	1.94	92.6
10/10/99 11:12 PM	3.5	13.6	91	41	80	1.96	92.6
10/11/99 12:12 AM	3.5	13.5	91	42	79	1.99	92.3
10/11/99 1:12 AM	3.3	12.5	92	41	75	1.77	92.8
10/11/99 2:12 AM	3.2	12.4	91	42	74	1.84	92.4
10/11/99 5:12 AM	3.3	12.5	91	42	75	1.86	92.5
10/11/99 6:12 AM	3.2	12.3	91	42	75	1.73	93.0
10/11/99 7:12 AM	3.3	12.6	91	42	76	1.82	92.8
10/11/99 10:12 AM	3.2	12.3	89	38	75	1.57	92.4
10/11/99 10:23 AM	3.2	12.4	90	38	76	1.62	92.4
10/11/99 11:12 AM	3.2	12.5	90	37	76	1.62	92.4
10/11/99 11:23 AM	3.3	12.7	91	39	76	1.79	92.1
10/11/99 11:24 AM	3.3	12.7	91	39	76	1.79	92.1
10/11/99 12:23 PM	3.2	12.4	91	38	75	1.72	92.3
10/11/99 12:24 PM	3.2	12.4	91	38	75	1.72	92.3
10/11/99 12:36 PM	3.3	12.5	85	39	77	1.71	92.3
10/11/99 12:40 PM	3.2	12.4	90	39	75	1.71	92.3
10/11/99 12:52 PM	3.1	12.1	102	38	71	1.78	91.9
10/11/99 1:04 PM	3.3	12.6	90	39	77	1.71	92.5
10/11/99 8:38 PM	3.7	14.2	93	51	77	3.03	92.5
10/11/99 9:20 PM	3.5	13.6	86	26	86	1.49	91.6
10/11/99 9:36 PM	3.6	14.0	92	43	82	2.05	92.7
10/11/99 9:36 PM	3.6	14.0	92	43	82	2.05	92.7
10/11/99 9:38 PM	3.6	13.8	91	44	82	2.07	93.0
10/11/99 10:08 PM	3.5	13.4	91	42	80	2.01	92.9
10/11/99 10:36 PM	3.5	13.4	91	43	80	2.01	92.9
10/11/99 10:36 PM	3.5	13.4	91	43	80	2.01	92.9
10/11/99 11:20 PM	3.5	13.4	91	43	80	2.05	92.8
10/11/99 11:36 PM	3.4	13.1	91	43	79	1.97	93.0
10/11/99 11:36 PM	3.4	13.1	91	43	79	1.97	93.0
10/11/99 11:38 PM	3.5	13.3	91	43	81	2.02	92.9
10/12/99 12:20 AM	3.4	13.2	91	44	79	2.00	92.8
10/12/99 12:36 AM	3.4	13.0	90	44	79	1.93	93.1
10/12/99 12:36 AM	3.4	13.0	90	44	79	1.93	93.1
10/12/99 12:38 AM	3.4	13.0	91	43	79	1.93	93.1
10/12/99 1:08 AM	3.4	13.1	90	43	79	1.94	93.1
10/12/99 1:20 AM	3.4	12.9	90	43	78	1.92	93.0

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
10/12/99 1:38 AM	3.4	12.9	91	44	79	1.89	93.2
10/12/99 2:36 AM	3.2	12.2	90	44	75	1.75	93.3
10/12/99 2:36 AM	3.2	12.2	90	44	75	1.75	93.3
10/12/99 2:38 AM	3.2	12.2	91	44	75	1.77	93.3
10/12/99 3:36 AM	3.2	12.2	91	44	75	1.77	93.3
10/12/99 3:38 AM	3.2	12.2	91	43	75	1.75	93.3
10/12/99 4:20 AM	3.2	12.1	89	44	75	1.73	93.4
10/12/99 4:36 AM	3.1	11.9	91	44	74	1.69	93.4
10/12/99 5:36 AM	3.2	12.2	91	43	75	1.72	93.5
10/12/99 5:38 AM	3.2	12.1	91	44	75	1.73	93.4
10/12/99 6:36 AM	3.1	12.1	91	44	75	1.69	93.5
10/12/99 6:36 AM	3.1	12.1	91	44	75	1.69	93.5
10/12/99 7:36 AM	3.2	12.2	92	44	75	1.72	93.4
10/12/99 8:08 AM	3.2	12.3	92	44	76	1.72	93.5
10/12/99 8:36 AM	3.2	12.5	92	45	78	1.76	93.5
10/12/99 9:36 AM	3.3	12.7	92	44	79	1.79	93.5
10/12/99 1:34 PM	3.4	13.1	92	43	79	1.92	93.1
10/12/99 3:42 PM	3.2	12.4	94	42	75	1.73	93.1
10/12/99 10:34 PM	3.7	14.0	95	51	82	16.62	61.3
10/12/99 11:24 PM	3.6	14.0	97	51	82	16.21	61.2
10/12/99 11:43 PM	3.7	14.1	97	51	82	16.16	61.1
10/13/99 12:36 AM	3.6	14.0	97	51	82	16.17	61.0
10/13/99 1:34 AM	3.6	13.9	96	52	82	16.14	61.1
10/13/99 1:43 AM	3.7	14.0	97	51	82	16.45	60.7
10/13/99 2:24 AM	3.6	13.9	97	51	82	16.30	60.9
10/13/99 2:34 AM	3.6	13.7	97	51	80	16.17	60.7
10/13/99 2:36 AM	3.6	13.9	97	51	82	16.27	61.0
10/13/99 2:42 AM	3.6	13.9	97	51	82	16.30	61.1
10/13/99 2:43 AM	3.6	13.7	97	51	80	16.17	61.0
10/13/99 3:34 AM	3.6	13.7	98	51	80	15.97	60.9
10/13/99 3:36 AM	3.6	13.6	97	52	80	15.97	60.6
10/13/99 4:24 AM	3.4	12.9	96	52	76	15.13	61.2
10/13/99 4:43 AM	3.4	12.9	97	52	76	15.07	61.0
10/13/99 5:24 AM	3.3	12.8	97	52	76	15.18	61.1
10/13/99 5:36 AM	3.3	12.6	97	53	75	14.81	61.1
10/13/99 5:43 AM	3.3	12.6	98	52	75	15.10	60.8
10/13/99 7:36 AM	3.3	12.6	98	50	76	14.40	60.3
10/13/99 8:34 AM	3.3	12.5	98	51	76	14.27	60.6
10/13/99 8:43 AM	3.3	12.5	98	51	76	14.69	59.7
10/13/99 9:36 AM	3.2	12.3	98	51	75	14.18	60.1
10/13/99 12:14 PM	3.4	13.1	95	49	79	13.77	61.5
10/14/99 5:17 PM	3.3	12.8	89	39	79	2.00	93.8
10/14/99 7:41 PM	2.4	9.1	75	21	76	1.63	94.3
10/15/99 9:17 AM	2.4	9.3	77	21	79	1.62	94.2
10/15/99 9:35 AM	2.4	9.3	78	21	80	1.61	94.3
10/15/99 4:25 PM	3.3	12.5	77	65	82	2.60	90.5
10/15/99 6:10 PM	2.9	11.1	79	68	79	1.62	93.5
10/15/99 7:10 PM	2.8	10.9	79	68	78	1.59	93.5
10/15/99 8:10 PM	2.7	10.5	79	68	76	1.51	93.7
10/15/99 8:50 PM	2.8	10.7	81	68	78	1.57	93.8
10/15/99 9:10 PM	2.8	10.6	78	64	78	1.38	93.6
10/15/99 11:10 PM	2.6	10.1	79	65	75	1.29	93.9

Time	J (L m <sup>-2</sup> hr <sup>-1</sup> atm <sup>-1</sup> )	NPF (L/min)	Pres. Diff. kPa		Standardized		
			Stage 1	Stage 2	% Recovery	% Salt Passage	% Rejection
10/16/99 2:50 AM	2.6	10.1	79	66	76	1.26	94.2
10/16/99 6:10 AM	2.7	10.2	79	66	78	1.29	94.2
10/16/99 6:44 AM	2.8	10.8	81	65	79	1.59	93.2
10/16/99 10:44 AM	2.8	10.7	79	65	82	1.47	93.7
10/16/99 4:44 PM	2.8	10.9	77	63	82	1.51	93.2
10/16/99 8:44 PM	2.9	11.0	74	66	82	1.43	93.5
10/17/99 12:44 AM	2.8	10.7	77	66	82	1.34	94.1
10/17/99 4:44 AM	2.7	10.5	77	66	82	1.26	94.4
10/17/99 11:59 AM	2.7	10.3	76	65	82	1.23	94.4
10/17/99 11:59 AM	2.7	10.3	76	65	82	1.23	94.4
10/17/99 1:59 PM	2.7	10.2	75	65	83	1.25	94.4
10/17/99 2:59 PM	2.7	10.2	77	64	82	1.27	94.3
10/17/99 5:31 PM	2.6	10.1	75	64	82	1.29	94.3
10/17/99 8:31 PM	2.6	9.9	78	65	82	1.26	94.6
10/17/99 10:59 PM	2.4	9.2	79	63	80	1.06	95.5
10/18/99 12:31 AM	2.3	8.8	80	58	80	1.01	95.7
10/18/99 12:59 AM	2.3	8.7	79	59	80	1.00	95.7
10/18/99 1:31 AM	2.2	8.6	79	57	79	0.98	95.8
10/18/99 3:31 AM	2.2	8.4	79	58	79	0.96	95.9
10/18/99 4:31 AM	2.2	8.4	79	58	80	0.95	96.1
10/18/99 6:31 AM	2.1	8.2	80	57	79	0.94	96.2
10/18/99 8:40 AM	2.1	8.1	79	57	79	0.92	96.2
10/18/99 10:40 AM	2.1	7.9	79	56	79	0.89	96.4
10/20/99 2:18 PM	3.3	12.8	87	46	82	1.86	94.5
10/20/99 3:28 PM	3.2	12.4	98	46	80	1.67	94.5
10/20/99 6:05 PM	3.4	13.1	95	45	82	1.65	94.5
10/20/99 10:35 PM	2.3	8.6	95	49	81	0.86	96.0
10/21/99 12:35 AM	3.4	13.0	99	41	83	1.44	94.8
10/21/99 2:35 AM	3.1	12.0	99	41	78	1.28	95.0
10/21/99 3:55 AM	3.2	12.3	101	42	80	1.29	95.1
10/21/99 5:55 AM	3.2	12.3	99	40	82	1.19	95.6