

#### The use of ceramic membranes for gas filtration

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## THE USE OF CERAMIC MEMBRANES FOR GAS FILTRATION

by
T.S. Crimmins

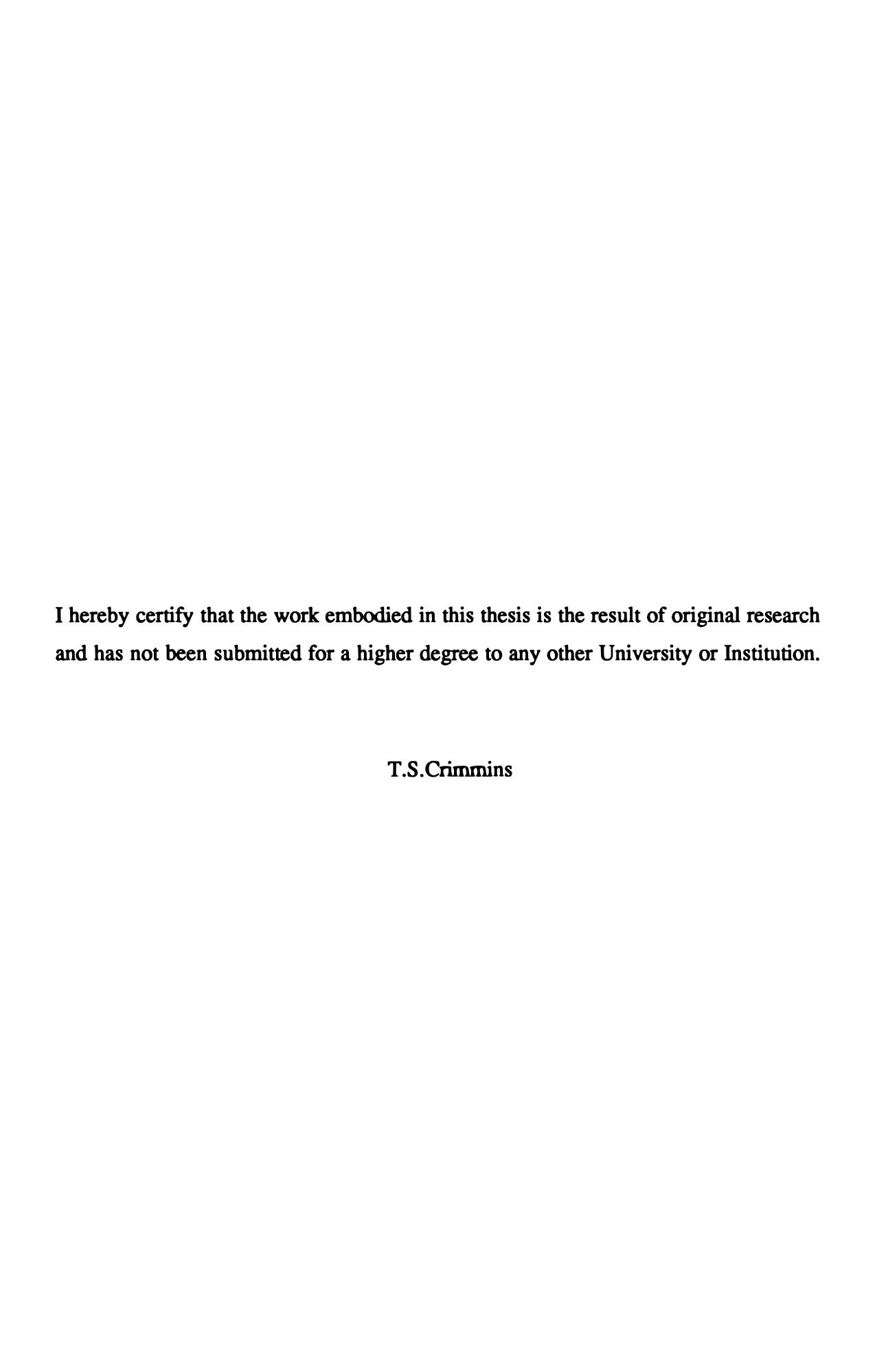
Thesis submitted for the degree of

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### LIST OF SYMBOLS

A = External surface area of the porous media exposed to the high pressure side of the permeant (m<sup>2</sup>).

C = Cunningham slip correction.

D = Particle Diffusion coefficient  $(kT/3\pi\eta d_p)$ .

 $d_f$  = Fibre diameter (m).

 $d_p$  = Particle diameter (m).

 $D_p = Pore diameter (m).$ 

 $J = Flux (gm mols: cm^{-2} sec^{-1}).$ 

k = Boltzmann's constant.

l = Thickness of porous medium (m).

M = Molecular weight (g).

Pe = Peclet number  $(U_o d_f/D)$ .

r = Radius of pore (m).

R = Universal gas constant (8.314 J/gm mol K).

Re = Reynold number  $(D_p U_o \rho / \eta)$ .

Stk = Stokes number  $(Cd_p^2 \rho_p U_o/18\eta d_f)$ .

 $S_v$  = Internal surface area of porous medium (per unit volume of non-porous material) (m<sup>2</sup>/m<sup>3</sup>).

T = Temperature (K).

 $U_o = Face velocity (m^2/s).$ 

 $\Delta V/\Delta t$  = Volume flux per second (m<sup>3</sup>/s).

 $\varepsilon$  = Volume fraction composed of pores (porosity).

 $\eta = \text{Viscosity (newton s/m}^2).}$ 

 $\rho$  = Density of gas (gm/ml).

 $\rho_p$  = Density of particle (gm/ml).

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## **ABSTRACT**

The Alcoa ceramic membrane was evaluated for clean room air filtration and high temperature gas cleaning.

Three tests were performed on a variety of pore sized ceramic membranes  $(5.0, 0.2, 0.035 \text{ and } 0.004 \mu m)$  to evaluate their applicability for clean room filtration. These tests included: a Pressure Drop test, a Mass Efficiency test, and a Grade Efficiency test. The results of these tests indicated that although the Alcoa ceramic membranes have very high efficiencies, that are of the same order of magnitude or greater than current clean room filters (HEPA), the operating costs are excessive, prohibiting their use as clean room filters.

Two tests (Cleanability and Grade Efficiency tests) were performed on the Alcoa 5.0 micron ceramic membrane to evaluate its applicability for high temperature gas cleaning. The results of these tests suggested that the membranes were capable of removing the particulates present in a hot and dusty gas stream with efficiencies up to 98.6%, and further, that the membrane could be regenerated by backflushing with pressures of 5 atmospheres.

The ability of the Alcoa ceramic membrane to withstand high temperatures together with the extremely high efficiencies obtained with moderate pressure drops makes the ceramic membrane potentially suitable for high temperature gas cleaning.

Here we go round the prickly pear

Prickly pear prickly pear

Here we go round the prickly pear

At five o'clock in the morning

from The Hollow Men
T.S. Eliot 1925

## CHAPTER ONE INTRODUCTION

Gas filtration is important as a means of gas borne particulate concentration control to many industries. This control is specified either internally by the industry for the particular process or by an external body, such as the government, for environmental considerations. To adhere to these specifications there is a variety of gas filters available. However, there is still a demand for more effective gas filters that suitably operate within a specific gas filtration environment, and also offer economic advantages in the form of higher efficiencies, lower operating costs, a longer filtration life, and reliability.

This project is concerned with the evaluation of ceramic membranes for gas cleaning. The membranes are supplied by Alcoa Pty. Ltd., and are made from Alpha-Alumina supported by a thick Alumina substrate. They offer the gas filtration market a durable element that is structurally strong and chemically inert to a majority of environments. Additionally, the membranes have a high porosity and their pore size can be tailored for precise application.

The Alcoa ceramic membrane has been evaluated for two applications. The first is final gas clean up for clean rooms. It is assumed that the ceramic membrane could offer a more effective gas filtration unit than the currently employed fibrous HEPA filter. This would be advantageous for clean room users, who demand meticulously clean incoming ventilation air. The second application is for tertiary control for high temperature gas emissions. This application requires a filter unit that is chemically and physically inert to its severe environment. With tighter particulate emission controls being imposed by the government for environmental considerations, the filtration unit must also offer higher efficiencies. As the Alcoa ceramic membrane is made from Alumina it is assumed that it would be capable of withstanding the harsh environment and still provide an efficiency that is higher than other filtration units.

As part of the project, currently employed gas filtration units and the application of ceramic gas membranes/filters have been reviewed. The nature of gas borne particulates, and methods to evaluate a gas filter, specifically for application to clean rooms and high temperature gas cleaning have been studied. This material is presented in Chapter Two, which also examines the features of clean rooms and high temperature gas cleaning environments, and assesses the assets of the ceramic membrane in such services.

In Chapter Three, an analysis of a variety of different pore sized Alcoa ceramic membranes for clean room application is presented. This includes an evaluation of a filter through a series of tests. The first test is a Pressure Drop test which indicates the operating cost of the specific membrane. The second test is a standard Mass Efficiency test, which determines the ability of the membrane to arrest a known mass of dust. The results of this test can be used to compare the membrane's performance to other filters. The last test is a Grade Efficiency test, which indicates the particular particle size range that would penetrate the membrane. This test is important for processes that are sensitive to definite particle sizes.

The fourth chapter presents an assessment of the Alcoa ceramic membrane for high temperature gas cleaning. Here the 5.0 micron ceramic membrane is evaluated through two tests, the first of which determines the cleanability of the membrane by backflushing with clean air. This is important as the high temperature environment has typically high dust concentrations. The second test examines the effect that the properties of the high temperature gas (viscosity, density, and velocity) and particles (collected on the surface of the membrane) have on the physical characteristics of the membrane.

The final chapter of the thesis gives an indication of the viability of the Alcoa ceramic membrane's employment in clean rooms and high temperature gas cleaning environments, relating the information obtained from chapters three and four, and comparing the membrane performance to other filters currently being used in such environments.

# CHAPTER TWO LITERATURE SURVEY

## 2.1 INTRODUCTION

This chapter reviews currently employed gas filtration units, and the employment of ceramic gas filters. The chapter examines the requirements of the clean room and high temperature gas clean-up environments, and the typical evaluation tests that are performed on a filter that is to be employed for such application.

The role that ceramic membranes have in the gas filtration market is limited to small scale employment. This limitation is due to the dominance in the gas filtration market of traditional gas filters. These traditional filters offer years of proven reliability. Appreciation of the ceramic membrane's/filter's involvement in this market gives some indication of their abilities, and how the gas filtration market perceives their function.

In order to employ the Alcoa ceramic membrane for clean room air filtration and high temperature gas cleaning, it is important to know the requirements demanded from the membrane. Furthermore, the nature of the gas cleaning environment and the characteristics of the gas borne particulates must be understood.

In a clean room, contamination dust levels are controlled by standard guidelines. The efficiency of a filter to be employed in a clean room is evaluated by two test methods. The first test is known as a Mass Efficiency test. It presents the efficiency of the filter as a percentage ratio to arrest a known mass of challenging dust. There are many Mass Efficiency tests available and selection depends upon the popularity of the test and its respective advantages. The second test is a Grade Efficiency test. Here the efficiency of the membrane is evaluated for specific particle size ranges. The result is known as the membrane selectivity, which indicates the particle size that is most likely to penetrate the filter under certain conditions.

In the high temperature gas cleaning environment contamination is controlled by the requirements of the process or by environmental emission controls. There is no standard test procedure for a filter to be employed as a high temperature gas cleaner. Currently a filter is tested with hot off gases from a specific process.

#### **2.2 GAS FILTRATION**

Solid-Gas filtration is the separation of solid particles from a gas stream. The aim of gas filtration can be demonstrated by the types and quantity of gas filters. As there are many gas filtration devices available, this reflects the numerous applications and environments that require gas filtration. They offer an extensive variety of separation techniques as shown in Table  $1^1$ . These filters have different operation economies and capabilities as shown in Figure  $1^2$ , which shows the effective cleaning ability of these filters to the size range of dusts (0.001 to 100000  $\mu$ m), smokes (< 1  $\mu$ m) and mists (80 to 100  $\mu$ m).

The purpose of gas filtration is to either increase product concentration for the specifications of a process or to post-treat a process's effluent (protection of equipment or environmental control). This thesis is concerned with the pretreatment of a product for a process (clean-rooms) and for the post-treatment of a process effluent (high temperature gas clean-up). These two applications vary in the performance required from the particular filter used, and the type of environments in which the filters are to be used.

Clean rooms are work areas that have very low particulate contamination. The major requirement of an air filter is that it provides very clean air at a reasonable operating cost. High temperature gas clean-up is the removal of particles from a gas stream at high temperatures. This requires a filter that can withstand harsh environments while outputting a substantially clean gas stream.

Dust collector	Gravi ty	Centri fugal	Electrical	Filtration	Scrubbing
Form  Separation area					The star draplet
Transport forces	Gravitational forces	Centrifugal forces	forces	inertia, thermodynomic (diffusion) and electri- cal forces	Inertia forces (ther- modynamic and electrical)
second in	Gravitation forces in flow stagnation zones	Exceeding of limit lood at vall	Adhesion forces	Mesh action achesion forces	boundary forces
Cleaning of the separa- tion space	Mechanical 	grovi tat ional	Periodic cleaning by knocking-down of dust, liquid film		Throughflow or circulation of liquid

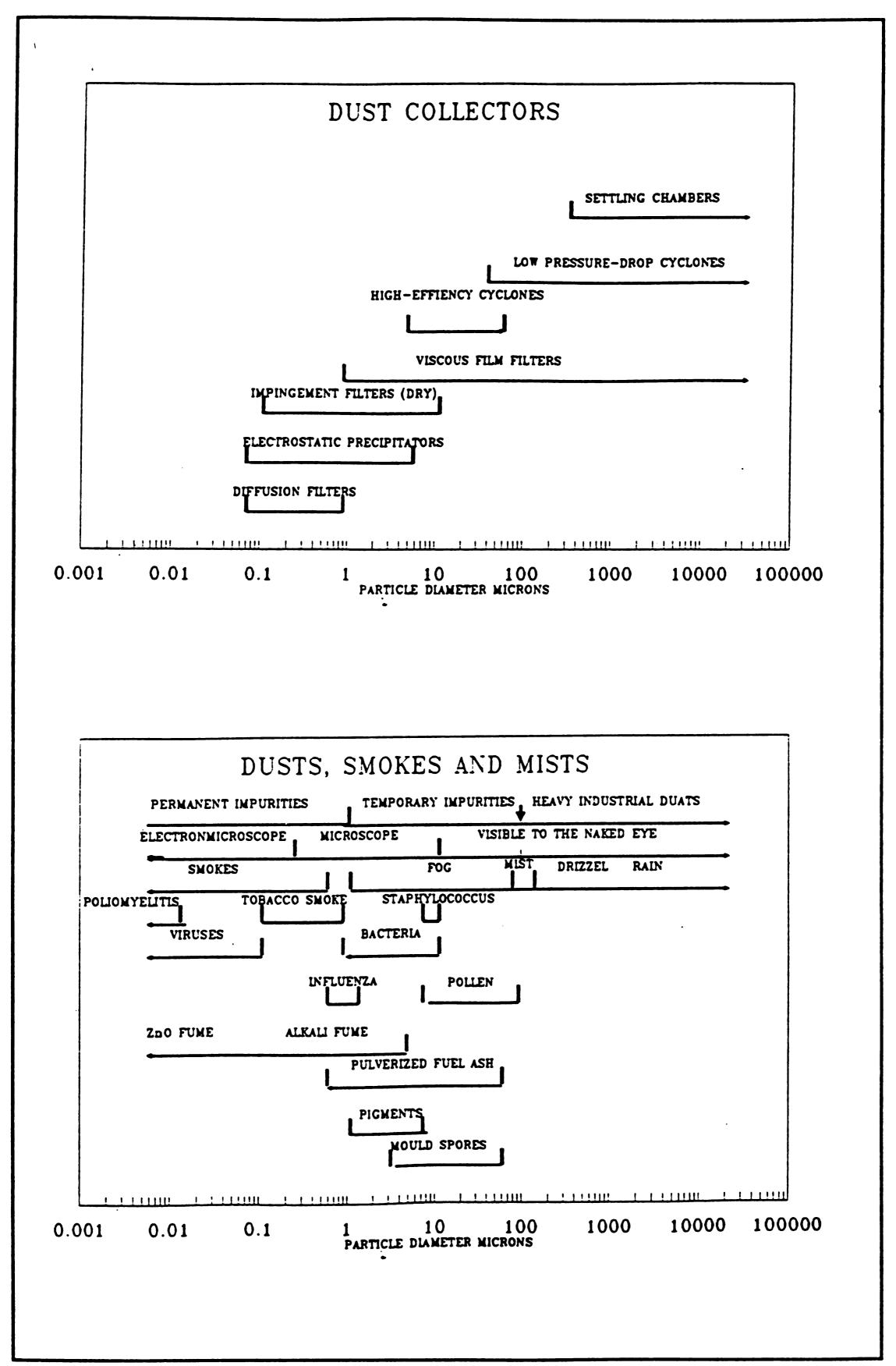


Figure 1. Filter Capabilities and the Size Range of Typical Air Borne Particles.

It is assumed that Alcoa ceramic membranes would be applicable for clean room and high temperature filtration. This is based on, firstly, their small sized nominal pore rating, which indicates the maximum sized particle that could penetrate the particular membrane. The pore size is sufficiently small to suggest that the membranes would act as highly efficient air filters, and thus be suitable for clean room air filtration. Secondly the membranes are made from Alumina which is a material that is chemically and mechanically inert to high temperatures, abrasive particles, and corrosive environments. This makes the membranes suitable for high temperature gas cleaning. Thirdly the membranes have a structure that is quite strong, thus enabling them to be cleaned by high pressure air backflushing. This increases the membranes air filtration life-span, which is attractive to clean room and high temperature gas cleaning applications. More importantly, unlike conventional air filtration, it offers a technology which does not require the use of a renewable filter.

### 2.3 CERAMIC MEMBRANES

A membrane is a porous media separating two phases<sup>3</sup>. Its operation can be likened to the function of a tea bag which separates the tea leaves from the volume of a cup whilst still allowing the boiling water to enter the tea bag and leach the available tannin. It has been colourfully described by Kesting<sup>4</sup> as "cohesive systems consisting of open-celled foams i.e., vacuoles with breached walls...Fastening the cellular network together are long hose- and chainlike ribs which spread out in three dimensions."

Membranes have existed for as long as life itself, for every simple cell requires a membrane to absorb amino acids from its environment to sustain its being. The first experiments involving membranes proceeded in the early 1800's, where scientists used natural membranes from cow bladders to observe the phenomena of diffusion<sup>5</sup>. Synthetic membranes are generally believed to have started with Schoenbian (1845) who developed a nitrocellulose membrane accidentally. This membrane was used by Fick in his famous dialysis experiments. Production then was limited to membranes consisting of nitrocellulose and esters of cellulose Acetate<sup>6</sup>. It was not until the 1920's that membranes were to be made of metal and other materials. Examples

include the distillation of Zinc out of Brass to leave a porous Copper substrate, and the plating of Nickel onto a Nickel and Bronze mesh reducing the mesh openings to 50 microns.

Though synthetic membranes have been around for 100's of years, commercialisation of this product only dates back to the 1940's where they were used as a tool for water bacteriology<sup>7</sup>. Present applications find membranes in many diverse fields ranging from water purification for drinking water to the classification of petroleum crude. The increasing employment of membranes has been due to the fact that they can be housed in mobile units, have a simple technology (which is attractive for intermittent and temporary use), and have a high porosity (permits high flow rates at low costs). They can be tailored for precise and uniform pore size control and allow for classification of retained particles because the surface of the membrane is used for filtration. Membranes provide one of the few filters which have dimensional tolerances capable of filtering bacteria out of solution<sup>8</sup>.

Ceramic membranes have been used by the French for 20 years in their nuclear industry for the separation of Uranium-Isotopes by gas diffusion<sup>9</sup>. It is only recently that the French government has allowed the membranes to be sold on the open market. Table 2<sup>9</sup> lists the companies that produce particular ceramic membranes world wide. The advantages in using ceramic membranes over other membranes lie in their:

- \* Ability to be steam cleaned for sterile environments.
- \* Ridged structure which incurs strong mechanical strength and therefore can be backwashed at high pressures.
- \* Resistance to high and low temperatures, acidic environments, solvents, and abrasive particles.
- \* Ability to be produced with precise pore structure and shape to fit any design
- \* High fluxes which can be greater than most polymer membranes.

Table 2. Ceramic Membrane Manufacturers.

Company	Type of membrane and attributes
Ceraver, or Societe de Ceramique Technique (SCT) (French)	Alcoa recently gained a share holding. Uses a Alumina substrate with an Alumina membrane, these being sintered together.  Pore sizes range from 10 microns to 40 Angstrom, as either single tubes of internal diameter 7 or 15 mm or as hexagonal multichannel units containing 19 tubes of 85 cm length (internal tube diameters 2, 4 or 6 mm in length, giving a total surface area of 3.8 m <sup>2</sup> ).
SFEC (French)	Manufacture a Carbon tube coated with a Zirconium Oxide membrane. Sintering is difficult for at elevated temperatures their is a reaction of Carbon with the Zirconium Oxide forming Zirconium Carbide.
Ceram Filtre (French)	Use Silicon Carbide as the substrate and either Alumina or Zirconium Oxide as the membrane. The tubes are moulded rather than extruded as is the case with the other membranes.
Norton (U.S.A.)	Manufacture a membrane not unlike SCT membrane.
Alcan (U.K.)	Have made a novel ceramic membrane from alumina. The membrane is made by passing a current through an electrolyte in contact with Aluminium. An anodic film of Alumina Oxide forms on the metal, forming a honeycomb pattern of pores. Pore size is controlled by varying the voltage, and the thickness of the membrane by time. The membrane is then etched onto a metal substrate.

#### 2.3.1 Ceramic Air Filters

A ceramic air filter can be a membrane, that has a controlled pore size, or a porcelain filter, which may be a woven bag. Ceramic air filters are currently employed in many various and diverse fields. In small scale application ceramic membranes are used as an analytical tool in laboratories for particle counting and analysis. This is because the membrane collects particles on its surface, thus enabling them to be viewed by a microscope<sup>10</sup>. The ultra-pure compressed gas companies use a ceramic membrane to remove particulates and oil from the gas stream as the cylinders are being filled<sup>11</sup>. This is because the ceramic membrane can withstand high pressures and provide effective removal of all contaminants.

Large scale application of the ceramic filter is limited to high temperature and/or harsh environments because they are expensive and are resilient to such environments. Presently employed are the ceramic candles<sup>12</sup> and bags<sup>13</sup> in electrical power stations, while a ceramic cross-flow filter made by Westinghouse<sup>14</sup> is currently being tested for high temperature cleaning of particulate emissions from coal gasification beds.

The application of ceramic filters for air filtration is still not being widely practised.

## 2.4 CLEAN ROOMS

A clean rooms is defined "as a room that has a ventilation system that removes airborne particulates more effectively than that required for a normal air-conditioned room<sup>15</sup>". The cleanliness of the clean room is based on strict clean room standards. Other important variables that are controlled include temperature, humidity, ventilation rates, and the amount of light. These are subjected to the demands of the particular operation using the clean room.

Historically clean rooms originated from operating rooms developed in the late 19th Century<sup>16</sup>. These operating rooms were developed as medical science became aware

of the transmission of diseases due to bacteria and other micro-organisms. To overcome this the first operating rooms used disinfectants to sanitise equipment used in operations. With time, further improvements to operating rooms included strict hygienic practices by personnel employed in these rooms, filtration of ventilation air, and control of the temperature and humidity in the operating rooms.

The need for clean rooms became apparent when production processes became more sensitive to their external environment. Failure in production due to particle contamination can occur when the size of the product is of the same magnitude as potential airborne contamination. It is widely acknowledged in the semi conductor industry that the loss of chip yield is mainly due to particulate contamination during processing. Figure 2<sup>17</sup> shows that Japanese semi conductor industries are producing higher quality products with better yield than their American counterparts because of the reduction in airborne particulates in production rooms.

environment to eliminate dust settling on the film. The need becomes apparent during photographic enlargement, where the deposited dust obscures the view. The size range that causes the greatest concern is the 5 to 10 micron particles<sup>18</sup>, (ii) In solid-state manufacturing film flaws are caused by deposited particles being entwined with the structure of the product<sup>19</sup>, (iii) Precision optical glass cleaning can damage expensive

There are many current processes that need a clean room. A few examples follow:

(i) The processing and manufacture of photographic film needs a dust free

structure of the product<sup>19</sup>, (iii) Precision optical glass cleaning can damage expensive glass wear if abrasive particles have been deposited between the glass and the cleaning equipment<sup>20</sup>, (iv) Very closely spaced moving parts can be jammed and eroded by deposited particles. Clean rooms are generally required in any industry producing technically sensitive equipment, such as the production of pharmaceuticals, electrooptical and electromechanical devices, hydraulic systems and micro-chips.

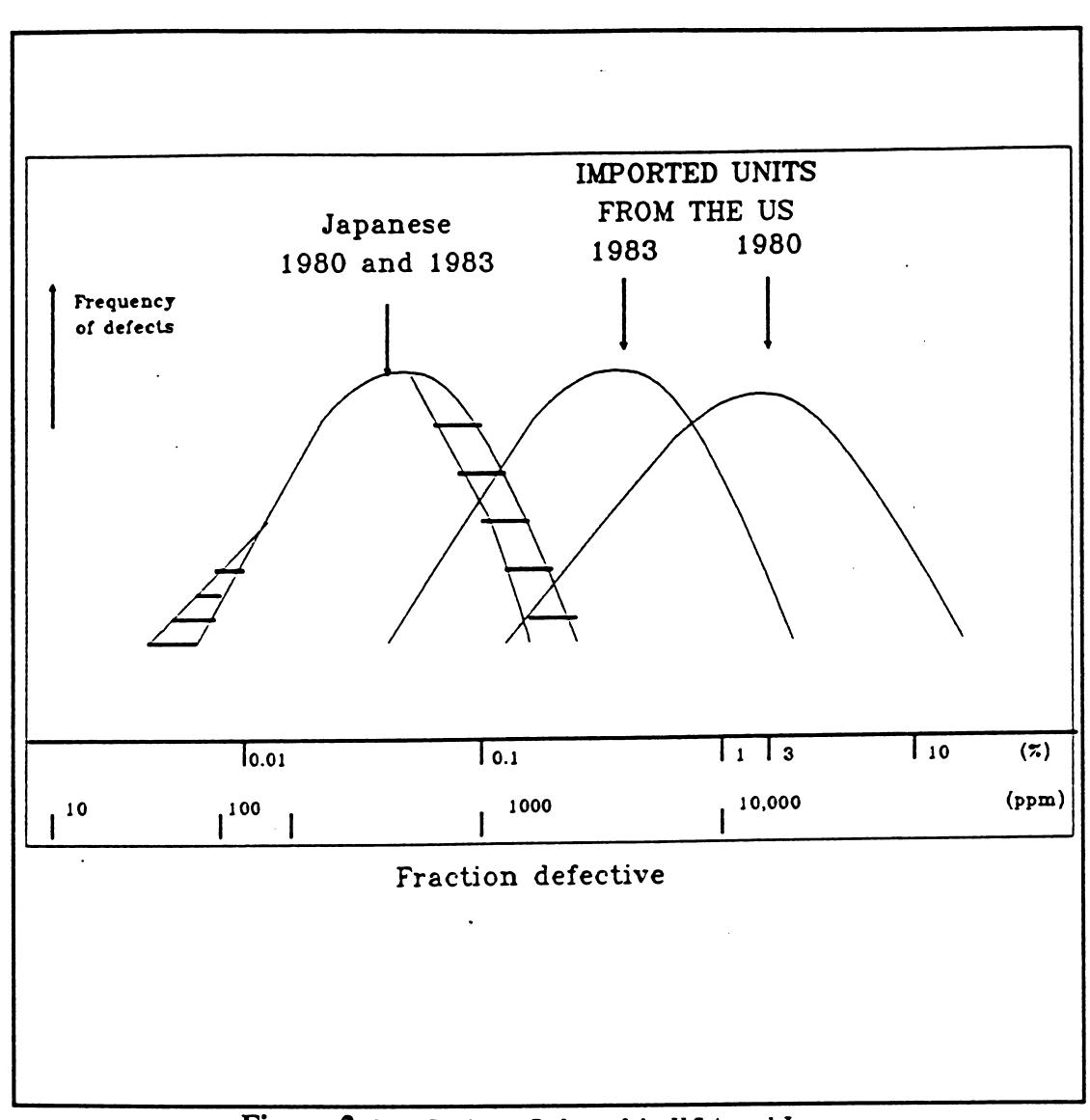


Figure 2. Semi Conductor Defects of the U.S.A. and Japan.

## 2.4.1 Source of Airborne Contamination

External sources of airborne contamination, which must be removed from air to be used in a clean room, include natural atmospheric pollutants. These atmospheric pollutants can consist of gases and/or solids<sup>21</sup>. Gas pollutants include Carbon Monoxide, Sulphur Dioxide, and Nitrogen Dioxide which can be removed by absorption filters, such as a wet scrubber. Solid particulate pollution include soot and smoke, minerals such as rock, metal or sand, and organic materials like grain, lint, hair or spores<sup>22</sup>. The size range and concentration of the solid pollutants are shown in Figure 3<sup>22</sup> and Table 3<sup>22</sup>. The important thing to be seen from Table 3 and Figure 3 is the variance of concentration with locality, and the large number percentage of particles below 0.5 microns that make up the small percentage of the total mass of the particles.

It is the particulate size range from 0.1 to 10.0 microns that causes major problems for sensitive processes as it persists in the atmosphere longer than any other size. This can be explained with Figure 4<sup>23</sup> which shows the trimodal distribution of ambient atmospheric particle populations. The shortest living modes are the Transient Nuclei (< 0.1 microns) and the Mechanically Formed mode (> 10 microns). The smaller particles of the Transient Nuclei mode quickly agglomerate to large particles in the accumulation mode, and the large particles of the Mechanically Formed mode settle out naturally. The Accumulation mode is suspended for the longest period of time as the particles are too large for further agglomeration and too small to settle.

Internal sources of clean room contamination originate in the vicinity of the product being produced. They are formed by machining and forming operations, and from general handling of equipment. These particles usually have a higher specific gravity and originating velocity than particles in ambient air. It is the migration of these contaminants that cause the greatest problems. Table 4<sup>24</sup> shows typical sources of internal particle generation, and Table 5<sup>25</sup> shows the increase in contamination levels by personnel activity.

Table 3. Mass of Airborne Solids at Different Locations.

Locality	Total mass of solids (mg/m³)
Rural and suburban	0.005 - 0.5
Metropolitan	0.1 - 1.0
Industrial	0.2 - 5.0
Factories and work rooms	0.5 - 10.0

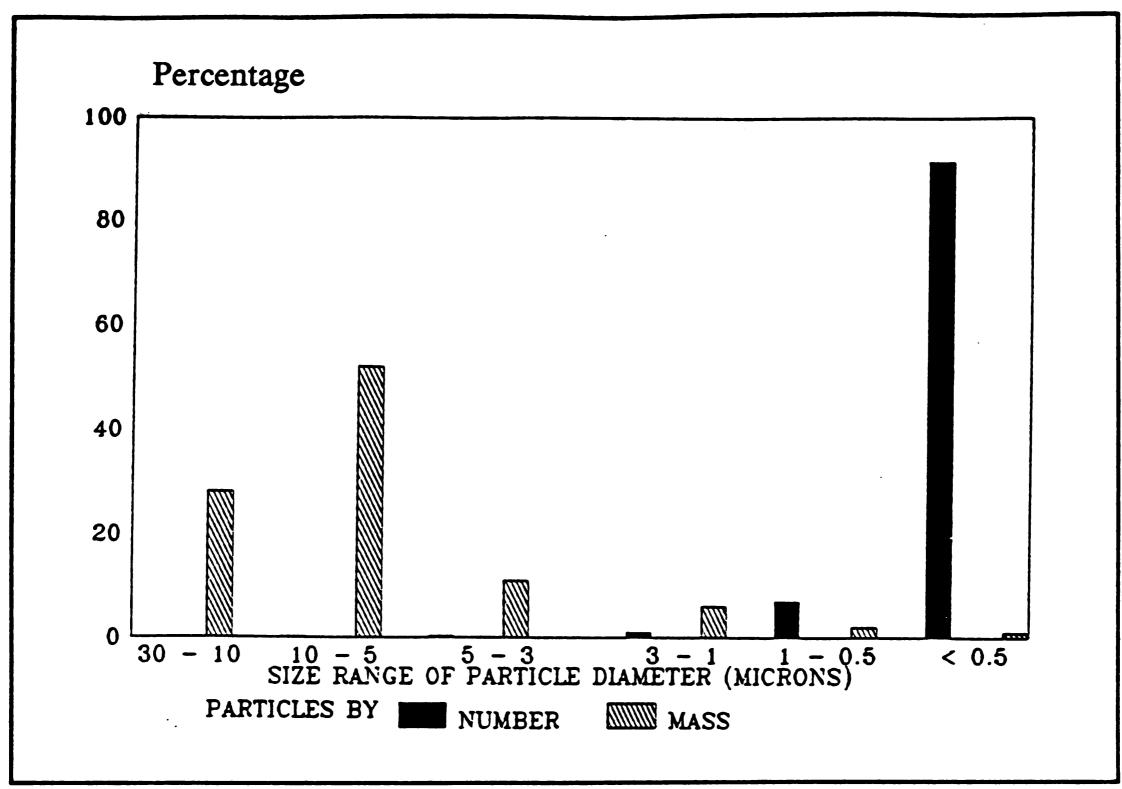


Figure 3. Size Distribution of Airborne Contaminants by Mass and Number.

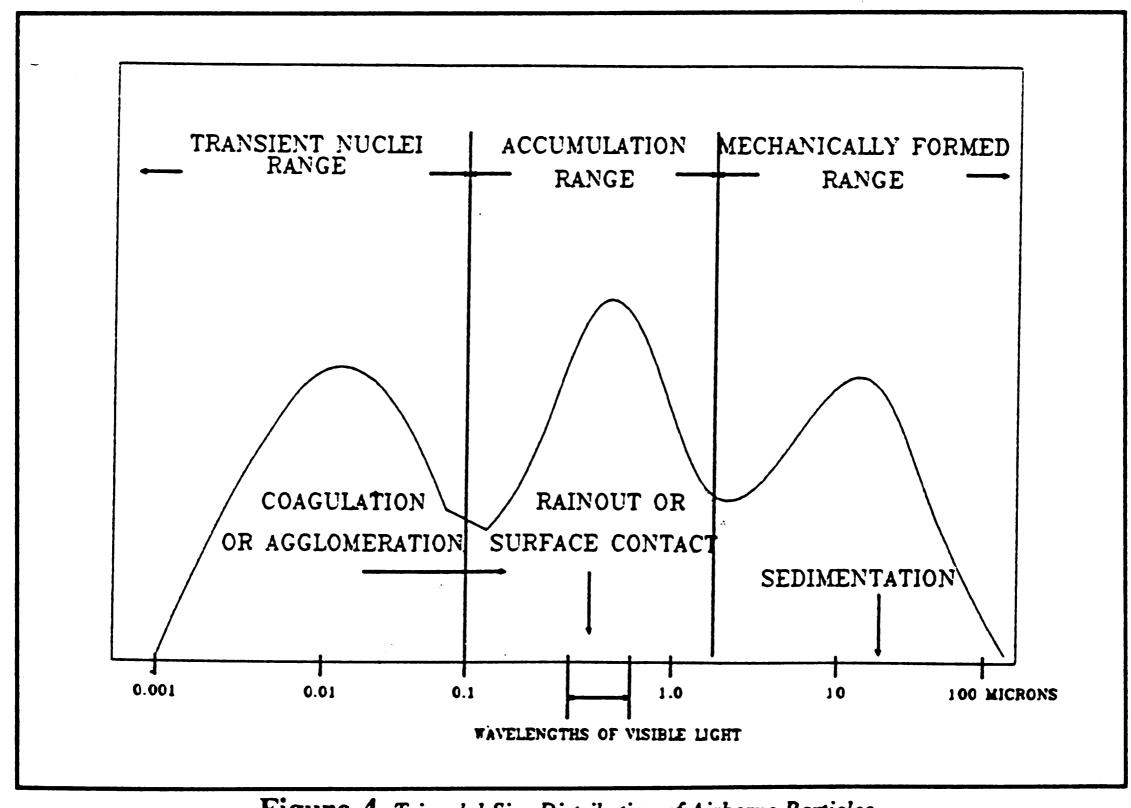


Figure 4. Trimodal Size Distribution of Airborne Particles.

Table 4. Size of Typical Contaminant Particles.

Activity	Particle size range microns
Rubbing ordinary painted surfaces	90
Sliding metal surfaces	75
Crumbling or folding paper	65
Rubbing an epoxy painted surface	40
Seating screws	30
Belt drives	30
Writing with a ballpoint pen on paper	20
Handling passive metals i.e. fastening materials	10
Vinyl fitting abraded by a wrench	8
Rubbing the skin	4

Table 5. Concentration of Typical Contaminant Particles.

Activity	Times increased  over ambient  levels (particles,  0.2 to 50 microns)
Personnel movements:	
Gathering together 4 to 5 people at one location	1.5 to 3
Normal walking	1.2 to 2
Sitting quietly	1 to 1.2
Personnel protective clothing:	
Brushing sleeve of uniform	1.5 to 3
Stamping on floor without shoe covering	10 to 50
Stamping on floor with shoe covering	1.5 to 3
Removing handkerchief from pocket	3 to 10
Personnel per se:	
Normal Breath	None
Breath of a smoker up to 20 min after smoking	2 to 5
Sneezing	5 to 20
Rubbing skin on hands and face	1 to 2

The deposition of particulates on products being processed is usually due to electrical, kinetic energy or thermal effects. Electrical gradients can cause electrostatic precipitation. Kinetic energy gradients, which lead to velocity differences between the particle and the depositing surface, can cause the accumulation of particles. Thermal gradients, due to temperature differences between the surrounding air and the depositing substrate, can also cause particle precipitation by setting up convective flows.

## 2.4.2 Clean Room Criteria and Methods of Control

Internationally defined standards, (the U.S. Federal standard and the German guideline VDI), provide precise clean room quality standards. These standards prescribe the limits of particle concentrations during normal clean room operation, as shown in Table 6<sup>26</sup>. Table 7<sup>19</sup> shows the specifications for controlling other variables in a clean room environment.

Contamination in a clean room is controlled by building design, equipment used in the room, procedures employed, personnel activity, environmental control, and maintenance<sup>27</sup>. Building design takes into account the type of air filters installed for the clean room's ventilation. This usually includes two parallel pre-filters of moderately high efficiency, followed by a very high efficiency filter.

Present clean room designs use a laminar flow principle<sup>28</sup>. Laminar flow means that the flow of the ventilation air is constant and in one direction, either horizontally or vertically. To assist this design, one wall or the ceiling is devoted to the inlet air vent and is made of High Efficiency Particulate Air (HEPA) filters, while the opposite wall or floor is the exhaust exit<sup>29</sup>. Table 6<sup>30</sup> <sup>31</sup> shows typical HEPA filters currently sold for clean room application.

The typical HEPA filter media is a special glass paper which is arranged in an extreme 'concerti' arrangement, separated by pieces of corrugated material such as Zinc, Dichromate or Aluminium<sup>32</sup>. These HEPA filters have the ability to deliver a

Table 6. Clean Room Grades under U.S and German Standards.

CLEAN RO	CLEAN ROOM GRADE		PERMITTED LEVEL
VDI	US Federal	PARTICLES PER CUBIC	
2083	Std 209b	METER OF AIR	
		> 0.5 Micron	< 0.5 Micron
3	100	4 X 10 <sup>3</sup>	-
4	1,000	4 X 10 <sup>4</sup>	$3 \times 10^2$
5	10,000	4 X 10 <sup>5</sup>	$3 \times 10^3$
6	100,000	4 X 10 <sup>6</sup>	3 X 10 <sup>4</sup>

 Table 7. Clean Room Specifications.

	CLEAN ROOM SPECIFICATIONS	
Temperature	72° F +/- 0.3° F	
Humidity	35 % RH +/- 0.3 %	
Vibration	< 500 micro in/sec, peak-to-peak, 15 Hz.	
Air change rate	540 times per hour	

Table 8. HEPA Filter Characteristics.

Filter Type	Size mm	Capacity m³/hr	Initial stance	Resi	Weight Kg	Penetration Against
From Vokes			mm WS	ins WG		NaCl Test B.S. 3939
22 MA	609 X 203 X 295	1700	12	0.5	17.5	5
55 MK	As above	1700	25	1	17.5	0.05
66 MK	As above	1700	25	1	17.5	0.01
77 MA	As above	1700	25	1	17.5	0.003
From		Flow at 250 Pa				
Gelman		m³/sec	Cl	FS		
751307	305 X 305 X 149	0.07	14	45	4.3	0.005
751376	610 X 1219 X 149	0.7	14	52	17.0	0.005
751376	610 X 762 X 292	0.7	14	52	20.2	0.005

continuous supply of very clean air at a low resistance (pressure drop). Also the HEPA filter produces a laminar flow air system which can be directly incorporated into the clean room design.

The HEPA filter is known as a single service filter. When this filter has reached its maximum capacity, assumed when its final pressure drop is twice its initial, the filter is not cleaned but replaced. This is not a disadvantage when it is realised that the life of a HEPA filter under average conditions is 1 to 2 years service and the purchasing cost of a new HEPA filter is remarkably low (\$ 500). The filter is also limited to a maximum temperature of 120°C, with untreated filter material, and a maximum burst pressure of 100 kPa. This restricts the application of HEPA filters to ambient operation, which applies to most clean rooms.

The HEPA filter is also a depth filter. A depth filter uses its exposed surface as well as its matrix to remove suspended material from a passing fluid (three dimensional filtration). They are quite thick (250 mm), and depend upon their pore length for the retention of particles. On the other hand membrane filters such as the Alcoa ceramic filter use only their surface to arrest passing particles (two dimensional filtration).

The Alcoa ceramic membrane could be used for normal clean room application if it provided a higher efficiency than current HEPA filters. The ceramic membranes are thought to have a higher efficiency due to their nominal pore sizing. Another application for the ceramic membranes could be found in small cleaning environments, such as bench top hoods, if the pressure drop of the membranes precludes large scale operation. An advantage of these ceramic membranes is that they could be cleaned and therefore never need replacing.

The growth in end user industries, such as microchip production, has lead to an increase in cleanrooms and clean room components. Figure 5<sup>33</sup> shows the projected sales of clean rooms in the world for the next year. The figure indicates that there is a growing market for clean room components and if ceramic membranes are comparable to HEPA filters, this will ensure a sound market basis.

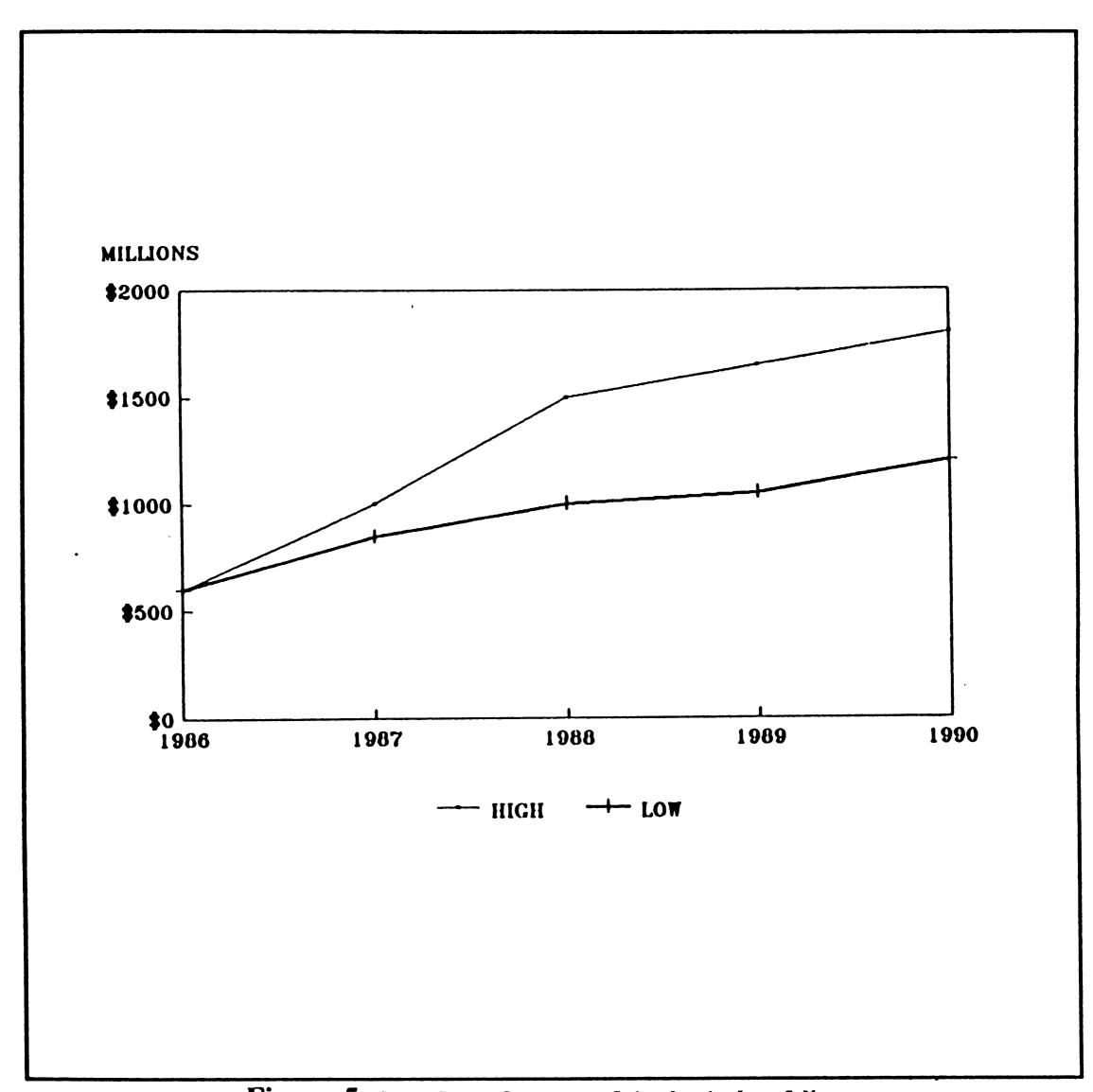


Figure 5. Clean Room Component Sales for the Last 5 Years.

## 2.4.3 High Efficiency Filter Tests

Numerous tests have been devised and standardised to determine a filter's performance. The Australian Filter Standards, based on overseas standards, provides four different tests specific for high efficiency filters. The tests themselves are controversial in that different testing aerosols and measuring techniques are used. It should be noted that a variety of non-standard tests are also available and each one is capable of giving reliable results. The four standard tests and others are listed below:

COLD DOP test (U.S.). This method detects the presence of flaws in the filter and/or holder<sup>34</sup>. A polydispersed aerosol of liquid Dioctyl Phthalate (DOP) is generated and then challenged to the test filter at a specified flow rate. Penetration of the filter by the DOP aerosol is measured with a probe nozzle of a light photometer. (AS 1132.9).

HOT DOP test (U.S.). This method is regarded as a highly sensitive and reliable technique for measuring fine particle arresting efficiency of air filters, specifically high efficiency filters. The aerosol, Dioctyl Phthalate, is generated by the condensation of the DOP vapor under controlled conditions. This monodispersed aerosol is fed to the test rig at a specified flow rate. The filter's efficiency is determined as a percentage of the DOP concentration arrested by the filter to that challenging the filter. The DOP aerosol penetrating the filter is measured with a linear light-scattering photometer<sup>35</sup>. (US Mil.Std. 136-300-175A).

SODIUM FLAME test (British). The test cloud is Sodium Chloride which has a polydispersed size distribution. Essentially a solution of water and Sodium Chloride is atomised in a spray box, this is then evaporated and dried to bring about the crystallisation of the Sodium Chloride. The test aerosol is fed to the test filter at a specified concentration and flow rate. The filter's efficiency is determined as a percentage of the Sodium Chloride arrested by the filter to that challenging the filter. The concentrations are measured by a flame photometer<sup>36</sup>.(B.S. 3928-1969)

URANINE test (French). This test uses the aerosol of Uranine (Soda-Fluorescein). The test cloud is heterodispersed and generated in much the same way as the sodium flame test. The mass concentration is measured with a condensation nucleus counter or by mass spectrometery<sup>37</sup>.

Other methods include the Methylene Blue stain test<sup>38</sup> and the Black Spot test<sup>39</sup> which are for filters with particle penetrations greater than 0.01%. These tests are limited due to method of particle detection. They require an effective quantity of aerosol to penetrate the test filter so a visible test stain can develop on the collection filter (esparto filter) to gauge the filter's performance.

Table 9<sup>40</sup> shows the characteristics of the Mass Efficiency test procedures. The two most popular of test methods are the HOT DOP and Sodium Chloride tests. In order to compare the ceramic membranes' mass efficiency with other filters it is necessary to use either of these two tests.

#### 2.4.3.1 Comparison of Mass Efficiency Test Methods

The Sodium Chloride and the HOT DOP tests are called Mass Efficiency tests. These tests base the efficiency of the filter on its ability to arrest a known mass of challenging aerosol. The problem with these tests is that the test circuitry and procedure must be identical to the standard given. Any slight change in the test procedure will lead to a different result. Another problem with these Mass Efficiency tests is that the chosen aerosol's characteristics may enhance results for one particular filter, but detract from another. Before these tests are used it is important that the attributes of the two aerosols are known.

Table 9. Standard Mass Efficiency tests.

DOP (thermal generation)	Aerosol Particle Diameter (microns)  Nominally 0.2	Sensitivity percent penetration  0.001	Speed of measurement  Rapid	Suitability for leak detection Good	Cost	Special advantages/ disadvantages  Requires a warm up period. Thus not suitable for infrequent tests.
DOP (air atomiser)	Hetero- dispersed mean 0.6	0.001	Rapid	Good	Low	Requires large volumes of compressed air.
Methylene blue	Hetero- dispersed mean 0.6	0.004	Slow	Not Suitable	Low	Simplicity
Uranine	Hetero- dispersed mean 0.12	0.0001	Slow	Not Suitable	Medi- um	Requires great cleanliness
Sodium Chloride	Hetero- dispersed mean 0.8	0.0001	Rapid	Good	Medi- um	<ol> <li>Can be used up to</li> <li>200°C.</li> <li>Requires large</li> <li>volumes of compressed</li> <li>air.</li> <li>RH in duct is less</li> <li>than 80%.</li> </ol>
Radioactive salts	Varies with test	Generally good	slow	Not Suitable		

The uniform particle size of the DOP test aerosol can bias the mass efficiency results of a filter. For example, the particle size that is most likely to penetrate a HEPA filter is close to 0.15 microns<sup>41</sup>. The size of the monodispersed DOP droplet is 0.3 microns, larger than the most penetrating particle size. This means that the HEPA filter can easily arrest the DOP aerosol giving a favourable result for the HEPA filter. However a membrane filter can come in a variety of pore sizes, each having a different particle size that will most likely penetrate it. If the most penetrating particle size is near 0.3 microns the DOP Mass Efficiency test result will be adverse. With the Sodium Chloride test no filter is biased as the test uses a heterodispersed aerosol. Thus in comparison to the theoretical DOP (0.3 micron) diameter, the Sodium Chloride aerosol can penetrate a HEPA filter by a ratio of 2 to 1<sup>42</sup>. That is, a HEPA filter tested with the DOP aerosol will have a higher mass efficiency result than if it were tested with NaCl.

Another advantage with the Sodium Chloride test is that its detection system provides for higher sensitivity. The lower limit of the DOP detection system is near 1 X 10<sup>-5</sup> (0.001%) and the Sodium Chloride test's limit is near 1 X 10<sup>-6</sup> (0.0001%)<sup>43</sup>. The higher sensitivity of the Sodium Chloride test is an advantage when evaluating filters that have efficiencies greater than 99.999%, and when comparing filters that have similar efficiencies. The lower sensitivity of the DOP aerosol means that more DOP aerosol is necessary to challenge the filter to obtain a comparable result. This is a disadvantage as the arrested liquid DOP is known to backspray from the filter during its normal operation. DOP, a carcinogenic material, could therefore become another airborne contaminant in a clean room<sup>44 43</sup>.

The fact that the DOP aerosol is labelled monodispersed means that it has a narrow size distribution. This distribution should have a geometric mean less than 1.2. Theoretically the value is 1.05, but under normal operating conditions this can vary to a value of approximately 1.2. These fluctuations in the DOP aerosol size distribution means that consistency is questionable. This means that the test results could be incorrect.

The test results from the Sodium Chloride flame photometer particle detection system is also questionable. When comparing the results of the NaCl particle detection using a flame photometer to a size-spectrometer it has been shown that there is a 37% particle volume penetration difference<sup>45</sup>. This does not mean that the flame photometer's result is incorrect, but indicates a disagreement between the two detection systems. This leaves some doubt about the mass efficiency results obtained from the flame photometer. Another problem with the flame photometer is that it is based on a non-linear response. This can lead to extrapolation errors when determining mass concentrations.

There has been considerable discussion about the benefits of using a liquid droplet (HOT DOP) or a solid particle (NaCl) as a mass efficiency test aerosol. If a solid particle is used as the test aerosol, the effect is a reduction in the filter life and an underestimation of particle penetration<sup>46</sup>. If a liquid droplet is used filter loading will cause particle spraying from the rear of the filter leading to an over estimation of particle penetration <sup>46</sup>. The Millipore test centre uses NaCl particles as the primary test aerosol because "particle bounce and reentrainment effects would be enhanced by dry solid particles<sup>47</sup>", and thus the tests would be more severe on the test filters.

In summary the Sodium Chloride Nebuliser Flame-Photometer test shows real advantages over the Hot DOP test. Its effective penetration of the filter is greater because of the large size range of the particles, their shape and higher penetrating volume. Also the Sodium Chloride aerosol is similar to particulates encounted in many industrial environments <sup>42</sup>. Whilst the reliability of the flame photometer particle penetration results are considered doubtful, it is generally believed that the test is acceptable in evaluating a filter's mass efficiency.

## 2.4.4 Grade Efficiency Tests

A Grade Efficiency test measures the arresting ability of a filter to incremental particle sizes, as shown in Figure  $6^{48}$ . The test provides a result of the filter's characteristic

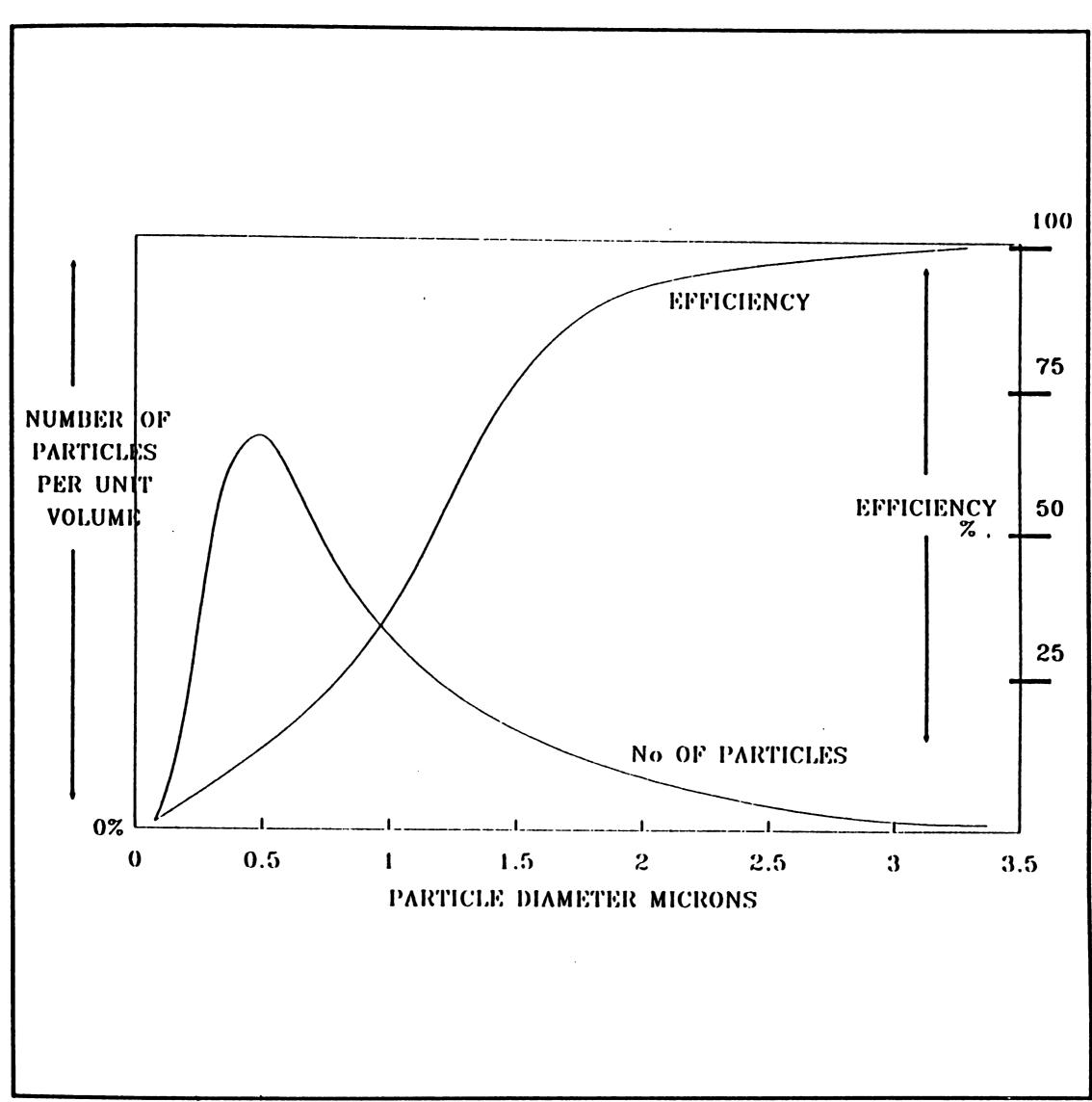


Figure 6. Filter Efficiency Related to Particle Size (Grade Efficiency).

maximum particle penetrating size. This maximum particle penetration indicates what particle size is most likely to penetrate the filter, and is caused by a minimum of retention forces. As every filter has its characteristic maximum penetrating size, this test is important for industries that are sensitive to particular particle sizes. The advantage of the Grade Efficiency test is that any variance in the generation of the aerosol's size distribution does not effect the accuracy of the results, whilst for the mass efficiency test this variance will lead to incorrect results. This is because the size distribution and concentrations of the challenging and penetrating particles are measured in the Grade Efficiency test.

Grade Efficiency tests are becoming the unofficially adopted test for high efficiency filters. Many novel test procedures have been developed. These either generate an aerosol of differing narrow size ranges with electrostatic classifiers or use an aerosol of a broad size range that are sized with instruments such as Laser Particle Counters (LPC), Mobility Classifiers (MC), or Condensation Nuclei Counters (CNC). These instruments determine the size range of the particles challenging or penetrating the filter. The Grade Efficiency test also allows for different test aerosols, such as Silica<sup>49</sup>, and a variety of oils, acids, and radioactive salts. This enables a filter to be tested with different materials which could reflect their specific employment, thus giving a practical evaluation of the filter.

Some of the many proposed test procedures such as that developed by Thorogood et al<sup>50</sup> use environmental air for the source of particulates and a Condensation Nuclei Counter (CNC) to detect particle size and concentration. An interesting feature of this test circuit was the idea of splitting the inlet dust laden stream into two equal flows so that the size and concentration of the stream challenging and penetrating the filter could be simultaneously recorded. Lathrache et al<sup>51</sup> used Sodium Chloride as their particulate challenger and a CNC to measure the particle size range penetrating the filter. Beregman et al<sup>52</sup> used Dioctyl Sebacate (DOC) as their challenging aerosol, and employed a CNC coupled with a Differential Mobility Classifier (DMC) to measure particle size ranges of 0.01 to 0.05 µm and 0.12 to 3.0 µm respectively. Rubow et al<sup>47</sup> used a different approach. They used Sodium Chloride as their

challenging aerosol coupled with an electrostatic classifier to produce particulates of a desired size range. A CNC was employed to detect particle concentration. They also split the challenging stream for simultaneous sampling.

The most effective design for a Grade Efficiency test is a circuit that simultaneously samples the size and concentration of the particles challenging and penetrating the filter. This reduces any error associated with the variance of a particle's characteristics with time. The aerosol used must be reliable and of value for such testing, such as the Sodium Chloride aerosol discussed previously. There is less chance for error if the filter is challenged with a heterodispersed aerosol and sampled by a Laser Particle Sizer (LPS), for the LPS gives instantaneous and precise results.

## 2.5 HIGH TEMPERATURE GAS CLEANING

High temperature gas cleaning is the removal of particulate pollutants from gas streams at elevated temperatures. This is important for the cleaning of for example, emissions from "radwaste" incinerators, the recovery of catalysts from off gasses, the removal of particulates from hydrocarbon processing plants above dew point, and the protection of turbines from erosive and corrosive elements.<sup>53</sup>

Historically the final gas clean-up of particulates from high temperature sources have been cyclones. Though they are, at best, capable of removing only 80% of the challenging particulate matter<sup>54</sup>, it was their ability to remove this dust at high throughput with little flow resistance that proved their application. Other benefits of the cyclone included its automatic cleaning system and durability to harsh environments. It was not until the 1960's<sup>55</sup> that research into more effective gas cleaners was initiated. This research was incited by new methods of power generation requiring a highly efficient gas cleaner, that could operate at high temperatures so as to protect turbines installed for electricity generation. The new methods of power generation include pressurised fluidised bed combustion and gasification. These processes generate electricity by the expansion of the off gases, from the pressurised coal beds, through a turbine. As this turbine operates within the high temperature environment (to reduce energy heat loss) highly efficient filters are installed to protect the turbine from the erosive environment.

The area of high temperature gas cleaning is probably the most challenging due to the tough cleaning environments and strict limits on particulate emissions.

# 2.5.1 The High Temperature Environment

The typical high temperature dirty gas environment is best exemplified by coal burning power station pre-filter emissions. Here the type of contaminants present include fly ash, compounds of sulfur and nitrogen, and alkaline metals. Particulate

concentrations range from 7,000 ppm to 22,000<sup>56</sup> ppm for large power stations. These particulates should be filtered at temperatures greater than 500°C, and at pressures higher than 6 atmospheres. The limitation to the effective removal of these contaminates is either due to the technical problems or cost. What is needed is a filter that is economic to operate, efficient at cleaning such dirty gas, and resistant to the harsh environment.

# 2.5.2 High Temperature Gas Emission Requirements

The gas requirements for a turbine operating in a high temperature dirty gas environment offers the best guidelines for a filter that is to be installed for its protection. These gas requirements for a turbine are shown in Table 10<sup>57</sup>. What is noted is the low particulate emissions required from the installed filter.

To meet these turbine requirements tertiary filtration devices such as electrostatic precipitators, wet scrubbers, granular beds, improved cyclones, and novel barrier filters, are currently being used or tested for application. The following is a summary of such tests and their associated problems.

Special electrostatic precipitators have been tested at extreme temperatures and pressures by Riepe et al<sup>58</sup> with some success. Their main concerns lay with the inability of the dust to adhere to the collection electrode due to the low resistivity of the dust at high temperatures. The second problem lies with the corona, its starting voltage and stability at high temperatures. Both problems have been overcome. However the electrostatic precipitator is expensive to construct and therefore uneconomical to use as a high temperature gas cleaner.

Using a wet scrubber at high temperatures posed numerous problems for Weber and associates<sup>59</sup>. They needed a suitable spraying liquid that operates at 500°C with negligible vapor pressure, and little or no formation of poisonous by-products. The scrubber must be also economical to operate and install. Currently Tin and some alkali

compounds are being tested as suitable scrubber liquids, however there has been little success.

Granular beds tested by Ghardiri et al<sup>60</sup>, at temperatures near 1000°C, have found limitations due to the lack of adhesion of the dust to the surface of the collector. It has been proposed that this can be improved by the addition of a liquid retention aid such as heavy fuel oil.

Improvements to cyclones, to increase their efficiencies, include:- turbulent suppressors that reduce fine particle reentrainment and addition of improvement devices. Paul et al<sup>61</sup> using a rotating wall technique have shown promising results with reductions in the frequency of turbulent bursts. Syred et al<sup>62</sup> using such devices as a vortex weir (ensures flow symmetry) and vortex collection pockets (removes particle factions), have shown cyclone improvement in the capture of small particles.

Barrier filters include ceramic bag filters and porous ceramic "slabs". Ceramic bag filters show advantages at temperatures exceeding 281°C, however practical problems do emerge with specific applications, such as mechanical failure of the fabric causing seepage of dust<sup>63</sup>. By far the best option is the Ceramic Cross Flow filter being tested by Westinghouse<sup>64</sup>. It consists of porous, ridged ceramic filter elements manifolded into modules. This offers a very high packing density seven times the ratio of surface area to volume of a bag filter. The pressure drop ranges from 1.25 to 7.5 kPa, and shows efficiencies close to 99.9%. The only problem that has surfaced is the delamination of the filter face at high temperatures.

Figure 7<sup>56</sup> compares the temperature limits of these various filters. It is noted that porous ceramic filters have an advantage of operating at higher temperatures. It is assumed from this that the Alcoa ceramic membranes could be applicable for high temperature filtration employment. Additionally, the membrane is chemically and mechanically resistant to the conditions operating within a high temperature environment, while assumed capable of the high efficiencies demanded by such application.

Table 10. High Temperature Gas Requirements for a Turbine.

**TYPE** GAS TURBINE REQUIREMENTS Temperature < 750°C Pressure 5 - 50 atm Heating value > 120 Btu/scf Composite Moderate H requirement if heating is to requirements low **Particulates** NSPS: 0.003 lbs/million Btu Sulfur (SO<sub>2</sub>) NSPS: 70 to 90% depending on coal type Alkali < 20 ppb at expander inlet after combustion

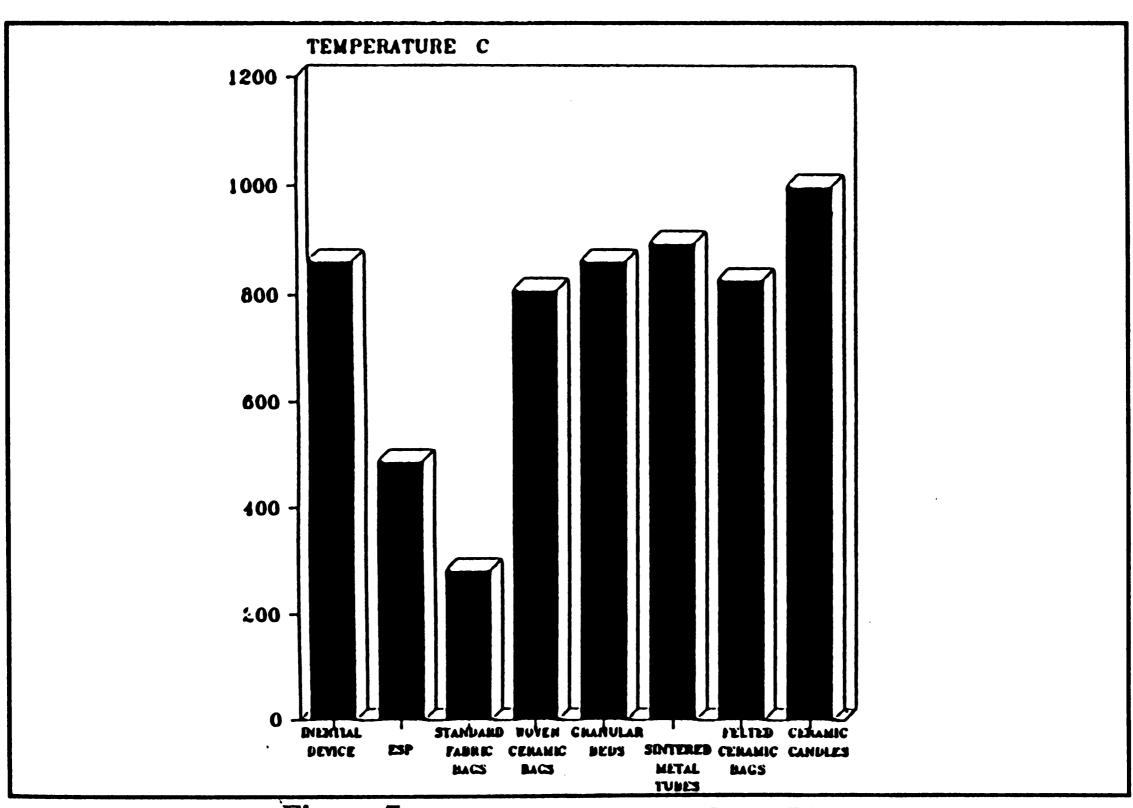


Figure 7. Temperature Capabilities of Typical Filters.

# 2.5.4 High Temperature Gas-Cleaning Tests

There is no standard test for filters that are to be used in high temperature cleaning environments. Research has shown that the majority of testing procedures use pilot plants that mimic application. This is done by testing the filter with fly ash and other contaminants, resulting from coal burning, at elevated temperatures and pressures. The filter is usually tested for its efficiency, pressure drop, cleanability, and the effect that high temperature environment has on the mechanical strength of the filter.

The Morgantown Energy Technology Centre (METC) test facility uses off gases extracted from a fluidised bed gasifier to test possible high temperature filters. Table 11<sup>63</sup> shows the operating ranges for the METC Bench-Scale Gasifier Filter test. In this test the carrier gas can be further heated to 871°C, and dust loadings are increased with a pressurised dust feeder. Nitrogen is used to backflush the filters. The mass efficiency of the filter is evaluated, and ceramic Alundum extraction thimbles collect the particles that penetrate the filter. The contents of the thimbles are then analysed for particle size, concentration, and composition. An average test lasts as long as three hours, whereby the filter is then cleaned. This test is satisfactory as it tests the filters within their application environment.

Table 11. METC Filter Test Operating Ranges.

Pressure	10.3 - 17.2 Bar
Temperature	538° - 871°C
Flow rate	28 - 142 nm³/hr
Mass Flow	0.009 - 0.045 hg/s
Particulate loading	$0.3 - 11.7 \text{ g/nm}^3$

#### 2.6 CONCLUSION

As the ceramic membrane is regenerable and of small nominal pore size it would be viable as a clean room air filter. To evaluate the membrane for clean room application three tests are performed on the membrane. The tests are (i) Pressure Drop test, (ii) Mass Efficiency test, and (iii) a Grade Efficiency test. In light of the work carried out previously with these tests, Sodium Chloride is used as the dust analogue for the Mass Efficiency and Grade Efficiency tests. Details of the tests, their results and a comparison of the membrane's performance to clean room HEPA filters are presented in Chapter Three.

The ceramic membrane has potential application for high temperature gas cleaning as the physical and chemical nature of the membrane makes it resilient to such a harsh environment. Two tests are performed on the ceramic membrane to imitate the typical high temperature gas cleaning environment. The first test is a Cleanability test, which determines the ability of the membrane to be cleaned by backflushing. The second test is a Grade Efficiency test. Here the membrane's selectivity is examined when: (i) a cake of deposited dust has formed on the surface of the membrane, (ii) the gas medium's velocity has increased, and (iii) when the physical nature of the gas medium changes (viscosity and density). Details of the tests, their results and a comparison of the membrane's performance to other filters used as high temperature gas cleaners are presented in Chapter Four.

# CHAPTER THREE CLEAN ROOM FILTRATION

#### 3.1 INTRODUCTION

In this chapter the Alcoa ceramic membrane is evaluated for possible use as a filter in clean room applications. Tests have been conducted on a range of filters to determine their operating characteristics and efficiency for particle capture. The results of these tests are then analysed in the light of clean room guidelines and the characteristics of currently available clean room filters, for example HEPA filters.

Three tests have been performed. The first of these is a Pressure Drop test, from which the relationship between transmembrane pressure and membrane capacity is obtained. This is important for the determination of the likely operating costs of the membrane filter. Additionally, the type of relationship obtained indicates the type of gas flow operating within the membrane. The second test is a Mass Efficiency test, which assesses the filter's ability to remove a specific particulate from an incident gas stream. This test can be used to make a comparison of the filter's cleaning efficiency with that of other filters. The third test is a Grade Efficiency test. The Grade Efficiency test evaluates the relationship between the efficiency of a filter and particle size. The result indicates which particle sizes are most likely to penetrate the matrix of a filter. The grade efficiency test is important for processes that are sensitive to particular particle size ranges, and it is also provides an insight into the predominate particle capture mechanisms operating in the filter.

# 3.2 SIGNIFICANCE OF TESTS CONDUCTED

## 3.2.1 Pressure Drop Test

The pressure drop across a membrane is dependent on the rate of gas flow passing through the membrane. The Pressure Drop test determines this relationship as static pressure across the membrane versus mass air flow rate. Static pressure drop  $\Delta p$  is defined as:

$$\Delta P - P_1 - P_2 \tag{1}$$

where p<sub>1</sub> and p<sub>o</sub> are the gas pressure before and after the membrane respectively. Information from the test allows for the determination of the operating costs of a particular membrane when installed as an air filter. As the transmembrane pressure is dependent on the physical properties of the gas medium and membrane matrix, the pressure drop-air flowrate relationship will also identify the type of gas flow operating within the membrane, and the structure of the membrane matrix.

The economics of operating the Alcoa ceramic membrane as an air filter for clean rooms includes the initial capital and running costs. Capital costs involve the financial outlay to buy and install the filter. Running costs are the expenses to operate the filter, such as fan power consumption and filter maintenance. Power consumption is dependent on the pressure drop and capacity Q of the filter.

$$Power - Q \times \Delta P \tag{2}$$

The direct proportionality between power and pressure drop means that for every N/m<sup>2</sup> unit increase in pressure there is a corresponding 0.28 W h/1000m<sup>3</sup> increase in power (operating costs). The pressure drop test can therefore provide a useful basis for an operating cost analysis of the ceramic membrane.

The relationship between transmembrane pressure drop and gas flow is known as the membrane permeability. The permeability of a porous material and its structure can

be defined by the Carman-Kozeny equation, derived from Poiseuille's equation. It describes laminar flow through a porous media as<sup>65</sup>:

$$\frac{\Delta V}{\Delta t} \frac{1}{A} - \frac{\Delta P e^3}{k_s k_s \ln S_v^2 (1 - \epsilon)^2}$$
 (3)

The product of  $k_o$  and  $k_t$  is defined as K, which is the Kozeny-Carman constant. The numerical value of  $k_o$  and  $k_t$  depend on the shape and tortuosity of the membrane pores respectively. For example, if the porous media is composed of regular packing of isometric shaped particles, then K is close to 5. Knowledge of the membranes structure gives insight into the predominant particle displacement mechanisms that can operate within the membrane.

The type of gas flow operating within the membrane matrix is of basic importance for the description of particle deposition on/within the membrane. It can be determined by the type of relationship between transmembrane pressure and gas flowrate. The two defined flow regimes of gas flow are:

Knudsen or free molecular flow. Here the main resistance to gas flow is caused by collisions between the gas molecules and the pore walls of the membrane. The relationship between gas flux and pressure drop is given by<sup>66</sup>:

$$J - \frac{4re}{3} \cdot \left(\frac{2RT}{\pi M}\right)^{\frac{1}{2}} \cdot \frac{P_o - P_l}{lRT} \tag{4}$$

It is noted that the relationship between pressure drop and flux is linear. Within this flow regime there is no impediment to particles being displaced toward the interior surface of the membrane and being captured. Therefore a filter's efficiency will generally be higher if the gas medium is operating within this regime.

Viscous flow. This is when the main resistance to gas flow is caused by the collisions between the gas molecules themselves. The pressure drop-gas flux relationship is:<sup>66</sup>

$$J = \frac{r^2 e}{8\eta} \cdot \frac{(P_o - P_l) (P_o + P_l)}{lRT}$$
 (5)

It is noted that the relationship between gas flux and membrane pressure drop is non-linear. Within this flow regime the particles are impeded in their displacement toward the interior surface of the membrane and subsequent capture due to particle-particle and particle-gas molecule collisions. As a result the efficiency of a filter will be lower if the gas medium was operating within this regime.

## 3.2.2 Mass Efficiency Test

Two test aerosols have been used in the Mass Efficiency test. One is Methylene Blue, the other is Sodium Chloride. The standard procedures for these tests have been amended in the experimental program due to equipment availability and in order to enhance the results.

The Mass or Gravimetric Efficiency test evaluates the quality of an air filter by direct comparison of results to other filters. The result of the test is reported as  $E_m$  where:

$$E_{m} = \frac{\text{Mass of particles collected by the filter}}{\text{Mass of particles challenging the filter}}$$
(6)

The antithesis of efficiency is penetration P, defined as<sup>67</sup>:

$$P - (1 - E_{-}) \tag{7}$$

The reciprocal of penetration is the penetration coefficient p\*67

$$p^* - \left(\frac{1}{P}\right) \tag{8}$$

The penetration coefficient describes the lowering of the particle concentration after passage through the filter. For example, if a filter has an efficiency of 99.999%, its penetration is  $10^{-3}$  and penetration coefficient  $10^{3}$ . This indicates that the particle concentration after passing through the filter will decrease by  $10^{3}$  times the

concentration of the challenging dust.

The main difference between the standard procedures recommended for Mass Efficiency tests and the test circuit employed within this work, is in the method of detection of the particle concentration before and after the filter. With the standard procedure for the Methylene Blue Mass Efficiency test the concentrations of particles challenging and penetrating the filter are determined by capturing the particles on esparto paper, exposing the paper to steam and comparing the intensity of colour developed with a series of calibrated stains. The standard method was developed to test the efficiency of gas masks and provides a quantitative measure of efficiency. The modification of the standard Methylene Blue test circuit employed in this work collects and dissolves a sample of the pre and post filter gas streams in a water column. The concentration of Methylene Blue in the water column is then determined with a calibrated light spectrophotometer. With this detection system the test should be ten times more sensitive than the standard, because the accuracy of the standard is determined by the efficiency of the esparto filter paper used to collect the Methylene Blue particles.

The test circuit used for the Sodium Chloride tests is different from the standard as it does not use a flame photometer. This is because one was not available. Instead the Sodium Chloride particles were dissolved in a water column and the resultant concentration determined with a conductivity meter. The sensitivity of this method is similar to that of the standard.

## 3.2.3 Grade Efficiency Test

Three different test aerosols were used in the Grade Efficiency tests: Methylene Blue, Sodium Chloride and Silica. All membranes were tested with Sodium Chloride and Methylene Blue as the size distribution of these aerosols were larger than the rated nominal pore size of the membranes. The Silica colloid aerosol was used to test only the 0.2 and 0.035 micron pore diameter membranes as they were the only membranes likely to capture the fine Silica particles.

Grade efficiency or fractional efficiency is a test of the removal ability of a filter to discrete particle size ranges. It is defined as:

$$E_e = \frac{Number of particles of a size range collected by the filter}{Number of particles challenging the filter of the same size range}$$

and is dependent on the modes of particle capture operating within the filter and the forces of particle retention and displacement.

Using a semi-permeable porous media to filter dust-containing gas relies on three modes of particle capture. The surface of the filter provides a barrier to particles larger than the pores at any given point. Smaller particles penetrating the surface lodge at the internal surface of the pores as a result of inertia and diffusion. These particles are retained by forces of adhesion.

For small particles (< 1.0 microns) diffusion is the only significant force while inertia effects particles greater than 1.0 microns. Figure 8 shows the regimes of the two forces in relation to particle size. It can be noted from the figure that there is a particle size of maximum particle penetration. This is created when the two particle displacement forces of inertia and diffusion are at a minimum and thus represents the size of particles that are least likely to be captured by the filter. This is significant for applications that are sensitive to particular particle size ranges, such as the manufacture of medical and photographic products.

Once a particle comes in contact with either the exterior or interior surfaces of the filter adequate adhesion forces are necessary to retain it. Adhesion forces include Van der Waals and electrostatic forces. These forces only come into being once the particle comes close to the filter's surface and depends on the surface area of contact, the nature of the filter and particle chemistry, and the momentum of collision between the particle and the surface. Shear forces, exerted by the flowing gas, can dislodge the

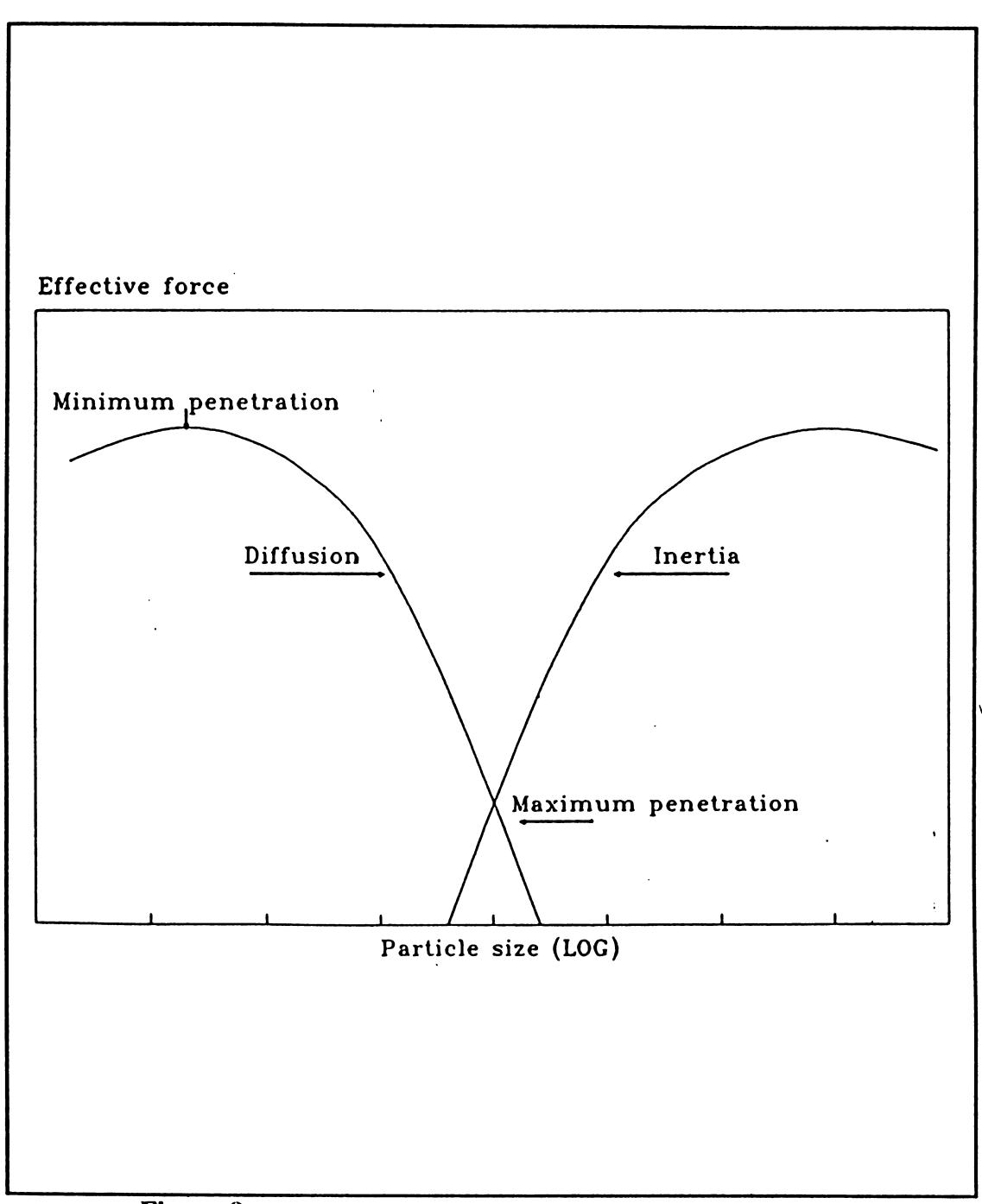


Figure 8. Variation of Diffusional and Inertial Efficiencies with Particle Size.

particles deposited on the surface of the filter. These shear forces are dependent on the gas velocity profile near the surface of the filter, which in turn depends on the velocity, density and viscosity of the gas.

In summary, the ability of a filter to collect particular particle sizes depends on the prevailing particle size regimes that influence the particle displacement mechanism of diffusion and inertia. Once the particle has been displaced to the surface of the filter, adequate adhesion forces are necessary to retain the particles against the removal forces of shear that are exerted by the passing gas.

#### 3.3 EXPERIMENTAL

## 3.3.1 Pressure Drop Test

The 0.035, 0.2, and 5.0 micron membranes were tested with clean, dry atmospheric air and pressure drops were recorded with a mercury manometer. As the pressure drop across the 0.004 micron membrane was greater than 1 atmosphere it was necessary to use clean, dry compressed air and pressure gauges to measure the pressure drop of this membrane.

# 3.3.1.1 Apparatus (for all membranes)

Figure 9 shows the equipment and circuitry employed for the pressure drop test. The equipment included: An Alcatel vacuum pump (A) that provided the necessary pressure drop for the air to pass through the membranes. GEC Elliott (2000 and 1100) rotameters (B) that measured the air flowrate entering the membrane. These were calibrated against an Alexander and Wright gas flow meter. A mercury manometer (C) was used to measure the transmembrane pressure of the 0.035, 0.2, and the 5.0 micron membranes, while Dobbie pressure gauges (D) were used to measure the pressure drop across the 0.004 micron membrane. All air entering the membranes was ensured to be dry and clean from particulates by passing it through a Silica drier (E) and a 0.3

Whatman pre-filter cartridge (F). The ceramic membranes being tested were provided by Alcoa and their nominal pore sizes were 5.0, 0.2, 0.035, and 0.004 micron, and were housed in a stainless steal cartridge.

# 3.3.1.2.1. Method (for the 5.0, 0.2, and 0.035 micron membranes)

Before each test the respective membrane was cleaned by backflushing with clean dry air at a pressure of 500 kPa for 30 minutes. The cleaned membrane and cartridge was then connected to the test circuit shown in Figure 9. Valve V1 was then closed and the vacuum pump turned on. Once the circuit had been evacuated valve V1 was slightly opened. The circuit was again allowed to stabilise, and the rotameter and manometer readings where recorded. The air flowrate to the membrane was increased at intervals with readings recorded from the rotameter and mercury manometer, till a prescribed flowrate was achieved. To check for hysteresis the air flowrate was decreased at intervals with readings recorded from the manometer and rotameter.

# 3.3.1.2.2 Method (for the 0.004 micron membrane)

The method used for the 0.004 micron membrane differed slightly from the test method used on the other membranes. Here compressed air was used as well as the vacuum pump so that there was enough air pressure to drive a reasonable amount of air through the membrane. Also Dobbie pressure gauges placed before and after the membrane cartridge (shown in Figure 9) were used to record the pressure drop across the membrane. The procedure for the test was the same as for the Pressure Drop test employed on the other membranes.

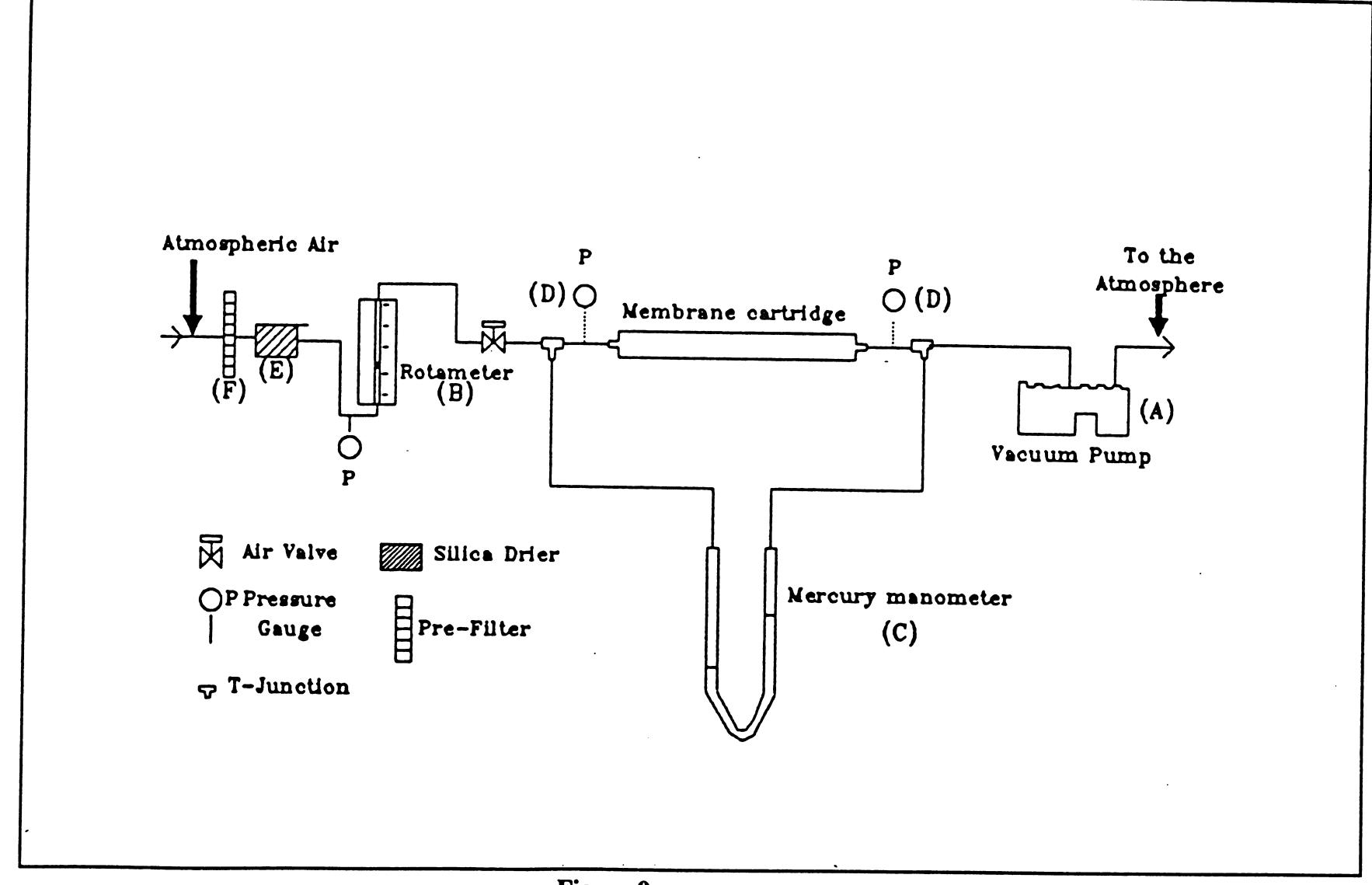


Figure 9. Pressure Drop Test Circuit.

## 3.3.2 Mass Efficiency Test

The Sodium Chloride and Methylene Blue Mass Efficiency tests use the same apparatus and method to evaluate the mass efficiency of the membrane filter.

## 3.3.2.1 Apparatus

The test was performed on an extended pressure drop circuit, as shown in Figure 10. A particle laden stream prepared according to the standard used to challenge the filter and the dust mass concentrations in the entering and leaving gas streams were determined.

The test aerosol was generated by atomising a solution of Methylene Blue or Sodium Chloride particles in a spray box (A), then crystallising the particles by drying the droplets in an evaporator (B). The water mist was removed from the gas stream by a condenser (C), and collected in a water trap (D). The spray box and atomiser were designed and built in accordance with the Methylene Blue standard B.S. 2577:1955. The evaporator and condenser were exactly the same in design. Both were made from perspex and of cylindrical shape. Their dimensions were 15 cm in diameter and 1 meter in height respectively. The gas stream passed through 20 meters of circuit hosing housed within the evaporator/condenser, while the hot/cold water passed through the evaporator/condenser shell.

Simultaneous sampling of the challenging and penetrating gas streams, entering and leaving the membrane cartridge respectively, was accomplished by dividing the stream leaving the condenser into two equal flowrate streams to ensure equal particulate mass loadings. The gas flowrates entering the divided streams were controlled by valve V2 on stream S2 (refer to Figure 10) with the accuracy of the split determined by pressure drop measurements taken by a water manometer.

Stream S1 challenged the particular membrane, and then was purged through a water

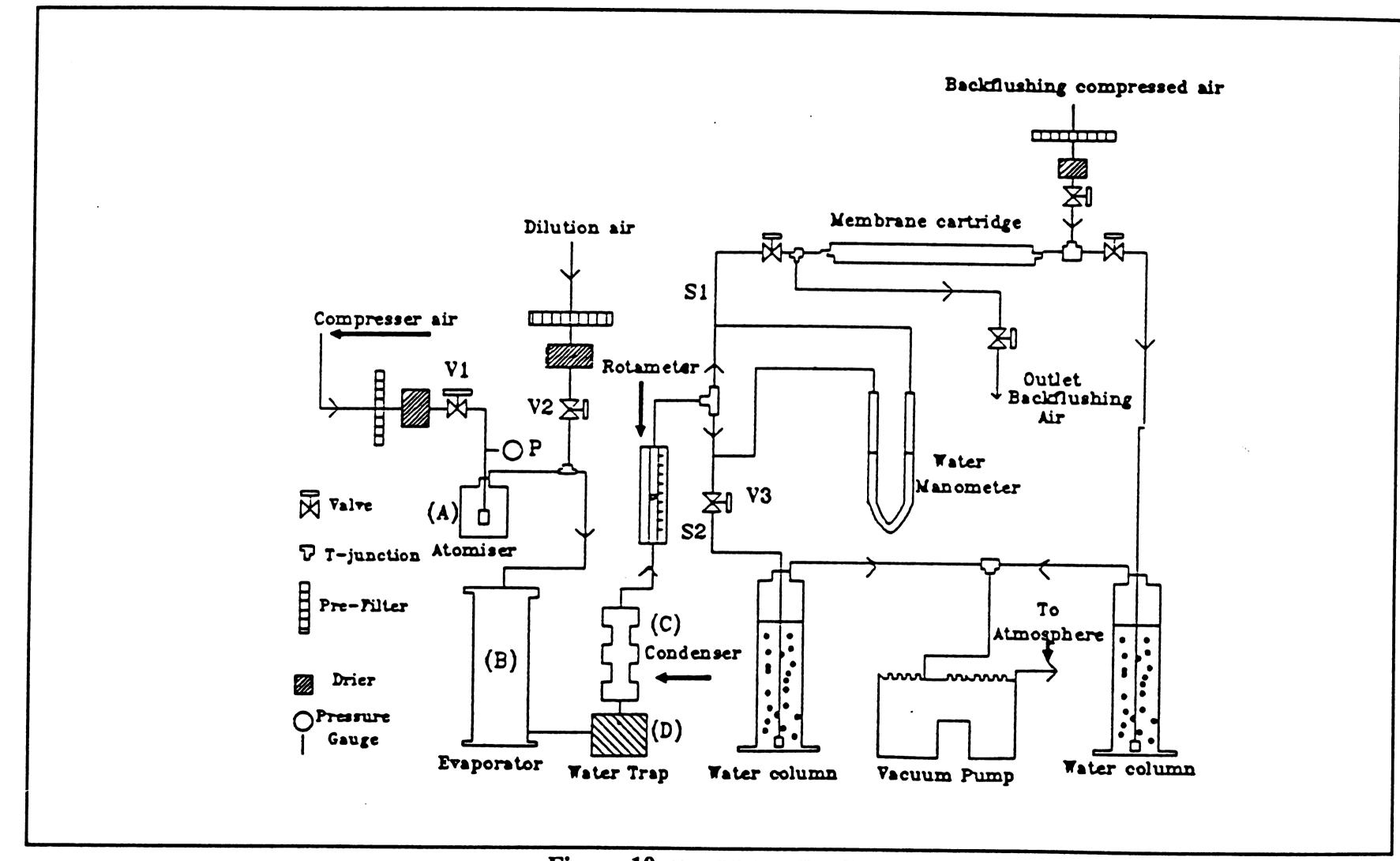


Figure 10. Mass Efficiency Test Circuit.

column to dissolve the particles penetrating the membrane. Stream S2 was directly purged through another water column to dissolve the particles challenging the membrane. The water columns were exactly the same as both were made from glass and of cylindrical shape. Their dimensions were 8 cm in diameter and 1.2 meters in height. They were filled with 2 mm diameter glass beads to assist in the particle dissolution. The efficiencies of these water columns were tested with a condensation nuclei counter which detected less than 0.001% penetration. The mass of the dissolved particles was determined with a calibrated CDM83 (Radiometer) conductivity meter, for the Sodium Chloride aerosol, and a calibrated PYE Unicam SP6-550 Uv/Vis light spectrophotometer, for the Methylene Blue aerosol.

#### 3.3.2.2 Method

2% Sodium Chloride and 1% Methylene Blue solutions were made with ultrapure water, in accordance with the respective standard, and fed into the atomiser. Before each membrane was tested they were cleaned by backflushing with clean dry air, as described in the previous section. The membrane within its cartridge was then connected to the test circuit. Thirty minutes before the test the hot water and cold water was allowed to pass through the evaporator and condenser. This allowed the evaporator to reach a stable temperature of 75°C and the condenser to stabilise at a temperature of 17°C. Next, the water columns were filled with ultrapure water and then sampled by either the conductivity meter or light spectrophotometer. The vacuum pump was then turned on, and the circuit was given 10 minutes to be totally evacuated. Clean dry compressed air was then supplied to the atomiser at a pressure of 202 kPa. The stream leaving the atomiser was diluted with clean dry atmospheric air to a total flowrate of 19 1/min as the gas flowrate from the atomiser was less than 3 1/min, which was too low to challenge the filter. Valve V3 was then adjusted till the pressure drop across streams S1 and S2 were equal. This ensured equal gas flowrates to streams S1 and S2.

The test was completed in three hours, after which a sample was extracted from each water column. The mass concentration of Methylene Blue or Sodium Chloride was

determined using the light spectrophotometer or conductivity meter respectively.

# 3.3.3 Grade Efficiency

Three different aerosols were used in this test: Methylene Blue, Sodium Chloride and Silica. The circuitry for this test was similar to that for the Mass Efficiency test, the only difference being that when the Silica was employed as the aerosol, only one collection column was used. The objective of the Grade Efficiency test was to collect the challenging and penetrating particles in a liquor that would not dissolve the particles.

## 3.3.3.1 Apparatus

The circuit was the same as the mass efficiency tests when Methylene Blue and Sodium Chloride were used as the test aerosols. When using the Silica test aerosol, provided by Syton Mosanto Raudow U.K., only one particle collection column was used (as shown in Figure 11), as the size distribution of the challenging Silica could be directly sampled from the spray box. The liquor used in the collection columns to the retain Methylene Blue was prefiltered Acetone, for Sodium Chloride a prefiltered mixture of 4 mols of Hydrochloric acid and 50% of the solution Ethyl alcohol, and for Silica it was ultrafiltered water at a pH of 9.7. The particles collected in the liquor columns were sampled for size distributions and concentration with the Malvern 4700 laser particle sizer.

#### 3.3.3.2 *Method*

The method for the Methylene Blue and Sodium Chloride was the same as for the Mass Efficiency tests. For Silica the atomiser solution was a 10% Silica solution, and the total air flowrate challenging the filter was 5 l/min. The rest of the method used with the Silica aerosol was the same as for the Methylene Blue and Sodium Chloride Mass Efficiency tests.

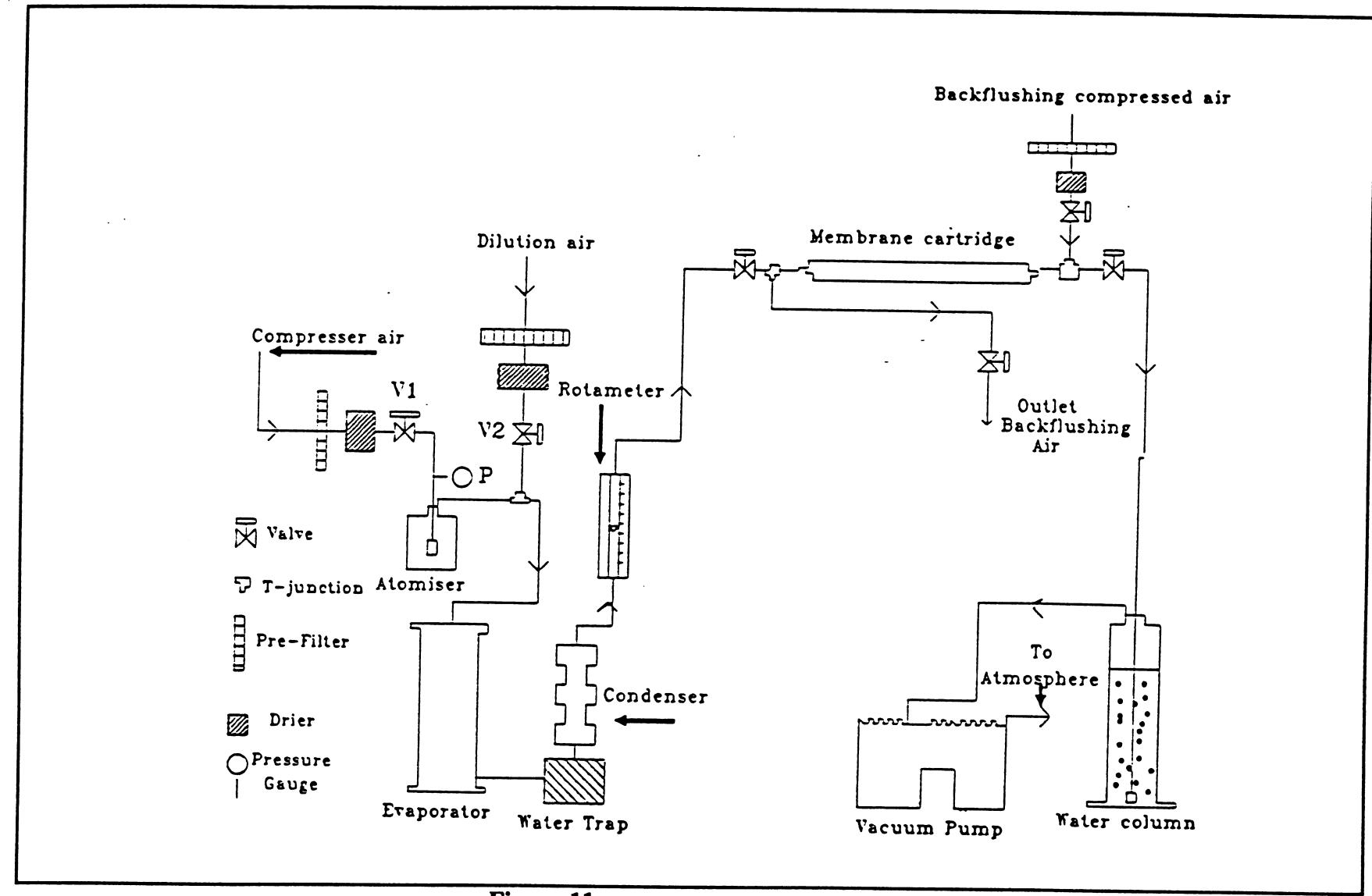


Figure 11. Silica Grade Efficiency Test Circuit.

#### 3.4 RESULTS AND DISCUSSION

The results and discussion presented in this section are of the Pressure Drop test and the Sodium Chloride Mass Efficiency test. There are no results for the Methylene Blue Mass Efficiency test and the Methylene Blue/Sodium Chloride Grade Efficiency tests. The tests that did not give satisfactory results. The reasons for this are discussed. The Silica Grade Efficiency test examines the efficiency of the 0.035 and 0.2 micron membranes, and is based on the size distributions of the Silica aerosol challenging the membranes and the detectable concentration limit of the Malvern 4700.

## 3.4.1 Pressure Drop Test

A summary of the results are shown in Figure 12 and Tables 12 and 13. Figure 12 shows graphically the relationship between transmembrane pressure and air flowrate at ambient temperature. Table 12 gives the calculated membrane constants assuming free-molecular flow and Table 13 gives the calculated Carman-Kozeny membrane constants assuming laminar flow through a network of cylinders of constant diameter.

From Figure 12 it is apparent that: (i) the pressure drops of the membranes are substantial when compared to typical HEPA filters', (ii) there is a linear relationship between membrane pressure drop and air flowrate, and (iii) none of the lines plotted intersect with the ordinate axes at the origin.

The linearity of the pressure drop-flowrate graph suggests that the flow regime operating within the membrane matrix is near free-molecular. The calculated membrane constants for free-molecular flow are shown in Table 12. When these constants are compared to each other the membranes with the smallest pores (0.035 and 0.004 micron) have similar values (near 1 x 10<sup>-6</sup>), while the membranes with larger pores (5 and 0.2 micron) have constants that are much larger (near 7 x 10<sup>-6</sup>). This suggests that the 0.035 and 0.004 micron membranes are operating within the free-molecular regime because they have the smallest pores and the chance of

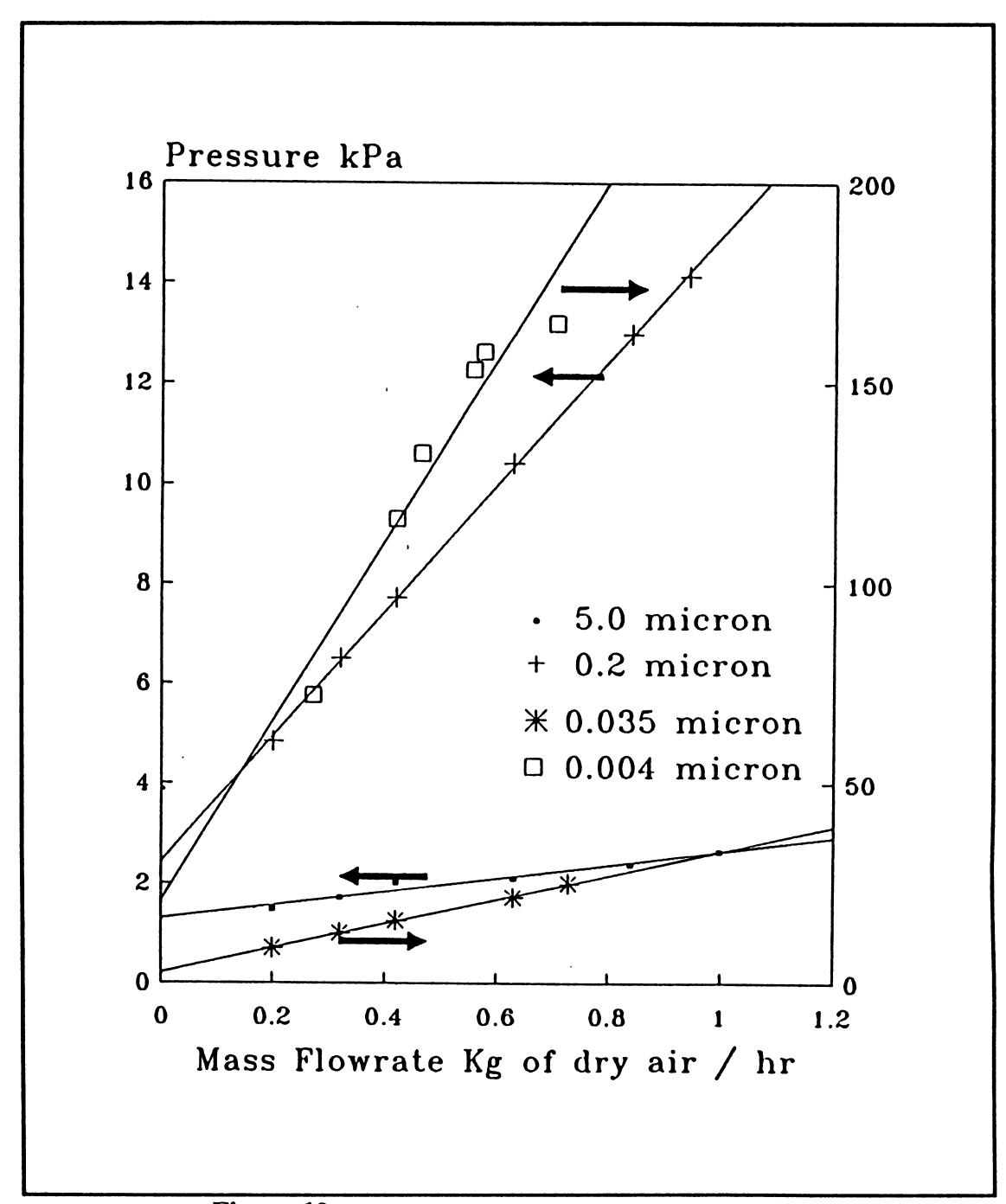


Figure 12. Membrane Pressure Drop-Air Flowrate Relationship.

Table 12. Membrane Constants for Free-Molecular Flow.

Membrane Constants Assuming Free-Molecular Flow	
Membrane pore size (microns)	Value of κ x10 <sup>6</sup>
5.0	7.85
0.2	2.50
0.035	1.10
0.004	1.05

Table 13. Membrane Kozeny-Carman Constants.

Membrane Kozeny-Carman Constants Assuming  Laminar Flow Through a Cylinder		
Membrane pore size (microns)	Value of K	
5.0	13.57	
0.2	10.50	
0.035	7.1	
0.004	6.44	

molecular-membrane wall collisions will be greater. The 5.0 and 0.2 micron membranes have an operative gas flow regime close to the transition region between free-molecular and viscous flow.

It was anticipated that all membranes would operate within or near the free molecular regime, which is characterised by greater gas molecule collisions with the walls of the membrane pores than with other gas molecules. This is because these membranes have very small pores which increases the chance of gas molecule-wall collision.

None of the lines presented in Figure 12 intersect at the origin. This is because an initial pressure drop is required to overcome the interfacial tension of air with the ceramic material of the membrane. The interfacial tension of air with the ceramic is caused by the intermolecular attraction forces between the air and the surface of the membrane pores. The pressure drop required to initiate gas flow through a membrane represents the attraction force between air and the membrane pores. The higher the attractive force the higher will be the pressure drop. It is anticipated that this attraction force will increase with decreasing pore size because of the increased surface contact of air and the membrane pore. This is confirmed in Figure 12 where the initial pressure drop across the membrane increases with decreasing membrane pore size.

The high pressure drop across the membranes can be explained by the Kozeny-Carman constant shown in Table 13. As stated previously, the normal value of K is near 5 but Table 13 gives values significantly higher. As K is a product of  $k_o$  and  $k_t$ , the constants representing the shape and tortuosity of the membrane pores respectively, its high value can be attributed to a high value of  $k_o$  and/or  $k_t$ . It is assumed that  $k_o$  is the same as for other ceramic membranes, at a value of 2.368. This gives  $k_t$  values ranging from 5.9 to 2.8 for the largest pore sized membrane to the smallest (5.0 to 0.004 micron) respectively. As  $k_t$  is equal to  $(l_s/l)^2$  (the tortuosity of the membrane pores), the ratio of pore length  $(l_s)$  to membrane thickness (l) ranges from 2.4 for the 5.0 micron membrane to 1.7 for the 0.004 micron membrane, indicating that the membrane is highly torturous. The high tortuosity of the membrane is due to the plate shape of the Alumina crystals. Relatively large and thin plates packed in a regular

structure will cause a highly tortuous path for flow and therefore lead to a high value of  $k_t$ . This high tortuosity of the membranes brings about a high membrane pressure drop.

The high pressure drop of the Alcoa ceramic membranes reduces the membranes' economic basis for application in clean room air filtration. As a clean room uses a fan to deliver air to the filters its maximum backpressure is 3.5 kPa, that is, only the 5.0 and 0.2 micron membranes could be used as their initial pressure drops are below this value. When comparing the pressure drop of the 5.0 micron membrane with a typical filter given in Chapter Two Table 8, it is noted that the HEPA filter operates at a tenth of the cost of a ceramic membrane with a 100 times its capacity. Increasing the number of membrane units is expensive when compared to the HEPA filter for both units are priced at \$500, Thus to install a comparable amount of ceramic membranes would cost 1000 times that of the HEPA filter. The only possible advantage would be that the ceramic membranes are potentially renewable whilst the HEPA filter is not.

In summary, the Alcoa ceramic membranes have a high pressure drop that is economically unacceptable for clean room filtration. This high pressure drop can be attributed to the high tortuosity of the membrane pores. The gas flow operating within the membrane is near the free-molecular regime for the smaller pore membranes (0.035 and 0.004 micron) and in the transition region for the larger pore membranes. This should assist the particle displacement mechanisms as there are less collisions with other particles that could lead to the displacement of trapped particles.

# 3.4.2 Mass Efficiency Test

This section will separately consider the results of the Methylene Blue and Sodium Chloride tests.

#### 3.4.2.1 Methylene Blue

The Mass Efficiency test using Methylene Blue as the challenging aerosol did not yield a result due to the limited solubility of dye in cold water which lead to particle agglomeration in the water column used to trap particles. This limited solubility of the dye in cold water was the draw back in the test, for the concentration of the dye was measured in cold water. It was found that as the dye was dispersed into the water column the individual particulates of Methylene Blue readily spread throughout the column. The column would initially turn to a shade of blue, but as time proceeded the blue shade would slowly diminish. This reduction in colour was due to the agglomeration of the Methylene Blue to large particles ( $> 5 \mu m$ ) which quickly settled to the bottom of the column. This agglomeration was further aided by the turbulent conditions in the glass bead packed column during the test.

To confirm that the particles had agglomerated, a sample of the dye mixture was drawn from the water column. The sample was then tested for its size distribution with the Malvern 4700 laser sizer. The same sample was tested again after a set time period. This was repeated and the results of this test are shown in Figure 13.

Figure 13 confirms the statements presented above. It shows the agglomeration of the particles with time. The net result of this agglomeration was that the test had to be abandoned. Before this step was taken, numerous efforts were made to stop particle agglomeration. These efforts included the covering of the water column to stop the penetration of light, and the use of surfactants to reduce the cohesion of the particles.

#### 3.4.2.2 Sodium Chloride

The results of this test are shown in Table 14. This test provides a comparison of the membranes efficiency to that of other clean room filters.

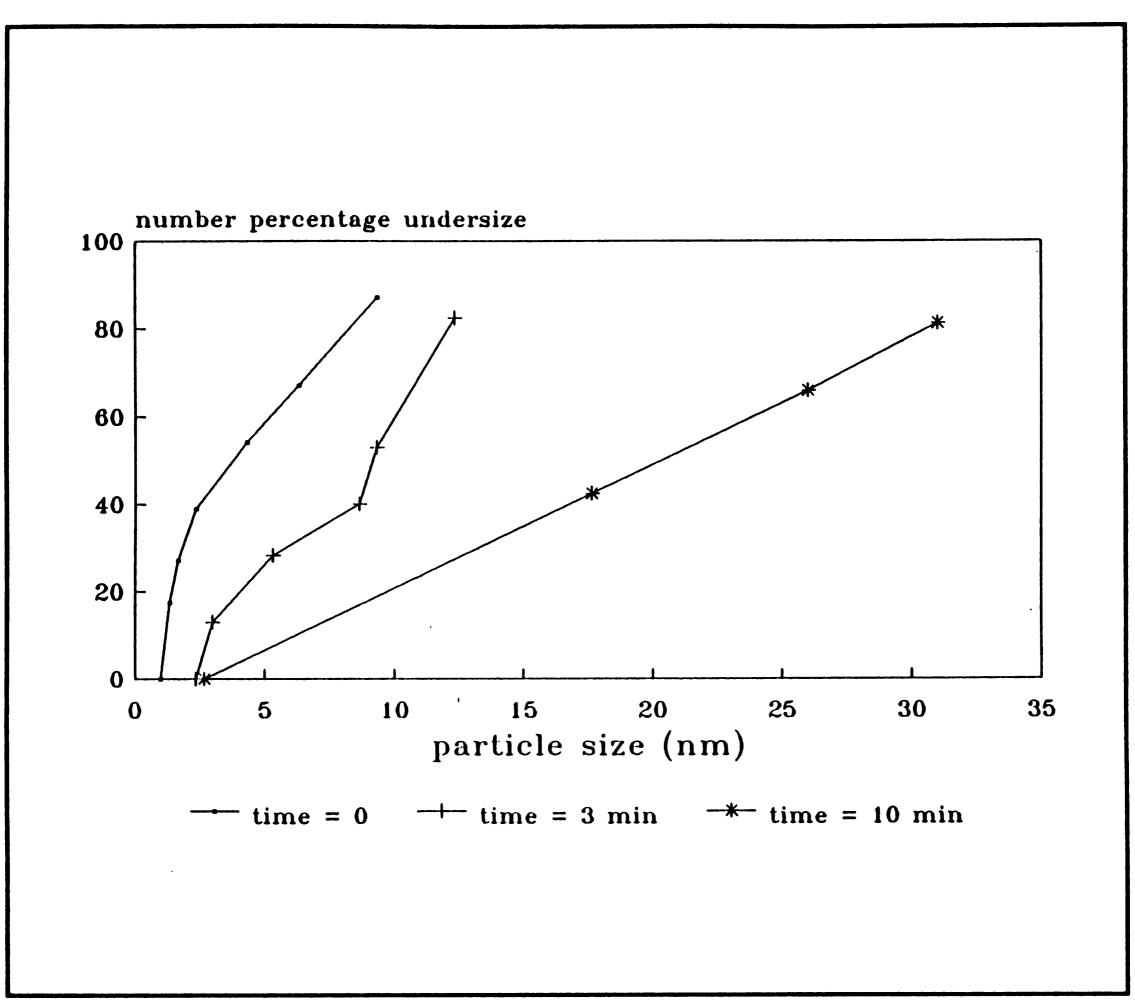


Figure 13. Methylene Blue Particle Agglomeration with Time.

Table 14. Sodium Chloride Mass Efficiencies.

Mass efficiencies of the ALCOA  Ceramic membranes	
Membrane pore size (microns)	Mass Efficiency %
5.0	99.57
0.2	99.94
0.035	99.993
0.004	> 99.999

The efficiencies of typical HEPA filters are shown in Chapter Two Table 8. The best efficiency obtained from a HEPA filter is 99.997%. When this is compared to the efficiencies of the membranes only two membranes are better than this. They are the 0.035 and the 0.004 micron membranes. The 0.2 is only slightly less efficient than the best HEPA filter. The 5.0 micron membrane has an efficiency 156 times less than the best HEPA filter but this is to be expected as its mean pore size is a lot larger than the 0.6 µm mean average size of the Sodium Chloride aerosol and the membrane is only 20 microns thick which reduces any chance of depth filtration.

## 3.4.3 Grade Efficiency Test

This section contains the results of the three Grade Efficiency tests used: Methylene Blue, Sodium Chloride and Silica.

## 3.4.3.1 Methylene Blue

This test was abandoned due to the agglomeration of the Methylene Blue particles. The particle size analysis of samples drawn from the collection column showed particle sizes greater than the rated pore of the respective membrane. This was exemplified when the 0.035 micron membrane was tested with the Methylene Blue dust analogue. The penetrating gas stream collection column was sampled for the malvern 4700 particle sizer, and the result (see Figure 14) showed the mean particle size to be 0.4 micron. This result was questionable as the efficiency of the membrane was exceptionally high as presented in the Sodium Chloride Mass Efficiency test.

Particles appeared to agglomerate in the collection column and hence gave a suspicious concentration measurement. Efforts were made to reduce agglomeration with surfactants and an Ultrasonic bath. This failed to change the process of agglomeration and hence the test was abandoned.

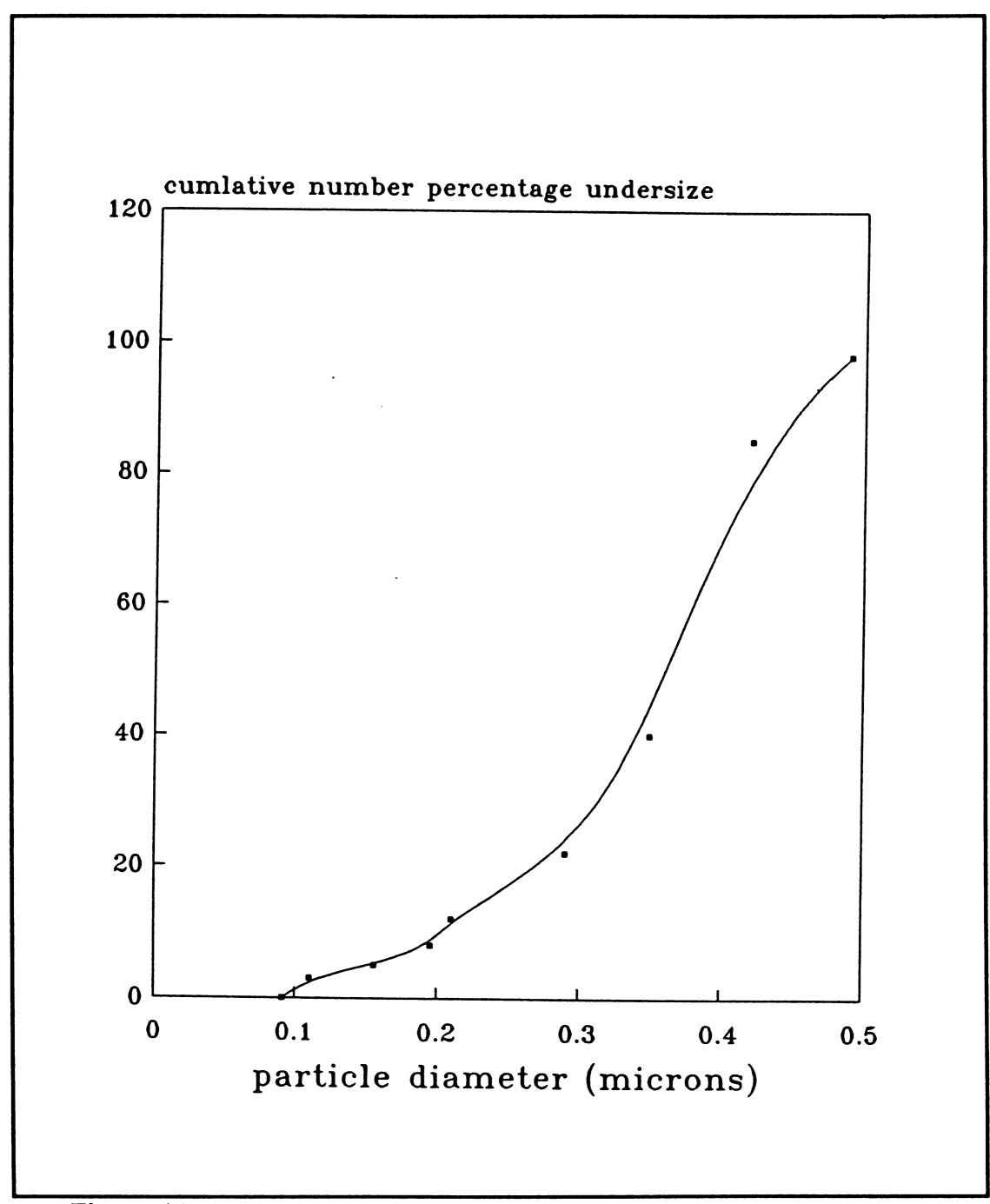


Figure 14. Methylene Blue Particle Size Distribution Penetrating the 0.035 micron Membrane.

#### 3.4.3.2 Sodium Chloride

This test failed due to particle agglomeration. The reason is the same as the Methylene Blue Grade Efficiency experiment.

#### 3.4.3.3 Silica

This test was more successful than the Methylene Blue and Sodium Chloride tests. The test was performed on the 0.2 and the 0.035 micron membranes. These membranes had mass efficiencies comparable to the HEPA filters. The only Silica particles that could be acquired had particle size ranges similar to the nominal pore sizes of the two selected membranes.

To evaluate whether the Silica particles were going to agglomerate a simple test was performed. This test involved using the circuit that was to be used for the Silica Grade Efficiency test. The only difference is that no membrane was inserted in the membrane cartridge. The test was run for 10 minutes and the results are shown in Figures 15 and 16. These results are identical to the size distribution of the Silica in the atomiser solution. Thus the test confirmed that there was no particle agglomeration and the grade efficiency test could be performed.

Figures 15 and 16 represent the challenging particle size distributions (of the Silica aerosol) for the 0.035 and 0.2 micron membranes respectively. As is noted all of the particulates are sized below their respective membrane pore size (with 50% of the particles being 30% smaller than the nominal rated pore size of the membranes). Therefore any particles that penetrate the membranes can only be present due to a mechanism governed by the minimum of the combined particle displacement forces of diffusion and inertia. The results of the test using Silica showed little particle penetration of the membranes. This is confirmed by the fact that no particle sizing could be performed on the samples drawn from the collection column for the concentration of Silica particles that had penetrated the membranes was too low for

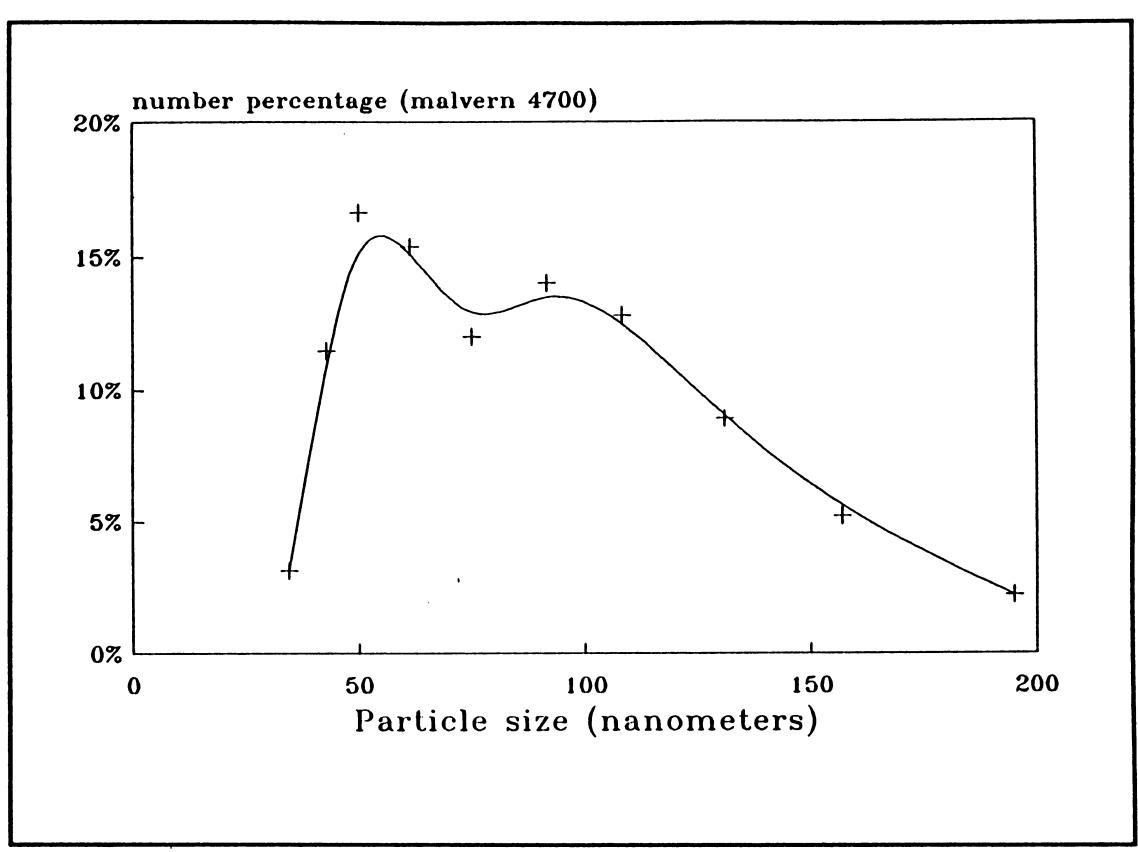


Figure 15. Silica Particle Size Distribution Challenging the 0.035 micron Membrane.

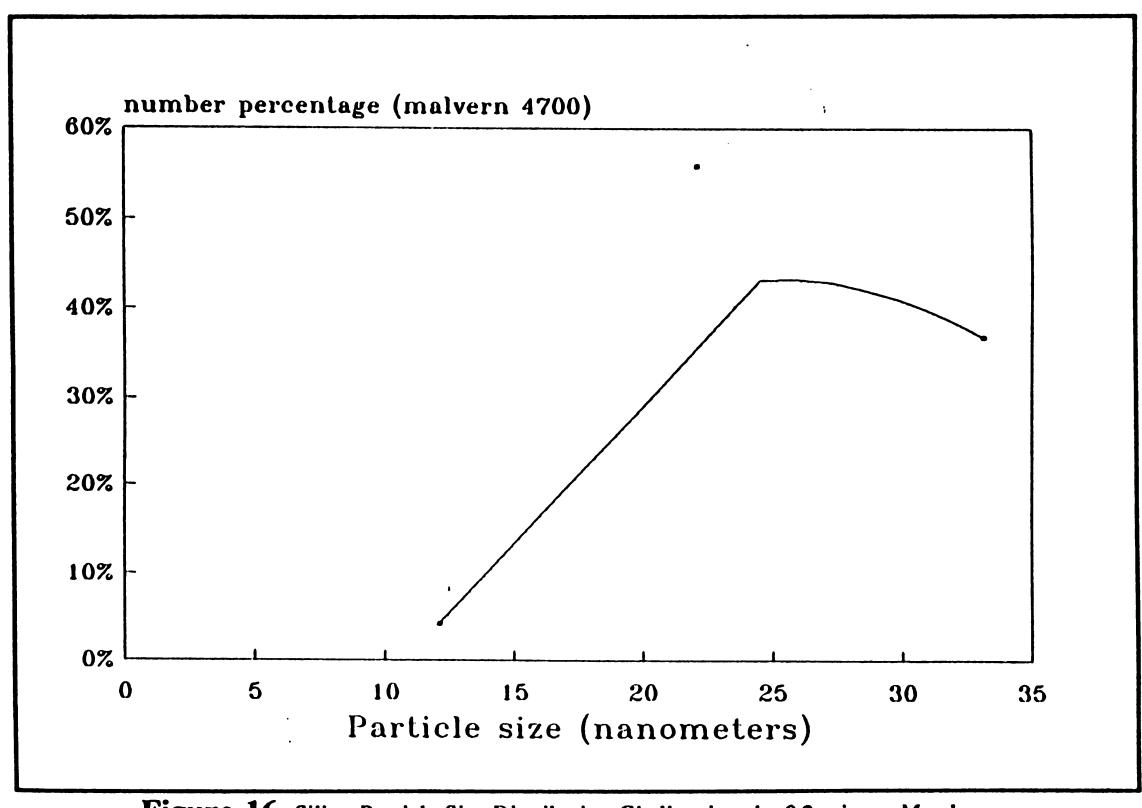


Figure 16. Silica Particle Size Distribution Challenging the 0.2 micron Membrane.

the Malvern 4700 to analyse. As the Malvern 4700 has a sensitivity of 6000 particles per ml the maximum penetration of the membranes is 0.13% (minimum efficiency of 99.87%). These results indicate that the 0.035 and 0.2 micron membranes are capable of removing particles below their nominally rated pore size, confirming the high Mass Efficiencies concluded in the Sodium Chloride mass efficiency test.

### 3.5 CONCLUSION AND RECOMMENDATIONS

The evaluation of the Alcoa ceramic membranes' application for clean room air filtration indicates that they have very high operating costs, while having efficiencies that are of the same order of magnitude or greater than current clean room filters (HEPA).

The Pressure Drop test shows that the pressure drop across the 5.0 micron membrane is ten times higher than current HEPA filters. This high pressure drop means higher operating costs. If the membranes were installed as clean room filters it would need 100 times more membranes than HEPA filters to deliver the same air quantity at the same pressure drop. The high pressure drop across the membranes can be attributed to the high tortuosity of the membrane pores, with a maximum ratio of pore length to membrane thickness of 2.4 for the 5.0 micron membrane.

The Mass Efficiency test showed that the membranes have efficiencies ranging from 99.57%, for the 5.0 micron membrane, to 99.999% for the 0.004 micron membrane. These efficiencies are comparable to the 99.997% efficiency of the HEPA filter. Therefore the membranes do not offer a significantly higher efficiency along with their higher operating costs.

The Silica Grade Efficiency test performed on the 0.2 and 0.035 micron membrane showed that these membrane's were highly efficient in removing particles smaller than the pore size of the membranes. This suggests that the majority of particles are captured by the cake formed on the surface of the membrane rather than within its matrix.

If the membranes were to be used as highly efficient filters their application would be directed toward smaller systems i.e. a filter hood for workbenches. These require lower air flow rates as they are not providing air for ventilation but rather to create a positive pressure within the bench space to reduce the migration of contaminants.

# CHAPTER FOUR HIGH TEMPERATURE GAS CLEAN-UP

#### 4.1 INTRODUCTION

High temperature gas clean-up is the filtration of pollutants, such as solid particulates, from gas streams at elevated temperatures. The purpose of gas filtration at high temperatures is to reduce the costs associated with energy loss, such as heat dissipation, that occurs with low temperature filtration. For example, with new coal conversion technologies it is important that the turbines, operating within harsh high temperature environments, are protected from the erosive solid particulates entrained in the off gas stream. This can only be achieved with highly efficient filters. These filters must operate within the high temperature environment, as the process would not be feasible if the off gas stream was cooled, then filtered, then re-heated for gas expansion through the turbines.

The high temperature environment is typically severe on the filter employed. This environment is very different from ambient air gas filtration as the filter must perform in temperatures in excess of 500°C, pressures higher than 6 atmospheres, very high particulate loads, a corrosive chemical atmosphere and with erosive particulates. The gas stream challenging the filter is also physically different from the ambient gas stream as the gas has a higher viscosity and its density is lower. The effect that these differences have on the performance of a filter must be evaluated to determine the filter's applicability for high temperature gas clean-up.

It is considered that the Alcoa ceramic membrane would be attractive as a high temperature gas filter because: other ceramic filters have been tested and are satisfactorily employed as final removers of particulates in high temperature environments; these membranes are made of Alumina which is a resilient material capable of withstanding high temperatures, corrosive environments, and abrasive particles; and they have high mass capture efficiencies as reported in Chapter Three.

The 5.0 micron membrane was the only membrane tested for high temperature cleaning as it had a sufficiently low pressure drop and its efficiency is sufficiently high to be feasible for such an application.

To evaluate the membrane's applicability as a high temperature gas filter, two tests were performed on the membrane. The first test determined whether the membrane could be cleaned by high pressure backflushing of the particles that had been collected on within the membrane. The second test was a Grade Efficiency test. Here the membrane's selectivity and efficiency is examined when: a cake has formed on the surface of the membrane; when the incident velocity of the challenging gas increases; and when the physical properties of the carrier gas (its density and viscosity) change.

# **4.2 SIGNIFICANCE OF TESTS**

In this section the objectives of the tests performed on the 5.0 micron membrane are discussed. The Cleanability test examines the ability of the membrane to be cleaned or regenerated by a simple load-backflush cycle. The Grade Efficiency test studies the rejection characteristics of the membrane.

# 4.2.1 Cleanability Test

Methods of cleaning regenerable air filters include low pressure backflushing, pulse cleaning and vibrating. Particulate removal from a filter relies on producing stresses that will deform the filter to dislodge retained particles. These stresses usually weaken the filter structure leading to small leaks or eventually total rupture. High temperature bag filters made of glass or ceramic fabrics are particularly sensitive to over-stressing. The Alcoa ceramic membrane, whilst not able to be shaken or vibrated can withstand backflushing pressures exceeding 800 kPa without experiencing structural damage<sup>9</sup>. Tests were therefore carried out to determine the effectiveness of backflushing as a means of removing dust particles trapped by the Alcoa membrane.

To determine the cleanability of a membrane, the membrane was subjected to a Cleaning Cycle test. This test required the membrane to be loaded with particles until its final pressure drop was twice its initial pressure drop. The filter was then cleaned by backflushing at high gas velocities. The efficiency of backflushing was then verified by comparing at the same flowrate the pressure drop of the regenerated filter to that when it was totally clean. The cleaned surface of the membrane was also observed through an electronmicroscope.

# 4.2.2 Grade Efficiency Tests

As previously discussed, grade efficiency is a measure of the selectivity of a filter to a range of particle sizes. To investigate the forces of particle displacement, adhesion and shear, under varying conditions on the entrapment of particles incident to a filter, grade efficiency graphs and their converse, grade percentage penetrating graphs, are employed. Figure 17 shows a typical grade percentage penetration graph. This graph can be used to assess the size range at which maximum and minimum penetration occur, the total efficiency of the filter, and the effect of each displacement force on the total efficiency of the filter.

The results obtained from the Grade Efficiency test provide the necessary information to develop a mathematical model that serves to explain the physical characteristics of the 5.0 micron membrane as an air filter. The more that is known about the physical filtration characteristics of the membrane the less experimental data is required for design purposes when the membrane is to be employed in different conditions. As high temperature gas clean-up evaluations are usually performed at ambient conditions, the existence of a predictive mathematical model would be beneficial to eliminate the need for experimentation at high temperatures.

The grade efficiency study was divided into three sections. Each section examined the different characteristics of the high temperature gas clean-up environment. The first test examined the effect of cake formation on the surface of the membrane. This mimics the intermittent cake that would develop on the membrane at high dust

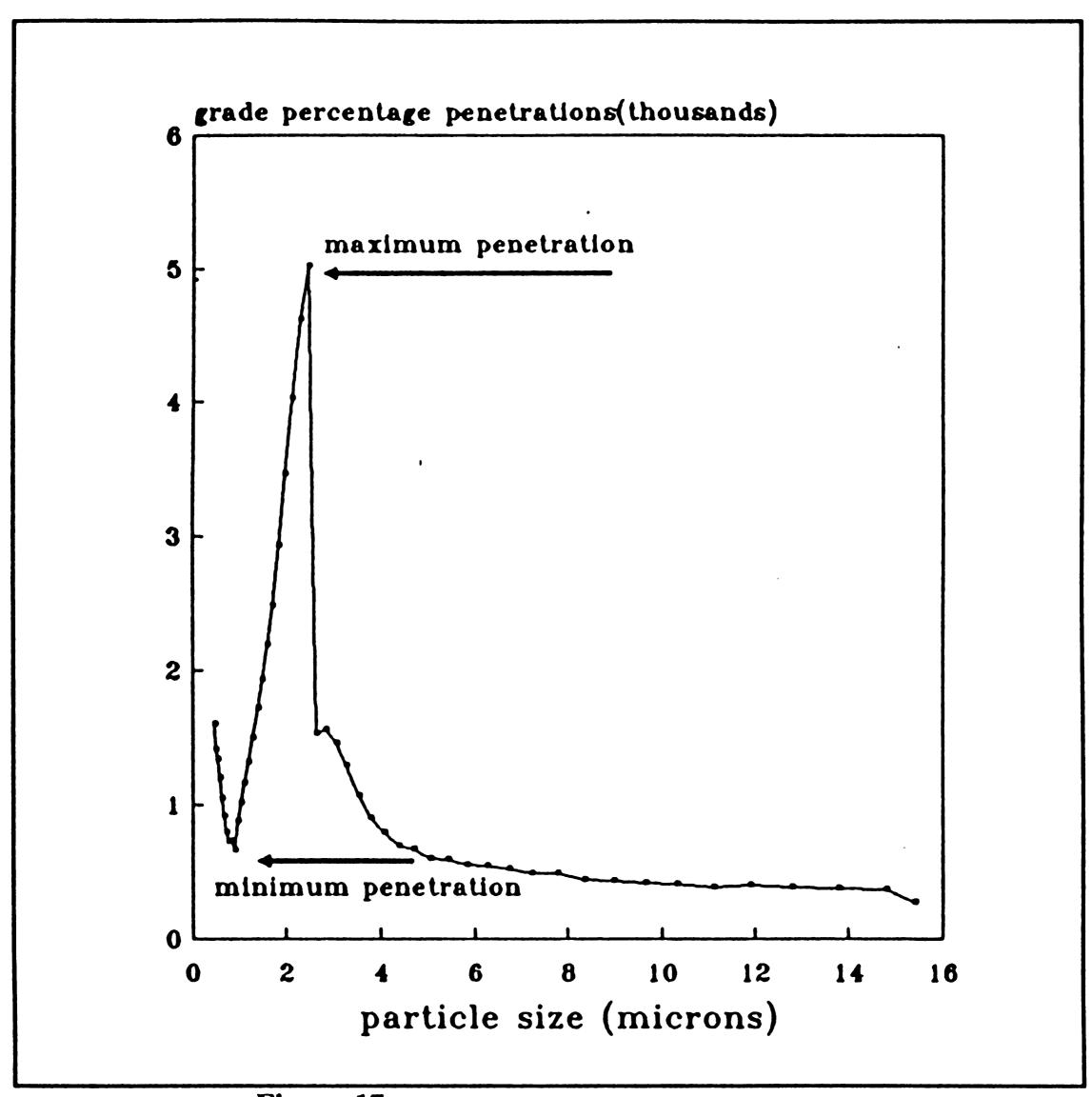


Figure 17. Typical Grade Percentage Penetration Graph.

loadings. The second test examines the effect of varying the velocity of the carrier gas and reflects the effect of fluctuating gas flows. The third test examines the effect of the change in the carrier gas's viscosity and density, which is different from its ambient values.

Measurement of the grade efficiency of the 5.0 micron membrane makes use of an insitu sampling instrument known as the aerodynamic particle sizer (APS). With this instrument precise results can be obtained instantaneously. The APS samples particles challenging and penetrating the 5.0 micron membrane. Size distributions based on the number of particles are obtained from the APS. Its theory is based on the velocity of the particle passing between two lasers. This is then correlated to the aerodynamic diameter of the particle.

# 4.2.2.1 Theory of Gas Filtration

The performance of a membrane as an air filter is dependent on the physical characteristics of the membrane, carrier gas, and challenging particles. Gas filtration performance can be explained using the particle displacement mechanisms of inertia and diffusion. The combination of these mechanisms results in a particle size that can easily penetrate the filter media (the most penetrating particle size).

In gas filtration there are six mechanisms that can displace a particle toward the filtration media. Five of these mechanisms are shown in Figure 18: diffusion, interception, electrostatic deposition, gravitational settling, and sieving (not shown in Figure 18). Once the particle is in contact with the filter media adhesion force will retain it while the shear force of the passing carrier gas will try to remove it.

Of the particle displacement mechanisms mentioned above, the two most important for the removal of submicron particles from a gas stream are inertia and diffusion<sup>69</sup>

70. The mechanism of sieving only effects particles larger than the membrane's pores.

The other displacement mechanisms play a negligible role in the displacement of particles within a membrane. The basis of the three displacement mechanisms of

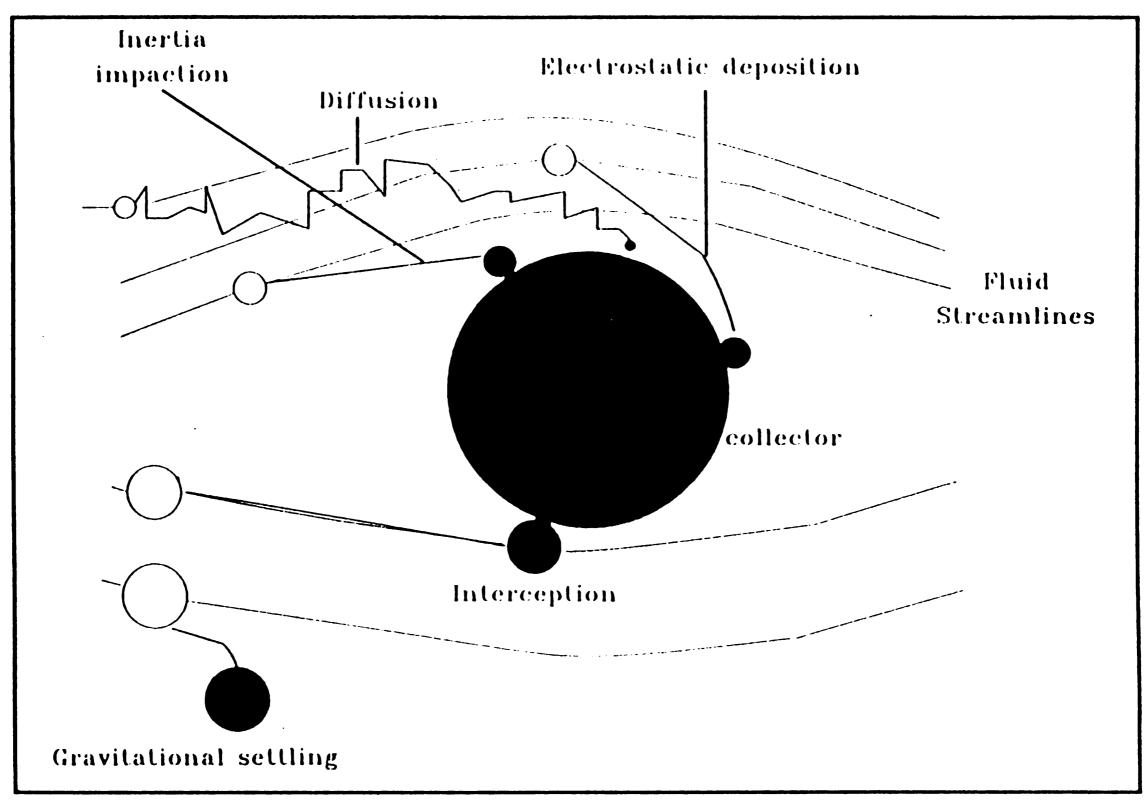


Figure 18. Particle Displacement Mechanisms.

inertia, diffusion, and sieving are detailed in Table 15.

To determine the mathematical relationship between the particle displacement forces and the filter efficiency the velocity profile of the passing gas near to the surface of the collector (membrane) must be calculated. This velocity profile is based on an assumed 'structure' for the membrane. The 'structure' of the membrane is viewed as layers of parallel fibres perpendicular to the gas flow with dimensions determined from the filter's void volume and fibre diameter.

The total efficiency of the filter,  $E_{total}$ , is equated as a combination of the efficiency of the particle displacement mechanisms of diffusion and inertia:

$$E_{Total} = aE_{Diffusion} + bE_{Inertia}$$
 (10)

where a and b are the constants of proportionality, and are calculated for each individual filter. The efficiency of diffusion,  $E_{\text{diffusion}}$ , and inertia,  $E_{\text{inertia}}$ , are based on the empirical calculations of Langmuir<sup>71</sup> and Hermann<sup>72</sup> respectively. They are equated as:

$$Diffusion - \frac{Pe^{-2/3}}{2 - Ln Re}$$
 (11)

and

Inertia - 
$$\frac{Stk^3}{Stk^3 + 0.77Stk^2 + 0.22}$$
 (12)

The equations for diffusion and inertia are approximate solutions for Re between the two limiting cases of potential (Re  $\rightarrow \infty$ ) and viscous (Re < 0.2 say) flow.

Once a particle is captured by the filter media, it must stay on the media for the filter to be effective. This depends on the relative magnitude of the adhesion forces between the particle and the filter media and the forces in the particle-fluid-filter media that act to remove the particle.

Adhesion forces determine how tightly a particle is held to the surface of the media.

Table 15. Particle Displacement Mechanism Prevailing in Membrane Air Filtration.

Displacement Force	Description
Diffusion	Is the displacement of dust particles due to collisions with gas molecules. The random movement of the gas molecules is caused by the thermal currents in the gas medium. This mechanism of particle displacement dominates for small particles less tha 0.3 microns <sup>73</sup> and when the mediums velocity is low.
Sieving	Occurs when a particle arriving at the surface of a membrane is larger than the surrounding apertures in the membrane and therefore is retained.
Inertia	Is the result of particle departure from its streamline. This departure is caused by the redirection of the gas stream and the particles inertia. Inertia is the amount of momentum that the dust particle has in its original velocity vector, so when a streamline changes direction a dust particle will retain some of its original momentum and thus be displaced from its streamline. This occurs when the particles have higher densities and larges sizes, and the mediums velocity is high.

These can range from 10<sup>4</sup> to 10<sup>6</sup> dyne/cm<sup>2</sup> for submicron particles<sup>74</sup>. The primary forces of adhesion are Van der Waal and electrostatic forces. Van der Waal forces of adhesion, assumed to be the most important adhesion force<sup>75</sup> are proportional to the particle's diameter and the Van der Waal constant of the particular material, and inversely proportional to the distance between the particle and collector's surface. Electrostatic force of attraction is made up of coulombic attraction and electrostatic potentials. Coulombic attractions are only possible for particles or surfaces that are charged and is dependent on the charge holding capacity of the particle and surface. Electrostatic forces occur upon particle-surface contact because of the formation of contact potential differences, caused by the difference between the local energy states. Adhesion forces are hard to theoretically calculate and must be determined through experiment.

The force that acts to remove particles once collected and held to the surface of a filter media is fluid drag or shear. This force increases with fluid viscosity and velocity, as well as the size of the particle. It is directly related to the velocity profile of passing gas. Figure 19 shows a typical velocity profile of a flowing gas stream near the surface of a collector. It is noted that the profile is parabolic and that there is a boundary layer between the filter surface and the flowing gas where the gas is stationary. This boundary layer has the effect of shielding particles from the force of the gas moving past the surface of the filter media. Smaller particles will be shielded more than larger ones because a larger fraction of their surface area is within the slowly moving fluid next to the surface of the membrane. Larger particles have more of their surface exposed to the fast flowing gas and are thus easily removed.

The exposure that a particle has to the force of the passing gas is dependent on where particles deposit. The deposition of particles on the surface of the filter has been observed by many authors<sup>76</sup> <sup>77</sup> as non-uniform. These particles deposit one upon another, forming so called trees (dendrites), as incoming particles apparently prefer to deposit on already deposited particles (see Figure 20). This growth is caused by the higher intermolecular forces between 'like' substances. The growth also exposes particles to the full force of the passing gas.

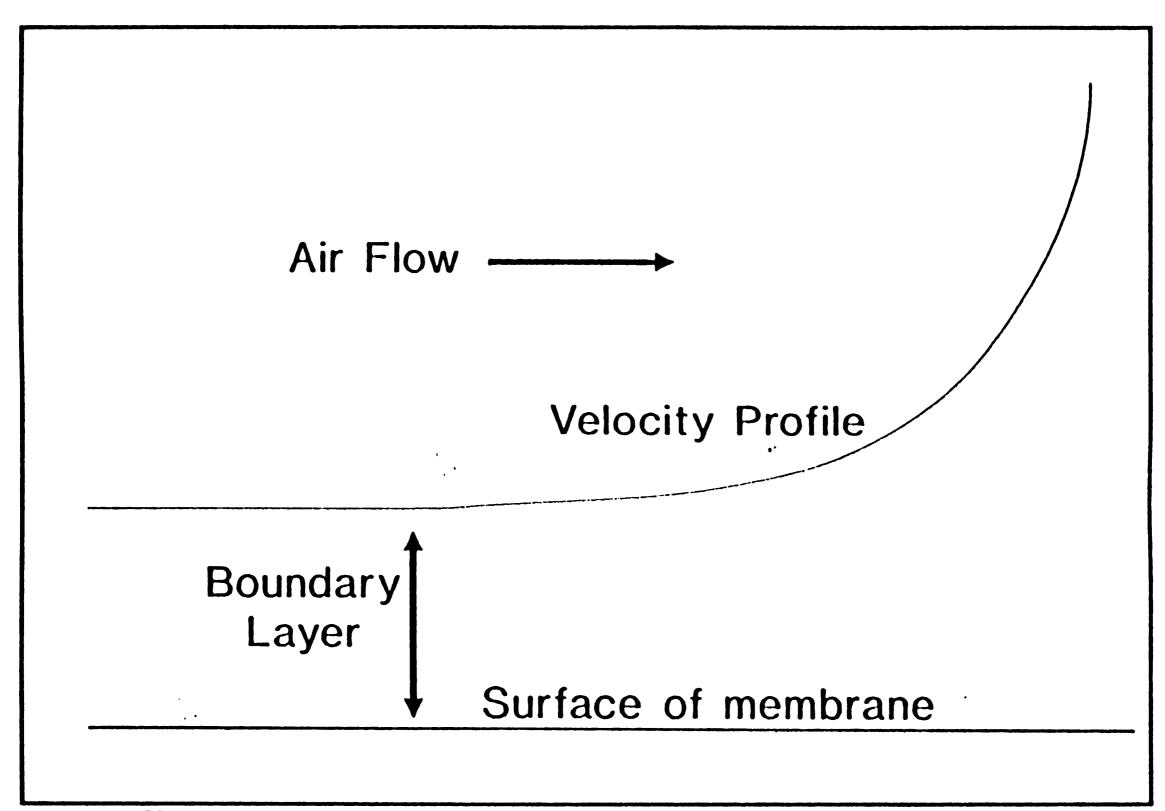


Figure 19. Velocity Profile of a Passing Gas Stream Near the Surface of a Collector.

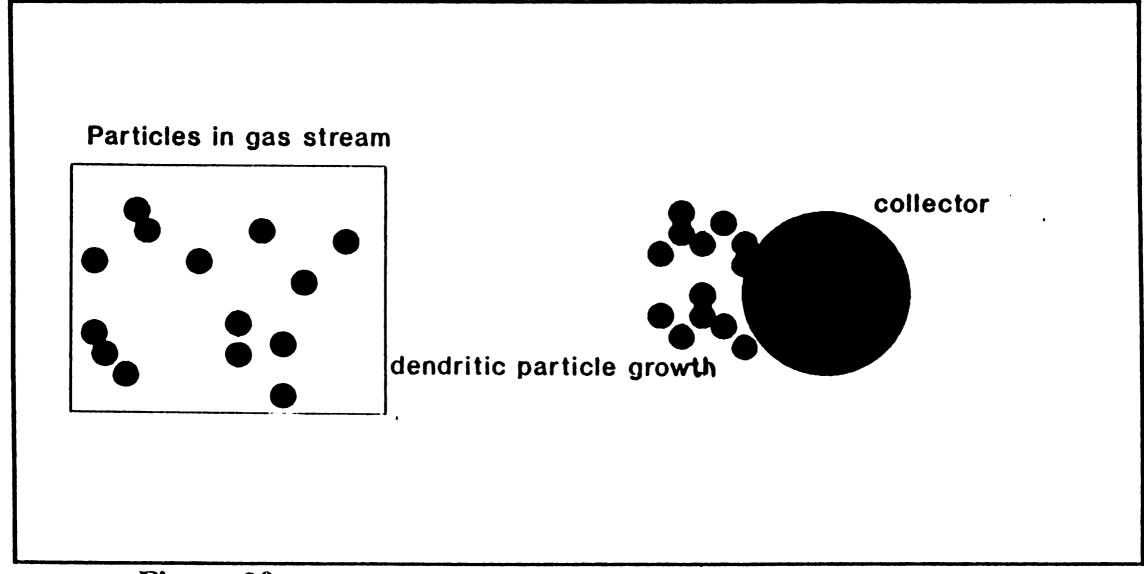


Figure 20. Dendritic Growth of Particles Depositing on the Surface of a Collector.

These particle displacement mechanisms and forces of retention and adhesion are considered in analysing the results of the Grade Efficiency test.

# 4.2.2.2 The Effect of Particle 'Cake' Formation

As particles are rejected at the surface of the filter, a filter cake forms. After a period of heavy dust loading the separated dust takes over the filtration function and the efficiency of the filter improves. This cake forms on the membrane when all available membrane surface is covered with the entrained dust. It is common to clean or replace a filter once the pressure drop across the filter is twice its initial reading<sup>78</sup>. For the Alcoa ceramic membrane a dust loading of 12 grams of talc was sufficient for a final pressure drop (64 mmHg) to be twice its initial value (32 mmHg). Once this cake stabilised, the grade efficiency was determined by plotting the percentage penetration curves and comparing these with those determined for the clean membrane.

# 4.2.2.3 Effect of Incident Gas Velocity

In high temperature gas cleaning environments the gas flow challenging the filter is never as stable as it is for normal ambient air filtration. This test will evaluate the effect of increasing gas flowrate on the selectivity and efficiency of the 5.0 micron membrane. In this series of runs the Alcoa 5.0 micron membrane was challenged with the dust analogue carried by gases at total gas flowrates of 32 l/min and 64 l/min (corresponding to incident velocities of 0.064 and 0.138 ms<sup>-1</sup> respectively). Both dirty and clean filters were used.

# 4.2.2.4 Effect of the Carrier Gas Physical Properties

At high temperature the viscosity of air increases and its density decreases. For example the density/viscosity ratio for air at 20 °C and 101 kPa is 6300 sec/m² while air at 800°C is 7640 sec/m². The purpose of this test is to examine the effect of changing the viscosity and density of the carrier gas on the efficiency and selectivity

of the 5.0 micron membrane. This is to simulate the different values of air's density and viscosity when it is heated, as found in high temperature gas clean-up environments, to ambient filtration conditions.

The test compares the grade efficiency of the 5.0 micron membrane when subjected to different gas mediums. Each gas medium has a different viscosity and density. The effect of viscosity and density on the different mechanisms of particle displacement can then be investigated. This provides an indication of the performance of the membrane at high temperatures.

#### **4.3 EXPERIMENTAL**

# 4.3.1 Cleanability Test

# 4.3.1.1 Apparatus

The experimental arrangement used in conducting the cleanability trials is shown in Figure 21. The circuit consists of a Wright dust feeder (A) which provides a metered flow of a dust analogue, (the dust analogue being Talcum powder). Following the dust feeder is a cylindrical settling (B), tank 25 cm long by 15 cm in diameter, in which the dust is allowed to stabilise and a desired particle size distribution of 0.5 to 15.0 microns obtained. A mercury manometer (C) was used to monitor the pressure drop of the membrane. The circuit was driven by clean, dry compressed air. All of the rotameters were calibrated with an Alexander and Wright gas meter, and the dust loading rate determined as a function of time.

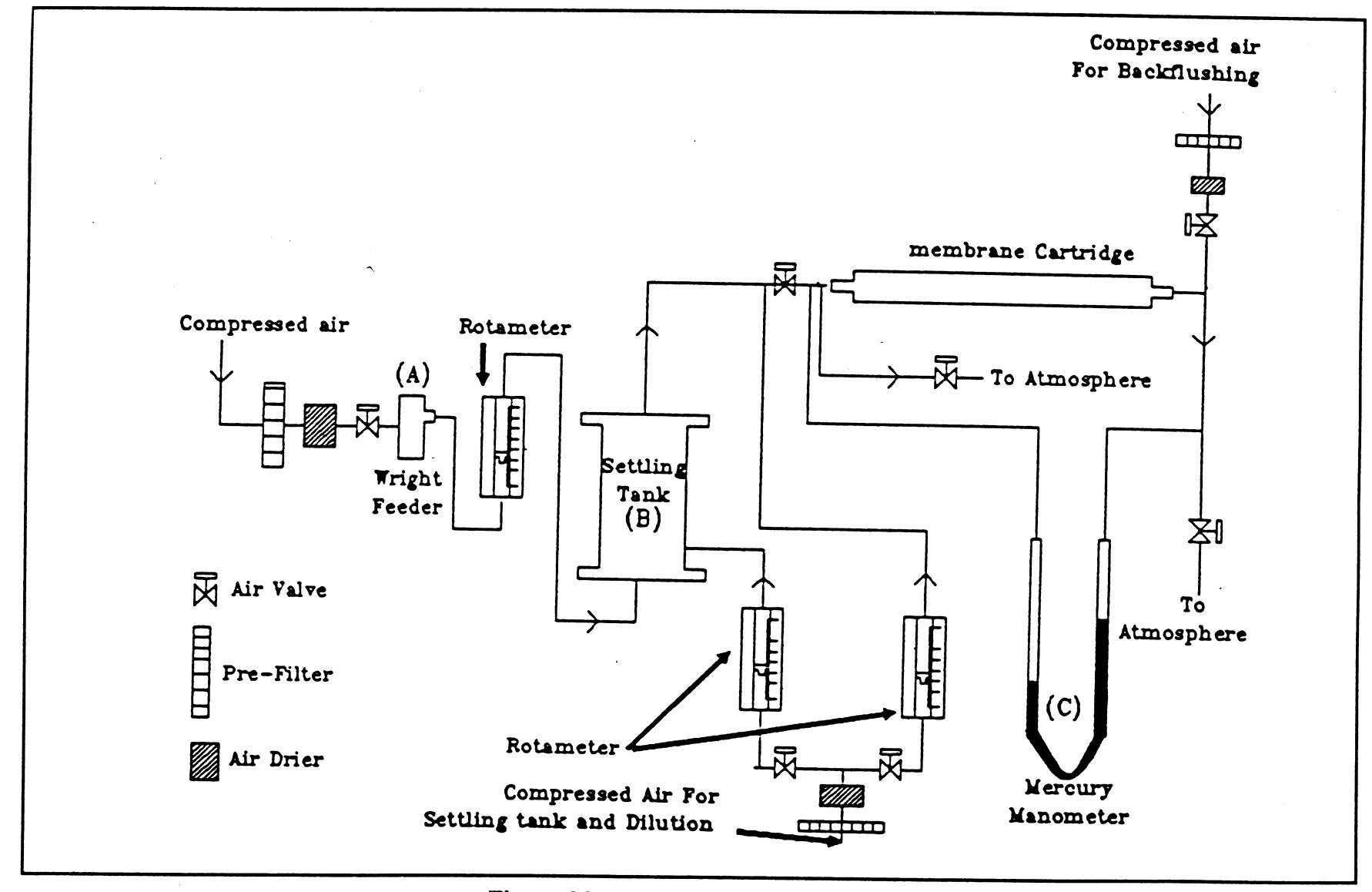


Figure 21. Cleanability Test Circuit.

#### 4.3.1.2 Method

#### 4.3.1.2.1 Loading

Talcum powder was fed to the settling tank with the Wright Dust Feeder. Dust loadings of 0.3 milligrams/sec and the desired particle size distribution was controlled with the flow of clean compressed air also entering the settling chamber. The dust leaving the settling chamber is diluted with compressed dry air which was then sent to the membrane cartridge at a total air flowrate of 30 l/min.

#### 4.3.1.2.2 Cleaning

The membrane was backflushed with air at 500 kPa once the pressure drop across the membrane was twice that for a clean membrane. During the cleaning cycle the dust laden air stream leaving the leading surface of the membrane was diverted into a separate dust collector.

# 4.3.2 Grade Efficiency

# 4.3.2.1 Cake Grade Efficiency Apparatus and Method

Cake grade efficiency was tested with a circuit similar to that used in the Cleanability test, except that a provision was made for the isokinetic sampling of the dust laden stream before and after the membrane filter. The provision for isokinetic sampling was a small volume chamber installed on the gas stream to be sampled. This chamber had one inlet and two outlet openings. The outlet openings were sized so that the smaller outlet opening delivered 5 l/min of air (for the APS), for a total inlet gas flowrate of 30 l/min. As the pressure drop across both outlet openings were the same this ensured an isokinetic sample. These samples were routed to an Aerodynamic Particle Sizer (APS 33B) as shown in Figure 22. The sample time for the sizer was set at 200

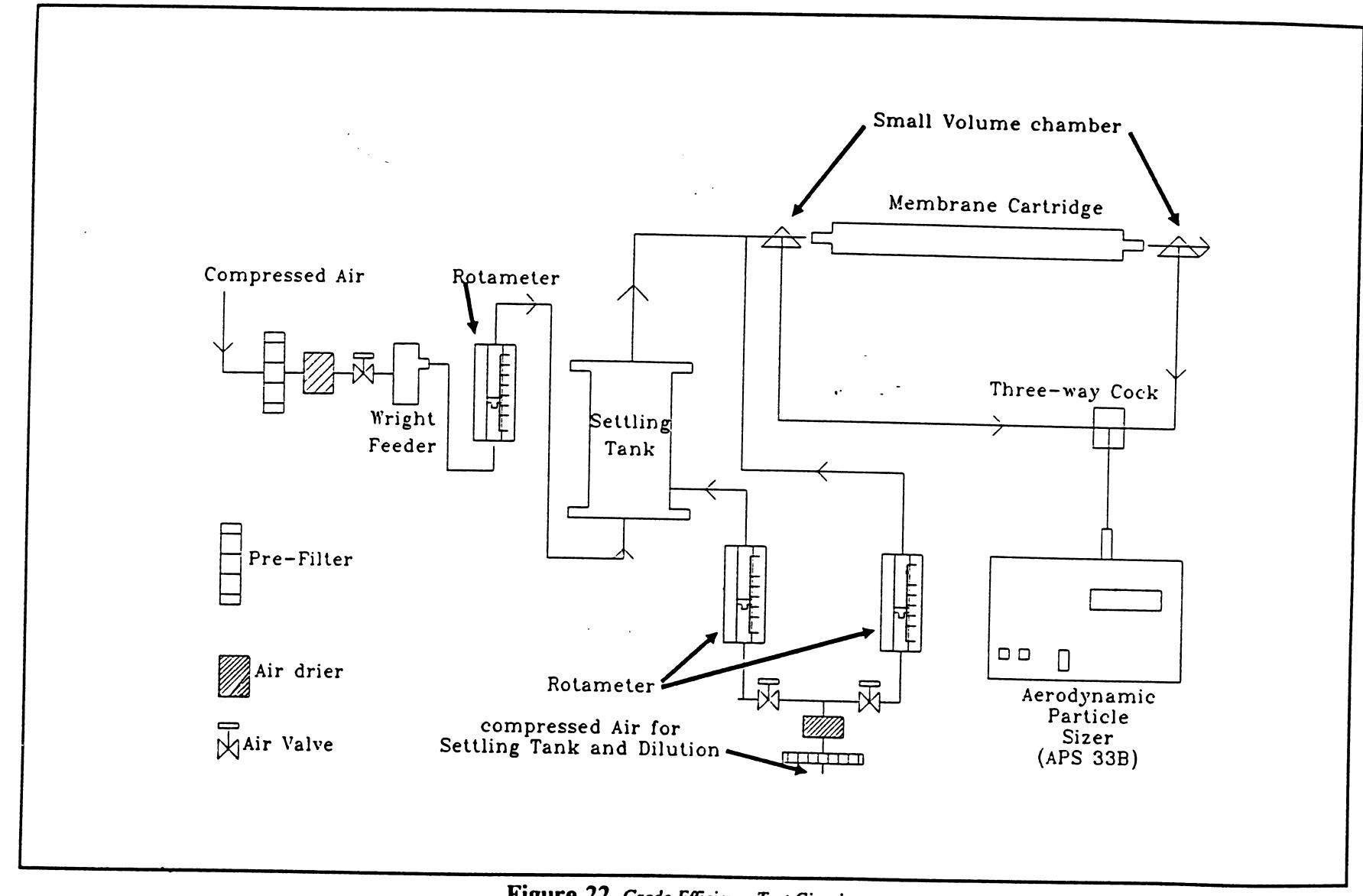


Figure 22. Grade Efficiency Test Circuit.

seconds for samples taken before the membrane, and 500 seconds for particle samples taken after the membrane, with ten independent samples being taken over the course of a run to ensure that a representative result was obtained.

Particle size distributions and concentrations, gas flow rates, rotameters, and other experimental equipment are the same as for the Cleanability test.

# 4.3.2.2 Effect of Incident Velocity Apparatus and Method

The apparatus and method are the same as for the "Effect of Cake Formation" Grade Efficiency test with a change in the total gas flowrates challenging the filter.

# 4.3.2.3 Effect of Carrier Gas's Physical Properties Apparatus and Method

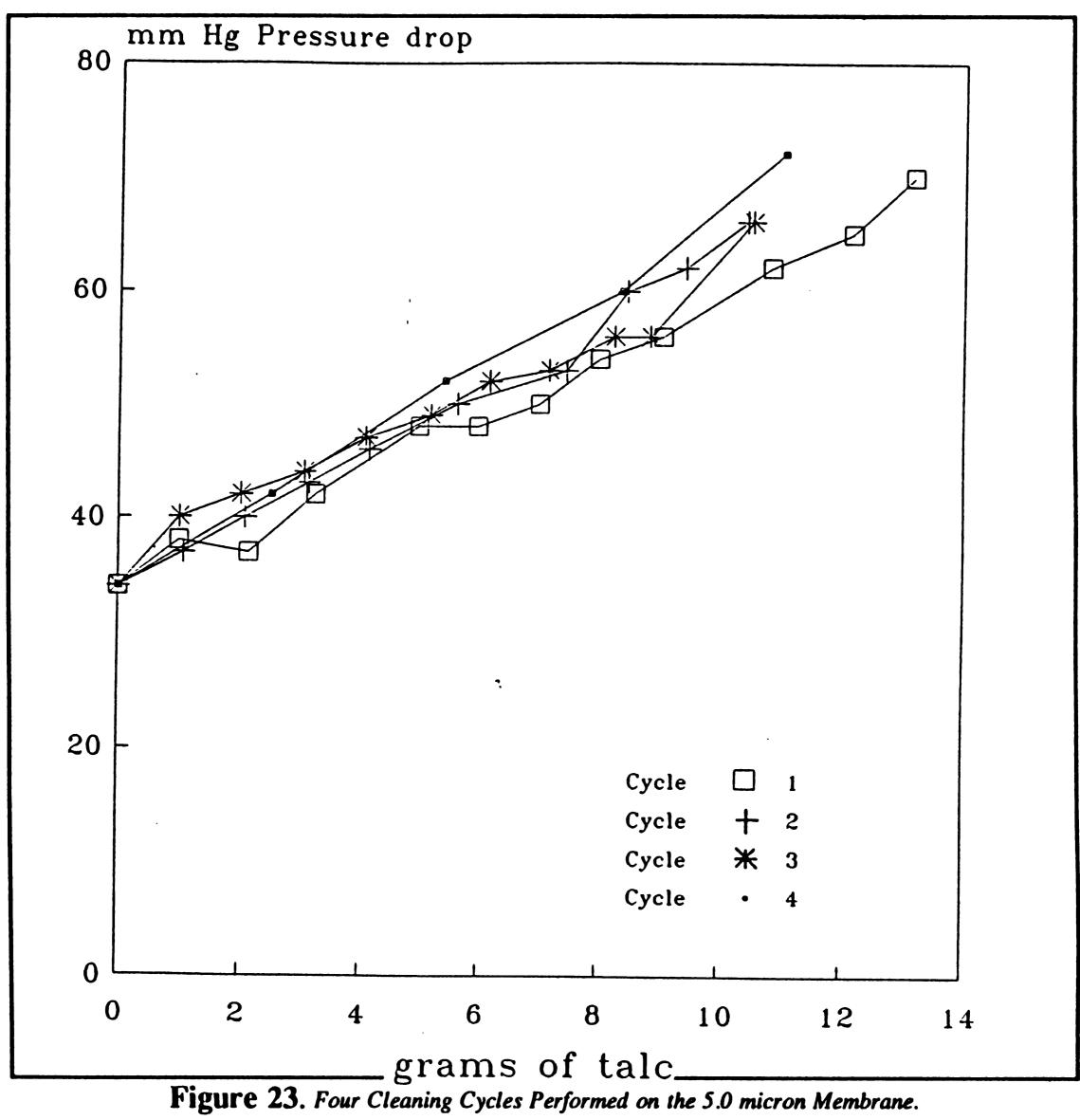
The test circuit, dust loadings, mass flowrates, and particle size ranges are similar to the "Effect of Cake Formation" Grade Efficiency test. In addition to the compressed air used to dilute the dust leaving the settling tank the following gases were used:

- A) Helium.
- B) Argon.
- C) Nitrogen.
- D) Oxygen.

# **4.4 RESULTS AND DISCUSSION**

# 4.4.1 Cleanability Test

The experimental results for four cycles of cleaning are given in Figure 23. Within each cycle the pressure drop across the membrane increased linearly with the total dust incident on the membrane. It is apparent that the cleaning cycle is effective in removing entrapped dust from the membrane and in restoring it to its original condition. This can be seen from the electronmicroscope photographs Plates 1 and 2, which show the 5.0 micron membrane when it is dirty and cleaned respectively. These observations suggest that the primary mode of dust capture is in the cake which is formed at the surface of the membrane. Were the membrane itself to function as a depth filter, it would be expected that the pressure drop-loading relationship would be non linear and that the cleaning operation by backflushing of the membrane would not be so effective in restoring the membrane to its original condition.



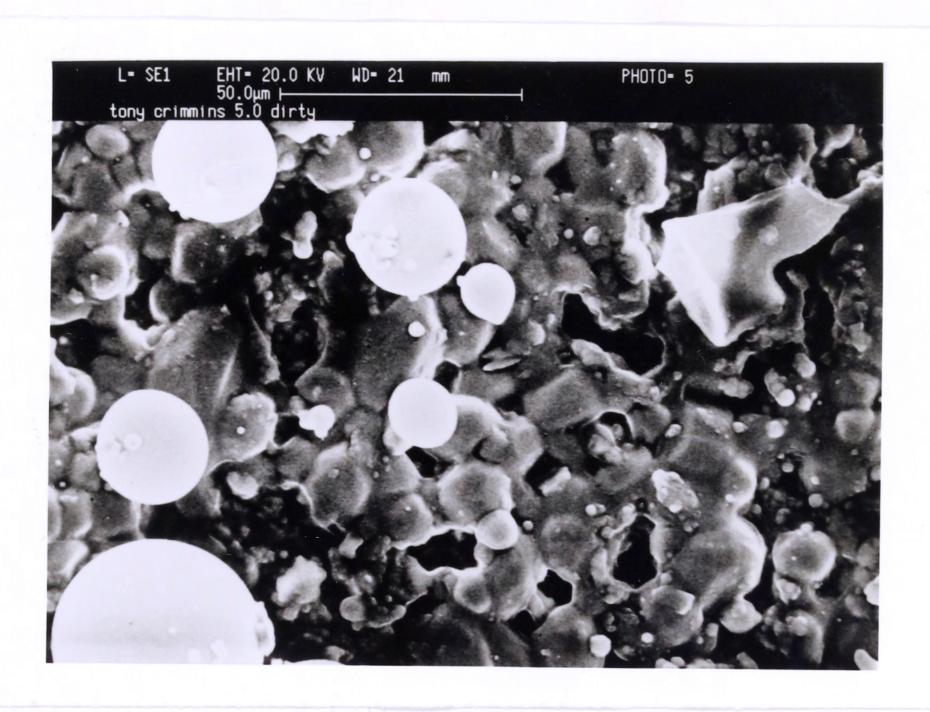


Plate 1. Dirty 5.0 micron Membrane.

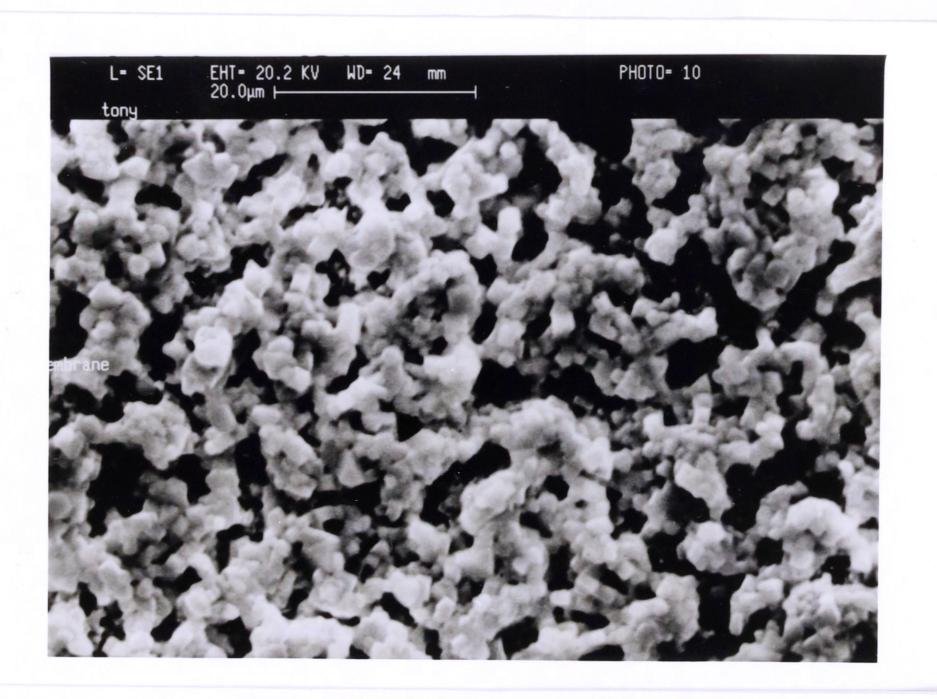


Plate 2. Cleaned 5.0 micron Membrane.

# 4.4.2 Grade Efficiency Test

# 4.4.2.1 Evaluation of the Constants of Proportionality for the Efficiencies of Diffusion and Inertia

Figure 24 shows a comparison of experimental data with that predicted by the combination of the efficiencies of particle displacement (CEPD). To fit the CEPD to the experimental grade efficiency results for the 5.0 micron membrane at a gas flow rate of 32 l/min, the constants of proportionality, a and b in Equation 10, are calculated to be 81 and 0.0261 respectively. The resulting plot of the CEPD is in agreement with the experimental data. The particle size of maximum penetration for the CEPD corresponds to that of the experimental data, as does the whole grade percentage penetration curve. As the constant of proportionality for diffusion (a) is 3000 times greater than the constant of proportionality for inertia (b) this implies that the dominant particle displacement mechanism acting within the membrane is diffusion.

It should be noted that the CEPD plot does not include the forces of particle adhesion and gas shear. It assumes that a particle is collected once it is in contact with the surface of the collector.

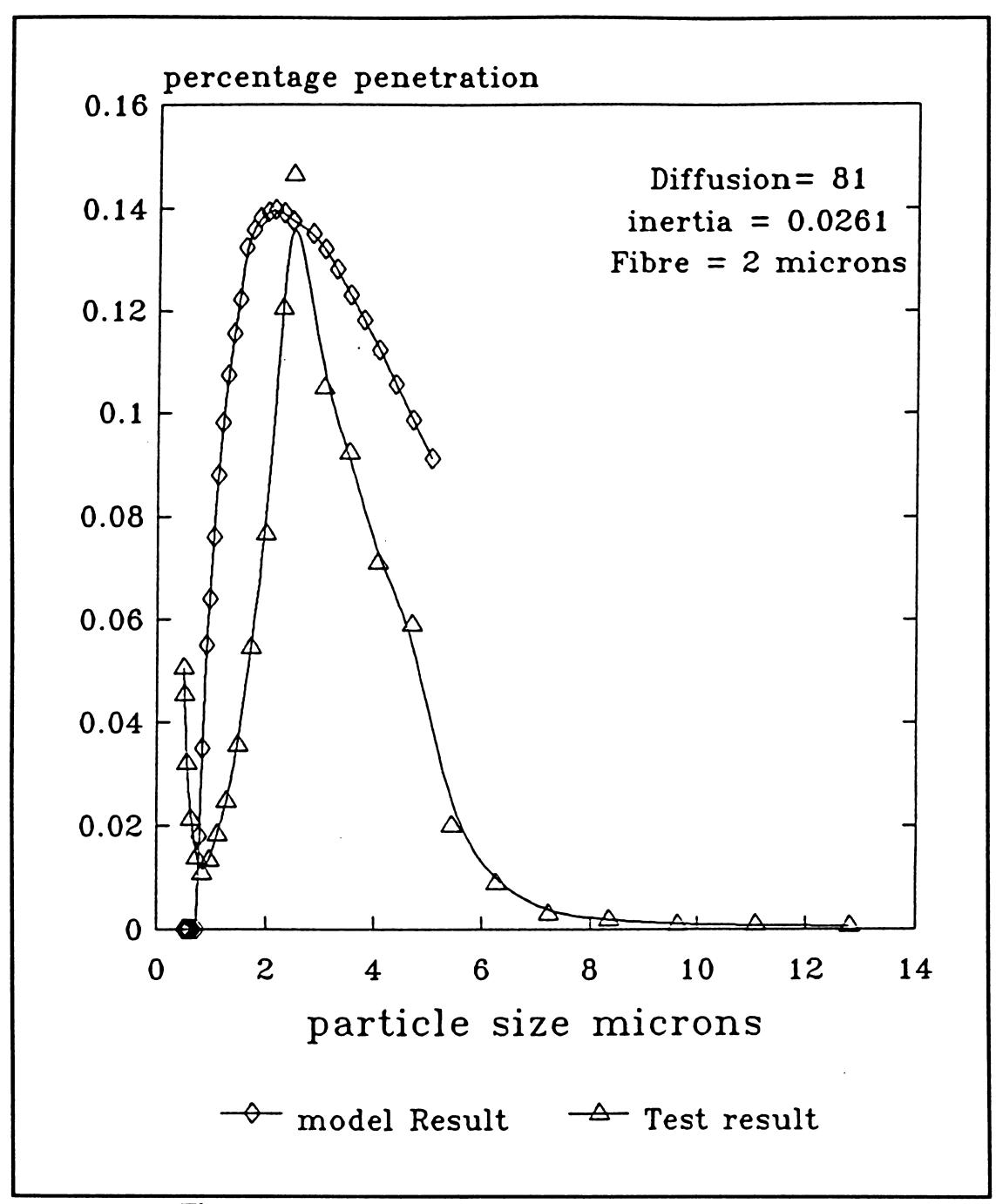


Figure 24. Comparison of the Predicted CEPD to Experimental Data for the 5.0 micron Membrane at 32 l/min.

# 4.4.2.2 The Effect of "Cake Formation"

Figure 25 shows a comparison of the particle size for the filter feed and permeate streams for clean and dirty filters respectively. The dirty filter is the one that had been in service for 450 minutes without backflushing. Table 16 gives the average results of the test. From these results it is observed that with cake formation: the total mass collection efficiency of the filter increases from 99.34% (pressure drop 32 mmHg), for the clean filter, to 99.93% (pressure drop 60-70 mmHg) for the dirty filter; the size range for the minimum and maximum penetrating size does not change; there are fewer particles penetrating the filter at the size corresponding to the maximum and minimum penetrating size; and the relative number of particles penetrating the membrane of less than 1 micron in size has decreased.

The increase in the total efficiency of the filter when a cake has formed is due to the increase in the thickness of the filter, the smaller pore size of the cake, and the greater cohesive forces between the talcum cake and the challenging talcum dust. The formation of a cake increases the distance that a particle has to travel to penetrate the filter matrix. This increases the probability of capturing smaller (less than 1.0 micron) particles. Diffusion plays an increasingly important role in capturing such particles.

By maintaining constant dust loadings and gas flows for all tests, any change in the penetrating sizes could only be due to differences between the cake and membrane. As the penetrating sizes of the clean and dirty membrane are similar it can be assumed that the regimes of the particle displacement mechanisms for the membrane and the cake are similar. It is therefore assumed that the major mechanism of particle arrest is surface capture.

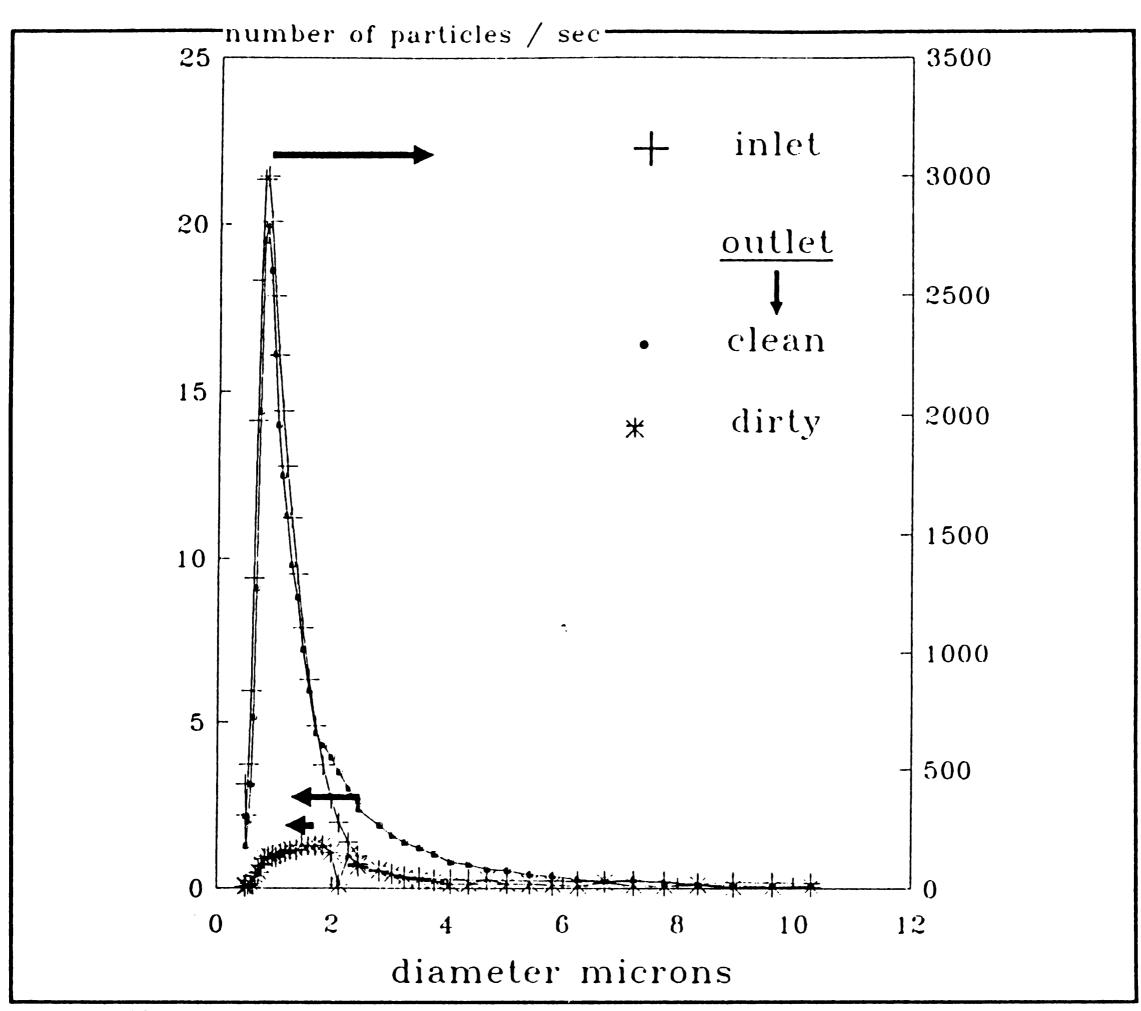


Figure 25. Inlet and Outlet Size Ranges for a Clean and Dirty 5.0 micron Membrane.

Table 16. Penetration of a Clean and Dirty 5.0 micron Membrane.

Minimum Penetrating Size (microns)	Percentage Penetration	Maximum Penetrating Size (microns)	Percentage Penetration	Penetration rate [particles/second]  for particle	
				< 1.0 micron	> 1.0 micron
		Clean	Membrane		
0.83	0.01	2.46	0.14	3	27
		Dirty	Membrane		
0.83	0.007	2.46	0.12	1.3	19

# 4.4.2.3 Effect of Incident Velocity

Results for this test are presented in Figure 26 and Table 17. The percentage penetration-particle size curves given in Figure 26 show a minimum in penetration at the particle size in the range 0.5 - 1.0 micron and a maximum penetration above 2 microns. Both minima and maxima are given in Table 17, together with the measured rate at which particles penetrate the membrane.

At the higher incident velocity the mass collection efficiency of the filter drops from 99.97% to 99.01% (clean filter) and from 99.97% to 99.88% (dirty filter). For both clean and dirty membranes the number of particles penetrating the filter increases with flowrate, but the extent of this increase is very dependent on whether the filter is clean or dirty. The effectiveness of the clean filter is severely compromised at the higher incident velocity. The total mass efficiency of the filter is dependent on the dominate displacement mechanism operating within the filter. For inertial capture, the efficiency of the filter is expected to increase with increasing gas velocity, and for diffusional capture, the opposite would be true. This suggests that the collection mechanism acting within the membrane is diffusion because this is expected to decrease with increasing gas velocity.

The results for both clean and dirty filters indicate that with increasing gas velocity the size of maximum penetration has increased while the size of minimum penetration has decreased. This is in disagreement with the theory of air filtration and the results of other authors<sup>79</sup> 80. Theory predicts that with increasing flowrate the effective regimes of diffusion and inertia should move to smaller sizes. In reference to Chapter Three Figure 8 both curves should move to the left indicating that the particle size of minimum and maximum penetration should decrease.

The results from many authors have shown variance in the effect that increasing velocity has on the maximum penetrating size. Rubow<sup>81</sup>, experimenting with membrane filters, found that total efficiency decreased with increasing velocity and there was a decrease in the maximum penetrating size. From his results he concluded

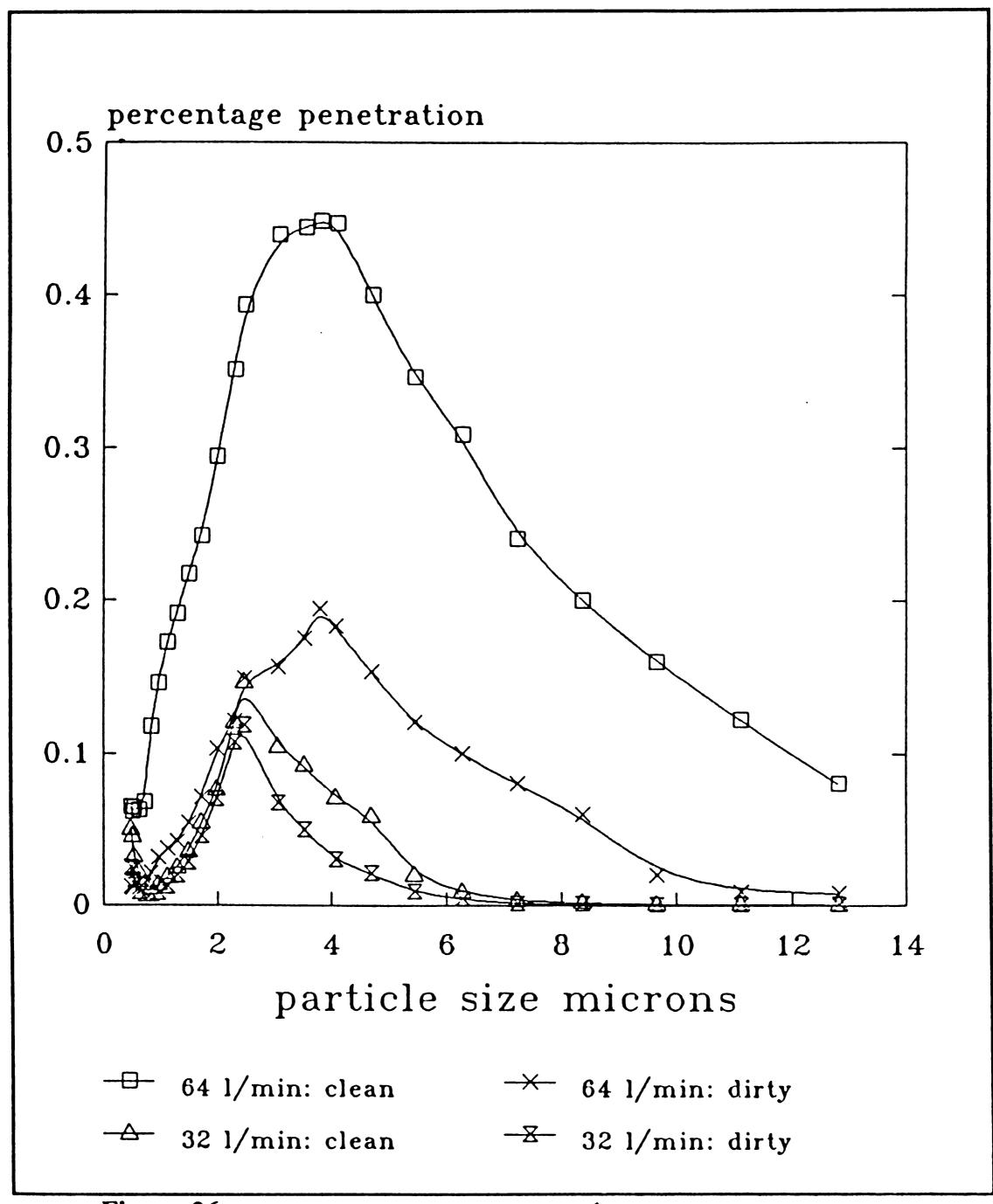


Figure 26. Penetration-Particle Size Curves for Air Flowrates of 32 l/min and 64 l/min.

Table 17. Penetration of a Clean and Dirty 5.0 micron Membrane at two incident Flows.

Minimum Penetrating Size (microns)	Percentage Penetration	Maximum Penetration Size (microns)	Percentage Penetration	Penetration Rate [particles/second] for Particle				
				< 1.0 micron	> 1.0 micron			
Clean membrane  Normal Flow								
0.83	0.01	2.46	0.14	3	27			
		Double	Flow					
0.50	0.06	3.7	0.44	11	120			
Dirty Membrane								
Normal Flow								
0.83	0.007	2.46	0.12	1.3	19			
		Double	Flow					
0.5	0.11	3.7	0.2	4.1	38			

that theory under-predicts the effect of pore diameter on the capture of small particles. Lee<sup>82</sup>, through experimenting with bed filters, found that the maximum penetrating size could increase or decrease with increasing gas velocity depending on the dominate mechanism present. The shift of the most penetrating size to a larger size occurs when diffusion and gravitation are operative, and shifts to a smaller size when diffusion and interception are operative.

The increase in the maximum penetrating size with increasing gas flow, observed with the experimental results, is due to the increase in the shear force stresses which increase with gas flow as shown in Figure 27.

Figure 27 shows the dendritic growth of particles within a membrane pore, and the velocity profiles associated with low and high gas velocities. The arrows represent the point area of shear force acting on the dendritic growth and this is where the breakage of the particle 'branch' occurs. As can be seen, the higher the gas velocity the lower the point force area of breakage. This results in larger branches being sheared from the main particle 'tree'. This is due to the smaller boundary layer associated with higher gas velocities and serves to explain that with higher gas velocities the particle size of maximum penetration increases.

# 4.4.2.4 Effect of the Carrier Gas's Physical Properties

The mass collection efficiencies resulting from these experiments are: 99.9% for air, 99.7% for Argon, 98.6% for Nitrogen, 99.8% for Oxygen, and 99.6% for Helium. Figure 28 shows the typical feed and filtrate size distributions determined by the particle sizer.

For the different gases studied the minimum and maximum sizes can be plotted against the ratio of density to viscosity for the gas (i.e. the terms representing gas physical property dependence). This is done in Figures 29 and 30. Both minimum and maximum penetrating sizes increase significantly with increasing density to viscosity ratio.

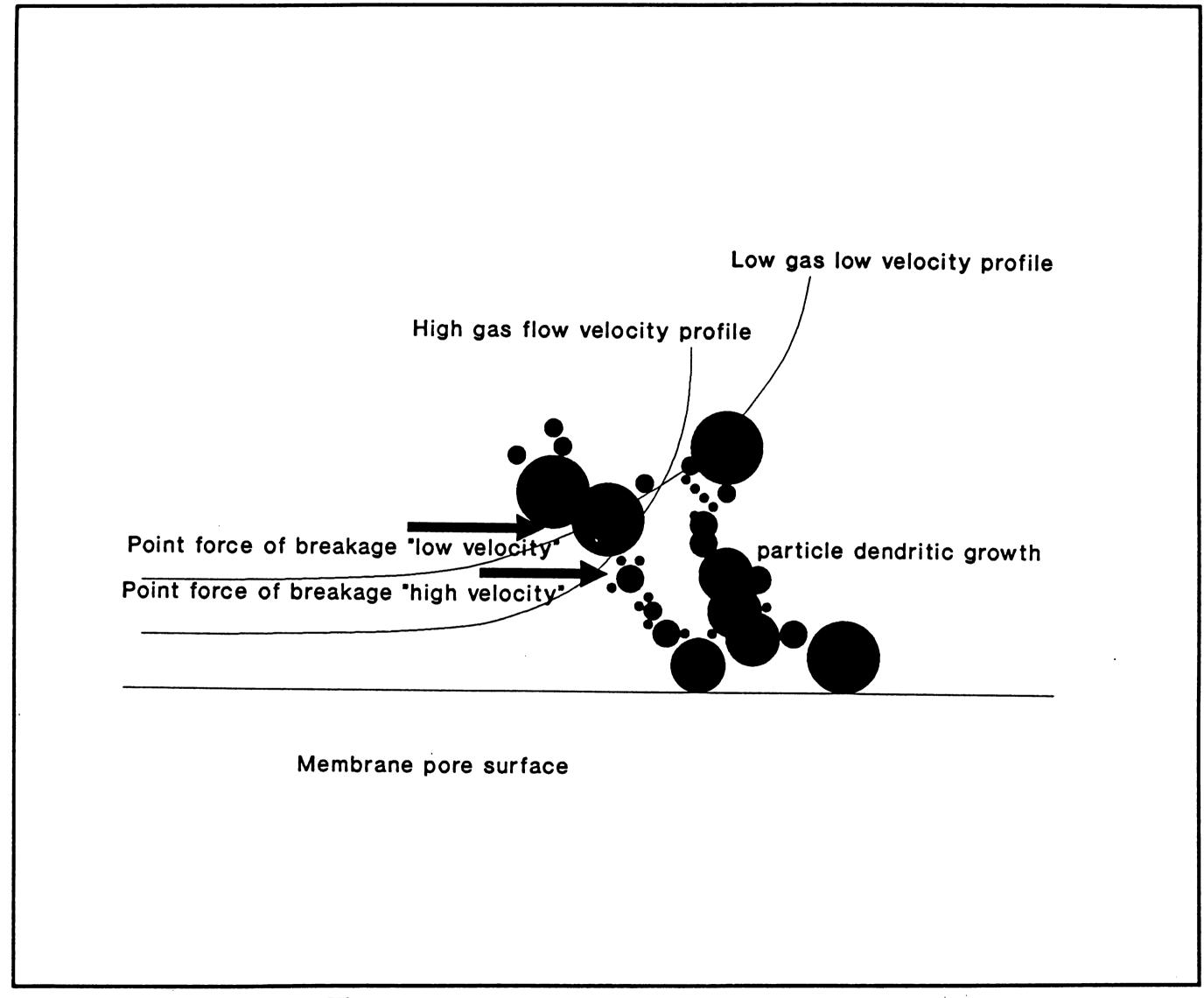


Figure 27. Effect of Increasing the Carrier Gas Velocity.

The efficiency of both diffusional and inertial mechanisms is expected to increase with the increasing density/viscosity ratio, but the results show that the increase in the diffusional process is more marked since the size of maximum penetration increases. Conversely, as the density/viscosity ratio decreases as the gas is heated to the level prevailing in a hot gas scrubber, the range of particle sizes at which the filter is least efficient narrows so that the overall efficiency is expected to be high.

# 4.4.3 Capture Mechanism

In an attempt to identify the capture mechanism prevailing on the 5.0 micron Alcoa ceramic membrane, scanning electron micrographs (SEM) of the surface of the membrane have been taken soon after the commencement of the gas filtration. Selected micrographs are shown in Plates 3 and 4. These show respectively the surface of a clean and membrane and that of a membrane that had been in service for 10 minutes with a calculated dust loading of 3 milligrams and a pressure drop of 32 mmHg. The SEM's suggest the primary capture mechanism is one of surface capture, with the presence of a retained cake of dust at the surface of the filter leading to an improvement in capture efficiency.

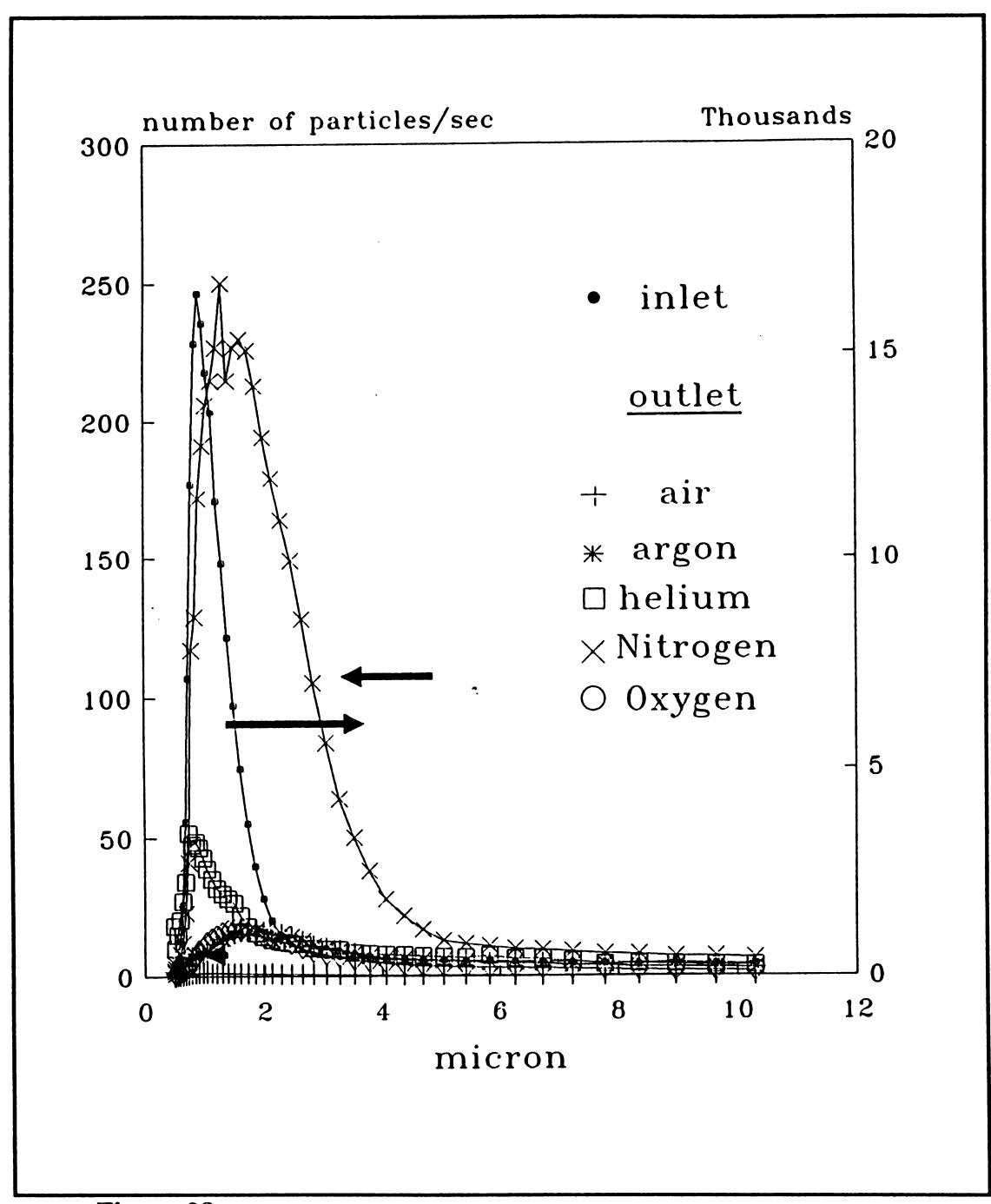


Figure 28. Inlet and Outlet Particle Size Distributions for the 5.0 micron Membrane with Air, Argon, Helium, Nitrogen, and Oxygen.

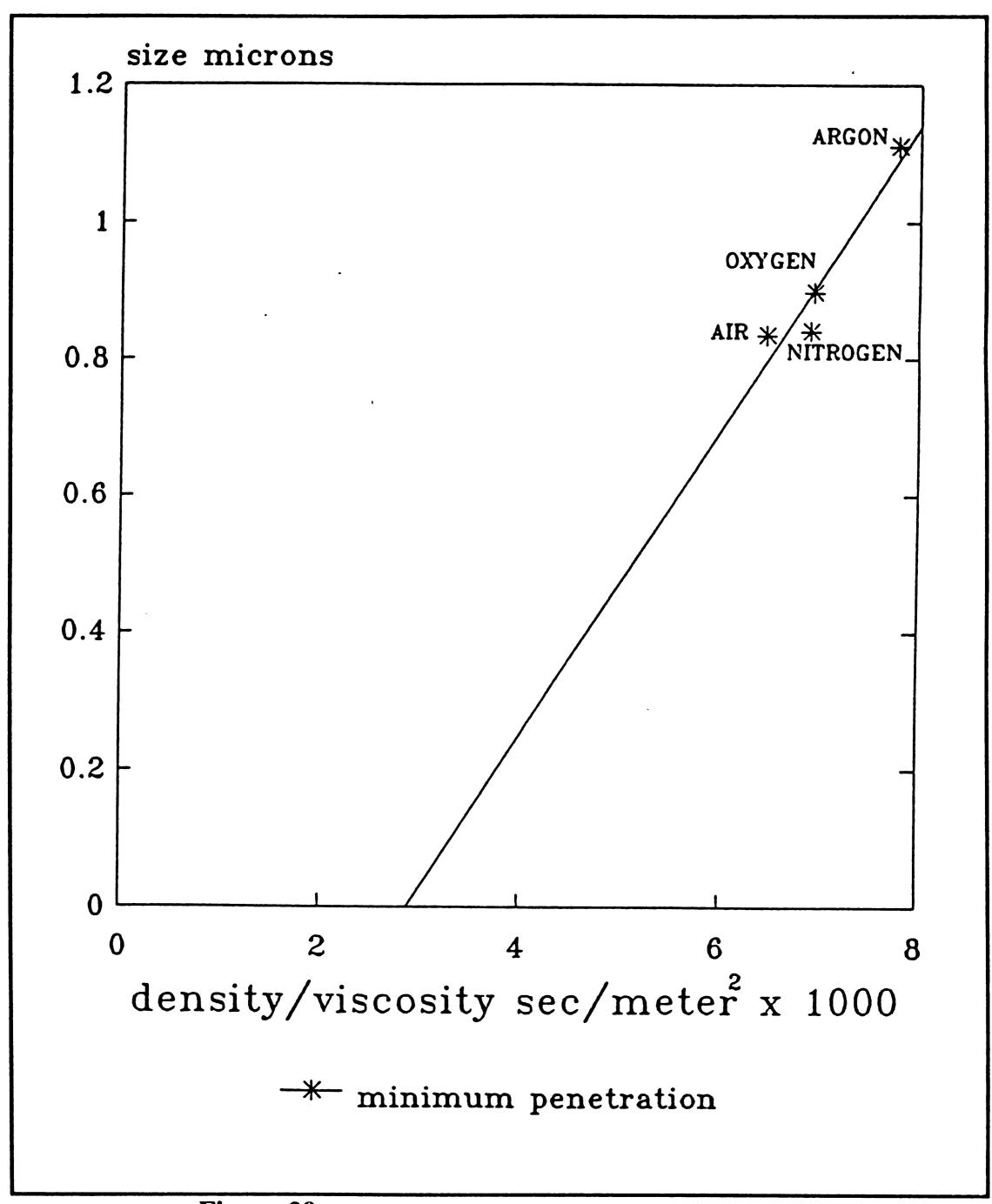


Figure 29. Minimum Penetrating Particle Size for the 5.0 micron Membrane with Different Carrier Gases.

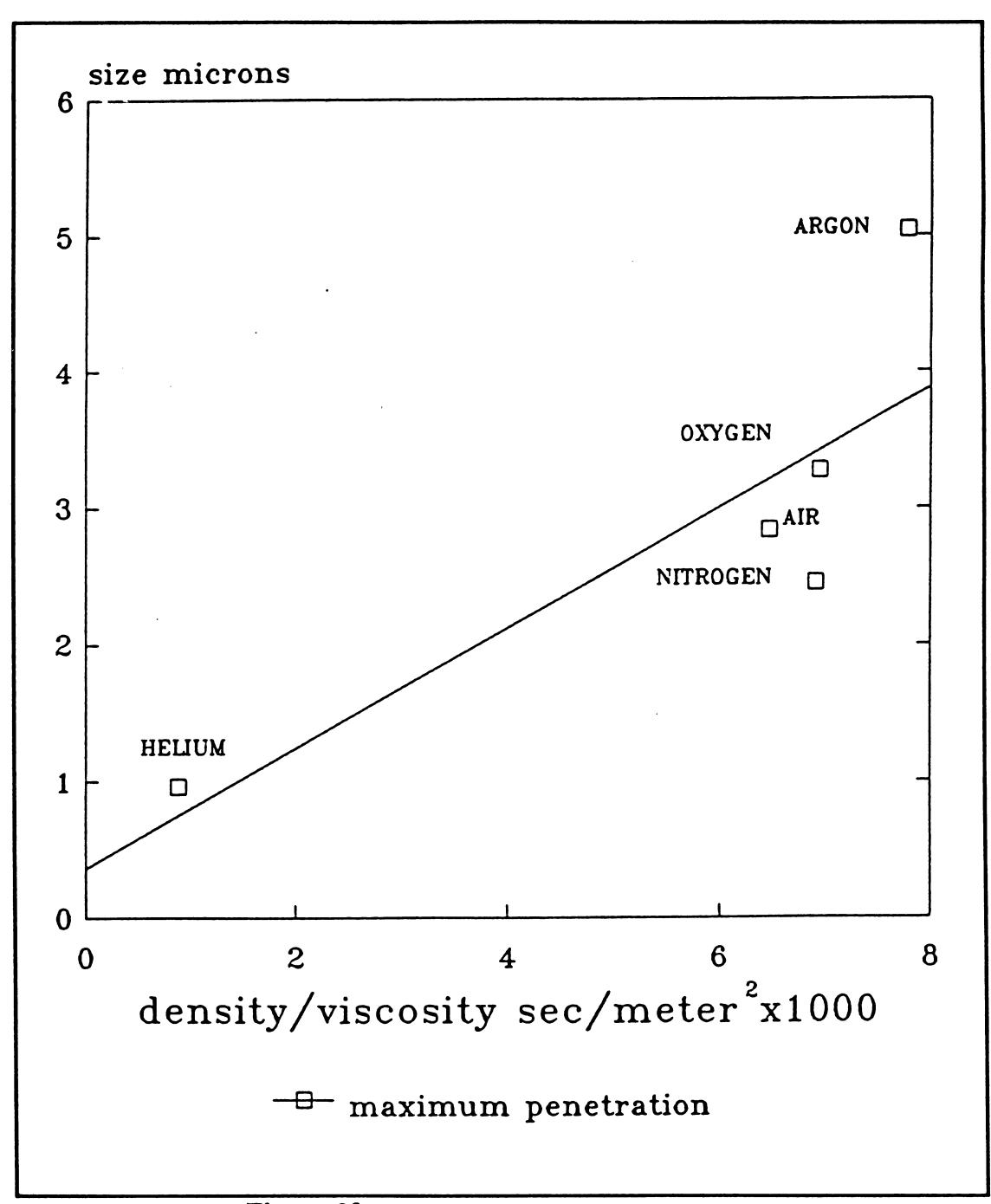


Figure 30. Maximum Penetrating Size for the 5 micron Membrane with Different Carrier Gases.

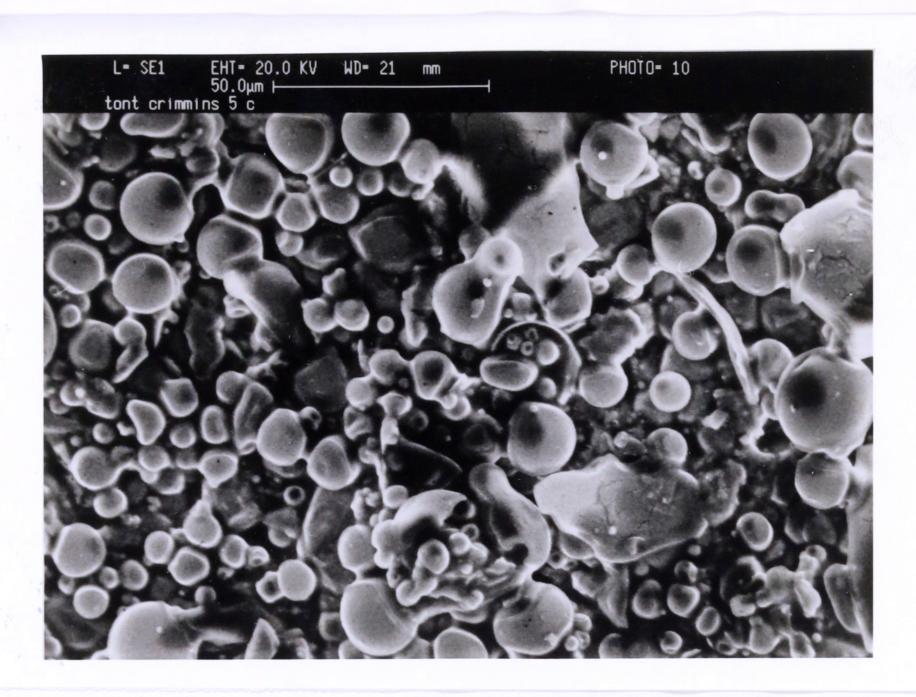


Plate 3. Electron Micrograph of the 5 micron Membrane when Clean.

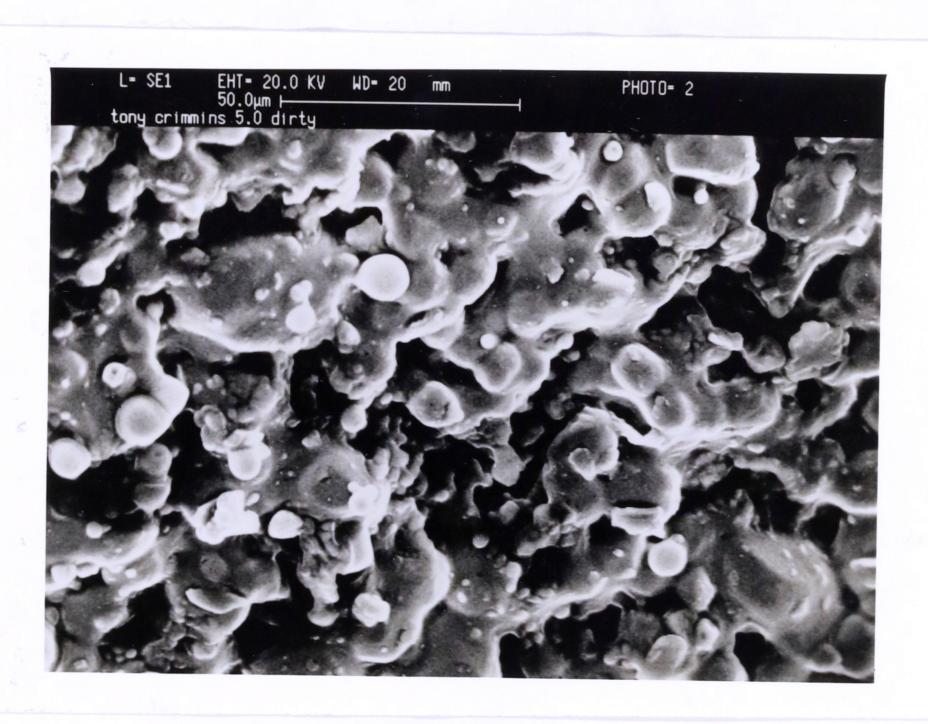


Plate 4. Electron Micrograph of the 5 micron Membrane which has been in Service for 10 Minutes.

# 4.5 CONCLUSION

The experimental program suggests that the Alcoa 5.0 micron pore size ceramic membrane is capable of removing the particulates present in hot and dusty gas streams to a high level of cleanliness. Whilst in service a cake of the retained dust builds up at the surface of the membrane and is responsible for an improvement in the efficiency of the filter over that of a clean filter.

The particle capture mechanism is primarily one of surface capture, with diffusion and inertia both significant in the retained cake. At elevated temperatures the diameter of the particles most likely to penetrate the filter will be lower than that at ambient temperature, resulting in higher overall collection efficiencies. Since doubling the incident velocity to the filter has a significant adverse effect on its performance, high efficiencies can only be maintained for hot gas cleaning environments if the membranes are configured so that diffusional capture within the membrane is maximised by maintaining a low face velocities to the membrane.

Gas backflushing for a relatively short period (30 seconds maximum) is sufficient to remove retained solids from the surface of the membrane.

The experimentally determined performance of the filter may be compared with that for a range of other industrial hot gas cleaning equipment. This is done in Table 18. The high temperature at which it can operate together with the extremely high efficiencies and moderate pressure drop makes the Alcoa ceramic membrane potentially attractive for hot gas cleaning applications. A prototype Alcoa gas filtration system could therefore consist of a group of Alcoa membranes, suitably housed to allow for regular backflushing to remove retained cake.

Table 18. Characteristics of High Temperature Gas Cleaners.

Туре	Temperature °C	Efficiency %	Velocity m/s	Pressure kPa
Cyclones <sup>23</sup>	800	91	16.3	Very low
Electrostatic Precipitators <sup>84</sup>	1000	99.06	0.8	Very Low
Ceramic crossflow <sup>85</sup> (150x150x50mm)	1000	99.9+	0.03	0.253
Ceramic Bag <sup>86</sup> (dia10.8cmx1.5m)	600	99.97	0.03	0.253
Ceramic Candle <sup>86</sup> (dia 60x1000mm)	1000	99+	0.17	10.13
Alcoa Ceramic Membrane (dia 11 x 750mm)	1000	99.98	0.07	10.6

# **5.0 CONCLUSIONS**

The work described in this thesis is an assessment of the Alcoa Ceramic Membrane for gas filtration. It was assumed that the membrane could offer a technology that would be beneficial to the users of gas filters, particularly as a gas filter for clean rooms and high temperature environments. The ceramic membrane could improve filtration in these two applications by achievement of high efficiencies due to the small rated nominal pore sizes and a longer filter life as the membrane could be regenerated by backflushing. Furthermore, the ability to withstand harsh environments due to its material of construction, Alumina, makes the Alcoa ceramic membrane suitable for hot gas cleaning.

Four ceramic membranes of pore sizes 5.0, 0.2, 0.035 and 0.004 micron were evaluated for clean room application by three tests; a Pressure Drop test, a Mass Efficiency test, and a Grade Efficiency test. The results from the Pressure Drop test showed that all of the ceramic membranes had a substantially higher pressure drop than HEPA filters which are currently employed in clean rooms. That is, the operating cost of the membranes would considerably higher than that of the HEPA filters currently used. The membranes had a high pressure drop due to their high tortuosity, created by the plate shape structure of the Alumina crystals.

The mass efficiency of the ceramic membranes, determined by a modified British Standard Sodium Chloride Mass Efficiency test, were of comparable magnitude to HEPA filters. For example, the mass efficiencies of the membranes ranged from 99.57% for the 5.0 micron membrane to 99.999% for the 0.004 micron membrane. Generally, although the mass efficiencies of the membranes were high, this asset did not outweigh the disadvantage of excessive pressure drops.

It was therefore concluded that employment of the membrane as a clean room filter would be uneconomical due to its high operating costs. However, the membrane could potentially be used in small applications in which large air flow rates are not required.

The 5.0 micron ceramic membrane was assessed for high temperature gas cleaning by examining the filtration efficiency, as well as its ability to be regenerated, and the effect that the high temperature gas filtration environment would have on the physical filtration characteristics of the membrane. It was found that the membrane could be regenerated by backflushing with clean air at high pressures (500 kPa) for a short period of time (30 seconds). This ease of cleaning suggests that the dominant mode of dust capture is on the surface of the membrane. A cake is first formed on the membrane surface, and this cake acts as the primary filter. If the membrane functioned as a depth filter the cleaning operation would not be so effective in restoring the membrane to its original condition.

The effect of the presence of a cake forming on the surface of the membrane was found to increase the overall efficiency of the membrane at the cost of a higher pressure drop. The increase in the total efficiency of the membrane when a cake has formed is due to the increase in the thickness of the filter, a decrease in the average pore size of the membrane, and an increase in particle retention due to the greater cohesion force between the cake and the challenging particles.

It was found that diffusion was the dominant mechanism for particle capture on the membrane surface. Thus, increasing the gas velocity decreased the overall capture efficiency, and increased the particle size range that is most likely to penetrate the filter. This is due to the increase in the shear force of the carrier gas and the fact that depositing particles are preferentially collected on particles that have previously deposited, forming dendrites. These dendrites protrude into the flowing gas stream and are effected by the shear force of the carrier gas. With the increase in the velocity of the carrier gas, the shear force acts on a larger area of the protruding dendrite, causing larger branches to shear or break from the dendrite. Thus increasing the particle size of maximum penetration.

At high temperatures the viscosity of air increases and its density decreases. For example, the density/viscosity ratio for air at 20°C and 101 kPa is 6300 sec/m² while for air at 800°C it is 7640 sec/m². There is an effect of changing the viscosity and

density of the carrier gas (as would be experienced in a high temperature environment) on the selectivity of the 5.0 micron membrane. The decrease in the density/viscosity ratio of the carrier gas as would be expected at high temperatures was found to decrease the particle size range in which the membrane is least efficient. This decrease in the maximum penetrating particle size is due to the increase in the diffusional process of particle displacement within the membrane matrix. The size range of minimum efficiency between the minimum and maximum penetrating particle size was found to decrease with increasing density/viscosity ratio. The effective efficiency of the membrane in a high temperature gas environment is thus expected to be higher than that at ambient conditions.

It was concluded that the Alcoa ceramic membranes are potentially suitable for hot gas cleaning due to their extremely high efficiencies, modest pressure drop, and ability to withstand a high temperature environment. It is recommended that the Alcoa Ceramic Membrane be further tested for high temperature gas cleaning. This should be performed on an array of membranes of larger pore size, suitably housed, at temperatures reflecting those typical in high temperature gas cleaning applications. These tests would investigate the effect that the harsh environment has on the operation of the ceramic membrane, and include an examination of the membranes structure after prolonged testing.

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# APPENDIX A

1. Calibration Charts for Rotameter 1 (Elliott 1100) of the Following Gases:

Helium

Argon

Oxygen

Nitrogen

Air

- 2. Calibration Chart for Rotameter 2 for air (Elliott 1100)
  - 3. Calibration Chart for air Rotameter (Elliott 2000)
    - 4. Calibration Chart for Conductivity Meter
    - 5. Calibration Chart for Light Spectrometer

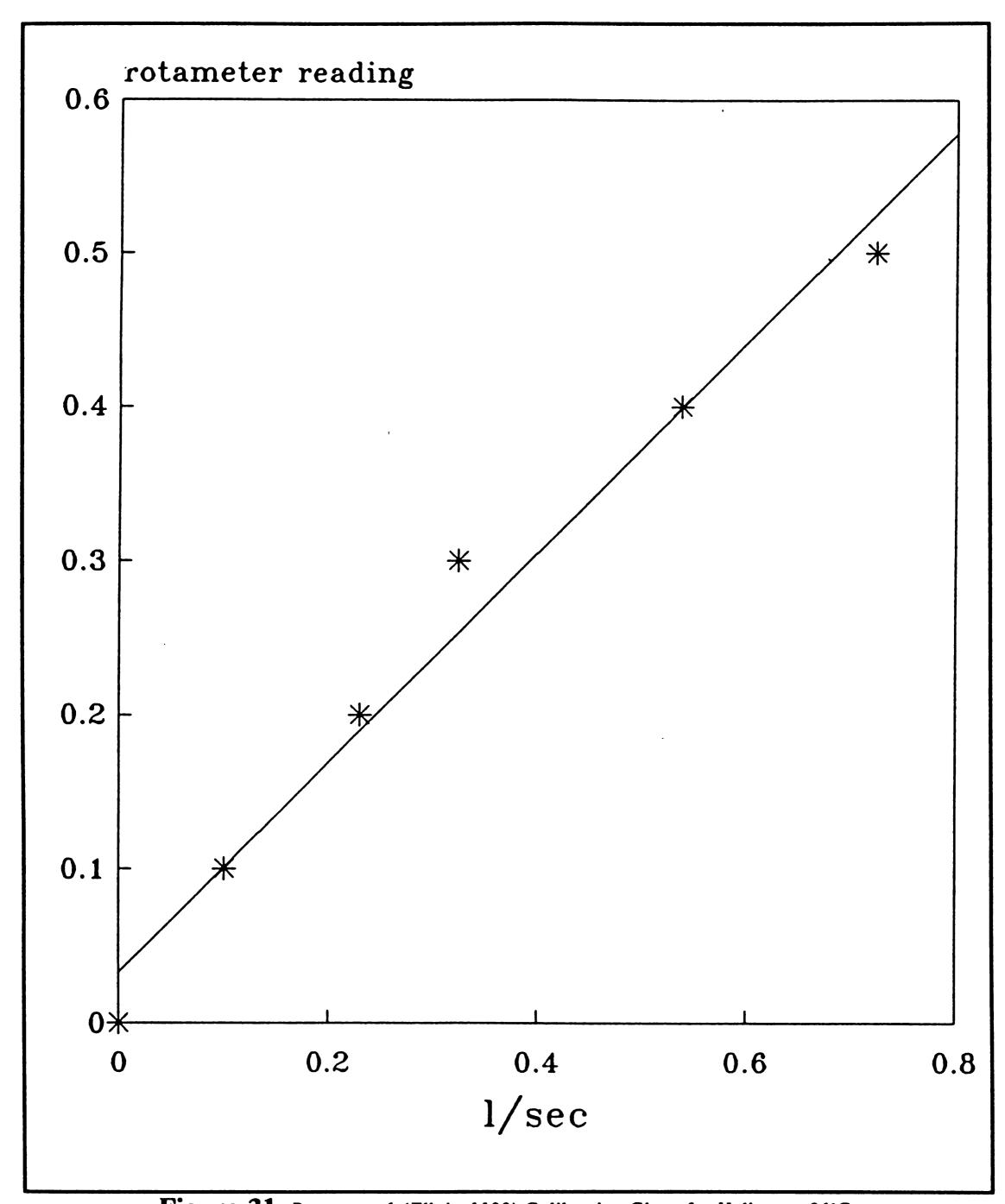


Figure 31. Rotameter 1 (Elloitt 1100) Calibration Chart for Helium at 21°C.

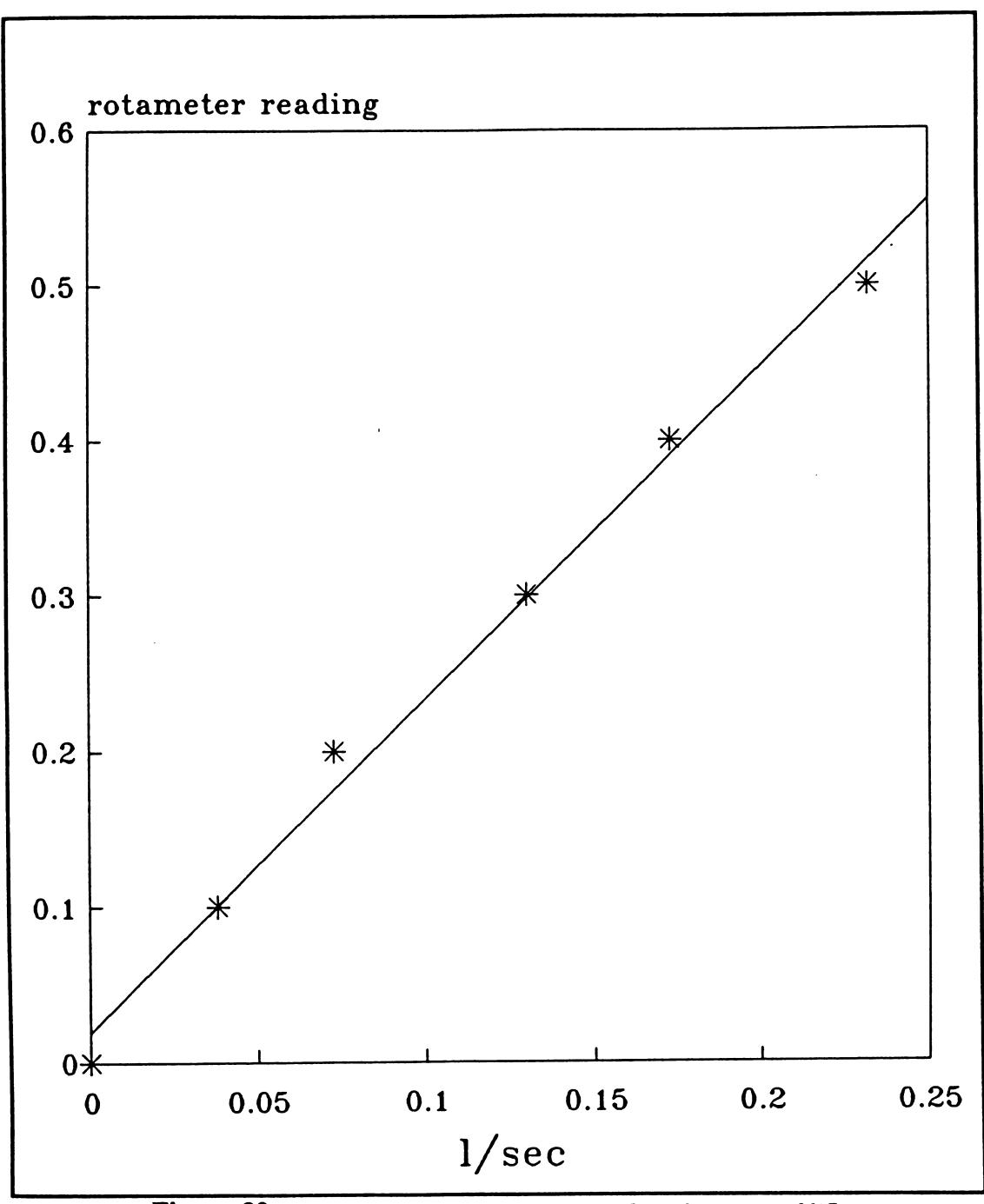


Figure 32. Rotameter 1 (Elliott 1100) Calibration Chart for Argon at 21°C.

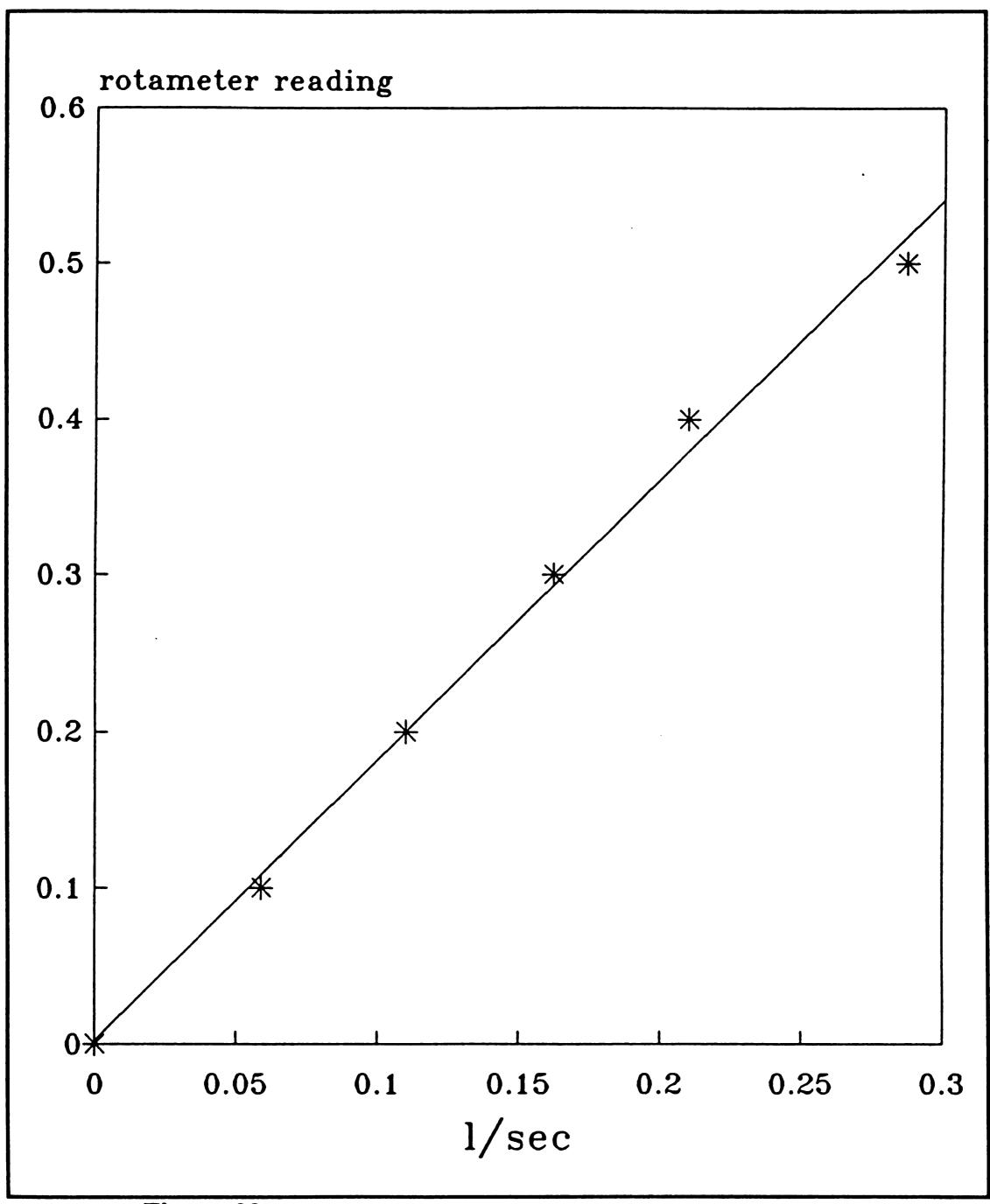


Figure 33. Rotameter 1 (Elliott 1100) Calibration Chart for Oxygen at 21°C.

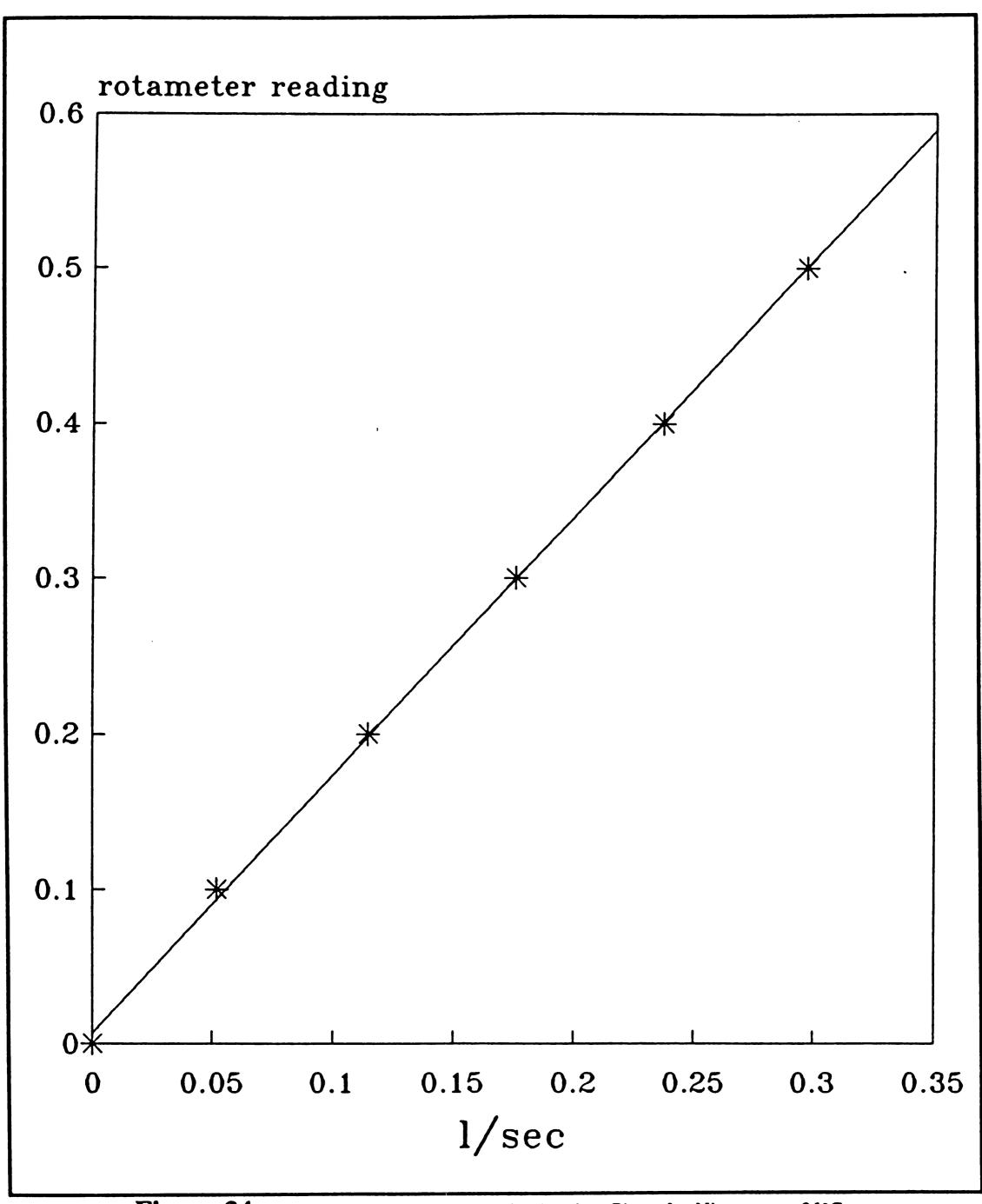


Figure 34. Rotameter 1 (Elliott 1100) Calibration Chart for Nitrogen at 21°C.

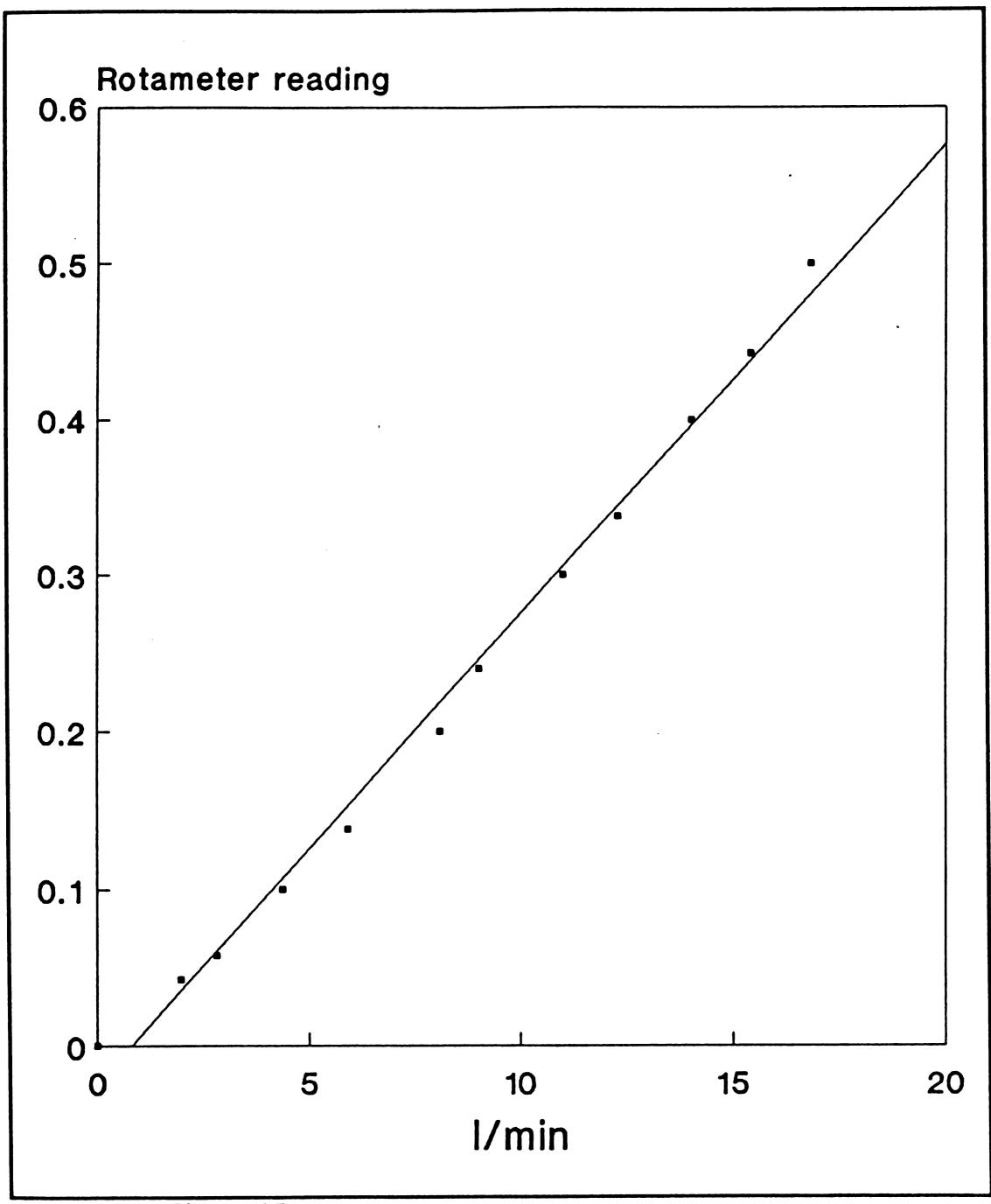


Figure 35. Rotameter 1 (Elliot 1100) Calibration Chart for Air at 21°C.

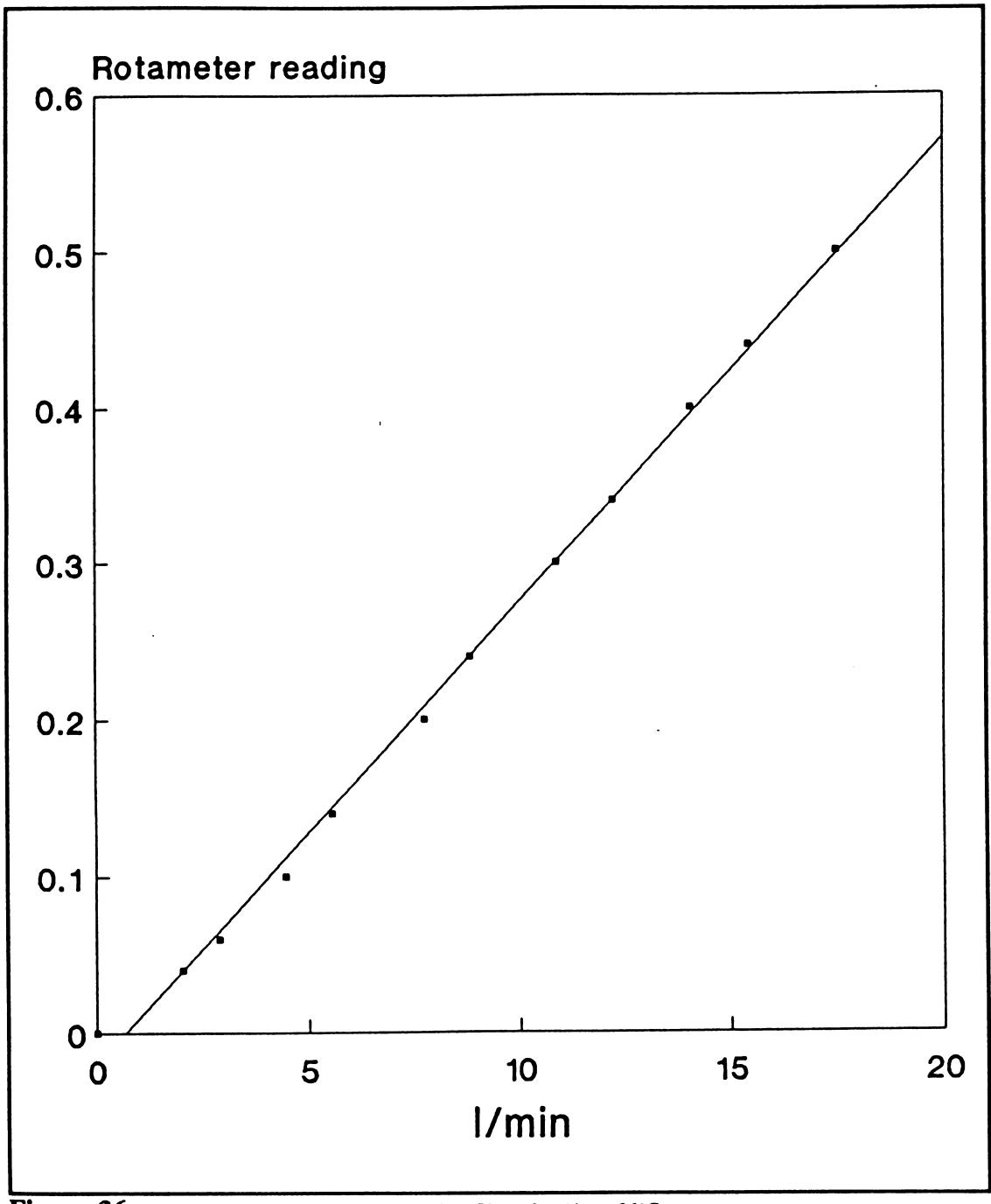


Figure 36. Rotameter 2 (Elliot 1100) Calibration Chart for Air at 21°C.

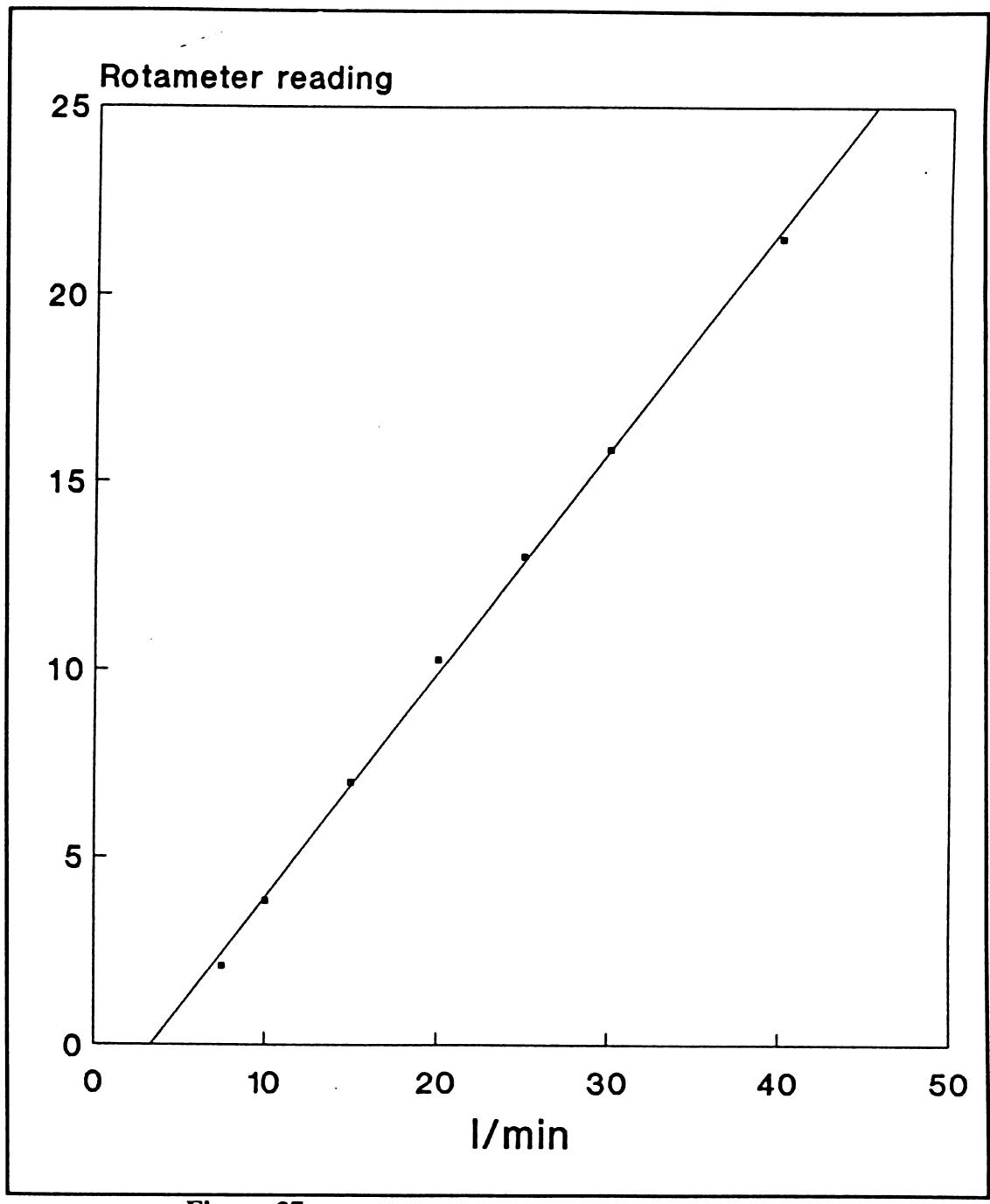


Figure 37. Air Rotameter (Elliott 2000) Calibration Chart at 21°C.

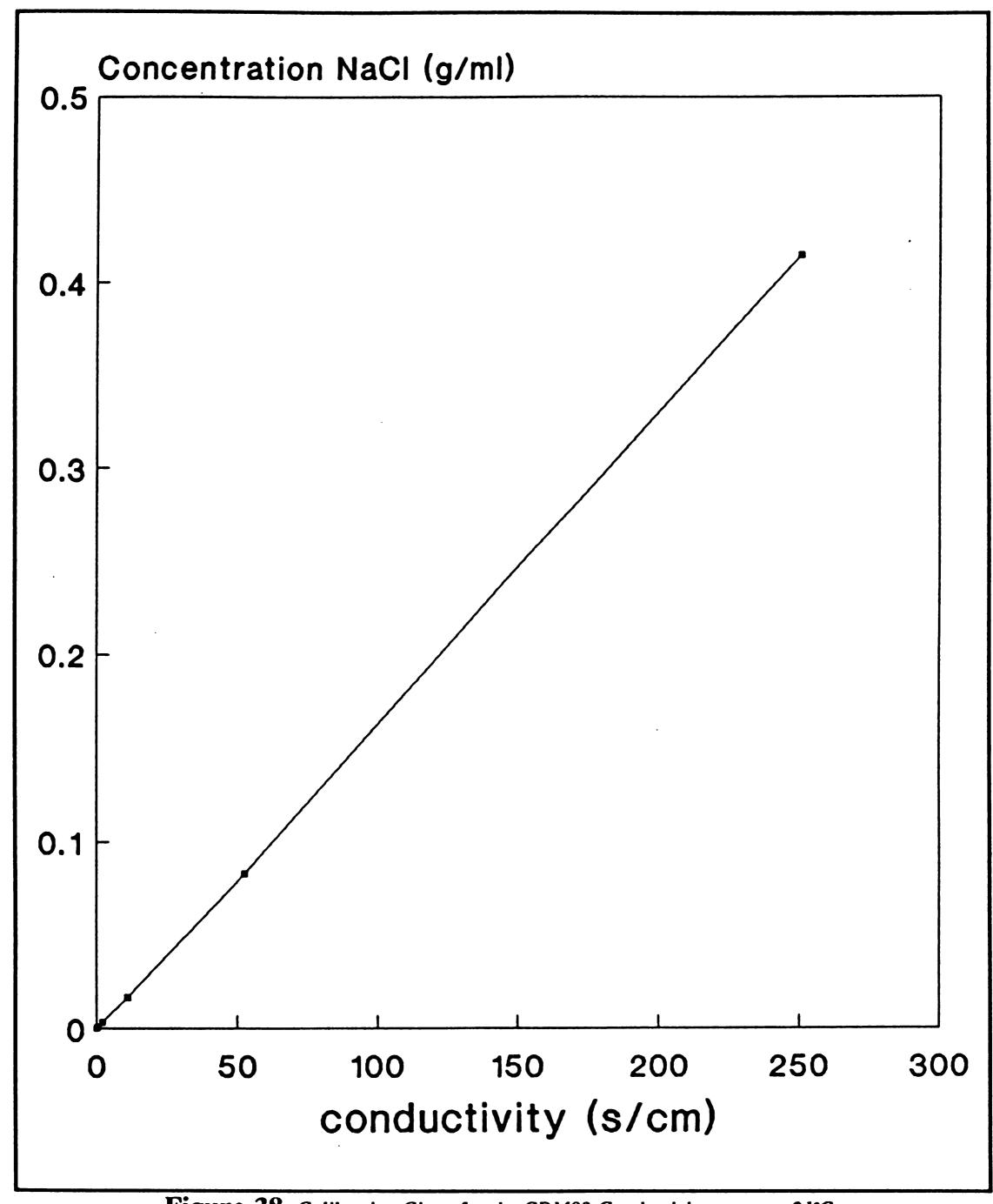


Figure 38. Calibration Chart for the CDM83 Conductivity meter at 21°C.

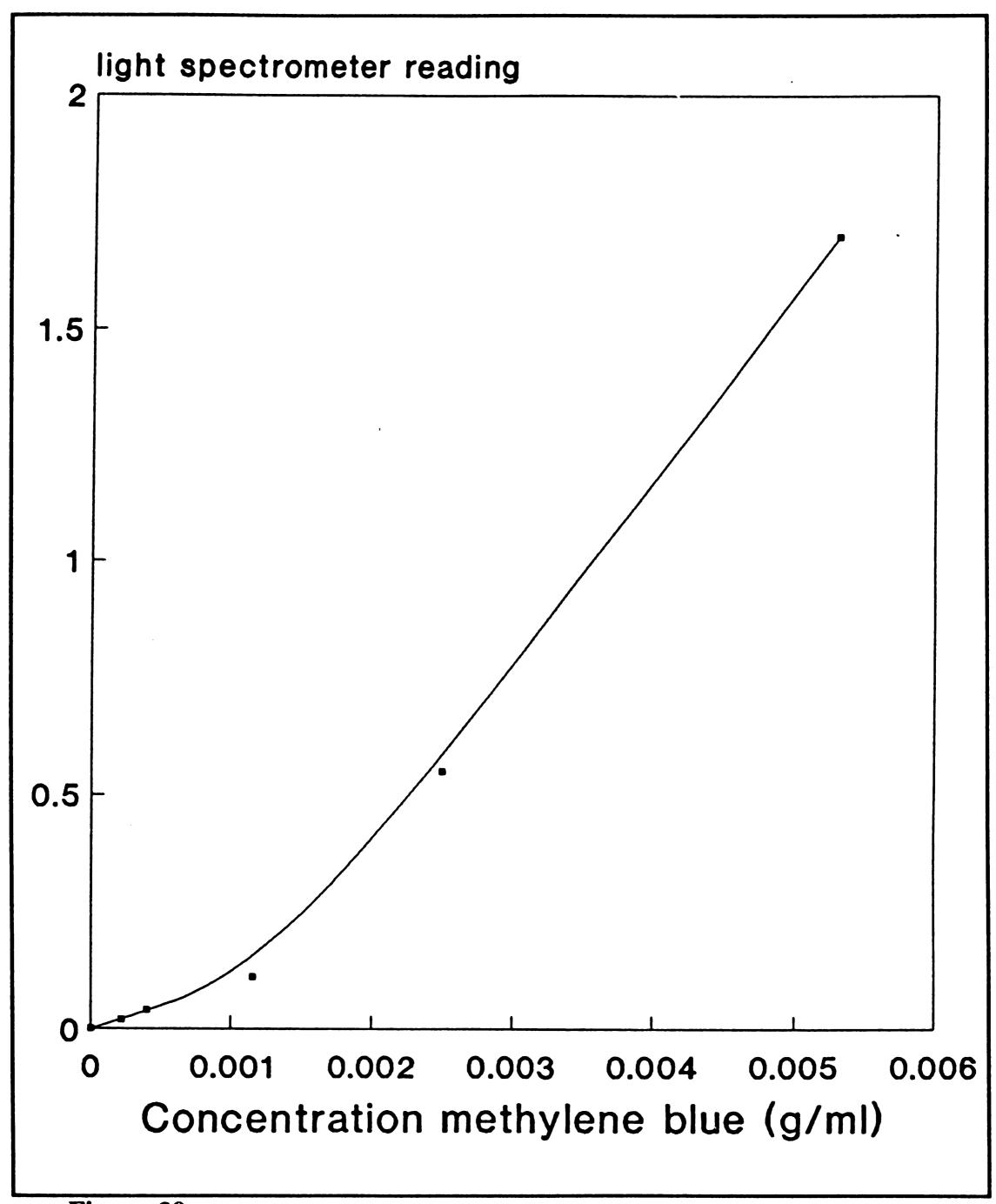


Figure 39. Calibration Chart for the PYE Unicam SP6-550 Uv/Vis Spectrophotometer at 21°C.

# APPENDIX B

Sample Calculation for the Sodium Chloride Mass Efficiency.

# Sample Calculation For Sodium Chloride Mass Efficiency Test

# Initial conductivity reading from:

Water colum	nn 1	Water Column 2		
(challenging	membrane)	(Penetrating membrane)		
4.25145	(1)	4.25153		
	Respective NaCl concentra	tion using conductivity		
	calibration graph:			
0.00703968	(2)	0.00703982		
	Final conductivity reading:			
4.49566	(3)	4.25260		
	Respective NaCl concentra	ting using conductivity		
	calibration graph:			
0.00744407	(4)	0.00704160		
	Volume of ultrapure water	•		
502 mls	(5)	490 mls		
	Mass of sodium Chloride			
Initial	$\{ (5) \times (2) \}$	Initial		
3.533919	(6)	3.449512		
Final	$\{ (5) \times (4) \}$	Final		
3.736923	<b>(7)</b>	3.450383		
Net	{ (7) - (6) }	Net		
0.203004	(8)	0.000872		

Mass efficiency =  $\frac{mass \ of \ particles \ challenging-mass \ of \ Particles \ penetrating}{the \ mass \ of \ particles \ challenging \ the \ filter}$ (13)

$$\therefore mass \ efficiency - \frac{0.203004 - 0.000872}{0.203004}$$
 (14)

= 95.5705%

# APPENDIX C

Raw Data from the APS for the Grade efficiency Test and the Effect of Cake formation.

Coded Experimental Data:

The Experimental Code for "Cake Formation" on the Membrane is:

Out5 9

The Experimental Codes for the Clean Membrane are:

Out5 7

Out5 10



FILE NAME: OUT5 9.002 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

#### CUMULATIVE % CONCENTRATIONS NUMBER SURFACE MASS NUMBER SURFACE MASS CHNL DIA < .486 7.20E-04 4.56E-04 3.43E-08 3.61E-01 1.63E-02 1.45E-03</p> 8.40E-04 6.72E-04 5.65E-08 7.82E-01 4.02E-02 3.84E-03 1.08E-03 9.97E-04 9.01E-08 1.32E+00 7.58E-02 7.65E-03 2.16E-03 2.30E-03 2.23E-07 2.41E+00 1.58E-01 1.71E-02 2.28E-03 2.80E-03 2.92E-07 3.55E+00 2.57E-01 2.94E-02 .673 4.68E-03 6.66E-03 7.47E-07 5.90E+00 4.95E-01 6.10E-02 5.88E-03 9.67E-03 1.17E-06 8.84E+00 8.40E-01 1.10E-01 8.76E-03 1.66E-02 2.16E-06 1.32E+01 1.43E+00 2.01E-01 .777 7 9.96E-03 2.18E-02 3.04E-06 1.82E+01 2.21E+00 3.30E-01 8 .835 1.12E-02 2.83E-02 4.23E-06 2.38E+01 3.22E+00 5.09E-01 9 .897 9.00E-03 2.63E-02 4.23E-06 2.83E+01 4.16E+00 6.88E-01 10 .964 9.72E-03 3.28E-02 5.67E-06 3.32E+01 5.33E+00 9.28E-01 11 1.03 9.72E-03 3.79E-02 7.04E-06 3.81E+01 6.68E+00 1.23E+00 12 1.11 8.28E-03 3.73E-02 7.44E-06 4.22E+01 8.01E+00 1.54E+00 13 1.19 9.72E-03 5.06E-02 1.08E-05 4.71E+01 9.81E+00 2.00E+00 14 1.28 7.32E-03 4.40E-02 1.01E-05 5.08E+01 1.14E+01 2.43E+00 15 1.38 1.08E-02 7.49E-02 1.85E-05 5.62E+01 1.41E+01 3.21E+00 16 1.48 1.07E-02 8.55E-02 2.28E-05 6.16E+01 1.71E+01 4.17E+00 17 1.59 1.06E-02 9.76E-02 2.79E-05 6.68E+01 2.06E+01 5.35E+00 18 1.71 1.10E-02 1.18E-01 3.62E-05 7.24E+01 2.48E+01 6.89E+00 19 1.84 9.12E-03 1.12E-01 3.71E-05 7.70E+01 2.88E+01 8.46E+00 20 1.98 7.20E-03 1.03E-01 3.64E-05 8.06E+01 3.25E+01 9.99E-00 21 2.12 8.52E-03 1.40E-01 5.34E-05 8.48E+01 3.74E+01 1.23E+01 22 2.28 5.64E-03 1.07E-01 4.38E-05 8.77E+01 4.13E+01 1.41E+01 23 2.45 4.44E-03 9.73E-02 4.28E-05 8.99E+01 4.47E+01 1.59E+01 4.08E-03 1.03E-01 4.89E-05 9.19E+01 4.84E+01 1.80E+01 2.83 3.48E-03 1.02E-01 5.17E-05 9.37E+01 5.20E+01 2.02E+01 26 3.05 2.64E-03 8.91E-02 4.87E-05 9.50E+01 5.52E+01 2.22E+01 27 2.40E-03 9.36E-02 5.49E-05 9.62E+01 5.86E+01 2.46E+01 28 3.52 1.20E-03 5.40E-02 3.41E-05 9.68E+01 6.05E+01 2.60E+01 29 3.78 6.00E-04 3.12E-02 2.11E-05 9.71E+01 6.16E+01 2.69E+01 30 4.06 6.00E-04 3.60E-02 2.62E-05 9.74E+01 6.29E+01 2.80E+01 31 4.37 8.40E-04 5.82E-02 4.56E-05 9.78E+01 6.50E+01 2.99E+01 32 4.69 6.00E-04 4.80E-02 4.04E-05 9.81E+01 6.67E+01 3.16E+01 33 5.04 6.00E-04 5.55E-02 5.01E-05 9.84E+01 6.87E+01 3.38E+01 34 5.42 1.20E-04 1.28E-02 1.24E-05 9.85E+01 6.91E+01 3.43E+01 35 5.82 6.00E-04 7.40E-02 7.72E-05 9.88E+01 7.17E+01 3.76E+01 36 6.26 3.60E-04 5.13E-02 5.75E-05 9.90E+01 7.36E+01 4.00E+01 37 6.73 3.60E-04 5.92E-02 7.13E-05 9.92E+01 7.57E+01 4.30E+01 1.20E-04 2.28E-02 2.95E-05 9.92E+01 7.65E+01 4.43E+(1) 39 7.77 1.20E-04 2.63E-02 3.66E-05 9.93E+01 7.74E+01 4.58E+01 40 8.35 0.00E+00 0.00E+00 0.00E+00 9.93E+01 7.74E+01 4.58E+01 41 8.97 2.40E-04 7.02E-02 1.13E-04 9.94E+01 7.99E+01 5.06E+01 42 9.64 2.40E-04 8.10E-02 1.40E-04 9.95E+01 8.28E+01 5.65E+01 43 10.3 2.40E-04 9.36E-02 1.74E-04 9.96E+01 8.62E+01 6.38E+01 44 11.1 2.40E-04 1.08E-01 2.16E-04 9.98E+01 9.00E+01 7.30E+01 2.40E-04 1.25E-01 2.68E-04 9.99E+01 9.45E+01 8.43E+01 1.20E-04 7.20E-02 1.66E-04 9.99E+01 9.70E+01 9.13E+01 48 14.8 1.20E-04 8.32E-02 2.06E-04 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 TOTALS: 1.99E-01 2.80E+00 2.36E-03

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 9.003 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		CONCI	ENTRATIONS		CUM	ULATIVE %	
CHNL	DTA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< <	.486	2.40E-04	1.34E-04	9.48E-09		7.63E-03	4.09E-04
1	.504	1.20E-04	9.60E-05	8.08E-09	6.62E-01	1.31E-02	7.57E-04
2	.542	1.20E-04	1.11E-04	1.00E-08	8.83E-01	1.94E-02	1.19E-03
3	.581	1.20E-04	1.28E-04	1.24E-08	1.10E+00	2.66E-02	1.72E-03
4	.625	8.40E-04	1.03E-03	1.07E-07	2.65E+00	8.51E-02	6.36E-03
5	.673	1.68E-03	2.39E-03	2.68E-07	5.74E+00	2.21E-01	1.79E-02
6	.723	2.40E-03	3.95E-03	4.76E-07	1.02E+01	4.45E-01	
7	.777	3.00E-03	5.70E-03	7.38E-07	1.57E+01	7.68E-01	7.03E-02 °
8	.835	3.00E-03	6.58E-03	9.16E-07	2.12E+01	1.14E+00	1.10E-01
9	.897	2.64E-03	6.69E-03	1.00E-06	2.60E+01	1.52E+00	1.53E-01
10	.964	2.64E-03	7.72E-03	1.24E-06	3.09E+01	1.96E+00	2.07E-01
11	1.03	3.48E-03	1.18E-02	2.03E-06	3.73E+01	2.63E+00	2.94E-01
12	1.11	3.12E-03	1.22E-02	2.26E-06	4.30E+01	3.32E+00	3.92E-01
13	1.19	2.04E-03	9.19E-03	1.83E-06	4.68E+01	3.84E+00	4.71E-01
14	1.28	2.28E-03	1.19E-02	2.54E-06	5.10E+01	4.51E+00	
15	1.38	1.56E-03	9.37E-03	2.16E-06	5.39E+01	5.04E+00	
16	1.48	1.68E-03	1.16E-02	2.88E-06	5.70E+01	5.70E+00	
17	1.59	2.04E-03	1.63E-02	4.35E-06	6.07E+01	6.63E+00	9.86E-01
18	1.71	1.32E-03	1.22E-02	3.49E-06	6.31E+01	7.32E+00	1.14E+00
19	1.84	1.56E-03	1.67E-02	5.12E-06	6.60E+01	8.27E+00	
20	1.98	1.08E-03	1.33E-02	4.40E-06	6.80E+01	9.02E+00	1.55E+00
21	2.12	1.32E-03	1.88E-02	6.67E - 06	7.04E+01	1.01E+01	1.83E+00
22	2.28	1.68E-03	2.76E-02	1.05E-05	7.35E+01	1.17E+01	2.29E+00
23	2.45	1.68E-03	3.19E-02	1.31E-05	7.66E+01	1.35E+01	2.85E+00
24	2.64	1.68E-03	3.68E-02	1.62E-05	7.97E+01	1.56E+01	$3.55E \div 00$
25	2.83	8.40E-04	2.13E-02	1.01E-05	8.12E+01	1.68E+01	3.99E+00
26	3.05	9.60E-04	2.81E-02	1.43E-05	8.30E+01	1.84E+01	4.60E+00
27	3.27	7.20E-04	2.43E-02	1.33E-05	8.43E+01	1.97E+01	5.17E+00
28	3.52	6.00E-04	2.34E-02	1.37E-05	8.54E+01	2.11E+01	5.77E+00
29	3.78	9.60E-04	4.32E-02	2.73E-05	8.72E+01	2.35E+01	6.94E+00
30	4.06	4.80E-04	2.50E-02	1.69E-05	8.81E+01	2.49E+01	7.67E+00
31	4.37	4:80E-04	2.88E-02	2.10E-05	8.90E+01	2.66E+01	8.58E+00
32	4.69	0.00E+00	0.00E+00	0.00E+00	8.90E+01	2.66E+01	8.58E+00
33	5.04	1.44E-03	1.15E-01	9.70E-05	9.16E+01	3.31E+01	1.28E+01
34	5.42	2.40E-04	2.22E-02	2.01E-05	9.21E+01	3.44E+01	1.36E+01
35	5.82	2.40E-04	2.56E-02	2.49E-05	9.25E+01	3.58E+01	1.47E+01
36	6.26	8.40E-04	1.04E-01	1.08E-04	9.40E+01	4.17E+01	1.94E+01
37	6.73	2.40E-04	3.42E-02	3.83E-05	9.45E+01	4.36E+01	2.10E+01
38	7.23	3.60E-04	5.92E-02	7.13E-05	9.51E+01	4.70E+01	2.41E+01
39	7.77	4.80E-04	9.11E-02	1.18E-04	9.60E+01	5.22E+01	2.92E+01
40	8.35	2.40E-04	5.26E-02	7.33E-05	9.65E+01	5.52E+01	3.24E+01
41	8.97	4.80E-04	1.22E-01	1.82E-04	9.74E+01	6.21E+01	4.02E+01
42	9.64	1.20E-04	3.51E-02	5.64E-05	9.76E+01	6.40E+01	4.26E+01
43	10.3	2.40E-04	8.10E-02	1.40E-04	9.80E+01	6.86E+01	4.87E+01
44	11.1	1.20E-04	4.68E-02	8.69E-05	9.82E+01	7.13E+01	5.24E+01
45	11.9	4.80E-04	2.16E-01	4.31E-04	9.91E+01	8.36E+01	7.10E+01
46	12.8	1.20E-04	6.24E-02	1.34E-04	9.93E+01	8.71E+01	7.68E+01
47	13.8	2.40E-04	1.44E-01	3.32E-04	9.98E+01	9.53E+01	9.11E+01
48	14.8	1.20E-04	8.32E-02	2.06E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	5.44E-02	1.76E+00 2.	32E-03			

FILE NAME: OUT5 9.004 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		20110					
<b></b>	D.T.A		ENTRATIONS			ULATIVE %	
	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<b>&lt;</b>	.486	7.20E-04	4.56E-04	3.43E-08	4.15E-01	1.28E-02	9.67E-04
1	.504	6.00E-04	4.80E-04	4.04E-08	7.61E-01	2.63E-02	2.11E-03
2	.542	8.40E-04	7.76E-04	7.01E-08	1.24E+00	4.82E-02	4.09E-03
3	.581	8.40E-04	8.93E-04	8.66E-08	1.73E+00	7.33E-02	6.53E-03
4	.625	1.80E-03	2.21E-03	2.30E-07	2.77E+00	1.35E-01	1.30E-02
5 6	.673	2.04E-03	2.90E-03	3.26E-07	3.94E+00	2.17E-01	2.22E-02
7	.723	3.60E-03	5.92E-03	7.14E-07	6.02E+00	3.84E-01	4.24E-02
8	.777 .835	4.80E-03	9.12E-03	1.18E-06	8.78E+00	6.40E-01	7.57E-02
9	.897	5.52E-03	1.21E-02	1.69E-06	1.20E+01	9.81E-01	1.23E-01
	.964	8.04E-03	2.04E-02	3.05E-06	1.66E+01	1.55E+00	2.09E-01
10		7.56E-03	2.21E-02	3.56E-06	2.10E+01	2.18E+00	3.10E-01
11	1.03	6.72E-03	2.27E-02	3.92E-06	2.48E+01	2.82E+00	4.20E-01
12	1.11	7.20E-03	2.81E-02	5.22E-06	2.90E+01	3.61E+00	5.68E-01
13	1.19	6.60E-03	2.97E-02	5.93E-06	3.28E+01	4.44E+00	7.35E-01
14 15	1.28	9.60E-03 6.96E-03	4.99E-02	1.07E-05	3.83E+01	5.85E+00	1.04E+00
16	1.38		4.18E-02	9.63E-06	4.23E+01	7.02E+00	1.31E+00
17	1.48 1.59	7.80E-03	5.41E-02	1.34E-05	4.68E+01	8.55E+00	1.69E+00
18	1.39	1.01E-02 8.76E-03	8.07E-02 8.10E-02	2.15E-05	5.26E+01	1.08E+01	2.29E+00
19	1.84	9.00E-03	9.61E-02	2.32E-05	5.77E+01	1.31E+01	2.95E+00
20	1.98	7.56E-03	9.32E-02	2.95E-05	6.29E+01	1.58E+01	3.78E+00
21	2.12	8.04E-03	1.14E-01	3.08E-05 4.06E-05	6.72E+01	1.84E+01	4.65E+00
22	2.28	8.52E-03	1.40E-01	5.34E-05	7.19E+01 7.68E+01	2.16E+01	5.80E+00
23	2.45	6.12E-03	1.16E-01	4.76E-05		2.56E+01	7.30E+00
24	2.64	6.00E-03	1.32E-01	5.79E-05	8.03E+01	2.89E+01	8.65E+00
25	2.83	5.28E-03	1.34E-01	6.32E-05	8.37E+01	3.26E+01	1.03E÷01
26	3.05	2.64E-03	7.72E-02	3.92E-05	8.68E+01	3.63E+01	1.21E+01
27	3.27	3.48E-03	1.17E-01	6.42E-05	8.83E+01 9.03E+01	3.85E+01 4.18E+01	1.32E+01
28	3.52	2.64E-03	· •	6.04E-05	9.18E+01	4.47E+01	1.50E+01
29	3.78	2.52E-03	1.13E-01	7.16E-05	9.33E+01		1.67E+01
30	4.06	2.04E-03	1.06E-01	7.19E-05	9.45E+01	4.79E+01 5.09E+01	1.87E+01
31	4.37	1.08E-03	6.48E-02	4.72E-05	9.51E+01	5.27E+01	2.07E+01 2.21E+01
32	4.69	1.32E-03	9.15E-02	7.17E-05	9.59E+01	5.53E+01	2.21E+01 2.41E+01
33	5.04	1.08E-03	8.65E-02	7.27E-05	9.65E+01	5.77E+01	2.41E+01 2.61E+01
34	5.42	7.20E-04	6.66E-02	6.02E-05	9.69E+01	5.96E+01	2.78E+01
35	5.82	1.08E-03	1.15E-01	1.12E-04	9.75E+01	6.28E+01	3.10E+01
36	6.26	3.60E-04	4.44E-02	4.63E-05	9.77E+01	6.41E+01	3.10E+01 3.23E+01
37	6.73	4.80E-04	6.83E-02	7.67E-05	9.80E+01	6.60E+01	3.45E+01
38	7.23	4.80E-04	7.89E-02	9.51E-05	9.83E+01	6.82E+01	3.72E+01
39	7.77	6.00E-04	1.14E-01	1.48E-04	9.86E+01	7.14E+01	4.13E+01
40	8.35	3.60E-04	7.89E-02	1.10E-04	9.88E+01	7.36E+01	4.44E+01
41	8.97	3.60E-04	9.11E-02	1.36E-04	9.90E+01	7.62E+01	4.83E+01
42	9.64	2.40E-04	7.02E-02	1.13E-04	9.92E+01	7.82E+01	5.15E+01
43	10.3	0.00E+00	0.00E+00	0.00E+00	9.92E+01	7.82E+01	5.15E+01
44	11.1	3.60E-04	1.40E-01	2.61E-04	9.94E+01	8.21E+01	5.88E+01
45	11.9	1.20E-04	5.40E-02	1.08E-04	9.94E+01	8.37E+01	6.19E+01
46	12.8	3.60E-04	1.87E-01	4.01E-04	9.97E+01	8.89E+01	7.32E+01
47	13.8	2.40E-04	1.44E-01	3.32E-04	9.98E+01	9.30E+01	8.26E+01
48	14.8	3.60E-04	2.50E-01	6.18E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	1.74E-01 3	.55E+00 3.		• •		· · · ·

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 9.005 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCE	NTRATIONS		CUMI	JLATIVE %	
CHNI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
CHNL	.486	2.40E-04	1.34E-04	9.48E-09	4.28E-01	6.97E-03	3.29E-04
<b>&lt;</b>	.504	0.00E+00	0.00E+00	0.00E+00	4.28E-01	6.97E-03	3.29E-04
1	.542	0.00E+00	0.00E+00	0.00E+00	4.28E-01	6.97E-03	3.29E-04
2 3	.542	2.40E-04	2.55E-04	2.47E-08	8.57E-01	2.02E-02	1.19E-03
	.625	1.20E-04	1.47E-04	1.53E-08	1.07E+00	2.78E-02	1.72E-03
4	.673	9.60E-04	1.37E-03	1.53E-07	2.78E+00	9.87E-02	7.04E-03
5		1.68E-03	2.76E-03	3.33E-07	5.78E+00	2.42E-01	1.86E-02
6 7	.723	2.04E-03	3.87E-03	5.02E-07	9.42E+00	4.43E-01	3.60E-02
	.777	2.88E-03	6.32E-03	8.79E-07	1.46E+01	7.70E-01	6.66E-02
8	.835	2.52E-03	6.38E-03	9.55E-07	1.91E+01	1.10E+00	9.97E-02
9	.897	1.92E-03	5.62E-03	9.03E-07	2.25E+01	1.39E+00	1.31E-01
10	. 964	1.92E-03	6.48E-03	1.12E-06	2.59E+01	1.73E+00	1.70E-01
11	1.03	3.24E-03	1.26E-02	2.35E-06	3.17E+01	2.38E+00	
12	1.11	1.92E-03	8.65E-03	1.73E-06	3.51E+01	2.83E+00	3.11E-01
13	1.19	1.92E-03	9.99E-03	2.14E-06	3.85E+01	3.35E+00	3.86E-01
14	1.28	2.52E-03	1.51E-02	3.49E-06	4.30E+01	4.14E+00	5.07E-01
15	1.38	2.16E-03	1.50E-02	3.71E-06	4.69E+01	4.91E+00	6.35E-01
16	1.48	2.76E-03	2.21E-02	5.88E-06	5.18E+01	6.06E+00	8.39E-01
17	1.59	3.96E-03	3.66E-02	1.05E-05	5.89E+01	7.96E+00	1.20E+00
18	1.71	2.28E-03	2.43E-02	7.48E-06	6.30E+01	9.22E+00	1.46E+00
19	1.84	2.76E-03	3.40E-02	1.12E-05	6.79E+01	1.10E+01	1.85E+00
20	2.12	2.52E-03	3.59E-02	1.27E-05	7.24E+01	1.28E+01	2.29E+00
21	2.12	1.80E-03	2.96E-02	1.13E-05	7.56E+01	1.44E+01	2.69E+00
22 23	2.45	9.60E-04	1.82E-02	7.46E-06	7.73E+01	1.53E+01	2.95E+00
23 24	2.64	1.56E-03	3.42E-02	1.51E-05		1.71E+01	3.47E+00
25	2.83	1.92E-03	4.86E-02	2.30E-05	8.35E+01	1.96E+01	4.27E+00
26	3.05	8.40E-04	2.46E-02	1.25E-05	8.50E+01	2.09E+01	4.70E+00
27	3.27	3.60E-04	1.22E-02	6.64E-06		2.15E+01	4.93E+00
28	3.52	1.56E-03	6.08E-02	3.57E-05	8.84E+01	2.47E+01	6.17E+00
29	3.78	7.20E-04	3.24E-02	2.05E-05	8.97E+01	2.64E+01	6.88E÷00
30	4.06	4.80E-04	2.50E-02	1.69E-05	9.06E+01	2.77E+01	7.47E+00
31	4.37	6.00E-04	3.60E-02	2.62E-05	9.16E+01	2.95E+01	8.38E+00
32	4.69	3.60E-04	2.50E-02	1.95E-05	9.23E+01	3.08E+01	9.06E+00
33	5.04	3.60E-04	2.88E-02	2.42E-05	9.29E+01	3.23E+01	9.90E+00
34	5.42	3.60E-04	3.33E-02	3.01E-05	9.36E+01	3.40E+01	1.09E+01
35	5.82	6.00E-04	6.40E-02	6.22E-05	9.46E+01	3.74E+01	1.31E+01
36	6.26	1.20E-04	1.48E-02	1.54E-05	.9.49E+01	3.81E+01	1.36E+01
37	6.73	2.40E-04	3.42E-02	3.83E-05	9.53E+01	3.99E+01	1.50E+01
38	7.23	4.80E-04	7.89E-02	9.51E-05	9.61E+01	4.40E+01	1.83E+01
39	7.77	0.00E+00	0.00E+00	0.00E+00	9.61E+01	4.40E+01	1.83E+01
40	8.35	1.20E-04	2.63E-02	3.66E-05	9.64E+01	4.54E+01	1.95E+01
41	8.97	0.00E+00	0.00E+00	0.00E+00	9.64E+01	4.54E+01	1.95E+01
42	9.64	3.60E-04	1.05E-01	1.69E-04	9.70E+01	5.08E+01	2.54E+01
43	10.3	1.20E-04	4.05E-02	7.00E-05	9.72E+01	5.29E+01	2.78E+01
44	11.1	0.00E+00	0.00E+00	0.00E+00	9.72E+01	5.29E+01	2.78E+01
45	11.9	3.60E-04	1.62E-01	3.23E-04	9.79E+01	6.13E+01	3.91E+01
46	12.8	2.40E-04	1.25E-01	2.68E-04	9.83E+01	6.78E+01	4.84E+01
47	13.8	4.80E-04	2.88E-01	6.64E-04	9.91E+01	8.27E+01	7.14E+01
48	14.8	4.80E-04	3.33E-01	8.24E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	5.60E-02	1.93E+00 2.	88E-03			

FILE NAME: OUT5 9.006 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCI	ENTRATIONS		CUMI	ULATIVE %	
CHNL	DTA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< <	.486	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ì	.504	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	.542	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	.581	2.40E-04	2.55E-04	2.47E-08	8.23E-01	2.02E-02	1.45E-03
	.625	1.20E-04	1.47E-04	1.53E-08	1.23E+00	3.19E-02	2.36E-03
4		4.80E-04	6.83E-04	7.66E-08	2.88E+00	8.60E-02	6.86E-03
5	.673	7.20E-04	1.18E-03	1.43E-07	5.35E+00	1.80E-01	1.53E-02
6 7	.723	8.40E-04	1.60E-03	2.07E-07	8.23E+00	3.06E-01	2.74E-02
	.777	9.60E-04	2.11E-03	2.93E-07	1.15E+01	4.73E-01	4.46E-02
8	.835	7.20E-04	1.82E-03	2.73E-07	1.40E+01	6.18E-01	6.07E-02
9	.897	4.80E-04	1.40E-03	2.26E-07	1.56E+01	7.29E-01	7.40E-02
10	.964	1.68E-03	5.67E-03	9.80E-07	2.14E+01	1.18E+00	1.32E-01
11	1.03		5.62E-03	1.04E-06	2.63E+01	1.62E+00	1.93E-01
12	1.11	1.44E-03	2.16E-03	4.31E-07	2.80E+01	1.80E+00	2.18E-01
13	1.19	4.80E-04		1.74E-06	3.33E+01	2.44E+00	3.21E-01
14	1.28	1.56E-03	8.11E-03		3.62E+01	2.44E+00	3.89E-01
15	1.38	8.40E-04	5.04E-03	1.16E-06		3.43E+00	4.98E-01
16	1.48	1.08E-03	7.49E-03	1.85E-06	3.99E+01		6.78E-01
17	1.59	1.44E-03	1.15E-02	3.07E-06	4.49E+01	4.35E+00	8.46E-01
18	1.71	1.08E-03	9.98E-03	2.85E-06	4.86E+01	5.14E+00	
19	1.84	6.00E-04	6.40E-03	1.97E-06	5.06E+01	5.64E+00	9.62E-01
20	1.98	1.20E-03	1.48E-02	4.89E-06	5.47E+01	6.82E+00	1.25E+00
21	2.12	7.20E-04	1.03E-02	3.64E-06	5.72E+01	7.63E+00	1.46E+00
22	2.28	1.56E-03	2.56E-02	9.78E-06	6.26E+01	9.66E+00	2.04E+00
23	2.45	1.32E-03	2.51E-02	1.03E-05	6.71E+01	1.16E+01	2.64E+00
24	2.64	1.44E-03	3.16E-02	1.39E-05	7.20E+01	1.42E+01	3.46E+00
25	2.83	1.08E-03	2.73E-02	1.29E-05	7.57E+01	1.63E+01	4.22E+00
26	3.05	2.40E-04	7.02E-03	3.57E-06	7.65E+01	1.69E+01	4.43E+00
27	3.27	7.20E-04	2.43E-02	1.33E-05	7.90E+01	1.88E+01	5.21E+00
28	3.52	9.60E-04	3.74E-02			2.18E+01	6.50E+00
29	3.78	6.00E-04	2.70E-02	1.70E-05		2.39E+01	7.50E+00
30	4.06	2.40E-04	1.25E-02	8.46E-06	8.52E+01	2.49E+01	8.00E+00
31	4.37	1.20E-04	7.20E-03	5.25E-06	8.56E+01	2.55E+01	8.31E+00
32	4.69	3.60E-04	2.50E-02	1.95E-05	8.68E+01	2.74E+01	9.46E+00
33	5.04	2.40E-04	1.92E-02	1.62E-05		2.90E+01	1.04E+01
34	5.42	4.80E-04	4.44E-02	4.01E-05		3.25E+01	1.28E+01
35	5.82	1.20E-04	1.28E-02	1.24E-05		3.35E+01	1.35E+01
36	6.26	3.60E-04	4.44E-02			3.70E+01	1.62E+01
37	6.73	4.80E-04	6.83E-02			4.24E+01	2.07E+01
38	7.23	3.60E-04	5.92E-02			4.71E+01	2.49E+01
39	7.77	3.60E-04	6.83E-02	8.85E-05		5.25E+01	3.01E+01
40	8.35	2.40E-04	5:26E-02			5.67E+01	3.44E+01
41	8.97	0.00E+00				5.67E+01	3.44E+01
42	9.64	1.20E-04	3.51E-02		9.63E+01	5.95E+01	3.78E+01
43	10.3	1.20E-04	4.05E-02	7.00E-05	9.67E+01	6.27E+01	4.19E+01
44	11.1	2.40E-04	9.36E-02		9.75E+01	7.01E+01	5.21E+01
45	11.9	2.40E-04	1.08E-01	2.16E-04	9.84E+01	7.87E+01	6.48E+01
46	12.8	2.40E-04	1.25E-01	2.68E-04	9.92E+01	8.86E+01	8.05E+01
47	13.8	2.40E-04	1.44E-01	3.32E-04	1.00E+02	1.00E+02	1.00E+02
48	14.8	0.00E+00			1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00		<del>-</del>	1.00E+02	1.00E+02	1,00E+02
1 TOTA	LS:	2.92E-02	1.26E+00 1	.70E-03			

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 9.007 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		CONC	ENTRATIONS		CUMI	JLATIVE %	
CHNL D	TA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MACC
	486	0.00E+00	0.00E+00		0.00E+00	0.00E+00	MASS
	504	2.40E-04	1.92E-04	1.62E-08	2.51E-01	8.77E-03	0.00E+00
	542	2.40E-04		2.00E-08			6.66E-04
			7.65E-04	7.42E-08		1.89E-02	1.49E-03
	581	7.20E-04			1.25E+00	5.38E-02	4.55E-03
	625	9.60E-04	1.18E-03	1.23E-07	2.26E+00	1.08E-01	9.61E-03
	673	2.16E-03	3.07E-03	3.45E-07	4.51E+00	2.48E-01	2.38E-02
	723	1.92E-03	3.16E-03	3.81E-07	6.52E+00	3.92E-01	3.95E-02
	777	3.48E-03	6.61E-03	8.56E-07	1.02E+01	6.94E-01	7.48E-02
	835	4.80E-03	1.05E-02	1.47E-06	1.52E+01	1.17E+00	1.35E-01
	897	4.68E-03	1.19E-02	1.77E-06	2.01E+01	1.72E+00	2.08E-01
	964	3.60E-03	1.05E-02	1.69E-06	2.38E+01	2.20E+00	2.78E-01
	.03	4.32E-03	1.46E-02	2.52E-06	2.83E+01	2.86E+00	3.82E-01
	.11	3.96E-03	1.54E-02	2.87E-06	3.25E+01	3.57E+00	5.00E-01
	.19	6.84E-03	3.08E-02	6.15E-06	3.96E+01	4.97E+00	7.53E-01
	.28	3.72E-03	1.93E-02	4.15E-06	4.35E+01	5.86E+00	9.24E-01
	.38	3.60E-03	2.16E-02	4.98E-06	4.72E+01	6.84E+00	1.13E+00
	. 48	4.80E-03	3.33E-02	8.24E-06	5.23E+01	8.36E+00	1.47E+00
	.59	4.56E-03	3.65E-02	9.72E-06	5.70E+01	1.00E+01	1.87E+00
	.71	5.04E-03	4.66E-02	1.33E-05	6.23E+01	1.22E+01	2.42E+00
19 1	. 84	4.32E-03	4.61E-02	1.42E-05	6.68E+01	1.43E+01	3.00E+00
20 1	. 98	3.72E-03	4.59E-02	1.51E-05	7.07E+01	1.64E+01	3.63E+00
21 2	.12	4.56E-03	6.49E-02	2.30E-05	7.54E+01	1.93E+01	4.58E+00
22 2	.28	2.76E-03	4.54E-02	1.73E-05	7.83E+01	2.14E+01	5.29E+00
23 2	.45	3.12E-03	5.92E-02	2.43E-05	8.16E+01	2.41E+01	6.29E+00
24 2	. 64	1.68E-03	3.68E-02	1.62E-05	8.33E+01	2.58E+01	6.96E+00
25 2	.83	1.92E-03	4.86E-02	2.30E-05	8.53E+01	2.80E+01	7.9CE+00
26 3	.05	2.16E-03	6.31E-02	3.21E-05	8.76E+01	3.09E+01	9.23E+00
27 3.	. 27	1.80E-03	6.08E-02	3.32E-05	8.95E+01	3.36E+01	1.06E+01
28 3	. 52	9.60E-04	3.74E-02	2.20E-05	9.05E+01	3.54E+01	1.15E+01
	. 78	1.20E-03	5.40E-02	3.41E-05	9.17E+01	3.78E+01	1.29E+01
	.06	4.80E-04	2.50E-02	1.69E-05	9.22E+01	3.90E+01	1.36E+01
	.37	9.60E-04	5.76E-02	4.20E-05	9.32E+01	4.16E+01	1.53E+01
	.69	4.80E-04	3.33E-02	2.61E-05	9.37E+01	4.31E+01	1.64E+01
	. 04	1.20E-03	9.61E-02	8.08E-05	9.50E+01	4.75E+01	1.97E+01
	. 42	4.80E-04	4.44E-02	4.01E-05	9.55E+01	4.95E+01	2.14E+01
	.82	2.40E-04	2.56E-02	2.49E-05	9.57E+01	5.07E+01	2.24E+01
	. 26	1.08E-03	1.33E-01	1.39E-04	9.69E+01	5.68E+01	2.81E+01
	.73	2.40E-04	3.42E-02	3.83E-05	9.71E+01	5.83E+01	2.97E+01
	. 23	3.60E-04	5.92E-02	7.13E-05	9.75E+01	6.10E+01	3.27E+01
	.77	4.80E-04	9.11E-02	1.18E-04	9.80E+01	6.52E+01	3.75E+01
	.35	4.80E-04	1.05E-01	1.47E-04	9.85E+01	7.00E+01	4.36E+01
	.97	0.00E+00	0.00E+00	0.00E+00	9.85E+01	7.00E+01	4.36E+01
	. 64	3.60E-04	1.05E-01	1.69E-04	9.89E+01	7.48E+01	5.05E+01
	0.3	1.20E-04	4.05E-02	7.00E-05	9.90E+01	7.66E+01	5.34E+01
	1.1	3.60E-04	1.40E-01	2.61E-04	9.94E+01	8.30E+01	6.42E+01
	1.9	0.00E+00	0.00E+00	0.00E+00	9.94E+01	8.30E+01	6.42E+01
	2.8	0.00E+00	0.00E+00	0.00E+00	9.94E+01	8.30E+01	6.42E+01
	3.8	4.80E-04	2.88E-01	6.64E-04	9.99E+01	9.62E+01	9.15E+01
	4.8	1.20E-04	8.32E-02	2.06E-04	1.00E+02	1.00E+02	1.00E+02
	5.4	0.00E+00	0.00E+00	0.00E+00			
TOTALS					1.00E+02	1.00E+02	1.00E+02
1014F2	•	3.30E-02 2	1.19E+00 2.	435-03			

FILE NAME: OUT5 9.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

					<b></b>		
			ENTRATIONS			LATIVE %	V. 66
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 486	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 7.77E-04
1	.504	2.40E-04	1.92E-04	1.62E-08	8.44E-01	1.41E-02 3.03E-02	1.74E-03
2	.542	2.40E-04	2.22E-04	2.00E-08	1.69E+00 2.53E+00	4.90E-02	2.93E-03
3	.581	2.40E-04	2.55E-04 4.42E-04	2.47E-08 4.60E-08	3.80E+00	8.13E-02	5.15E-03
<del>1</del> 5	.625 .673	3.60E-04 7.20E-04	1.02E-03	1.15E-07	6.33E+00	1.56E-01	1.07E-02
5 6	.723	1.20E-04	1.02E-03	2.38E-08	6.75E+00	1.71E-01	1.18E-02
7	.777	8.40E-04	1.60E-03	2.07E-07	9.70E+00	2.88E-01	2.18E-02
8	.835	1.20E-03	2.63E-03	3.66E-07	1.39E+01	4.80E-01	3.94E-02
9	.897	8.40E-04	2.13E-03	3.18E-07	1.69E+01	6.36E-01	5.47E-02
10	.964	8.40E-04	2.46E-03	3.95E-07	1.98E+01	8.16E-01	7.37E-02
11	1.03	7.20E-04	2.43E-03	4.20E-07	2.24E+01	9.94E-01	9.40E-02
12	1.11	1.44E-03	5.62E-03	1.04E-06	2.74E+01	1.41E+00	1.44E-01
13	1.19	1.20E-03	5.40E-03	1.08E-06	3.16E+01	1.80E+00	1.96E-01
1 1	1.28	9.60E-04	4.99E-03	1.07E-06	3.50E+01	2.17E+00	2.48E-01
15	1.38	7.20E-04	4.32E-03	9.96E-07	3.76E+01	2.48E+00	2.96E-01
16	1.48	9.60E-04	6.66E-03	1.65E-06	4.09E+01	2.97E+00	3.75E-01
17	1.59	1.08E-03	8.65E-03	2.30E-06	4.47E+01	3.60E+00	4.86E-01
13	1.71	1.32E-03	1.22E-02	3.19E-06	4.94E+01	4.50E+00	6.53E-01
13	1.84	7.20E-04	7.695-03	2.36E-06	5.19E+01		7.67E-01
20	1.98	4.80E-01	5.92E-03	1.95E-06	5.36E+01	5.49E+00	8.61E-01
21	2.12	1.80E-03	2.565-02	9.10E-06	5.99E+01	7.37E+00	1.30E+00
22	2.28	9.60E-04	1.585-02	6.025-06	6.33E+01	8.53E+00	1.59E+00
23	2.45	1.56E-03	2.9dE-02	1.21E-05	6.835+01	1.07E+01	2.17E+00
21	2.64	1.08E-03	2.37E-02	1.04E-05	7.26E+01	1.24E+01	2.67E+00
25	2.83	7.20E-04	1.82E-02	8.62E-06	7.51E+01	1.38E+01	3.09E+00
26	3.05	9.60E-04	2.81E-02	1.43E-05	7.85E+01	1.58E+01	3.78E+00
27	3.27	3.60E-04	1.22E-02	6.64E-06 1.65E-05	7.97E+01	1.67E+01 1.88E+01	4.09E+00 4.89E+00
23	3.52	7.20E-04	2.81E-02	1.02E-05	8.23E+01 8.35E+01	1.99E+01	5.38E+00
29	3.78 4.06	3.60E-04 3.60E-04	1.62E-02 1.87E-02	1.02E-05	8.48E+01	2.13E+01	5.99E+00
30 31	4.37	1.80E-04	2.88E-02	2.10E-05	8.65E+01	2.34E+01	7.00E+00
32	1.69	2.40E-04	1.66E-02	1.30E-05	8.73E+01	2.46E+01	7.63E+00
33	5.04	4.80E-04	3.84E-02	3.23E-05	8.90E+01	2.75E+01	9.18E+00
34	5.42	1.20E-04	1.11E-02	1.00E-05	8.95E+01	2.83E+01	9.67E+00
35	5.82	4.80E-04	5.12E-02	4.98E-05	9.11E+01	3.20E+01	1.21E+01
36	6.26	1.20E-04	1.48E-02	1.54E-05	9.16E+01	3.31E+01	1.28E+01
37	6.73	2.40E-04	3.42E-02	3.83E-05	9.24E+01	3.56E+01	1.47E+01
38	7.23	1.20E-04	1.97E-02	2.38E-05	9.28E+01	3.71E+01	1.58E+01
39	7.77	2.40E-04	4.56E-02	5.90E-05	9.37E+01	4.04E+01	1.86E+01
40	8.35	0.00E+00	0.00E+00	0.00E+00	9.37E+01	4.04E+01	1.86E+01
41	8.97	2.40E-04	6.08E-02	9.09E-05	9.45E+01	4.48E+01	2.30E+01
42	9.64	1.20E-04	3.51E-02	5.64E-05	9.49E+01	4.74E+01	2.57E+01
43	10.3	· 2.40E-04	8.10E-02	1.40E-04	9.58E+01	5.33E+01	3.25E+01
4.4	11.1	1.20E-04	4.68E-02	8.69E-05	9.62E+01	5.68E+01	3.66E+01
45	11.9	4.80E-04	2.16E-01	4.31E-04	9.79E+01	7.26E+01	5.74E+01
46	12.8	2.40E-04	1.25E-01	2.68E-04	9.87E+01	8.17E+01	7.03E+01 7.03E+01
47	13.8	0.00E+00	0.00E+00	0.00E+00	9.87E+01	8.17E+01 1.00E+02	1.00E+02
48	14.8	3.60E-04	2.50E-01	6.18E-04	1.00E+02 1.00E+02	1.00E+02	1.00E+02
, > TOTA	15.4	0.00E+00	0.00E+00 1.37E+00 2	0.00E+00	1.002702	1.006702	1.002102
TOTA	ro:	6.04E-U2	L.SIETUU Z	. VOE-UJ			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 9.009 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

CHNL DIA NUMBER SURFACE ( .486 2.40E-04 1.34E-04 9.48E-09 1.41E-01 4.74E-03 3.66E-04 1.504 1.20E-04 9.60E-05 8.08E-09 2.11E-01 8.13E-03 6.78E-03 3.581 8.40E-04 3.32E-04 3.00E-08 4.23E-01 1.98E-02 1.84E-03 3.581 8.40E-04 8.93E-04 8.66E-08 9.16E-01 5.13E-02 5.18E-03 5.667 3 1.56E-03 2.22E-03 3.00E-08 4.18E-03 1.23E-07 1.47E-01 1.79E-02 5.18E-03 5.673 1.56E-03 2.22E-03 7.4E-07 2.40E+00 1.71E-01 1.95E-02 7.777 5.28E-03 1.00E-02 1.30E-06 7.61E+00 7.34E-01 9.73E-02 7.777 5.28E-03 1.00E-02 1.30E-06 7.61E+00 7.34E-01 9.73E-02 9.897 7.68E-03 1.95E-02 2.91E-06 7.61E+00 7.34E-01 9.73E-02 9.897 7.68E-03 2.39E-02 3.48E-06 2.52E+01 3.69E+00 4.31E-03 1.22E+00 1.71E-01 1.95E-02 1.00E-02 1.30E-06 7.61E+00 7.34E-01 9.73E-02 1.00E-02 1.30E-06 7.61E+00 7.34E-01 9.73E-02 1.00E-03 1.00E-02 1.30E-06 7.61E+00 7.34E-01 9.73E-02 1.00E-03 1.00E-02 1.30E-06 7.61E+00 7.34E-01 9.73E-02 1.00E-03 1.00E-0		DID: KAI		211101		•	
CHILL DIA   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   1.86E-04   1.36E-04   1.20E-04   9.60E-05   8.08E-09   1.41E-01   4.74E-03   6.78E-04   1.50E-04   3.32E-04   8.66E-08   1.41E-01   4.74E-03   6.78E-04   4.625   9.60E-04   8.38E-04   8.66E-08   9.16E-01   1.58E-02   1.84E-05   6.66T-03   2.22E-03   2.49E-07   1.48E+00   9.29E-02   9.92E-03   6.76E-04   7.77T   5.28E-03   1.00E-02   7.49E-07   7.77T   5.28E-03   1.00E-02   7.08E-03   7.14E-07   4.51E+00   3.80E-01   4.71E-02   7.77T   5.28E-03   1.00E-02   7.08E-03   7		CONC	ENTRATIONS		CUM	ULATIVE %	
1	CHNL DIA			MASS			MASS
1 .504 1.20E-04 9.60E-05 8.08E-09 2.11E-01 8.13E-03 6.78E-04 2 .542 3.60E-04 3.32E-04 3.00E-08 4.23E-01 1.98E-02 1.84E-03 3 .581 8.40E-04 8.93E-04 8.66E-08 9.16E-01 5.13E-02 5.18E-03 4 .625 9.60E-04 1.18E-03 1.23E-07 1.48E+00 9.29E-02 9.92E-03 6 .723 3.60E-03 5.92E-03 7.14E-07 4.51E+00 3.80E-01 4.71E-02 6 .723 3.60E-03 5.92E-03 7.14E-07 4.51E+00 3.80E-01 4.71E-02 7 .777 5.28E-03 1.00E-02 1.91E-06 1.58E+01 1.92E+00 1.71E-01 9.73E-02 8 .835 6.24E-03 1.37E-02 1.91E-06 1.58E+01 1.92E+00 1.71E-01 1.95E-02 2 .91E-06 1.58E+01 1.90E+00 2.83E-01 10 .987 7.88E-03 1.95E-02 2.91E-06 1.58E+01 1.90E+00 2.83E-01 11 1.03 7.92E-03 2.67E-02 4.62E-06 2.06E+01 2.74E+00 4.31E-01 11 1.03 7.92E-03 3.62E-02 7.22E-06 3.40E+01 5.92E+00 6.05E-01 13 1.19 8.04E-03 3.62E-02 7.22E-06 3.40E+01 5.92E+00 1.47E+00 1.47E+00 1.5 1.38 1.06E-03 2.74E-02 7.22E-06 3.40E+01 5.92E+00 1.47E+00 1.5 1.38 1.06E-03 2.38E-02 7.22E-06 3.40E+01 5.92E+00 1.47E+00 1.5 1.38 1.06E-02 6.34E-02 1.46E-05 4.55E+01 9.81E+00 2.83E+00 1.5 1.38 1.06E-02 8.46E-02 2.06E-05 5.26E+01 1.27E+01 2.83E+00 1.08E+00 1.48 1.00E-02 8.46E-02 2.06E-05 5.26E+01 1.27E+01 2.83E+00 1.08E+00 1.98 8.04E-03 9.91E-02 2.95E-05 6.80E+01 1.27E+01 2.83E+00 1.08E+00 1.98 8.04E-03 9.91E-02 2.95E-05 6.80E+01 1.27E+01 2.83E+00 1.08E+00 1.98 8.04E-03 9.91E-02 3.87E-05 7.03E+01 2.26E+01 1.97E+00 1.98 8.04E-03 9.91E-02 3.27E-05 7.03E+01 2.26E+01 1.97E+01 2.89E+00 1.08E+00 1.98 8.04E-03 9.91E-02 3.87E-05 9.03E+01 3.05E+01 1.97E+00 1.98 8.04E-03 9.91E-02 3.87E-05 9.03E+01 3.05E+01 1.97E+01 3.97E+00 1.98 8.04E-03 9.91E-02 3.27E-05 7.03E+01 2.66E+01 1.97E+00 1.97E+00 1.98 8.04E-03 9.91E-02 3.27E-05 7.03E+01 2.66E+01 1.97E+00 1.97E+00 1.98 8.04E-03 9.91E-02 3.27E-05 7.03E+01 2.66E+01 1.97E+00 1.07E+00 1.98 8.04E-03 9.91E-02 3.07E-05 9.03E+01 3.05E+01 1.97E+01 3.05E+01 1.97E+00 3.05E+01 3.05E+01 1.97E+00 3.05E+01 3.0							
2 .542 3.60E-04 3.32E-04 3.00E-08 4.23E-01 1.98E-02 1.84E-03 4 .625 9.60E-04 1.18E-03 1.23E-07 1.48E+00 9.29E-02 9.92E-03 6 .673 1.56E-03 2.22E-03 2.49E-07 2.40E+00 1.71E-01 1.95E-02 7 .777 5.28E-03 1.00E-02 1.30E-06 7.61E+00 7.34E-01 9.73E-02 7 .777 5.28E-03 1.00E-02 1.30E-06 7.61E+00 7.34E-01 9.73E-02 9.89E-03 7 .777 5.28E-03 1.00E-02 1.30E-06 7.61E+00 7.34E-01 9.73E-02 9.897 7.68E-03 1.95E-02 2.91E-06 1.58E+01 1.90E+00 2.83E-01 10 .964 8.16E-03 2.39E-02 3.84E-06 2.06E+01 1.22E+00 1.71E-01 11 10 .96E-02 6 8.16E-03 2.37E-02 4.62E-06 2.52E+01 3.69E+00 6.10E-01 12 1.11 6.96E-03 2.71E-02 5.04E-06 2.52E+01 3.69E+00 6.10E-01 12 1.11 6.96E-03 2.71E-02 5.04E-06 2.93E+01 4.64E+00 8.05E-01 13 1.19 8.04E-03 3.62E-02 7.22E-06 3.40E+01 5.92E+00 1.08E+00 14 1.28 9.00E-03 4.68E-02 1.00E-05 3.93E+01 7.57E+00 1.47E+00 16 1.38 1.06E-02 6.34E-02 1.06E-05 5.26E+01 9.81E+00 2.04E+00 16 1.38 1.06E-02 6.34E-02 1.06E-05 5.26E+01 1.27E+01 2.83E+00 17 1.59E 0.00E-03 9.61E-02 2.95E-05 7.03E+01 1.57E+01 2.83E+00 19 1.88 9.00E-03 9.61E-02 2.95E-05 7.03E+01 1.57E+01 2.83E+00 19 1.88 9.00E-03 9.61E-02 2.95E-05 7.03E+01 1.57E+01 4.79E+00 19 1.88 8.04E-03 9.91E-02 2.87E-05 7.03E+01 1.57E+01 1.79E+00 19 1.88 8.04E-03 9.91E-02 3.77E-05 7.51E+01 2.61E+01 1.79E+00 12 2.28 8.88E-03 7.89E-02 2.82E-05 6.50E+01 1.27E+01 4.79E+00 19 1.88 8.04E-03 9.91E-02 3.87E-05 8.38E+01 3.39E+01 1.57E+01 4.79E+00 12 2.28 8.88E-03 7.89E-02 2.85E-05 7.03E+01 1.35E+01 1.36E+01 1.36E+0				8.08E-09	2.11E-01	8.13E-03	
3         .581         8.40E-04         8.93E-04         8.66E-08         9.16E-01         5.18E-03         9.29E-02         9.92E-03           5         .673         1.56E-03         2.22E-03         2.49E-07         2.40E+00         1.71E-01         1.95E-02           6         .723         3.60E-03         5.92E-03         7.14E-07         4.51E+00         7.34E-01         9.75E-02           7         .777         5.28E-03         1.30E-02         1.30E-06         7.61E+00         7.34E-01         9.75E-02           8         .835         6.24E-03         1.35E-02         2.91E-06         1.13E+01         1.90E+00         2.83E-01           10         .964         8.16E-03         2.39E-02         3.84E-06         2.52E+01         2.74E+00         4.11E-01           11         1.03         7.92E-03         2.67E-02         4.62E-06         2.52E+01         3.69E+00         4.12E-01           12         1.11         6.96E-03         2.71E-02         5.04E-06         2.93E+01         4.64E+00         8.05E-01           13         1.19         8.00E-03         4.68E-02         1.00E-05         3.93E+01         7.57E+00         8.05E+01           14         1.28         9.00E-0		3.60E-04	3.32E-04	3.00E-08	4.23E-01	1.98E-02	1.84E-03
4         .625         9.60E-04         1.18E-03         1.23E-07         2.40E-07         2.40E-07         2.40E-07         2.40E-07         2.40E-03         3.80E-01         4.71E-02           6         .723         3.60E-03         5.92E-03         7.14E-07         4.51E+00         3.80E-01         4.71E-02           7         .777         5.28E-03         1.00E-02         1.30E-06         7.61E+00         7.34E-01         1.71E-01           9         .897         7.68E-03         1.95E-02         2.91E-06         1.13E+01         1.22E+00         1.71E-01           10         .964         8.16E-03         2.39E-02         3.84E-06         2.56E+01         2.74E-04         4.31E-01           11         1.03         7.92E-03         2.67E-02         4.62E-06         2.52E+01         3.69E+00         6.10E-01           13         1.19         8.04E-03         3.62E-02         7.22E-06         3.40E+01         5.92E+01         1.08E+00         4.17E+00           14         1.28         9.00E-03         4.68E-02         1.00E-05         3.93E+01         7.57E+00         1.47E+00           15         1.38         1.06E-05         8.46E-02         2.25E-05         5.26E+01         1.27E+01		8.40E-04	8.93E-04	8.66E-08	9.16E-01	5.13E-02	5.18E-03
6         .723         3.60E-03         5.92E-03         7.14E-07         4.51E+00         3.80E-01         9.73E-02           8         .835         6.24E-03         1.07E-02         1.30E-06         7.61E+00         7.34E-01         9.73E-02           9         .897         7.68E-03         1.95E-02         2.91E-06         1.58E+01         1.90E+00         2.83E-01           10         .964         8.16E-03         2.39E-02         3.84E-06         2.06E+01         2.74E+00         4.31E-01           11         1.03         7.92E-03         2.67E-02         4.62E-06         2.52E+01         3.69E+00         6.10E-01           12         1.11         6.96E-03         2.71E-02         5.04E-06         2.93E+01         4.64E+00         6.05E-01           13         1.19         8.04E-03         3.62E-02         7.22E-06         3.40E+01         5.92E+00         1.08E+00           14         1.28         9.00E-03         4.68E-02         1.06E-05         3.93E+01         7.57E+00         1.47E+00           15         1.38         1.06E-02         8.46E-02         2.05E-05         5.86E+01         1.27E+01         2.83E+00           16         1.48         1.20E-03         8.61E		9.60E-04	1.18E-03	1.23E-07	1.48E+00	9.29E-02	9.92E-03
8 .835 6.24F-03 1.00E-02 1.91E-06 1.13F+01 1.22E+00 1.71E-01 9 .897 7.68E-03 1.95E-02 2.91E-06 1.13E+01 1.22E+00 1.71E-01 1.0 .964 8.16E-03 2.39E-02 3.84E-06 2.06E+01 2.74E+00 4.31E-01 11 103 7.92E-03 2.67E-02 4.62E-06 2.52E+01 3.69E+00 6.10E-01 12 1.11 6.96E-03 2.71E-02 5.04E-06 2.52E+01 3.69E+00 6.10E-01 12 1.11 6.96E-03 2.71E-02 5.04E-06 2.93E+01 4.64E+00 8.05E-01 13 1.19 8.04E-03 2.71E-02 5.04E-06 2.93E+01 4.64E+00 8.05E-01 13 1.19 8.04E-03 4.68E-02 1.00E-05 3.93E+01 7.57E+00 1.08E+00 14 1.28 9.00E-03 4.68E-02 1.00E-05 3.93E+01 7.57E+00 1.47E+00 15 1.38 1.06E-02 6.34E-02 1.46E-05 4.55E+01 9.81E+00 2.04E+00 16 1.48 1.00E-02 8.46E-02 2.06E-05 5.26E+01 1.27E+01 2.83E+00 17 1.59 1.06E-02 8.46E-02 2.25E-05 5.26E+01 1.27E+01 2.83E+00 17 1.59 1.06E-02 8.46E-02 2.25E-05 6.60E+01 1.57E+01 3.70E+00 19 1.84 9.00E-03 9.61E-02 2.95E-05 7.03E+01 1.57E+01 3.70E+00 19 1.84 9.00E-03 9.61E-02 2.95E-05 7.03E+01 2.26E+01 5.93E+00 12 1.21 8.88E-03 1.26E-01 4.49E-05 8.03E+01 1.25E+01 8.93E+00 21 2.12 8.88E-03 7.26E-01 3.27E-05 7.51E+01 3.03E+01 8.93E+00 22 2.28 4.80E-03 7.89E-02 3.01E-05 8.33E+01 3.03E+01 8.93E+00 22 2.28 4.80E-03 7.89E-02 3.01E-05 8.33E+01 3.03E+01 1.01E+01 7.01E+01 7.00E+02 7.00E+	5 .673	1.56E-03	2.22E-03	2.49E-07	2.40E+00	1.71E-01	1.95E-02
8 .835 6.24F-03 1.00E-02 1.91E-06 1.13F+01 1.22E+00 1.71E-01 9 .897 7.68E-03 1.95E-02 2.91E-06 1.13E+01 1.22E+00 1.71E-01 1.0 .964 8.16E-03 2.39E-02 3.84E-06 2.06E+01 2.74E+00 4.31E-01 11 103 7.92E-03 2.67E-02 4.62E-06 2.52E+01 3.69E+00 6.10E-01 12 1.11 6.96E-03 2.71E-02 5.04E-06 2.52E+01 3.69E+00 6.10E-01 12 1.11 6.96E-03 2.71E-02 5.04E-06 2.93E+01 4.64E+00 8.05E-01 13 1.19 8.04E-03 2.71E-02 5.04E-06 2.93E+01 4.64E+00 8.05E-01 13 1.19 8.04E-03 4.68E-02 1.00E-05 3.93E+01 7.57E+00 1.08E+00 14 1.28 9.00E-03 4.68E-02 1.00E-05 3.93E+01 7.57E+00 1.47E+00 15 1.38 1.06E-02 6.34E-02 1.46E-05 4.55E+01 9.81E+00 2.04E+00 16 1.48 1.00E-02 8.46E-02 2.06E-05 5.26E+01 1.27E+01 2.83E+00 17 1.59 1.06E-02 8.46E-02 2.25E-05 5.26E+01 1.27E+01 2.83E+00 17 1.59 1.06E-02 8.46E-02 2.25E-05 6.60E+01 1.57E+01 3.70E+00 19 1.84 9.00E-03 9.61E-02 2.95E-05 7.03E+01 1.57E+01 3.70E+00 19 1.84 9.00E-03 9.61E-02 2.95E-05 7.03E+01 2.26E+01 5.93E+00 12 1.21 8.88E-03 1.26E-01 4.49E-05 8.03E+01 1.25E+01 8.93E+00 21 2.12 8.88E-03 7.26E-01 3.27E-05 7.51E+01 3.03E+01 8.93E+00 22 2.28 4.80E-03 7.89E-02 3.01E-05 8.33E+01 3.03E+01 8.93E+00 22 2.28 4.80E-03 7.89E-02 3.01E-05 8.33E+01 3.03E+01 1.01E+01 7.01E+01 7.00E+02 7.00E+	6 .723	3.60E-03	5.92E-03	7.14E-07	4.51E+00	3.80E-01	4.71E-02
9 .897	7 .777	5.28E-03	1.00E-02	1.30E-06	7.61E+00	7.34E-01	9.73E-02
10	8 .835	6.24E-03	1.37E-02	1.91E-06	1.13E+01	1.22E+00	1.71E-01
1							
1.11							
1.19							
14         1.28         9.00E-03         4.68E-02         1.00E-05         3.93E+01         7.57E+00         1.47E+00           15         1.38         1.06E-02         6.34E-02         1.46E-05         4.55E+01         9.81E+00         2.04E+00           16         1.48         1.20E-02         8.32E-02         2.06E-05         5.26E+01         1.27E+01         2.83E+00           17         1.59         1.06E-02         8.46E-02         2.25E-05         5.88E+01         1.57E+01         3.70E+00           18         1.71         1.07E-02         9.87E-02         2.95E-05         7.03E+01         2.26E+01         5.93E+00           20         1.98         8.04E-03         9.91E-02         3.27E-05         7.51E+01         2.61E+01         7.19E+00           21         2.12         8.88E-03         1.26E-01         4.49E-03         3.05E+01         3.05E+01         8.93E+00           21         2.12         8.88E-03         1.26E-01         4.05E-05         8.84E+01         3.36E+01         1.01E+01           23         2.15         4.92E-03         9.34E-02         3.82E-05         8.05E+01         3.66E+01         1.01E+01           24         2.66         4.19E-03         9.							
15 1.38 1.06E-02 6.34E-02 1.46E-05 4.55E+01 9.81E+00 2.04E+00 16 1.48 1.20E-02 8.32E-02 2.06E-05 5.26E+01 1.27E+01 2.83E+00 17 1.59 1.06E-02 8.46E-02 2.25E-05 5.26E+01 1.27E+01 3.70E+00 18 1.71 1.07E-02 9.87E-02 2.82E-05 6.50E+01 1.92E+01 4.79E+00 19 1.84 9.00E-03 9.61E-02 2.95E-05 7.03E+01 2.26E+01 5.93E+00 20 1.98 8.04E-03 9.91E-02 3.27E-05 7.51E+01 2.661E+01 7.19E+00 21 2.12 8.88E-03 1.26E-01 4.49E-05 8.03E+01 3.05E+01 8.93E+00 22 2.28 4.80E-03 7.89E-02 3.01E-05 8.31E+01 3.33E+01 1.01E+01 23 2.15 4.92E-03 9.34E-02 3.82E-05 8.60E+01 3.99E+01 1.31E+01 23 2.15 4.92E-03 9.34E-02 3.88E-05 8.60E+01 3.99E+01 1.31E+01 25 2.83 3.24E-03 8.20E-02 3.88E-05 9.03E+01 4.28E+01 1.66E+01 26 3.05 3.36E-03 9.82E-02 4.99E-05 9.37E+01 4.89E+01 1.66E+01 26 3.05 3.36E-03 9.82E-02 4.99E-05 9.37E+01 4.89E+01 1.66E+01 27 3.27 2.28E-03 7.70E-02 4.20E-05 9.37E+01 4.89E+01 1.92E+01 30 4.06 9.60E-04 4.99E-02 3.38E-05 9.61E+01 5.52E+01 1.99E+01 32 4.69 8.40E-04 5.82E-02 4.56E-05 9.63E+01 5.52E+01 2.25E+01 31 4.37 4.80E-04 2.88E-02 2.10E-05 9.68E+01 5.52E+01 2.25E+01 33 5.04 6.00E-04 4.80E-02 4.56E-05 9.68E+01 5.83E+01 2.51E+01 33 5.04 6.00E-04 4.80E-02 4.06E-05 9.68E+01 5.83E+01 2.51E+01 33 5.04 6.00E-04 4.80E-02 4.04E-05 9.72E+01 6.24E+01 2.66E+01 33 5.04 6.00E-04 4.80E-02 4.04E-05 9.72E+01 6.24E+01 2.90E+01 35 5.82 4.80E-04 5.82E-02 4.98E-05 9.76E+01 6.24E+01 2.90E+01 35 5.82 4.80E-04 5.82E-02 4.98E-05 9.78E+01 5.33E+01 2.51E+01 33 5.04 6.00E-04 8.88E-02 9.27E-05 9.88E+01 5.83E+01 2.51E+01 3.98E+01 3.99E+01 3.45E+01 3.45E+01 3.99E+01 3.45E+01 3.99E+01 4.80E-04 4.80E-04 5.82E-02 4.98E-05 9.76E+01 6.24E+01 2.90E+01 35 5.82 4.80E-04 5.82E-02 4.98E-05 9.78E+01 5.83E+01 2.51E+01 3.66E+01 3.99E+01 3.45E+01 3.45E+01 3.66E+01 3.99E+01 3.45E+01 3.45E+01 3.66E+01 3.99E+01 3.45E+01 3.66E+01 3.66E+01 3.99E+01 3.45E+01 3.66E+01 3.66E+01 3.99E+01 3.45E+01 3.66E+01							
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18         1.71         1.07E-02         9.87E-02         2.82E-05         6.50E+01         1.92E+01         4.79E+00           19         1.84         9.00E-03         9.61E-02         2.95E-05         7.03E+01         2.26E+01         5.93E+00           20         1.98         8.04E-03         9.91E-02         3.27E-05         7.51E+01         2.61E+01         7.19E+00           21         2.12         8.88E-03         1.26E-01         4.49E-05         8.03E+01         3.05E+01         8.93E+00           22         2.28         4.80E-03         7.89E-02         3.01E-05         8.31E+01         3.33E+01         1.01E+01           24         2.64         4.20E-03         9.21E-02         4.05E-05         8.84E+01         3.99E+01         1.31E+01           25         2.83         3.24E-03         8.20E-02         3.88E-05         9.03E+01         4.28E+01         1.46E+01           26         3.05         3.36E-03         9.82E-02         4.99E-05         9.23E+01         4.62E+01         1.66E+01           27         3.27         2.28E-03         7.70E-02         4.29E-05         9.37E+01         4.89E+01         1.62E+01           28         3.52         1.92E-03         7.							
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1.98			<del>-</del>				
21         2.12         8.88E-03         1.26E-01         4.49E-05         8.03E+01         3.05E+01         8.93E+00           22         2.28         4.80E-03         7.89E-02         3.01E-05         8.31E+01         3.33E+01         1.01E+01           23         2.45         4.92E-03         9.34E-02         3.83E-05         8.60E+01         3.66E+01         1.16E+01           24         2.64         4.20E-03         9.21E-02         4.05E-05         8.84E+01         3.99E+01         1.31E+01           25         2.83         3.24E-03         8.20E-02         3.88E-05         9.03E+01         4.28E+01         1.46E+01           26         3.05         3.36E-03         9.82E-02         4.99E-05         9.23E+01         4.62E+01         1.66E+01           27         3.27         2.26E-03         7.70E-02         4.20E-05         9.37E+01         4.89E+01         1.82E+01           28         3.52         1.92E-03         7.49E-02         4.39E-05         9.48E+01         5.16E+01         1.99E+01           29         3.78         1.20E-03         5.40E-02         3.38E-05         9.61E+01         5.52E+01         2.32E+01           30         4.06         9.60E-04         4.							
22         2.28         4.80E-03         7.89E-02         3.01E-05         8.31E+01         3.33E+01         1.01E+01           23         2.16         4.92E-03         9.34E-02         3.83E-05         8.60E+01         3.66E+01         1.16E+01           24         2.64         4.20E-03         9.21E-02         4.05E-05         8.84E+01         3.99E+01         1.31E+01           25         2.83         3.24E-03         8.20E-02         3.88E-05         9.03E+01         4.28E+01         1.46E+01           26         3.05         3.36E-03         9.82E-02         4.99E-05         9.23E+01         4.62E+01         1.66E+01           27         3.27         2.28E-03         7.70E-02         4.20E-05         9.37E+01         4.89E+01         1.82E+01           28         3.52         1.92E-03         7.49E-02         3.41E-05         9.48E+01         5.6E+01         1.99E+01           29         3.78         1.20E-03         5.40E-02         3.41E-05         9.55E+01         5.35E+01         2.25E+01           30         4.06         9.60E-04         4.99E-02         3.38E-05         9.61E+01         5.52E+01         2.25E+01           31         4.37         4.60E-04         5.8							
23         2.15         4.92E-03         9.34E-02         3.83E-05         8.60E+01         3.66E+01         1.16E+01           24         2.64         4.20E-03         9.21E-02         4.05E-05         8.84E+01         3.99E+01         1.31E+01           25         2.83         3.24E-03         8.20E-02         3.88E-05         9.03E+01         4.28E+01         1.46E+01           26         3.05         3.36E-03         9.82E-02         4.99E-05         9.23E+01         4.6E+01         1.46E+01           27         3.27         2.28E-03         7.70E-02         4.20E-05         9.37E+01         4.89E+01         1.82E+01           28         3.52         1.92E-03         7.49E-02         4.39E-05         9.48E+01         5.16E+01         1.99E+01           30         4.06         9.60E-04         4.99E-02         3.38E-05         9.61E+01         5.5E+01         2.25E+01           31         4.37         4.80E-04         2.88E-02         2.10E-05         9.63E+01         5.63E+01         2.51E+01           32         4.69         8.40E-04         5.82E-02         4.56E-05         9.68E+01         5.83E+01         2.51E+01           33         5.04         6.00E-04         4.80							
24       2.64       4.20E-03       9.21E-02       4.05E-05       8.84E+01       3.99E+01       1.31E+01         25       2.83       3.24E-03       8.20E-02       3.88E-05       9.03E+01       4.28E+01       1.46E+01         26       3.05       3.36E-03       9.82E-02       4.99E-05       9.23E+01       4.62E+01       1.66E+01         27       3.27       2.28E-03       7.70E-02       4.20E-05       9.37E+01       4.89E+01       1.82E+01         28       3.52       1.92E-03       7.49E-02       4.39E-05       9.48E+01       5.16E+01       1.99E+01         30       4.06       9.60E-04       4.99E-02       3.38E-05       9.61E+01       5.52E+01       2.12E+01         30       4.06       9.60E-04       4.99E-02       3.38E-05       9.63E+01       5.63E+01       2.33E+01         32       4.69       8.40E-04       5.82E-02       2.10E-05       9.63E+01       5.83E+01       2.51E+01         33       5.04       6.00E-04       4.80E-02       9.72E+01       6.00E+01       2.66E+01         34       5.42       7.20E-04       6.66E-02       6.02E-05       9.76E+01       6.24E+01       2.90E+01         35       5.82							
25         2.83         3.24E-03         8.20E-02         3.88E-05         9.03E+01         4.28E+01         1.46E+01           26         3.05         3.36E-03         9.82E-02         4.99E-05         9.23E+01         4.62E+01         1.66E+01           27         3.27         2.28E-03         7.70E-02         4.20E-05         9.37E+01         4.89E+01         1.82E+01           28         3.52         1.92E-03         7.49E-02         4.39E-05         9.48E+01         5.16E+01         1.99E+01           29         3.78         1.20E-03         5.40E-02         3.41E-05         9.55E+01         5.35E+01         2.12E+01           30         4.06         9.60E-04         4.99E-02         3.38E-05         9.61E+01         5.52E+01         2.25E+01           31         4.37         4.80E-04         5.82E-02         4.56E-05         9.63E+01         5.63E+01         2.33E+01           32         4.69         8.46E-04         5.82E-02         4.04E-05         9.72E+01         6.00E+01         2.66E+01           34         5.42         7.20E-04         4.88E-02         9.27E-05         9.78E+01         6.42E+01         3.09E+01           35         5.82         4.80E-04         5.							
26       3.05       3.36E-03       9.82E-02       4.99E-05       9.23E+01       4.62E+01       1.66E+01         27       3.27       2.28E-03       7.70E-02       4.20E-05       9.37E+01       4.89E+01       1.82E+01         28       3.52       1.92E-03       7.49E-02       4.39E-05       9.48E+01       5.16E+01       1.99E+01         29       3.78       1.20E-03       5.40E-02       3.41E-05       9.55E+01       5.35E+01       2.12E+01         30       4.06       9.60E-04       4.99E-02       3.38E-05       9.61E+01       5.52E+01       2.25E+01         31       4.37       4.80E-04       2.88E-02       2.10E-05       9.63E+01       5.63E+01       2.33E+01         32       4.69       8.40E-04       5.82E-02       4.56E-05       9.68E+01       5.83E+01       2.51E+01         33       5.04       6.00E-04       4.80E-02       4.04E-05       9.72E+01       6.00E+01       2.66E+01         34       5.42       7.20E-04       6.66E-02       6.02E-05       9.76E+01       6.42E+01       3.09E+01         35       5.82       4.80E-04       5.12E-02       4.98E-05       9.87E+01       6.73E+01       3.45E+01         36 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
27       3.27       2.28E-03       7.70E-02       4.20E-05       9.37E+01       4.89E+01       1.82E+01         28       3.52       1.92F-03       7.49E-02       4.39E-05       9.48E+01       5.16E+01       1.99E+01         29       3.78       1.20E-03       5.40E-02       3.41E-05       9.55E+01       5.35E+01       2.12E+01         30       4.06       9.60E-04       4.99E-02       3.38E-05       9.61E+01       5.52E+01       2.25E+01         31       4.37       4.80E-04       2.88E-02       2.10E-05       9.63E+01       5.63E+01       2.33E+01         32       4.69       8.40E-04       5.82E-02       4.56E-05       9.68E+01       5.83E+01       2.51E+01         33       5.04       6.00E-04       4.80E-02       4.04E-05       9.72E+01       6.00E+01       2.66E+01         34       5.42       7.20E-04       6.66E-02       6.02E-05       9.76E+01       6.42E+01       3.09E+01         35       5.82       4.80E-04       5.12E-02       4.98E-05       9.79E+01       6.42E+01       3.09E+01         36       6.26       7.20E-04       8.88E-02       9.27E-05       9.83E+01       6.73E+01       3.45E+01         37 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
28       3.52       1.92E-03       7.49E-02       4.39E-05       9.48E+01       5.16E+01       1.99E+01         29       3.78       1.20E-03       5.40E-02       3.41E-05       9.55E+01       5.35E+01       2.12E+01         30       4.06       9.60E-04       4.99E-02       3.38E-05       9.61E+01       5.52E+01       2.25E+01         31       4.37       4.80E-04       2.88E-02       2.10E-05       9.63E+01       5.63E+01       2.33E+01         32       4.69       8.40E-04       5.82E-02       4.56E-05       9.68E+01       5.83E+01       2.51E+01         33       5.04       6.00E-04       4.80E-02       4.04E-05       9.72E+01       6.00E+01       2.66E+01         34       5.42       7.20E-04       6.66E-02       6.02E-05       9.76E+01       6.24E+01       2.90E+01         35       5.82       4.80E-04       5.12E-02       4.98E-05       9.79E+01       6.42E+01       3.09E+01         36       6.26       7.20E-04       8.88E-02       9.27E-05       9.83E+01       7.37E+01       3.45E+01         37       6.73       6.00E-04       8.54E-02       9.58E-05       9.87E+01       7.17E+01       4.00E+01         38 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
29       3.78       1.20E-03       5.40E-02       3.41E-05       9.55E+01       5.35E+01       2.12E+01         30       4.06       9.60E-04       4.99E-02       3.38E-05       9.61E+01       5.52E+01       2.25E+01         31       4.37       4.80E-04       2.88E-02       2.10E-05       9.63E+01       5.63E+01       2.33E+01         32       4.69       8.40E-04       5.82E-02       4.56E-05       9.68E+01       5.83E+01       2.51E+01         33       5.04       6.00E-04       4.80E-02       4.04E-05       9.72E+01       6.00E+01       2.66E+01         34       5.42       7.20E-04       6.66E-02       6.02E-05       9.76E+01       6.24E+01       2.90E+01         35       5.82       4.80E-04       5.12E-02       4.98E-05       9.79E+01       6.42E+01       3.09E+01         36       6.26       7.20E-04       8.88E-02       9.27E-05       9.83E+01       6.73E+01       3.45E+01         37       6.73       6.00E-04       8.54E-02       9.58E-05       9.87E+01       7.03E+01       3.82E+01         38       7.23       2.40E-04       3.95E-02       4.76E-05       9.88E+01       7.17E+01       4.00E+01         40 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
30       4.06       9.60E-04       4.99E-02       3.38E-05       9.61E+01       5.52E+01       2.25E+01         31       4.37       4.80E-04       2.88E-02       2.10E-05       9.63E+01       5.63E+01       2.33E+01         32       4.69       8.40E-04       5.82E-02       4.56E-05       9.68E+01       5.83E+01       2.51E+01         33       5.04       6.00E-04       4.80E-02       4.04E-05       9.72E+01       6.00E+01       2.66E+01         34       5.42       7.20E-04       6.66E-02       6.02E-05       9.76E+01       6.24E+01       2.90E+01         35       5.82       4.80E-04       5.12E-02       4.98E-05       9.79E+01       6.42E+01       3.09E+01         36       6.26       7.20E-04       8.88E-02       9.27E-05       9.83E+01       6.73E+01       3.45E+01         37       6.73       6.00E-04       8.54E-02       9.58E-05       9.87E+01       7.17E+01       4.00E+01         38       7.23       2.40E-04       3.95E-02       4.76E-05       9.88E+01       7.17E+01       4.00E+01         39       7.77       1.20E-04       2.28E-02       2.95E-05       9.89E+01       7.25E+01       4.11E+01         41 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
31       4.37       4.80E-04       2.88E-02       2.10E-05       9.63E+01       5.63E+01       2.33E+01         32       4.69       8.40E-04       5.82E-02       4.56E-05       9.68E+01       5.83E+01       2.51E+01         33       5.04       6.00E-04       4.80E-02       4.04E-05       9.72E+01       6.00E+01       2.66E+01         34       5.42       7.20E-04       6.66E-02       6.02E-05       9.76E+01       6.24E+01       2.90E+01         35       5.82       4.80E-04       5.12E-02       4.98E-05       9.79E+01       6.42E+01       3.09E+01         36       6.26       7.20E-04       8.88E-02       9.27E-05       9.83E+01       6.73E+01       3.45E+01         37       6.73       6.00E-04       8.54E-02       9.58E-05       9.87E+01       7.03E+01       3.82E+01         38       7.23       2.40E-04       3.95E-02       4.76E-05       9.88E+01       7.17E+01       4.00E+01         39       7.77       1.20E-04       2.28E-02       2.95E-05       9.89E+01       7.25E+01       4.11E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.90E+01       7.46E+01       4.46E+01         42 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
32       4.69       8.40E-04       5.82E-02       4.56E-05       9.68E+01       5.83E+01       2.51E+01         33       5.04       6.00E-04       4.80E-02       4.04E-05       9.72E+01       6.00E+01       2.66E+01         34       5.42       7.20E-04       6.66E-02       6.02E-05       9.76E+01       6.24E+01       2.90E+01         35       5.82       4.80E-04       5.12E-02       4.98E-05       9.79E+01       6.42E+01       3.09E+01         36       6.26       7.20E-04       8.88E-02       9.27E-05       9.83E+01       6.73E+01       3.45E+01         37       6.73       6.00E-04       8.54E-02       9.58E-05       9.87E+01       7.03E+01       3.82E+01         38       7.23       2.40E-04       3.95E-02       4.76E-05       9.88E+01       7.17E+01       4.00E+01         39       7.77       1.20E-04       2.28E-02       2.95E-05       9.89E+01       7.25E+01       4.11E+01         40       8.35       0.00E+00       0.00E+00       0.00E+00       9.09E-05       9.90E+01       7.25E+01       4.11E+01         41       8.97       2.40E-04       7.02E-02       1.13E-04       9.92E+01       7.71E+01       4.90E+01							
33 5.04 6.00E-04 4.80E-02 4.04E-05 9.72E+01 6.00E+01 2.66E+01 34 5.42 7.20E-04 6.66E-02 6.02E-05 9.76E+01 6.24E+01 2.90E+01 35 5.82 4.80E-04 5.12E-02 4.98E-05 9.79E+01 6.42E+01 3.09E+01 36 6.26 7.20E-04 8.88E-02 9.27E-05 9.83E+01 6.73E+01 3.45E+01 3.7 6.73 6.00E-04 8.54E-02 9.58E-05 9.87E+01 7.03E+01 3.82E+01 38 7.23 2.40E-04 3.95E-02 4.76E-05 9.88E+01 7.17E+01 4.00E+01 39 7.77 1.20E-04 2.28E-02 2.95E-05 9.89E+01 7.25E+01 4.11E+01 40 8.35 0.00E+00 0.00E+00 0.00E+00 9.89E+01 7.25E+01 4.11E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.90E+01 7.46E+01 4.46E+01 4.2 9.64 2.40E-04 7.02E-02 1.13E-04 9.92E+01 7.71E+01 4.90E+01 4.3 10.3 3.60E-04 1.22E-01 2.10E-04 9.94E+01 8.14E+01 5.71E+01 4.11 2.40E-04 9.36E-02 1.74E-04 9.95E+01 8.47E+01 6.38E+01 4.5 11.9 4.80E-04 2.16E-01 4.31E-04 9.98E+01 9.23E+01 8.05E+01 4.5 11.9 4.80E-04 8.32E-02 1.34E-04 9.99E+01 9.45E+01 8.56E+01 4.5 11.9 4.80E-04 8.32E-02 1.66E-04 9.99E+01 9.71E+01 9.20E+01 4.8 14.8 1.20E-04 8.32E-02 2.06E-04 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02							
34       5.42       7.20E-04       6.66E-02       6.02E-05       9.76E+01       6.24E+01       2.90E+01         35       5.82       4.80E-04       5.12E-02       4.98E-05       9.79E+01       6.42E+01       3.09E+01         36       6.26       7.20E-04       8.88E-02       9.27E-05       9.83E+01       6.73E+01       3.45E+01         37       6.73       6.00E-04       8.54E-02       9.58E-05       9.87E+01       7.03E+01       3.82E+01         38       7.23       2.40E-04       3.95E-02       4.76E-05       9.88E+01       7.17E+01       4.00E+01         39       7.77       1.20E-04       2.28E-02       2.95E-05       9.89E+01       7.25E+01       4.11E+01         40       8.35       0.00E+00       0.00E+00       9.09E-05       9.90E+01       7.46E+01       4.46E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.90E+01       7.71E+01       4.90E+01         43       10.3       3.60E-04       1.22E-01       2.10E-04       9.94E+01       8.14E+01       5.71E+01         44       11.1       2.40E-04       9.36E-02       1.74E-04       9.99E+01       9.23E+01       8.05E+01         45 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
35       5.82       4.80E-04       5.12E-02       4.98E-05       9.79E+01       6.42E+01       3.09E+01         36       6.26       7.20E-04       8.88E-02       9.27E-05       9.83E+01       6.73E+01       3.45E+01         37       6.73       6.00E-04       8.54E-02       9.58E-05       9.87E+01       7.03E+01       3.82E+01         38       7.23       2.40E-04       3.95E-02       4.76E-05       9.88E+01       7.17E+01       4.00E+01         39       7.77       1.20E-04       2.28E-02       2.95E-05       9.89E+01       7.25E+01       4.11E+01         40       8.35       0.00E+00       0.00E+00       9.09E-05       9.90E+01       7.46E+01       4.1E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.90E+01       7.46E+01       4.46E+01         42       9.64       2.40E-04       7.02E-02       1.13E-04       9.92E+01       7.71E+01       4.90E+01         43       10.3       3.60E-04       1.22E-01       2.10E-04       9.94E+01       8.14E+01       5.71E+01         44       11.1       2.40E-04       9.36E-02       1.74E-04       9.95E+01       8.47E+01       6.38E+01         45 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
36       6.26       7.20E-04       8.88E-02       9.27E-05       9.83E+01       6.73E+01       3.45E+01         37       6.73       6.00E-04       8.54E-02       9.58E-05       9.87E+01       7.03E+01       3.82E+01         38       7.23       2.40E-04       3.95E-02       4.76E-05       9.88E+01       7.17E+01       4.00E+01         39       7.77       1.20E-04       2.28E-02       2.95E-05       9.89E+01       7.25E+01       4.11E+01         40       8.35       0.00E+00       0.00E+00       0.00E+00       9.89E+01       7.25E+01       4.11E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.90E+01       7.46E+01       4.46E+01         42       9.64       2.40E-04       7.02E-02       1.13E-04       9.92E+01       7.71E+01       4.90E+01         43       10.3       3.60E-04       1.22E-01       2.10E-04       9.94E+01       8.14E+01       5.71E+01         44       11.1       2.40E-04       9.36E-02       1.74E-04       9.95E+01       8.47E+01       6.38E+01         45       11.9       4.80E-04       2.16E-01       4.31E-04       9.99E+01       9.45E+01       8.56E+01         46 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
37 6.73 6.00E-04 8.54E-02 9.58E-05 9.87E+01 7.03E+01 3.82E+01 38 7.23 2.40E-04 3.95E-02 4.76E-05 9.88E+01 7.17E+01 4.00E+01 39 7.77 1.20E-04 2.28E-02 2.95E-05 9.89E+01 7.25E+01 4.11E+01 40 8.35 0.00E+00 0.00E+00 0.00E+00 9.89E+01 7.25E+01 4.11E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.90E+01 7.46E+01 4.46E+01 42 9.64 2.40E-04 7.02E-02 1.13E-04 9.92E+01 7.71E+01 4.90E+01 43 10.3 3.60E-04 1.22E-01 2.10E-04 9.94E+01 8.14E+01 5.71E+01 4.11.1 2.40E-04 9.36E-02 1.74E-04 9.95E+01 8.47E+01 6.38E+01 4.5 11.9 4.80E-04 2.16E-01 4.31E-04 9.98E+01 9.23E+01 8.05E+01 4.5 11.9 4.80E-04 6.24E-02 1.34E-04 9.99E+01 9.45E+01 8.56E+01 4.7 13.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.71E+01 9.20E+01 4.8 14.8 1.20E-04 8.32E-02 2.06E-04 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02							
38       7.23       2.40E-04       3.95E-02       4.76E-05       9.88E+01       7.17E+01       4.00E+01         39       7.77       1.20E-04       2.28E-02       2.95E-05       9.89E+01       7.25E+01       4.11E+01         40       8.35       0.00E+00       0.00E+00       9.89E+01       7.25E+01       4.11E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.90E+01       7.46E+01       4.46E+01         42       9.64       2.40E-04       7.02E-02       1.13E-04       9.92E+01       7.71E+01       4.90E+01         43       10.3       3.60E-04       1.22E-01       2.10E-04       9.94E+01       8.14E+01       5.71E+01         44       11.1       2.40E-04       9.36E-02       1.74E-04       9.95E+01       8.47E+01       6.38E+01         45       11.9       4.80E-04       2.16E-01       4.31E-04       9.98E+01       9.23E+01       8.05E+01         46       12.8       1.20E-04       6.24E-02       1.34E-04       9.99E+01       9.45E+01       8.56E+01         47       13.8       1.20E-04       7.20E-02       1.66E-04       9.99E+01       9.71E+01       9.20E+01         48       14.8				- · ·			
39       7.77       1.20E-04       2.28E-02       2.95E-05       9.89E+01       7.25E+01       4.11E+01         40       8.35       0.00E+00       0.00E+00       0.00E+00       9.89E+01       7.25E+01       4.11E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.90E+01       7.46E+01       4.46E+01         42       9.64       2.40E-04       7.02E-02       1.13E-04       9.92E+01       7.71E+01       4.90E+01         43       10.3       3.60E-04       1.22E-01       2.10E-04       9.94E+01       8.14E+01       5.71E+01         44       11.1       2.40E-04       9.36E-02       1.74E-04       9.95E+01       8.47E+01       6.38E+01         45       11.9       4.80E-04       2.16E-01       4.31E-04       9.98E+01       9.23E+01       8.05E+01         46       12.8       1.20E-04       6.24E-02       1.34E-04       9.99E+01       9.45E+01       8.56E+01         47       13.8       1.20E-04       7.20E-02       1.66E-04       9.99E+01       9.71E+01       9.20E+01         48       14.8       1.20E-04       8.32E-02       2.06E-04       1.00E+02       1.00E+02       1.00E+02         > 15.							
40 8.35 0.00E+00 0.00E+00 0.00E+00 9.89E+01 7.25E+01 4.11E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.90E+01 7.46E+01 4.46E+01 42 9.64 2.40E-04 7.02E-02 1.13E-04 9.92E+01 7.71E+01 4.90E+01 43 10.3 3.60E-04 1.22E-01 2.10E-04 9.94E+01 8.14E+01 5.71E+01 44 11.1 2.40E-04 9.36E-02 1.74E-04 9.95E+01 8.47E+01 6.38E+01 45 11.9 4.80E-04 2.16E-01 4.31E-04 9.98E+01 9.23E+01 8.05E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.45E+01 8.56E+01 47 13.8 1.20E-04 7.20E-02 1.66E-04 9.99E+01 9.71E+01 9.20E+01 48 14.8 1.20E-04 8.32E-02 2.06E-04 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02							
41 8.97 2.40E-04 6.08E-02 9.09E-05 9.90E+01 7.46E+01 4.46E+01 42 9.64 2.40E-04 7.02E-02 1.13E-04 9.92E+01 7.71E+01 4.90E+01 43 10.3 3.60E-04 1.22E-01 2.10E-04 9.94E+01 8.14E+01 5.71E+01 44 11.1 2.40E-04 9.36E-02 1.74E-04 9.95E+01 8.47E+01 6.38E+01 45 11.9 4.80E-04 2.16E-01 4.31E-04 9.98E+01 9.23E+01 8.05E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.45E+01 8.56E+01 47 13.8 1.20E-04 7.20E-02 1.66E-04 9.99E+01 9.71E+01 9.20E+01 48 14.8 1.20E-04 8.32E-02 2.06E-04 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02							
42       9.64       2.40E-04       7.02E-02       1.13E-04       9.92E+01       7.71E+01       4.90E+01         43       10.3       3.60E-04       1.22E-01       2.10E-04       9.94E+01       8.14E+01       5.71E+01         44       11.1       2.40E-04       9.36E-02       1.74E-04       9.95E+01       8.47E+01       6.38E+01         45       11.9       4.80E-04       2.16E-01       4.31E-04       9.98E+01       9.23E+01       8.05E+01         46       12.8       1.20E-04       6.24E-02       1.34E-04       9.99E+01       9.45E+01       8.56E+01         47       13.8       1.20E-04       7.20E-02       1.66E-04       9.99E+01       9.71E+01       9.20E+01         48       14.8       1.20E-04       8.32E-02       2.06E-04       1.00E+02       1.00E+02       1.00E+02         > 15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02							
43       10.3       3.60E-04       1.22E-01       2.10E-04       9.94E+01       8.14E+01       5.71E+01         44       11.1       2.40E-04       9.36E-02       1.74E-04       9.95E+01       8.47E+01       6.38E+01         45       11.9       4.80E-04       2.16E-01       4.31E-04       9.98E+01       9.23E+01       8.05E+01         46       12.8       1.20E-04       6.24E-02       1.34E-04       9.99E+01       9.45E+01       8.56E+01         47       13.8       1.20E-04       7.20E-02       1.66E-04       9.99E+01       9.71E+01       9.20E+01         48       14.8       1.20E-04       8.32E-02       2.06E-04       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02							
44       11.1       2.40E-04       9.36E-02       1.74E-04       9.95E+01       8.47E+01       6.38E+01         45       11.9       4.80E-04       2.16E-01       4.31E-04       9.98E+01       9.23E+01       8.05E+01         46       12.8       1.20E-04       6.24E-02       1.34E-04       9.99E+01       9.45E+01       8.56E+01         47       13.8       1.20E-04       7.20E-02       1.66E-04       9.99E+01       9.71E+01       9.20E+01         48       14.8       1.20E-04       8.32E-02       2.06E-04       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02							
45 11.9 4.80E-04 2.16E-01 4.31E-04 9.98E+01 9.23E+01 8.05E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.45E+01 8.56E+01 47 13.8 1.20E-04 7.20E-02 1.66E-04 9.99E+01 9.71E+01 9.20E+01 48 14.8 1.20E-04 8.32E-02 2.06E-04 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02							
46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.45E+01 8.56E+01 47 13.8 1.20E-04 7.20E-02 1.66E-04 9.99E+01 9.71E+01 9.20E+01 48 14.8 1.20E-04 8.32E-02 2.06E-04 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02							
47 13.8 1.20E-04 7.20E-02 1.66E-04 9.99E+01 9.71E+01 9.20E+01 48 14.8 1.20E-04 8.32E-02 2.06E-04 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02							
48 14.8 1.20E-04 8.32E-02 2.06E-04 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02							
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02				·			
		<del>-</del> -					
		1.70E-01	2.84E+00 2.	59E-03			

01-01-1980 FILE NAME: OUT5 9.010 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCE	NTRATIONS			JLATIVE X	****
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	1.20E-04	8.32E-05	6.51E-09	2.28E-01	3.77E-03	2.00E-04
1	.504	2.40E-04	1.92E-04	1.62E-08	6.85E-01	1.25E-02	6.96E-04
2	.542	3.60E-04	3.32E-04	3.00E-08	1.37E+00	2.75E-02	1.62E-03
3	.581	6.00E-04	6.38E-04	6.18E-08	2.51E+00	5.64E-02	3.52E-03
4	.625	3.60E-04	4.42E-04	4.60E-08	3.20E+00	7.64E-02	4.93E-03
5	.673	1.08E-03	1.54E-03	1.72E-07	5.25E+00	1.46E-01	1.02E-02
6	.723	7.20E-04	1.18E-03	1.43E-07	6.62E+00	2.00E-01	1.46E-02
7	.777	1.32E-03	2.51E-03	3.25E-07	9.13E+00	3.13E-01	2.46E-02
8	.835	1.80E-03	3.95E-03	5.50E-07	1.26E+01	4.92E-01	4.14E-02
9	.897	2.28E-03	5.77E-03	8.64E-07	1.69E+01	7.53E-01	6.80E-02
10	.964	2.76E-03	8.07E-03	1.30E-06	2.21E+01	1.12E+00	1.08E-01
11	1.03	1.32E-03	4.46E-03	7.70E-07	2.47E+01	1.32E+00	1.31E-01
12	1.11	2.04E-03	7.96E-03	1.48E-06	2.85E+01	1.68E+00	1.77E-01
13	1.19	1.56E-03	7.02E-03	1.40E-06	3.15E+01	2.00E+00	2.20E-01
14	1.28	2.52E-03	1.31E-02	2.81E-06	3.63E+01	2.59E+00	3.06E-01
15	1.38	1.92E-03	1.15E-02	2.66E-06	4.00E+01	3.12E+00	3.88E-01
16	1.48	1.92E-03	1.33E-02	3.30E-06	4.36E+01	3.72E+00	4.89E-01
17	1.59	2.16E-03	1.73E-02	4.60E-06	4.77E+01	4.50E+00	6.30E-01
18	1.71	2.88E-03	2.66E-02	7.61E-06	5.32E+01	5.71E+00	8.64E-01
19	1.84	2.40E-03	2.56E-02	7.87E-06	5.78E+01	6.87E+00	1.11E+00
20	1.98	3.24E-03	4.00E-02	1.32E-05	6.39E+01	8.68E+00	1.51E+00
21	2.12	2.76E-03	3.93E-02	1.39E-05	6.92E+01	1.05E+01	1.94E+00
22	2.28	1.68E-03	2.76E-C2	1.05E-05	7.24E+01	1.17E+01	2.25E+00
23	2.45	1.68E-03	3.19E-02	1.31E-05	7.56E+01	1.32E+01	2.66E+00
	2.64	1.56E-03	3.42E-02	1.51E-05		1.47E+01	3.12E+00
24 25	2.83	1.44E-03	3.65E-02	1.72E-05	8.13E+01	1.64E+01	3.65E+00
26	3.05	7.20E-04	2.10E-02	1.07E-05	8.26E+01	1.73E+01	3.98E+(·0
27	3.27	4.80E-04	1.62E-02	8.85E-06	8.36E+01	1.80E+01	4.25E+00
28	3.52	2.40E-04	9.36E-03	5.49E-06		1.85E+01	4.42E+00
29	3.78	9.60E-04	4.32E-02	2.73E-05		2.04E+01	5.26E+00
50	4.06	4.80E-04	2.50E-02	1.69E-05	8.68E+01		5.78E+00
31	4.37	7.20E-04	4.32E-02	3.15E-05	8.81E+01	2.35E+01	6.75E±00
	4.69	1.20E-04	8.32E-03	6.51E-06			6.95E+00
32		6.00E-04	4.80E-02	4.04E-05			8.19E+00
33	5.04	3.60E-04	3.33E-02	3.01E-05	9.02E+01		9.11E+00
34	5.42	4.80E-04	5.12E-02	4.98E-05	9.11E+01		1.06E+01
35	5.82	4.80E-04	5.92E-02	6.18E-05			1.25E+01
36 37	6.26	4.80E-04 4.80E-04	6.83E-02	7.67E-05			1.49E+01
37	6.73	3.60E-04	5.92E-02	7.13E-05			1.71E+01
38	7.23		2.28E-02	2.95E-05			1.80E+01
39	7.77	1.20E-04	1.05E-01	1.47E-04			2.25E+01
40	8.35	4.80E-04	9.11E-02	1.36E-04			2.67E+01
41	8.97	3.60E-04	3.51E-02	5.64E-05			2.84E+01
42	9.64	1.20E-04	1.22E-01	2.10E-04			3.48E+01
43	10.3	3.60E-04	1.40E-01	2.10E-04 2.61E-04			4.28E+01
44	11.1	3.60E-04 3.60E-04	1.40E-01 1.62E-01	3.23E-04			5.28E+01
45 46	11.9	6.00E-04	3.12E-01	6.69E-04			7.33E+01
46	12.8		2.88E-01	6.64E-04	9.98E+01		9.37E+01
47	13.8	4.80E-04 1.20E-04		2.06E-04			1.00E+02
48	14.8	0.00E+00		0.00E+00			1.00E+02
> TOT 4	15.4		2.21E+00 3	·	11002.02		
TOTA	LJ:	J. 4 UE-U4	L. LIETUU 3	. 102 00			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 9.011 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

	•	CONCE	ENTRATIONS		CUMI	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1	.504	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	.542	2.40E-04	2.22E-04	2.00E-08	1.29E-01	6.26E-03	5.68E-04
3	.581	9.60E-04	1.02E-03	9.89E-08	6.46E-01	3.51E-02	3.37E-03
4	.625	8.40E-04	1.03E-03	1.07E-07	1.10E+00	6.42E-02	6.42E-03
5		1.44E-03	2.05E-03	2.30E-07	1.87E+00	1.22E-01	1.29E-02
6	.723	3.84E-03	6.32E-03	7.62E-07	3.94E+00	3.01E-01	3.45E-02
7	.777	5.16E-03	9.80E-03	1.27E-06	6.72E+00	5.77E-01	7.06E-02
8	.835	5.52E-03	1.21E-02	1.69E-06	9.69E+00	9.19E-01	1.18E-01
9	.897	6.96E-03	1.76E-02	2.64E-06	1.34E+01	1.42E+00	1.18E-01 1.93E-01
10	.964	6.48E-03	1.90E-02	3.05E-06	1.69E+01	1.95E+00	2.80E-01
11	1.03	8.64E-03	2.92E-02	5.04E-06	2.16E+01	2.78E+00	4.23E-01
12	1.11	8.88E-03	3.46E-02	6.43E-06	2.64E+01	3.76E+00	6.05E-01
13	1.19	1.06E-02	4.75E-02	9.49E-06	3.20E+01	5.10E+00	8.74E-01
14	1.28	9.60E-03	4.99E-02	1.07E-05	3.72E+01	6.51E+00	1.18E+00
15	1.38	9.48E-03	5.69E-02	1.31E-05	4.23E+01	8.12E+00	1.55E+00
16	1.48	1.19E-02	8.24E-02	2.04E-05	4.87E+01	1.04E+01	2.13E+00
17	1.59	9.84E-03	7.88E-02	2.10E-05	5.40E+01	1.27E+01	2.72E+00
18	1.71	1.21E-02	1.12E-01	3.20E-05	6.05E+01	1.58E+01	3.63E+00
19	1.84	9.96E-03	1.06E-01	3.27E-05	6.59E+01	1.88E+01	4.56E+00
20	1.98	1.02E-02	1.26E-01	4.15E-05	7.14E+01	2.24E+01	5.74E+00
21	2.12	9.00E-03	1.28E-01	4.55E-05	7.62E+01	2.60E+01	7.03E+00
22	2.28	8.40E-03	1.38E-01	5.26E-05	8.07E+01	2.99E+01	8.52E+00
23	2.45	6.48E-03	1.23E-01	5.04E-05	8.42E+01	3.34E+01	9.95E+00
24	2.64	4.44E-03	9.73E-02	4.28E-05	8.66E+01	3.61E+01	1.12E+01
25	2.83	4.92E-03	1.25E-01	5.89E-05	8.93E+01	3.97E+01	1.28E+01
26	3.05	5.16E-03	1.51E-01	7.67E-05	9.21E+01	4.39E+01	1.50E+01
27	3.27	2.28E-03	7.70E-02	4.20E-05	9.33E+01	4.61E+01	1.62E+01
28	3.52	1.92E-03	7.49E-02	4.39E-05	9.43E+01	4.82E+01	1.74E+01
29	3.78	1.20E-03	5.40E-02	3.41E-05	9.50E+01	4.97E+01	1.84E+01
30	4.06	9.60E-04	4.99E-02	3.38E-05	9.55E+01	5.11E+01	1.94E+01
31	4.37	6.00E-04	3.60E-02	2.62E-05	9.58E+01	5.22E+01	2.01E+01
32	4.69	7.20E-04	4.99E-02	3.91E-05	9.62E+01	5.36E+01	2.12E+01
33	5.04	4.80E-04	3.84E-02	3.23E-05	9.64E+01	5.47E+01	2.21E+01
34	5.42	9.60E-04	8.87E-02	8.02E-05	9.70E+01	5.72E+01	2.44E+01
35	5.82	7.20E-04	7.69E-02	7.47E-05	9.74E+01	5.93E+01	2.65E+01
36	6.26	6.00E-04	7.40E-02	7.72E-05	9.77E+01	6.14E+01	2.87E+01
37	6.73	3.60E-04	5.13E-02	5.75E-05	9.79E+01	6.29E+01	3.04E+01
38	7.23	6.00E-04	9.86E-02	1.19E-04	9.82E+01	6.57E+01	3.37E+01
39	7.77	3.60E-04	6.83E-02	8.85E-05	9.84E+01	6.76E+01	3.62E+01
40	8.35	6.00E-04	1.32E-01	1.83E-04	9.87E+01	7.13E+01	4.14E+01
41	8.97	3.60E-04	9.11E-02	1.36E-04	9.89E+01	7.39E+01	4.53E+01
42	9.64	7.20E-04	2.10E-01	3.38E-04	9.93E+01	7.98E+01	5.49E+01
43	10.3	1.20E-04	4.05E-02	7.00E-05	9.94E+01	8.10E+01	5.69E+01
44	11.1	1.20E-04	4.68E-02	8.69E-05	9.94E+01	8.23E+01	5.94E+01
45	11.9	2.40E-04	1.08E-01	2.16E-04	9.95E+01	8.54E+01	6.55E+01
46	12.8	2.40E-04	1.25E-01	2.68E-04	9.97E+01	8.89E+01	7.31E+01
47	13.8	2.40E-04	1.44E-01	3.32E-04	9.98E+01	9.29E+01	8.25E+01
48	14.8	3.60E-04	2.50E-01	6.18E-04	1.00E+02	1.00E+02	1.00E+02
> TOTAL	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	L9:	1.86E-01 3	.54E+UU 3.	55E-03	•		

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#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 9.012 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

EFFIC. CORRECT.: D1 DIL. RATIO: 1:1

CONCENTRATIONS CUMULATIVE % SURFACE MASS SURFACE MASS NUMBER CHNL DIA NUMBER 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 .486 8.08E-09 1.90E-01 6.18E-03 4.96E-04 1.20E-04 9.60E-05 0.00E+00 0.00E+00 0.00E+00 1.90E-01 6-18E-03 4.96E-04 2.40E-04 2.55E-04 2.47E-08 5.70E-01 2.26E-02 2.02E-03 .581 2.40E-04 2.95E-04 3.07E-08 9.51E-01 4.16E-02 3.90E-03 1.20E-03 1.71E-03 1.92E-07 2.85E+00 1.52E-01 1.57E-02 7.20E-04 1.18E-03 1.43E-07 3.99E+00 2.28E-01 2.45E-02 1.68E-03 3.19E-03 4.13E-07 6.65E+00 4.33E-01 4.99E-02 .777 2.04E-03 4.47E-03 6.23E-07 9.89E+00 7.21E-01 8.81E-02 2.28E-03 5.77E-03 8.64E-07 1.35E+01 1.09E+00 1.41E-01 1.80E-03 5.26E-03 8.47E-07 1.63E+01 1.43E+00 1.93E-01 10 3.00E-03 1.01E-02 1.75E-06 2.11E+01 2.08E+00 3.01E-01 11 2.76E-03 1.08E-02 2.00E-06 2.55E+01 2.78E+00 4.24E-01 12 1.11 2.64E-03 1.19E-02 2.37E-06 2.97E+01 3.54E+00 5.70E-01 13 3.48E-03 1.81E-02 3.88E-06 3.52E+01 4.71E+00 8.08E-01 1.28 14 3.12E-03 1.87E-02 4.32E-06 4.01E+01 5.92E+00 1.07E+00 15 4.08E-03 2.83E-02 7.00E-06 4.66E+01 7.74E+00 1.50E+00 16 1.48 3.24E-03 2.59E-02 6.90E-06 5.17E+01 9.41E+00 1.93E+00 17 3.36E-03 3.11E-02 8.88E-06 5.70E+01 1.14E+01 2.47E+00 18 1.71 3.36E-03 3.59E-02 1.10E-05 6.24E+01 1.37E+01 3.15E+00 19 2.88E-03 3.55E-02 1.17E-05 6.69E+01 1.60E+01 3.87E+00 20 1.98 2.16E-03 3.08E-02 1.09E-05 7.03E+01 1.80E+01 4.54E+00 21 2.123.36E-03 5.52E-02 2.11E-05 7.57E+01 2.15E+01 5.84E+00 2.64E-03 5.01E-02 2.05E-05 7.98E+01 2.48E+01 7.10E+00 1.80E-03 3.95E-02 1.74E-05 8.27E+01 2.73E+01 8.17E+00 2.64 1.32E-03 3.34E-02 1.58E-05 8.48E+01 2.95E+01 9.14E+00 26 3.05 1.20E-03 3.51E-02 1.78E-05 8.67E+01 3.17E+01 1.02E+01 27 7.20E-04 2.43E-02 1.33E-05 8.78E+01 3.33E+01 1.10E+01 28 3.52 8.40E-04 3.27E-02 1.92E-05 8.92E+01 3.54E+01 1.22E+01 29 3.78 1.08E-03 4.86E-02 3.07E-05 9.09E+01 3.65E+01 1.41E+01 4.80E-04 2.50E-02 1.69E-05 9.16E+01 30 4.06 4.01E+01 1.52E+01 31 4.80E-04 2.88E-02 2.10E-05 9.24E+01 4.37 4.20E+01 1.64E+01 32 7.20E-04 4.99E-02 3.91E-05 9.35E+01 4.52E+01 1.88E+01 33 6.00E-04 4.80E-02 4.04E-05 9.45E+01 4.83E+015.04 2.13E+01 34 3.60E-04 3.33E-02 3.01E-05 9.51E+01 5.04E+01 2.32E+01 35 0.00E+00 0.00E+00 0.00E+00 9.51E+01 5.82 5.04E+01 '2.32E+01 36 3.60E-04 4.44E-02 4.63E-05 9.56E+01 5.33E+01 2.60E+01 37 6.73 2.40E-04 3.42E-02 3.83E-05 9.60E+01 5.55E+01 2.84E+01 38 7.23 6.06E+01 3.42E+01 4.80E-04 7.89E-02 9.51E-05 9.68E+01 7.20E-04 1.37E-01 1.77E-04 9.79E+01 6.94E+01 4.51E+01 3.60E-04 7.89E-02 1.10E-04 9.85E+01 7.45E+01 5.19E+01 0.00E+00 0.00E+00 0.00E+00 9.85E+01 7.45E+01 5.19E+01 8.97 41 2.40E-04 7.02E-02 1.13E-04 9.89E+01 7.90E+01 5.88E+01 42 9.64 1.20E-04 4.05E-02 7.00E-05 9.90E+01 8.16E+01 6.31E+01 43 10.3 11.1 3.60E-04 1.40E-01 2.61E-04 9.96E+01 9.06E+01 7.91E+01 44 0.00E+00 0.00E+00 0.00E+00 9.96E+01 9.06E+01 7.91E+01 45 11.9 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.98E+01 9.46E+01 8.73E+01 0.00E+00 0.00E+00 0.00E+00 9.98E+01 9.46E+01 8.73E+01 47 13.8 1.20E-04 8.32E-02 2.06E-04 1.00E+02 1.00E+02 1.00E+02 48 14.8 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4 6.31E-02 1.55E+00 1.63E-03 TOTALS:

#### TSI AERODYNAMIC PARTICLE SIZER

EFFIC. CORRECT.: D1

FILE NAME: OUT5 9.013 01-01-1980

OO SEC LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1

CONCENTRATIONS CUMULATIVE X SURFACE NUMBER SURFACE MASS NUMBER MASS 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 2.40E-04 1.92E-04 1.62E-08 2.82E-01 1.04E-02 7.77E-04 1.20E-04 1.11E-04 1.00E-08 4.23E-01 1.64E-02 1.26E-03 6.00E-04 6.38E-04 6.18E-08 1.13E+00 5.09E-02 4.23E-03 6.00E-04 7.36E-04 7.67E-08 1.83E+00 9.08E-02 7.92E-03 9.60E-04 1.37E-03 1.53E-07 2.96E+00 1.65E-01 1.53E-02 2.37E-03 2.86E-07 4.65E+00 2.93E-01 2.90E-02 1.44E-03 2.28E-03 4.33E-03 5.61E-07 7.32E+00 5.28E-01 5.60E-02 3.12E-03 6.84E-03 9.53E-07 1.10E+01 8.98E-01 1.02E-01 3.36E-03 8.51E-03 1.27E-06 1.49E+01 1.36E+00 1.63E-01 3.00E-03 8.77E-03 1.41E-06 1.85E+01 1.83E+00 2.31E-01 3.48E-03 1.18E-02 2.03E-06 2.25E+01 2.47E+00 3.29E-01 3.12E-03 1.22E-02 2.26E-06 2.62E+01 3.13E+00 4.37E-01 4.08E-03 1.84E-02 3.67E-06 3.10E+01 4.13E+00 6.14E-01 2.25E-02 4.82E-06 3.61E+01 5.34E+00 8.46E-01 4.32E-03 4.08E-03 2.45E-02 5.65E-06 4.08E+01 6.67E+00 1.12E+00 3.24E-02 8.03E-06 4.63E+01 8.43E+00 1.50E+00 4.68E-03 4.92E-03 3.94E-02 1.05E-05 5.21E+01 1.06E+01 2.01E+00 4.55E-02 1.30E-05 5.79E+01 1.30E+01 2.63E+00 4.92E-03 4.80E-03 5.12E-02 1.57E-05 6.35E+01 1.58E+01 3.39E+00 5.62E-02 1.86E-05 6.89E+01 1.88E+01 4.28E+00 4.56E-03 5.40E-03 7.69E-02 2.73E-05 7.52E+01 2.30E+01 5.60E+00 5.28E-03 8.68E-02 3.31E-05 8.14E+01 2.77E+01 7.19E+00 3.64E-02 1.49E-05 8.37E+01 2.97E+01 7.81E+00 1.92E-03 6.31E-02 2.78E-05 8.70E+01 3.31E+01 9.24E+00 2.88E-03 1.44E-03 3.65E-02 1.72E-05 8.87E+01 3.51E+01 1.01E+01 1.68E-03 4.91E-02 2.50E-05 9.07E+01 3.77E+01 1.13E+01 8.40E-04 2.84E-02 1.55E-05 9.17E+01 3.93E+01 1.20E+01 2.16E-03 8.42E-02 4.94E-05 9.42E+01 4.3EE+01 1.44E+01 2.40E-04 1.08E-02 6.82E-06 9.45E+01 4.44E+01 1.47E+01 2.50E-02 1.69E-05 9.51E+01 4.58E+01 1.55E+01 4.80E-04 2.16E-02 1.57E-05 9.55E+01 4.69E+01 1.63E+01 3.60E-04 3.33E-02 2.61E-05 9.61E+01 4.87E+01 1.76E+01 4.80E-04 3.60E-04 2.88E-02 2.42E-05 9.65E+01 5.03E+01 1.87E+01 2.40E-04 2.22E-02 2.01E-05 9.68E+01 5.15E+01 1.97E+01 1.24E-05 9.69E+01 5.22E+01 2.03E+01 1.20E-04 1.28E-02 2.40E-04 2.96E-02 3.09E-05 9.72E+01 5.38E+01 2.18E+01 1.92E-05 9.73E+01 5.47E+01 2.27E+01 1.20E-04 1.71E-02 1.20E-04 1.97E-02 2.38E-05 9.75E+01 5.58E+01 2.38E+01 1.20E-04 2.28E-02 2.95E-05 9.76E+01 5.70E+01 2.53E+01 40 8.35 2.40E-04 5.26E-02 7.33E-05 9.79E+01 5.99E+01 2.88E+01 4.80E-04 1.22E-01 1.82E-04 9.85E+01 6.65E+01 3.75E+01 41 8.97 2.40E-04 7.02E-02 1.13E-04 9.87E+01 7.03E+01 4.30E+01 42 9.64 1.20E-04 4.05E-02 7.00E-05 9.89E+01 7.25E+01 4.63E+01 43 10.3 44 11.1 1.20E-04 4.68E-02 8.69E-05 9.90E+01 7.50E+01 5.05E+01 2.40E-04 1.08E-01 2.16E-04 9.93E+01 8.09E+01 6.09E+01 45 11.9 3.60E-04 1.87E-01 4.01E-04 9.97E+01 9.10E+01 8.02E+01 46 12.8 0.00E+00 0.00E+00 0.00E+00 9.97E+01 9.10E+01 8.02E+01 47 13.8 48 14.8 2.40E-04 1.66E-01 4.12E-04 1.00E+02 1.00E+02 1.00E+02 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4 8.52E-02 1.85E+00 2.08E-03 TOTALS:

FILE NAME: OUT5 9.014 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CONCENTRATIONS CUMULATIVE %  CHNL DIA NUMBER SURFACE MASS NUMBER SURFACE MASS  < .486  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E  1  .504  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E  2  .542  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E  3  .581  3.60E-04  3.83E-04  3.71E-08  3.44E-01  1.61E-02  1.39E  4  .625  8.40E-04  1.03E-03  1.07E-07  1.15E+00  5.93E-02  5.40E	+00 +00 -03 -03
CARB DIA       0.00E+00       0.00E+00 <td< td=""><td>+00 +00 -03 -03</td></td<>	+00 +00 -03 -03
1 .504 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E 2 .542 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E 3 .581 3.60E-04 3.83E-04 3.71E-08 3.44E-01 1.61E-02 1.39E 4 .625 8.40E-04 1.03E-03 1.07E-07 1.15E+00 5.93E-02 5.40E	+00 +00 -03 -03
2 .542 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E 3 .581 3.60E-04 3.83E-04 3.71E-08 3.44E-01 1.61E-02 1.39E 4 .625 8.40E-04 1.03E-03 1.07E-07 1.15E+00 5.93E-02 5.40E	+00 -03 -03 -02
3 .581 3.60E-04 3.83E-04 3.71E-08 3.44E-01 1.61E-02 1.39E 4 .625 8.40E-04 1.03E-03 1.07E-07 1.15E+00 5.93E-02 5.40E	-03 -03 -02
4 .625 8.40E-04 1.03E-03 1.07E-07 1.15E+00 5.93E-02 5.40E	-03 -02
4 1020 01702 01 11002 00 11012 11	-02
	-02
5 .673 1.20E-03 1.71E-03 1.92E-07 2.29E+00 1.31E-01 1.26E 6 .723 1.44E-03 2.37E-03 2.86E-07 3.67E+00 2.30E-01 2.32E	~ ~
7 .777 2.64E-03 5.01E-03 6.50E-07 6.19E+00 4.41E-01 4.75E	-02
8 .835 3.96E-03 8.68E-03 1.21E-06 9.98E+00 8.05E-01 9.27E	-02
9 .897 3.12E-03 7.90E-03 1.18E-06 1.30E+01 1.14E+00 1.37E	-01
10 .964 4.80E-03 1.40E-02 2.26E-06 1.75E+01 1.73E+00 2.21E	-01
11 1.03 4.20E-03 1.42E-02 2.45E-06 2.16E+01 2.32E+00 3.13E	-01
12 1.11 2.88E-03 1.12E-02 2.09E-06 2.43E+01 2.79E+00 3.91E	-01
13 1.19 5.52E-03 2.49E-02 4.96E-06 2.96E+01 3.84E+00 5.76E	-01
14 1.28 4.44E-03 2.31E-02 4.95E-06 3.38E+01 4.81E+00 7.61E	-01
15 1.38 4.80E-03 2.88E-02 6.64E-06 3.84E+01 6.02E+00 1.01E	+00
16 1.48 6.72E-03 4.66E-02 1.15E-05 4.48E+01 7.97E+00 1.44E	+00
17 1.59 6.84E-03 5.48E-02 1.46E-05 5.14E+01 1.03E+01 1.98E	+00
18 1.71 6.96E-03 6.43E-02 1.84E-05 5.80E+01 1.30E+01 2.67E	+00
19 1.84 7.08E-03 7.56E-02 2.32E-05 6.48E+01 1.61E+01 3.54E	+00
20 1.98 5.16E-03 6.36E-02 2.10E-05 6.97E+01 1.88E+01 4.32E	+00
21 2.12 5.04E-03 7.18E-02 2.55E-05 7.45E+01 2.18E+01 5.28E	÷00
22 2.28 5.52E-03 9.07E-02 3.46E-05 7.98E+01 2.56E+01 6.57E	÷()()
23 2.45 2.04E-03 3.87E-02 1.59E-05 8.18E+01 2.73E+01 7.16E	+00
24 2.64 3.12E-03 6.84E-02 3.01E-05 8.47E+01 3.01E+01 8.29E	+00
25 2.83 2.76E-03 6.99E-02 3.31E-05 8.74E+01 3.31E+01 9.52E	÷GO
26 3.05 2.28E-03 6.67E-02 3.39E-05 8.96E+01 3.59E+01 1.08E	÷01
27 3.27 1.92E-03 6.48E-02 3.54E-05 9.14E+01 3.86E+01 1.21E	+(1
28 3.52 1.32E-03 5.15E-02 3.02E-05 9.27E+01 4.07E+01 1.32E	+01
29 3.78 7.20E-04 3.24E-02 2.05E-05 9.33E+01 4.21E+01 1.40E	+01
30 4.06 2.40E-04 1.25E-02 8.46E-06 9.36E+01 4.26E+01 1.43E	+()1
31 4.37 9.60E-04 5.76E-02 4.20E-05 9.45E+01 4.50E+01 1.59E	
32 4.69 3.60E-04 2.50E-02 1.95E-05 9.48E+01 4.61E+01 1.66E	
33 5.04 6.00E-04 4.80E-02 4.04E-05 9.54E+01 4.81E+01 1.81E	
34 5.42 3.60E-04 3.33E-02 3.01E-05 9.58E+01 4.95E+01 1.93E	
35 5.82 3.60E-04 3.84E-02 3.73E-05 9.61E+01 5.11E+01 2.06E	
36 6.26 4.80E-04 5.92E-02 6.18E-05 9.66E+01 5.36E+01 2.30E	
37 6.73 7.20E-04 1.03E-01 1.15E-04 9.72E+01 5.79E+01 2.73E	
38 7.23 3.60E-04 5.92E-02 7.13E-05 9.76E+01 6.04E+01 2.99E	
39 7.77 7.20E-04 1.37E-01 1.77E-04 9.83E+01 6.61E+01 3.65E	
40 8.35 2.40E-04 5.26E-02 7.33E-05 9.85E+01 6.83E+01 3.93E	
41 8.97 1.20E-04 3.04E-02 4.55E-05 9.86E+01 6.96E+01 4.10E	
42 9.64 2.40E-04 7.02E-02 1.13E-04 9.89E+01 7.26E+01 4.52E	
43 10.3 1.20E-04 4.05E-02 7.00E-05 9.90E+01 7.43E+01 4.78E	
44 11.1 2.40E-04 9.36E-02 1.74E-04 9.92E+01 7.82E+01 5.43E	
45 11.9 1.20E-04 5.40E-02 1.08E-04 9.93E+01 8.05E+01 5.83E	
46 12.8 0.00E+00 0.00E+00 0.00E+00 9.93E+01 8.05E+01 5.83E	
47 13.8 3.60E-04 2.16E-01 4.98E-04 9.97E+01 8.95E+01 7.69E	
48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02 1.00E	
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E	+02
TOTALS: 1.05E-01 2.38E+00 2.68E-03	

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 9.015 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		CONCE	ENTRATIONS		CUM	ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1	.504	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	.542	1.20E-04	1.11E-04		1.19E-01	5.62E-03	5.13E-04
3	.581	4.80E-04	5.10E-04	4.95E-08	5.95E-01	3.15E-02	3.05E-03
4	.625	4.80E-04	5.89E-04			6.14E-02	6.19E-03
5	.673	1.44E-03				1.65E-01	1.80E-02
6	.723	1.92E-03	3.16E-03		4.40E+00	3.26E-01	3.75E-02
7	.777	3.36E-03	6.38E-03		7.74E+00	6.50E-01	7.98E-02
8	.835	3.60E-03	7.89E-03		1.13E+01	1.05E+00	1.36E-01
9	.897	3.00E-03	7.60E-03			1.44E+00	1.94E-01
10	.964	2.88E-03	8.42E-03		1.71E+01	1.86E+00	2.64E-01
11	1.03	3.24E-03	1.09E-02		2.04E+01	2.42E+00	3.61E-01
12	1.11	5.04E-03	1.97E-02		2.54E+01	3.42E+00	5.48E-01
13	1.19	4.08E-03	1.84E-02			4.35E+00	7.36E-01
14	1.28	6.84E-03	3.56E-02		3.62E+01	6.15E+00	1.13E+00
15	1.38	6.00E-03	3.60E-02		4.21E+01	7.98E+00	1.55E+00
16	1.48	7.20E-03	4.99E-02		4.93E+01	1.05E+01	2.19E+00
17	1.59	6.00E-03	4.80E-02		5.52E+01	1.30E+01	2.84E+00
18	1.71	6.00E-03	5.55E-02		6.12E+01	1.58E+01	3.65E+00
19	1.84	4.56E-03	4.87E-02		6.57E+01	1.82E+01	4.42E+00
20	1.98	4.92E-03	6.07E-02		7.06E+01	2.13E+01	5.45E+00
21	2.12	4.92E-03	7.01E-02		7.55E+01	2.13E+01 2.49E+01	6.72E+00
		4.68E-03	7.69E-02		8.01E+01	2.88E+01	
22	2.28	4.80E-03	9.11E-02				
23	2.45	2.52E+03			8.49E+01	3.34E+01	1.01E+01
24	2.64		5.52E-02		8.74E+01	3.62E+01	1.14E+01
25	2.83	2.04E-03	5.16E-02		8.94E+01	3.88E+01	1.26E+01
26	3.05	1.56E-03	4.56E-02		9.10E+01	4.11E+01	1.38E+01
27	3.27	1.68E-03	5.67E-02	3.10E-05	9.26E+01	4.40E+01	1.54E+01
28	3.52	1.20E-03	4.68E-02		9.38E+01	4.64E+01	1.68E+01
29	3.78	7.20E-04	3.24E-02	2.05E-05	9.45E+01	4.80E+01	1.79E+01
30	4.06	9.60E-04	4.99E-02	3.38E-05	9.55E+01	5.06E+01	1.96E+01
31	4.37	2.40E-04	1.44E-02	1.05E-05	9.57E+01	5.13E+01	2.01E+01
32	4.69	4.80E-04	3.33E-02	2.61E-05	9.62E+01	5.30E+01	2.15E+01°
33	5.04	2.40E-04	1.92E-02	1.62E-05	9.64E+01	5.40E+01	2.23E+01
34	5.42	3.60E-04	3.33E-02	3.01E-05	9.68E+01	5.57E+01	2.38E+01
35	5.82	2.40E-04	2.56E-02	2.49E-05	9.70E+01	5.70E+01	2.51E+01
3 <b>6</b>	6.26	3.60E-04	4.44E-02	4.63E-05	9.74E+01	5.92E+01	2.75E+01
37	6.73	2.40E-04	3.42E-02	3.83E-05	9.76E+01	6.09E+01	2.95E+01
38	7.23	2.40E-04	3.95E-02	4.76E-05	9.79E+01	6.29E+01	3.19E+01
39	7.77	4.80E-04	9.11E-02	1.18E-04	9.83E+01	6.76E+01	3.79E+01
40	8.35	2.40E-04	5.26E-02	7.33E-05	9.86E+01	7.02E+01	4.17E+01
41	8.97	1.20E-04	3.04E-02	4.55E-05	9.87E+01	7.18E+01	4.40E+01
42	9.64	2.40E-04	7.02E-02	1.13E-04	9.89E+01	7.53E+01	4.98E+01
43	10.3	1.20E-04	4.05E-02	7.00E-05	9.90E+01	7.74E+01	5.34E+01
44	11.1	3.60E-04	1.40E-01	2.61E-04	9.94E+01	8.45E+01	6.67E+01
45	11.9	2.40E-04	1.08E-01	2.16E-04	9.96E+01	9.00E+01	7.78E+01
46	12.8	2.40E-04	1.25E-01	2.68E-04	9.99E+01	9.63E+01	9.15E+01
47	13.8	1.20E-04	7.20E-02	1.66E-04	1.00E+02	1.00E+02	1.00E+02
48	14.8	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	1.01E-01 1	.97E+00 1	95E-03			

FILE NAME: OUT5 9.016 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

•		CONCE	NTRATIONS		CUMU	LATIVE %	
CHNI	DIA		SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ì	.504	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	.542	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	.581	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	.625	4.80E-04	5.89E-04	6.14E-08	2.40E+00	9.88E-02	1.05E-02
5	.673	2.40E-04	3.42E-04	3.83E-08	3.59E+00	1.56E-01	1.70E-02
6	.723	2.40E-04	3.95E-04	4.76E-08	4.79E+00	2.22E-01	2.52E-02
7	.777	7.20E-04	1.37E-03	1.77E-07	8.38E+00	4.52E-01	5.54E-02
8	.835	1.32E-03	2.89E-03	4.03E-07	1.50E+01	9.37E-01	1.24E-01
9	.897	6.00E-04	1.52E-03	2.27E-07	1.80E+01	1.19E+00	1.63E-01
10	.964	2.40E-04	7.02E-04	1.13E-07	1.92E+01	1.31E+00	1.82E-01
11	1.03	3.60E-04	1.22E-03	2.10E-07	2.10E+01	1.51E+00	2.18E-01
12	1.11	1.56E-03	6.09E-03	1.13E-06	2.87E+01	2.53E+00	4.11E-01
13	1.19	1.08E-03	4.86E-03	9.70E-07	3.41E+01	3.35E+00	5.77E-01
14	1.28	2.40E-04	1.25E-03	2.68E-07	3.53E+01	3.56E+00	6.23E-01
15	1.38	3.60E-04	2.16E-03	4.98E-07	3.71E+01	3.92E+00	7.08E-01
16	1.48	1.32E-03	9.15E-03	2.27E-06	4.37E+01	5.46E+00	1.09E+00
17	1.59	3.60E-04	2.88E-03	7.67E-07	4.55E+01	5.94E+00	1.23E+00
18	1.71	3.60E-04	3.33E-03	9.51E-07	4.73E+01	6.50E+00	1.39E+00
19	1.84	1.08E-03	1.15E-02	3.54E-06	5.27E+01	8.43E+00	1.99E+00
20	1.98	3.60E-04	4.44E-03	1.47E-06	5.45E+01	9.18E+00	2.24E+00
21	2.12	6.00E-04	8.54E-03	3.03E-06	5.75E+01	1.06E+01	2.76E+00
22	2.28	7.20E-04	1.18E-02	4.51E-06	6.11E+01	1.2EE+01	3.53E+00
23	2.45	1.20E-03	2.28E-02	9.33E-06	6.71E+01	1.64E+01	5.13E+00
24	2.64	7.20E-04	1.58E-02	6.95E-06	7.07E+01	1.91E+01	6.31E+00
25	2.83	6.00E-04	1.52E-02	7.19E-06	7.37E+01	2.16E+01	7.54E+00
26	3.05	7.20E-04	2.10E-02	1.07E-05	7.72E+01	2.51E+01	9.37E+00
27	3.27	6.00E-04	2.03E-02	1.11E-05	8.02E+01	2.85E+01	1.13E+01
28	3.52	7.20E-04	2.81E-02	1.65E-05	8.38E+01		1.41E+01
29	3.78	4.80E-04	2.16E-02	1.36E-05	8.62E+01	3.69E+01	1.64E+01
30	4.06	0.00E+00	0.00E+00	0.00E+00	8.62E+01	3.69E+01	1.64E+01
31	4.37	1.20E-04	7.20E-03	5.25E-06		3.81E+01	1.73E+01
32	4.69	3.60E-04	2.50E-02	1.95E-05	8.86E+01	4.23E+01	2.06E+01
33	5.04	4.80E-04	3.84E-02	3.23E-05	9.10E+01	4.87E+01	2.62E+01
34	5.42	3.60E-04	3.33E-02	3.01E-05	9.28E+01	5.43E+01	3.13E+01
35	5.82	3.60E-04	3.84E-02	3.73E-05		6.08E+01 7.07E+01	3.77E+01 4.82E+01
36 37	6.26	4.80E-04 1.20E-04	5.92E-02 1.71E-02	6.18E-05 1.92E-05	9.70E+01 9.76E+01	7.35E+01	5.15E+01
38	6.73 7.23	1.20E-04 1.20E-04	1.71E-02 1.97E-02	2.38E-05	9.82E+01	7.69E+01	5.56E+01
39	7.77	0.00E+00	0.00E+00	0.00E+00	9.82E+01	7.69E+01	5.56E+01
40	8.35	0.00E+00	0.00E+00	0.00E+00	9.82E+01	7.69E+01	5.56E+01
41	8.97	0.00E+00	0.00E+00	0.00E+00	9.82E+01	7.69E+01	5.56E+01
42	9.64	1.20E-04	3.51E-02	5.64E-05	9.88E+01	8.27E+01	6.52E+01
43	10.3	1.20E-04 1.20E-04	4.05E-02	7.00E-05	9.94E+01	8.95E+01	7.72E+01
44	11.1	0.00E+00	0.00E+00	0.00E+00	9.94E+01	• • • • • • •	7.72E+01
45	11.1	0.00E+00	0.00E+00	0.00E+00	9.94E+01	8.95E+01	7.72E+01
46	12.8	1.20E-04	6.24E-02	1.34E-04	1.00E+02	1.00E+02	1.00E+02
47	13.8	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
48	14.8	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA		2.00E-02 5					
· ·		J. 7 7 2 0 0					

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 9.017 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

		CONCI	ENTRATIONS		CUMU	LATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	2.40E-04	1.55E-04	1.18E-08	1.00E-01	3.95E-03	3.15E-04
1	.504	2.40E-04	1.92E-04	1.62E-08	2.00E-01	8.84E-03	7.47E-04
2	.542	2.40E-04	2.22E-04	2.00E-08	3.00E-01	1.45E-02	1.28E-03
3	.581	4.80E-04	5.10E-04	4.95E-08	5.01E-01	2.75E-02	2.60E-03
4	.625	2.28E-03	2.80E-03	2.92E-07	1.45E+00	9.87E-02	1.04E-02
5	.673	2.52E-03	3.59E-03	4.02E-07	2.50E+00	1.90E-01	2.12E-02
6	.723	6.00E-03	9.87E-03	1.19E-06	5.01E+00	4.41E-01	5.30E-02
7	.777	5.40E-03	1.03E-02	1.33E-06	7.26E+00	7.02E-01	8.85E-02
8	.835	7.32E-03	1.61E-02	2.24E-06	1.03E+01	1.11E+00	1.48E-01
9	.897	8.64E-03	2.19E-02	3.27E-06	1.39E+01	1.67E+00	2.36E-01
10	.964	1.03E-02	3.02E-02	4.85E-06	1.82E+01	2.44E+00	3.66E-01
11	1.03	9.96E-03	3.36E-02	5.81E-06	2.24E+01	3.29E+00	5.21E-01
12	1.11	8.52E-03	3.32E-02	6.17E-06	2.59E+01	4.14E+00	6.86E-01
13	1.19	1.19E-02	5.35E-02	1.07E-05	3.09E+01	5.50E+00	9.72E-01
14	1.28	1.27E-02	6.62E-02	1.42E-05	3.62E+01	7.18E+00	1.35E+00
15	1.38	1.76E-02	1.06E-01	2.44E-05	4.35E+01	9.88E+00	2.00E+00
16	1.48	1.44E-02	9.98E-02	2.47E-05	4.95E+01	1.24E+01	2.66E+00
17	1.59	1.37E-02	1.10E-01	2.91E-05	5.53E+01	1.52E+01	3.44E+00
18	1.71	1.43E-02	1.32E-01	3.77E-05		1.86E+01	4.45E+00
19	1.84	1.50E-02	1.60E-01	4.92E-05	6.75E+01	2.26E+01	5.77E+00
20	1.98	1.06E-02	1.30E-01	4.30E-05	7.19E+01	2.60E+01	6.92E+00
21	2.12	1.31E-02	1.86E-01	6.61E-05		3.07E+01	8.69E+00
22	2.28	1.22E-02	2.01E-01	7.67E-05		3.58E+01	1.07E+01
23	2.45	9.72E-03	1.84E-01	7.56E-05	8.65E+01	4.05E+01	1.28E+01
24	2.54	6.96E-03	1.53E-01	6.72E-05	8.94E+01	4.44E+01	1.46E+01
25	2.83	7.56E-03	1.91E-01	9.05E-05		4.93E+01	1.70E+01
26	3.05	3.36E-03	9.82E-02	4.99E-05	9.39E+01	5.18E+01	1.83E+01
27	3.27	2.76E-03	9.32E-02	5.09E-05	9.51E+01	5.41E+01	1.97E+01
28	3.52	1.92E-03	7.49E-02	4.39E-05	9.59E+01	5.61E+01	2.08E+01
29	3.78	1.56E-03	7.02E-02	4.43E-05	9.65E+01	5.78E+01	2.20E+01
30	4.06	7.20E-04	3.74E-02	2.54E-05	9.68E+01	5.88E+01	2.27E+01
31	4.37	1.20E-03	7.20E-02	5.25E-05	9.73E+01	6.06E+01	2.41E+01
32	4.69	4.80E-04	3.33E-02	2.61E-05		6.15E+01	2.48E+01
33	5.04	2.40E-04	1.92E-02	1.62E-05	9.76E+01	6.20E+01	2.52E+01
34	5.42	9.60E-04	8.87E-02	8.02E-05	9.80E+01	6.42E+01	2.74E+01
35	5.82	7.20E-04	7.69E-02	7.47E-05		6.62E+01	2.94E+01
36	6.26	6.00E-04	7.40E-02	7.72E-05		6.81E+01	3.15E+01
37	6.73	6.00E-04	8.54E-02	9.58E-05	,	7.02E+01	3.40E+01
38	7.23	1.20E-04	1.97E-02	2.38E-05		7.07E+01	3.47E+01
39	7.77	4.80E-04	9.11E-02	1.18E-04		7.31E+01	3.78E+01
40	8.35	2.40E-04	5.26E-02	7.33E-05		7.44E+01	3.98E+01
41	8.97	2.40E-04	6.08E-02	9.09E-05		7.59E+01	4.22E+01
42	9.64	1.20E-04	3.51E-02	5.64E-05	9.93E+01	7.68E+01	4.37E+01
43	10.3	0.00E+00	0.00E+00	0.00E+00		7.68E+01	4.37E+01
44	11.1	2.40E-04	9.36E-02	1.74E-04		7.92E+01	4.84E+01
45	11.9	3.60E-04	1.62E-01	3.23E-04	9.96E+01	8.33E+01	5.70E+01
46	12.8	0.00E+00	0.00E+00	0.00E+00		8.33E+01	5.70E+01
47	13.8	1.20E-04	7.20E-02	1.66E-04	9.96E+01	8.52E+01	6.14E+01
48	14.8	8.40E-04	5.82E-01	1.44E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00		1.00E+02	1.00E+02
TOTA			3.93E+00 3.				

FILE NAME: OUT5 9.018 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCE	NTRATIONS		CUMU	LATIVE %	
CHNL	DTA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
CHND <	.486		7.21E-05	5.25E-09		2.26E-03	1.24E-04
ì	.504	1.20E-04	9.60E-05	8.08E-09	1.81E-01		3.15E-04
2	.542	1.20E-04	1.11E-04	1.00E-08	2.72E-01		5.51E-04
3	.581	3.60E-04	3.83E-04	3.71E-08	5.44E-01		1.43E-03
4	.625	9.60E-04	1.18E-03	1.23E-07	1.27E+00		4.33E-03
5	.673	1.32E-03	1.88E-03	2.11E-07	2.27E+00		9.31E-03
6	.723	3.00E-03	4.93E-03	5.95E-07	4.54E+00		2.34E-02
7	.777	3.60E-03	6.84E-03	8.86E-07	7.26E+00		4.43E-02
8	.835	5.16E-03	1.13E-02	1.58E-06	1.12E+01		8.15E-02
9	.897	4.20E-03	1.06E-02	1.59E-06	1.43E+01	1.17E+00	1.19E-01
10	.964	6.00E-03	1.75E-02	2.82E-06	1.89E+01	1.72E+00	1.86E-01
11	1.03	4.92E-03	1.66E-02	2.87E-06	2.26E+01	2.25E+00	2.54E-01
12	1.11	7.32E-03	2.86E-02	5.30E-06	2.81E+01	3.14E+00	3.79E-01
13	1.19	8.16E-03	3.67E-02	7.33E-06	3.43E+01	4.29E+00	5.52E-01
14	1.28	6.84E-03	3.56E-02	7.63E-06	3.95E+01	5.41E+00	7.32E-01
15	1.38	7.92E-03	4.76E-02	1.10E-05	4.55E+01	6.90E+00	9.91E-01
16	1.48	8.52E-03	5.91E-02	1.46E-05	5.19E+01	8.76E+00	1.34E+00
17	1.59	8.54E-03	6.92E-02	1.84E-05	5.84E+01	1.09E+01	1.77E+00
18	1.71	5.64E-03	5.21E-02	1.49E-05	6.27E+01	1.26E+01	2.12E+00
19	1.84	8.88E-03	9.48E-02	2.91E-05	6.94E+01	1.55E+01	2.81E+00
20	1.98	7.44E-03	9.17E-02	3.03E-05	7.50E+01	1.84E+01	3.53E+00
21	2.12	6.00E-03	8.54E-02	3.03E-05	7.96E+01	2.11E+01	4.24E+00
22	2.28	3.24E-03	5.33E-02	2.03E-05	8.20E+01	2.28E+01	4.72E+00
23	2.45	3.50E-03	6.83E-02	2.80E-05	8.48E+01	2.49E+01	5.38E+00
24	2.64	3.00E-03	6.58E-02	2.89E-05	8.70E+01	2.70E+01	6.07E+00
25	2.83	2.40E-03	6.08E-02	2.87E-05	8.8E+01	2.89E+01	6.75E+00
26	3.05	2.88E-03	8.42E-02	4.28E-05	9.10E+01	3.15E+01	7.76E+00
27	3.27	1.44E-03	4.86E-02	2.66E-05	9.21E+01	3.30E+01	8.39E+00
28	3.52	9.60E-04	3.74E-02	2.20E-05	9.28E+01	3.42E+01	8.91E+00
29	3.78	9.60E-04	4.32E-02	2.73E-05	9.36E+01	3.56E+01	9.55E+00
30	4.06	8.40E-04	4.37E-02	2.96E-05	9.42E+01	3.69E+01	1.02E+01
31	4.37	9.60E-04	5.76E-02	4.20E-05	9.49E+01	3.87E+01	1.12E+01
32	4.€9	0.00E+00	0.00E+00	0.00E+00	9.49E+01	3.87E+01	1.12E+01
33	5.04	7.20E-04	5.76E-02	4.85E-05	9.55E+01	4.06E+01	1.24E+C1
34	5.42	6.00E-04	5.55E-02	5.01E-05	9.59E+01	4.23E+01 ·	-
35	5.82	4.80E-04	5.12E-02	4.98E-05	9.63E+01	4.39E+01	1.47E+01
36	6.26	2.40E-04	2.96E-02	3.09E-05	9.65E+01	4.48E+01	1.55E+01
37	6.73	6.00E-04	8.54E-02	9.58E-05	9.69E+01	4.75E+01	1.77E+01
38	7.23	4.80E-04	7.89E-02	9.51E-05	9.73E+01	5.00E+01	2.00E+01
39	7.77	3.60E-04	6.83E-02	8.85E-05	9.75E+01	5.21E+01	2.21E+01
40	8.35	4.80E-04	1.05E-01	1.47E-04	9.79E+01	5.54E+01	2.55E+01
41	8.97	1.20E-04	3.04E-02	4.55E-05	9.80E+01	5.64E+01	2.66E+01
42	9.64	3.60E-04	1.05E-01	1.69E-04	9.83E+01	5.97E+01	3.06E+01
43	10.3	3.60E-04	1.22E-01	2.10E-04	9.85E+01	6.35E+01	3.56E+01
44	11.1	2.40E-04	9.36E-02	1.74E-04	9.87E+01	6.64E+01	3.97E+01
45	11.9	1.20E-04	5.40E-02	1.08E-04	9.88E+01	6.81E+01	4.22E+01
46 47	12.8 13.8	1.20E-04 4.80E-04	6.24E-02 2.88E-01	1.34E-04	9.89E+01 9.93E+01	7.01E+01 7.91E+01	4.54E+01 6.11E+01
48	14.8	9.60E-04	6.66E-01	6.64E-04 1.65E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02 1.00E+02
TOTAL			1.19E+00 4.		1.002702	1.002+02	1.002.402
171							

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 9.019 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

•					<b>61114</b>		
			ENTRATIONS	WA 00		JLATIVE %	WASS
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1	.504	1.20E-04	9.60E-05	8.08E-09	2.55E-01	7.85E-03	5.22E-04
2	.542	1.20E-04	1.11E-04	1.00E-08	5.10E-01	1.69E-02	1.17E-03
3	.581	1.20E-04	1.28E-04	1.24E-08	7.65E-01	2.73E-02	1.97E-03
4	.625	3.60E-04	4.42E-04	4.60E-08	1.53E+00	6.34E-02	4.95E-03
<b>5</b>	.673	3.60E-04	5.12E-04	5.75E-08	2.30E+00	1.05E-01	8.66E-03
<b>6</b> ;	.723	8.40E-04	1.38E-03	1.67E-07	4.08E+00	2.18E-01	1.94E-02
7 ;	.777	7.20E-04	1.37E-03	1.77E-07	5.61E+00	3.30E-01	3.09E-02
8 '	.835	1.68E-03	3.68E-03	5.13E-07	9.18E+00	6.31E-01	6.41E-02
9	.897	1.80E-03	4.56E-03	6.82E-07	1.30E+01	1.00E+00	1.08E-01
10	.964	1.08E-03	3.16E-03	5.08E-07	1.53E+01	1.26E+00	1.41E-01
11	1.03	2.28E-03	7.70E-03	1.33E-06	2.02E+01	1.89E+00	2.27E-01
12	1.11	2.76E-03	1.08E-02	2.00E-06	2.60E+01	2.77E+00	3.56E-01
13	1.19	2.40E-03	1.08E-02	2.16E-06	3.11E+01	3.65E+00	4.96E-01
14	1.28	2.64E-03	1.37E-02	2.94E-06	3.67E+01	4.78E+00	6.86E-01
15	1.38	2.16E-03	1.30E-02	2.99E-06			8.80E-01
16	1.48	3.00E-03	2.08E-02	5.15E-06	4.77E+01	7.54E+00	1.21E+00
17.	1.59	3.24E-03	2.59E-02	6.90E-06	5.46E+01	9.66E+00	1.66E+00
18	1.71	2.64E-03	2.44E-02	6.98E-06		1.16E+01	2.11E+00
19	1.84	2.64E-03		8.66E-06			
20	1.98	1.92E-03	2.37E-02	7.82E-06		1.59E+01	
21	2.12	2.64E-03	3.76E-02	1.33E-05	7.55E+01	1.90E+01	4.04E+00
22	2.28	1.80E-03	2.96E-02	1.13E-05	7.93E+01	2.14E+01	4.77E+00
23	2.45	1.32E-03	2.51E-02	1.03E-05		2.34F+01	5.43E+00
24	2.64	1.56E-03	3.42E-02	1.51E-05		2.62E+01	6.41E+00
25	2.83	8.40E-04	2.13E-02	1.01E-05	8.72E+01	2.80E+01	7.06E+00
26	3.05	1.08E-03	3.16E-02	1.61E-05	8.95E+01	3.05E+01	8.10E+00
27	3.27	3.60E-04	1.22E-02	6.64E-06	9.03E+01	3.15E+01	8.52E+00
28	3.52	4.80E-04	1.87E-02	1.10E-05	9.13E+01	3.31E+01	9.24E+00
29	3.78	4.80E-04	2.16E-02	1.36E-05	9.23E+01	3.48E+01	1.01E+01
30	4.06	1.20E-04	6.24E-03	4.23E-06	9.26E+01	3.53E+01	1.04E+01
31	4.37	3.60E-04	2.16E-02	1.57E-05	9.34E+01	3.71E+01	1.14E+01
32	4.69	4.80E-04	3.33E-02	2.61E-05	9.44E+01	3.98E+01	1.31E+01
33	5.04	3.60E-04	2.88E-02	2.42E-05	9.52E+01	4.22E+01	1.47E+01
34	5.42	2.40E-04	2.22E-02	2.01E-05	9.57E+01	4.40E+01	1.60E+01
35	5.82	1.20E-04	1.28E-02	1.24E-05	9.59E+01	4.50E+01	1.68E+01
36	6.26	0.00E+00	0.00E+00	0.00E+00	9.59E+01	4.50E+01	1.68E+01
37	6.73	0.00E+00	0.00E+00	0.00E+00		4.50E+01	1.68E+01
38	7.23	2.40E-04	3.95E-02	4.76E-05		4.83E+01	1.98E+01
39.	7.77	3.60E-04	6.83E-02	8.85E-05	9.72E+01	5.38E+01	2.56E+01
40	8.35	1.20E-04	2.63E-02	3.66E-05	9.74E+01	5.60E+01	2.79E+01
41	8.97	2.40E-04	6.08E-02	9.09E-05	9.80E+01	6.10E+01	3.38E+01
42	9.64	0.00E+00	0.00E+00	0.00E+00	9.80E+01	6.10E+01	3.38E+01
43	10.3	1.20E-04	4.05E-02	7.00E-05	9.82E+01	6.43E+01	3.83E+01
44	11.1	2.40E-04	9.36E-02	1.74E-04	9.87E+01	7.19E+01	4.96E+01
45	11.9	1.20E-04	5.40E-02	1.08E-04	9.90E+01	7.63E+01	5.66E+01
46	12.8	1.20E-04	6.24E-02	1.34E-04	9.92E+01	8.14E+01	6.52E+01
47	13.8	2.40E-04	1.44E-01	3.32E-04	9.97E+01	9.32E+01	8.67E+01
48	14.8	1.20E-04	8.32E-02	2.06E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	4.70E-02	1.22E+00 1.	55E-03			

FILE NAME: OUT5 7.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		60):61			CIM	HATTUR &	
CUNI	DIA	NUMBER	ENTRATIONS SURFACE	MASS	NUMBER	ULATIVE % SURFACE	MASS
CHNL	.486	9.96E-03	6.17E-03			7.03E-02	6.65E-03
1	.504		4.51E-03		1.55E+00	1.22E-01	1.21E-02
2	.542	9.48E-03			2.49E+00	,	2.36E-02
3	.581	1.34E-02			3.82E+00		4.37E-02
4	.625	1.91E-02	2.34E-02	2.44E-06	5.72E+00	6.51E-01	7.91E-02
5	.673	4.00E-02	5.69E-02	6.38E-06	9.68E+00	1.30E+00	1.72E-01
6	.723	6.52E-02			1.61E+01		3.59E-01
7	.777	9.00E-02	1.71E-01		2.51E+01	4.47E+00	6.80E-01
8	.835	1.02E-01	2.23E-01	3.10E-05	3.52E+01	7.01E+00	1.13E+00
9	.897	8.72E-02	2.21E-01		4.38E+01	9.53E+00	1.61E+00
10	.964	7.67E-02			5.14E+01	1.21E+01	2.13E+00
11	1.03	6.42E-02			5.78E+01	1.46E+01	2.67E+00
12	1.11	5.80E-02	2.26E-01	4.20E-05	6.35E+01	1.71E+01	3.28E+00
13	1.19	5.23E-02	2.36E-01	4.70E-05	6.87E+01	1.98E+01	3.97E+00
14	1.28	4.62E-02			7.33E+01	2.26E+01	4.71E+00
15	1.38	4.19E-02	2.52E-01		7.75E+01	2.54E+01	5.55E+00
16	1.48	3.22E-02	2.23E-C1	5.52E-05	8.07E+01	2.80E+01	6.35E÷00
17	1.59	2.88E-02	2.31E-01	6.14E-05	8.35E+01	3.0EE+01	7.24E+00
18	1.71	2.14E-02	1.97E-01		8.56E+01	3.29E+01	8.06E+00
: 9	1.84	1.91E-02	2.04E-01	6.26E-05	8.75E+01	3.52E+01	8.97E-00
20	1.98	1.87E-01	2.31E-01	7.62E-05	8.94E+01	3.78E+01	1.01E+01
21	2.12	1.54E-02	2.19E-01	7.76E-05	9.09E+01	4.08E-01	1.11E-01
22	2.28	1.84E-01	1.11E-01	8.42E-05	9.22E+01	4.28E+01	1.24E+C:
23	2.45	1.09E-02	1.07E-01	8.49E-05	9.33E+01	4.52E+01	1.37E-01
24	2.64	1.01E-02	2.11E-01	9.73E-05	9.43E+01	4.77E+01	1.51E+01
25	2.83	8.52E-03	2.16E-01	1.02E-04	9.52E+01	5.01E+01	1.67E-01
25	3.05	7.56E-03	2.21E-01	1.12E-04	9.89E+01	5.27E+01	1.82E-01
27	3.27	8.16E-03	2.75E-01	1.50E-04	9.67E+01	5.58E+01	2.(3E-0)
28	3.52	5.52E-03	2.16E-01	1.26E-04	9.73E+01	5.83E÷01	2.22E+01
29	3.78	3.12E-03	1.40E-01	8.86E-05	9.76E+C1	5.99E+01	2.35E-01
30	4.06	4.32E-03	2.25E-01	1.52E-04	9.80E+01	6.24E+01	2.57E+01
31	4.37	2.52E-03	1.51E-01	1.10E-04	9.83E+01	6.42E+01	2.73E-01
32	4.69	3.36E-03	2.33E-01	1.82E-04	9.86E+01	6.68E+01	2.99E+01
33	5.04	2.52E-03	2.02E-01	1.70E-04	9.891+01	6.91E÷01	3.04E+(1
34	5.42	1.80E-03	1.66E-01	1.50E-04	9.90E÷01	7.10E÷01	3.46E-01
35	5.82	2.16E-03	2.31E-01	2.24E-04	9.92E+01	7.36E+01	3.78E+01
36	6.26	8.40E-0:	1.04E-01	1.08E-04	9.93E+01	7.4EE+01	3.94E-01
37	6.73	7.20E-04	1.03E-01	1.15E-04	9.94E+01	7.60E+01	4.10E+01
38	7.23	1.44E-03	2.37E-01	2.85E-04	9.95E+01	7.87E+01	4.82E+01
39	7.77	6.00E-04	1.14E-01	1.48E-04	9.96E+01	\$.00E+01	4.73E+61
<b>∔0</b> <b>∔1</b>	8.35 8.97	4.80E-04 2.40E-04	1.05E-01 6.08E-02	1.47E-04 9.09E-05	9.97E+01 9.97E+01	8.12E+01 8.19E+01	4.94E+01 ,5.08E+01
42	9.64	3.60E-04	1.05E-01	1.69E-04	9.97E+01	8.31E+01	15.32E+01
13	10.3	3.60E-04	1.05E-01 1.22E-01	2.10E-04	9.97E+01 9.97E+01	8.45E÷01	5.63E+01
14	11.1	2.40E-04	9.36E-02	1.74E-04	9.98E+01	8.55E+01	5.88E+01
45	11.9	7.20E-04	3.24E-01	6.47E-04	9.98E+01	8.92E+01	6.82E+01
46	12.8	6.00E-04	3.12E-01	6.69E-04	9.99E+01	9.28E+01	7.78E-01
47	13.8	3.60E-04	2.16E-01	4.98E-04	9.99E+01	9.53E+01	8.51E+01
48	14.8	6.00E-04	4.16E-01	1.03E-03	1.00E-02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL		1.01E+00 8		–			_ · · •

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 7.002 01-C1-1980

LAST CALIERATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		coxes	ENTRATIONS		CUMI	CLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
\( \)	.485	6.48E-03		3.00E-07	8.76E-01		4.90E-C3
1	.504	4.20E-03		2.83E-07	1.44E+00		9.50E-03
2	.542	5.88E-03		4.91E-07	2.24E+00		1.75E-02
3	.581	8.76E-03		9.03E-07	3.42E+00		3.22E-02
	.625	1.72E-02		2.19E-06			6.79E-02
4 5 6 7	.673	3.11E-02		4.96E-06	9.94E+00		1.49E-01
6	.723	5.36E-02	8.82E-02	1.06E-05	1.72E+01	2.56E+00	3.22E-01
-	.777	6.85E-02		1.69E-05	2.65E+01	4.46E+00	5.97E-01
6	.835	6.60E-02		2.02E-05			
8 9		5.83E-02		2.01E-05			9.26E-01
10	.897		1.48E-01	2.65E-05	4.33E+01	8.72E+00	1.29E+00
10	.964	5.64E-02	1.65E-01		5.09E+01	1.11E+01	1.72E+CO
11	1.03	4.93E-02	1.672-01	2.88E-05	5.76E+01	1.35E+01	2.19E+00
12	1.11	4.43E-02		3.21E-05	6.36E+01	1.61E+01	2.71E+00
13	1.19	3.64E-02	1.64E-01	3.27E-05	6.85E+01	1.85E+01	3.24E+00
14	1.28	3.70E-02	1.92E-01	4.12E-05	7.35E+01	2.13E+01	3.91E+00
15	1.38	2.96E-02	1.782-01	4.10E-05	7.75E+01	2.38E+01	4.58E+00
16	1.48	2.45E-02		4.20E-C5			5.27E+00
17	1.59	2.00E-02	1.60E-01	4.27E-05		2.87E+01	5.96E+00
19	1.71	1.665-02	1.53E-01	4.38E-05	8.57E+01	3.09E+01	6.67E+00
19	1.84	1.35E-02	1.45E-01	4.45E-05	8.76E+01	3.30E+01	7.40E+00
20	1.98	1.30E-02	1.60E-01	5.28E-05			8.26E+00
21	2.12	1.192-02	1.69E-01	6.00E-03	9.09E-01		9.24E+00
22	2.28	1.01E-02	1.66E-01	6.32E-05	9.23E+01	4.02E+01	1.03E+01
23	2.45	8.75E-03	1.66E-01	6.81E-05	9.35E÷01	4.26E+01	1.14E+01
24	2.54	7.32E-03	1.60E-01	7.06E-05	9.45E+01	4.50E-01	1.23E+01
25	2.83	5.76E-03	1.46E-01	6.90E-05	9.52E+01	4.71E+01	1.37E+01
2€	3.05	5.88E-03	1.72E-C1	8.74E-05	9.60E+01	4.96E-01	1.51E+01
27	3.27	5.16E-03	1.74E-01	9.52E-05	9.67E+01	5.21E+01	1.66E+01
28	3.52	3.24E-03	1.26E-01	7.42E-05	9.72E+01	5.40E+01	1.78E+01
29	3.78	2.76E-03	1.24E-01	7.84E-05	9.76E+01	5.58E+01	1.91E+01
30	4.06	2.28E-03	1.19E-01	8.04E-C5	9.79E+01	5.75E-01	2.04E+01
31	4.37	2.52E-03	1.51E-01	1.10E-04	9.82E+01	5.97E+01	2.22E+01
32	4.69	2.64E-03	1.83E-01	1.43E-04	9.86E+01	6.24E+01	2.46E+01
33	5.04	1.32E-03	1.06E-01	8.89E-05	9.87E+01	6.39E+01	2.60E+01
34	5.42	9.60E-04	8.87E-02	8.02E-05	9.89E+01	6.52E+01	2.73E+01
35	5.82	1.32E-03	1.41E-01	1.37E-04	9.90E+01	6.73E+01	2.95E+01
36	6.26	9.60E-04	1.18E-01	1.24E-04	9.92E+01	6.90E+01	3.16E+01
37	6.73	1.08E-03	1.54E-01	1.72E-04	9.93E+01	7.12E+01	3.44E+01
38	7.23	4.80E-04	7.89E-02	9.51E-05	9.94E+01	7.24E+01	3.59E+01
39	7.77	9.60E-04	1.82E-01	2.36E-04	9.95E+01	7.50E+01	3.98E+01
40	8.35	4.80E-04	1.05E-01	1.47E-04	9.96E+01	7.66E+01	4.21E+01
	8.97	2.40E-04	6.08E-02	9.09E-05	9.96E+01	7.75E+01	4.36E+01
41			7.02E-02	1.13E-04	9.96E+01	7.85E+01	4.55E+01
42	9.64	2.40E-04	8.10E-02	1.13E-04 1.40E-04	9.97E+01	7.83E+01 7.97E+01	4.77E+01
43	10.3	2.40E-04	1.40E-01	2.61E-04	9.97E+01	8.17E+01	5.20E+01
44	11.1	3.60E-04		1.08E-04	9.97E+01	8.25E+01	5.37E+01
45	11.9	1.20E-04	5.40E-02		9.98E+01	8.52E+01	6.03E+01
46	12.8	3.60E-04	1.87E-01	4.01E-04		9.15E+01	7.65E+01
47	13.8	7.20E-04	4.32E-01	9.96E-04	9.99E+01	1.00E+02	1.00E+02
48	14.8	8.40E-04	5.82E-01	1.44E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.002402	1.UVETU2
TOTA	rg:	1.4UE-01	6.86E+00 6.	145-02			

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# TSI AERODYNAMIC PARTICLE SIZER

01-01-1980 FILE NAME: OUT5 7.003 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

					CUMI	11 ATTVE W	
			NTRATIONS	WA 66	• • • • • •	LATIVE % SURFACE	MASS
CHNL			SURFACE	MASS	NUMBER 8.80E-01	5.69E-02	4.89E-03
<	.486	8.52E-03	5.31E-03	3.96E-07	1.46E+00	1.05E-01	9.58E-03
1	.504	5.64E-03	4.51E-03	3.80E-07		1.85E-01	1.79E-02
2	.542	8.04E-03	7.42E-03	6.71E-07	2.29E+00	3.19E-01	3.28E-02
3	.581	1.18E-02	1.25E-02	1.21E-06	3.51E+00	5.95E-01	6.60E-02
4	.625	2.10E-02	2.58E-02	2.69E-06	5.68E+00	1.12E+00	1.34E-01
5	.673	3.47E-02	4.94E-02	5.54E-06	9.26E+00	2.26E+00	2.92E-01
5 6 7	.723	6.44E-02	1.06E-01	1.28E-05	1.59E+01	3.91E+00	5.38E-01
-	.777	8.09E-02	1.54E-01	1.99E-05	2.43E+01	6.11E+00	8.92E-01
8	.835	9.38E-02	2.06E-01	2.87E-05	3.40E+01	8.40E+00	1.29E+00
9	.897	8.45E-02	2.14E-01	3.20E-05	4.27E+01	1.07E+01	1.71E+00
10	.964	7.25E-02	2.12E-01	3.41E-05	5.02E+01	1.07E+01 1.29E+01	2.16E+00
11	1.03	6.25E-02	2.11E-01	3.65E-05	5.66E+01	•	2.10E+00 2.65E+00
12	1.11	5.45E-02	2.13E-01	3.95E-05	6.23E+01	1.52E+01	3.21E+00
13	1.19	5.09E-02	2.29E-01	4.57E-05	6.75E+01	1.77E+01	3.84E+00
14	1.28	4.60E-02	2.39E-01	5.13E-05	7.23E+01	2.02E+01	4.53E+00
15	1.38	3.98E-02	2.39E-01	5.51E-05	7.64E+01	2.28E+01	5.28E+00
16	1.48	3.55E-02	2.46E-01	6.10E-05	8.00E+01	2.54E+01	5.97E+00
17	1.59	2.63E-02	2.10E-01	5.60E-05	8.27E+01	2.77E+01	
18	1.71	1.91E-02	1.76E-01	5.04E-05	8.47E+01	2.96E+01	6.59E+00
19	1.84	1.96E-02	2.09E-01	6.41E-05	8.67E+01	3.18E+01	7.38E+00
20	1.98	1.88E-02	2.32E-01	7.67E-05	8.£7E+01	3.43E+01	8.33E+00
21	2.12	1.60E-02	2.27E-01	8.07E-05	9.00E+01	3.67E+01	8.03E+00
22	2.18	1.49E-02	2.45E-01	9.33E-05	9.15E+01	3.54E+01	1.05E+01 1.10E+01
23	2.45	1.18E-02	2.23E-01	9.14E-05	9.31E+01	4.18E+01	1.28E+01
24	2.64	9.84E-03	2.16E-01	9.49E-05	9.41E+01	4.41E+01	1.40E+01
25	2.83	8.28E-03	2.10E-C1	9.92E-05	9.50E+01	4.65E+01 4.83E+01	1.52E-01
26	3.05	6.24E-03	1.82E-01	9.27E-05	9.56E+01		1.65E+01
27	3.27	6.12E-03	2.07E-01	1.13E-04		8.(48E+01 8.84E+01	1.85E+61
28	3.52	6.96E-03	2.71E-01	1.59E-04	9.70E+01 9.73E+01	5.48E-01	1.96E+01
29	3.78	3.00E-03		8.52E-05	9.78E+01 9.76E+01	5.67E+01	2.10E+01
30	4.06	3.36E-03	1.75E-01	1.18E-04		5.92E+01	2.31E+01
31	4.37	3.84E-03	2.31E-01	1.68E-04	9.84E÷01	6.18E+01	2.54E-01
32	4.69	3.48E-03	2.41E-01	1.89E-04		6.29E+01	2.65E+01
33	5.04	1.32E-03	1.06E-01	8.89E-05			2.81E-01
34	5.42	1.56E-03	1.44E-01	1.30E-04			
35	5.82	2.28E-03	2.43E-01	2.36E-04		6.94E+01	3.39E-01
36	6.26	1.80E-03	2.22E-01	2.32E-04		7.11E+01	3.61E+01
37	6.73	1.08E-03	1.54E-01	1.72E-04 2.38E-04			3.90E+01
38	7.23	1.20E-03	1.97E-01	3.25E-04			4.30E+01
39	7.77	1.32E-03	2.51E-01	3.23E-04 7.33E-05			4.39E+01
40	8.35	2.40E-04	5.26E-02				4.84E+01
41	8.97	9.60E-04		3.64E-04 3.38E-04			5.26E+01
42	9.54	7.20E-04	2.10E-01				5.78E+01
÷3	10.3	7.20E-04	2.43E-01	4.20E-04 4.34E-04			6.31E+01
44	11.1	6.00E-04	2.34E-01	2.16E-04	•		6.58E+01
45	11.9	2.40E-04	1.08E-01	_		-	6.58E+01
46	12.8	0.00E+00		0.00E+00			8.22E+01
47	13.8	9.60E-04		1.33E-03		·	1.00E-02
48	14.8	8.40E-04		1.44E-03 0.00E+00			1.00E+02
>	15.4	0.00E+00	0.00E+00		1.UULTUZ	1.002,02	
TOT.	7T2:	3.08F-01	9.33E+00 E.	, 105-00			

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 7.004 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1 DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

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		CONC	ENTRATIONS		CUMI	ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	7.56E-03	4.67E-03	3.47E-07	8.77E-01		6.52E-03
1	.504	4.08E-03	3.26E-03	2.75E-07	1.35E+00		1.17E-02
2	.542	6.84E-03	6.32E-03	5.71E-07	2.14E+00	1.96E-01	2.24E-02
3	.581	1.08E-02	1.15E-02	1.11E-06	3.40E+00	3.54E-01	4.33E-02
4	.625	1.91E-02	2.34E-02	2.44E-06	5.61E+00		8.92E-02
5	.673	3.28E-02	4.66E-02	5.23E-06	9.41E+00	1.32E+00	1.87E-01
6 7	.723	5.47E-02	9.00E-02	1.09E-05	1.58E+01	2.56E+00	3.91E-01
7	.777	7.82E-02	1.49E-01	1.93E-05	2.48E+01	4.60E+00	7.53E-01
8	.835	8.12E-02	1.78E-01	2.48E-05	3.43E+01	7.05E+00	1.22E+00
9	.897	7.55E-02	1.91E-01	2.86E-05	4.30E+01	9.68E+00	
10	.964	6.24E-02	1.83E-01	2.93E-05	5.03E+01	1.22E+01	1.76E+00
11	1.03	5.92E-02	2.00E-01	3.45E-05	5.71E+01		2.31E+00
12	1.11	4.56E-02	1.78E-01	3.30E-05	6.24E+01	1.49E+01	2.96E+00
13	1.19	4.67E-02	2.10E-01	4.19E-05		1.74E+01	3.58E+00
14	1.28	4.04E-02	2.10E-01	4.51E-05	6.78E+01	2.03E+01	4.37E+00
15	1.38	3.72E-02	2.23E-01	5.15E-05	7.25E+01	2.32E+01	5.21E+00
16	1.48	3.06E-02	2.12E-01		7.68E+01	2.63E+01	6.18E+00
17	1.59	2.23E-02	1.79E-01	5.25E-05	8.04E+01	2.92E+01	7.17E+00
18	1.71	1.93E-02	_	4.76E-05	8.30E+01	3.16E+01	8.06E+00
19	1.84		1.79E-01	5.11E-05	8.52E+01	3.41E+01	9.02E+00
20	1.98	1.86E-02	1.99E-01	6.10E-05	8.74E+01	3.68E+01	1.02E+01
21		1.85E-02	1.91E-01	6.30E-05	8.92E+01	3.94E-01	1.14E+01
	2.12	1.39E-02	1.98E-01	7.03E-05	9.08E+01	4.22E+01	1.27E+01
	2.18	1.54E-02	1.52E-01	9.63E-05	9.26E+01	4.57E+01	1.45E-01
23	2.45	9.60E-03	1.82E-01	7.46E-05	9.37E+01	4.82E+01	1.ffE+01
6.3	2.64	9.84E-03	2.16E-01	9.46E-05	9.48E+01	5.11E+01	1.77E+01
15 16	2.83	7.68E-03	1.94E-01	9.20E-05	9.57E+01	5.38E+01	1.94E+01
	3.65	5.12E-03	1.79E-01	9.10E-05	9.64E+01	5.63E+01	2.11E+01
27	3.27	5.64E-03	1.90E-01	1.04E-04	9.71E+01	5.89E+01	2.31E+01
28	3.52	4.44E-03	1.73E-G1	1.02E-04	9.76E+01	6.13E+01	2.50E+01
29	3.78	2.88E-03	1.30E-01	8.18E-05	9.79E+01	6.30E+01	2.65E+01
30	4.06	2.28E-03	1.19E-01	8.04E-05	9.82E÷01	6.47E+01	2.80E+01
31	4.37	2.40E-03	1.44E-01	1.05E-04	9.85E+01	6.67E + 01	3.00E+01
32	4.69	1.44E-03	9.98E-02	7.82E-05	9.86E+01	6.80E+01	3.15E+01
33	5.04	1.80E-03	1.44E-01	1.21E-04	9.89E+01	7.00E+01	3.37E+01
34	5.42	1.20E-03	1.11E-01	1.00E-04	9.90E+01	7.15E+01	3.56E+01
35	5.82	1.44E-03	1.54E-01	1.49E-04	9.92E+01	7.37E+01	3.8-E+01
36	6.26	9.60E-04	1.18E-01	1.24E-04	9.93E+01	7.53E+01	4.08E+01
3 <b>7</b>	6.73	7.20E-04	1.03E-01	1.15E-04	9.94E+01	7.67E÷01	4.29E+01
38	7.23	8.40E-04	1.38E-01	1.66E-04	9.95E+01	7.86E+01	4.60E+01
39	7.77	1.20E-03	2.28E-01	2.95E-04	9.96E+01	8.17E+01	5.16E+01
40	8.35	4.80E-04	1.05E-01	1.47E-04	9.97E+01	8.32E+01	5.43E+01
41	8.97	6.00E-04	1.52E-01	2.27E-04	9.97E+01	8.53E+01	5.86E+01
42	9.64	6.00E-04	1.75E-01	2.82E-04	9.98E+01	8.77E÷01	6.39E+01
43	10.3	2.40E-04	8.10E-02	1.40E-04	9.98E+01	8.88E+01	6.65E+01
11	11.1	4.80E-04	1.87E-01	3.47E-04	9.99E+01	9.14E+01	7.31E+01
45	11.9	2.40E-04	1.08E-01	2.16E-04	9.99E+01	9.29E+01	7.71E+01
46	12.8	2.40E-04	1.25E-01	2.68E-04	9.99E+01	9.46E+01	8.22E+01
47	13.9	2.40E-04	1.44E-01	3.32E-04	1.00E+02	9.66E+01	8.84E+01
48	14.8	3.60E-04	2.50E-01	6.18E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.0CE+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	.\$:	8.62E-01 7	.27E+00 5.3	32E-03			

FILE NAME: OUT5 7.005 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CONCENTRATIONS CUMULATIVE % SURFACE CHNL DIA NUMBER MASS NUMBER SURFACE MASS .486 6.48E-03 4.03E-03 3.00E-07 7.26E-01 4.68E-02 3.89E-03 2.83E-07 1.20E+00 8.58E-02 .504 4.20E-03 3.36E-03 5.81E-07 1.98E+00 1.60E-01 6.96E-03 6.43E-03 .542 1.22E-02 1.30E-02 1.26E-06 3.35E+00 .581 3.11E-01 1.97E-02 2.42E-02 2.52E-06 5.55E+00 5.91E-01 6.40E-02 3.41E-02 4.85E-02 5.44E-06 9.37E+00 1.15E+00 5.72E-02 9.41E-02 1.14E-05 1.58E+01 .723 2.25E+00 .777 7.85E-02 1.49E-01 1.93E-05 2.46E+01 3.98E+00 8.32E-02 1.82E-01 2.54E-05 3.39E+01 6.09E+00 8.61E-01 .897 7.52E-02 1.91E-01 2.85E-05 4.23E+01 8.30E+00 6.48E-02 1.90E-01 3.05E-05 4.96E+01 .964 1.05E+01 6.43E-02 2.17E-01 3.75E-05 5.68E+01 11 1.03 1.30E+01 12 5.11E-02 1.99E-01 3.70E-05 1.11 6.25E+01 1.53E+01 13 1.19 4.84E-02 2.18E-01 4.34E-05 6.79E+01 1.79E+01 3.95E-02 2.05E-01 14 1.28 4.40E-05 7.23E+01 2.02E+01 1.38 15 3.94E-02 2.36E-01 5.45E-05 7.68E+01 2.30E+01 16 1.48 2.94E-02 2.04E-01 5.05E-05 8.01E+01 2.53E+01 5.09E+00 17 1.59 2.35E-02 1.88E-01 5.01E-05 8.27E÷01 2.75E+01 5.74E+00 18 1.71 2.16E-02 2.00E-01 5.73E-05 8.51E+01 19 1.84 1.68E-02 1.79E-01 5.51E-05 8.70E÷01 3.19E+01 20 1.98 1.81E-02 2.23E-01 7.38E-05 8.90E+01 3.45E+01 1.43E-02 2.03E-01 7.22E-05  $9.06E \pm 01$ 3.66E+01 1.13E-02 1.8FE-01 7.07E-05 9.19E+01 3.90E+01 2.21E-01 1.16E-02 9.05E-05 9.32E+01 4.16E+01 2.64 8.04E-03 1.76E-01 7.76E-05 9.41E+01 4.36E+01 2.83 9.72E-03 2.46E-01 J.16E-04 9.52E+01 4.65E+01 3.05 6.24E-03 1.82E-01 9.27E-05 9.59E+01 4.86E+01 3.27 4.44E-03 1.50E-01 8.19E-05 9.64E+01 5.03E+01 2°S 3.524.68E-03 1.52E-01 1.07E-04 9.69E+01 5.25E+01 29 3.78 4.56E-03 2.05E-01 1.30E-04 9.74E+015.48E+01 30 4.06 2.16E-03 1.12E-01 7.61E-05 9.76E+01  $5.61E \div 01$ 31 4.37 3.00E-03 1.80E-01 1.31E-04 9.80E+01 5.82E+01 2.17E+01 32 4.69 2.52E-03 1.75E-01 1.37E-04 9.83E-01 6.03E+01 5.04 2.52E-03 2.02E-01 1.70E-04 9.85E+016.26E+0134 5.42 1.70E-04 2.04E-03 1.89E-01 9.88E+01 6.4EE+01 5.82 1.44E-03 1.54E-01 1.49E-04 9.89E+01 6.66E+01 1.39E-04 6.26 1.08E-03 1.33E-01 9.91E+01  $6.81E \div 01$ 6.73 1.32E-03 1.88E-01 2.:1E-04 9.92E+01 7.03E+01 3.44E+012.38E-04 1.20E-03 1.97E-01 9.93E+01 7.26E+01 3.74E+01 1.44E-03 2.73E-01 3.54E-04 9.95E+01 7.58E÷01 4.20E÷01 6.00E-04 1.32E-01 1.83E-04 9.96E+01 7.73E-01 4.44E+01 3.60E-04 9.11E-02 1.36E-04 9.96E+01 7.83E+01 4.62E+01 2.40E-04 7.02E-02 1.13E-04 9.96E+01 7.92E+01 4.76E+01 42 9.6443 10.3 1.20E-04 4.05E-02 7.00E-05 9.97E+01 7.96E+01 4.85E+01 3.60E-04 1.40E-01 2.61E-04 9.97E+01 8.13E+01 5.19E+01 44 11.1 45 11.9 6.00E-04 2.70E-01 5.39E-04 9.98E+01 8.44E+01 5.89E+01 46 12.8 3.60E-04 1.87E-01 4.01E-04 9.98E+01 8.66E+01 6.41E-01 9.60E-04 5.76E-01 1.33E-03 9.99E+01 9.32E+01 8.13E+01 47 13.8 18 14.8 8.40E-04 5.82E-01 1.44E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 TOTALS: 8.93E-01 8.62E+00 7.72E-03

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 7.006 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		20110			CUMU	LATIVE %	
		•	NTRATIONS	MACC		SURFACE	MASS
CHNL			SURFACE	MASS 3.60E-07	8.33E-01	5.19E-02	4.43E-03
<	.486	7.80E-03	4.84E-03		1.32E+00	9.10E-02	8.20E-03
1	.504	4.56E-03	3.65E-03	3.07E-07		1.66E-01	1.60E-02
2	.542	7.56E-03	6.98E-03	6.31E-07	2.13E+00	3.01E-01	3.10E-02
3	.581	1.19E-02	1.26E-02	1.22E-06	3.40E+00		6.54E-02
4	.625	2.18E-02	2.68E-02	2.79E-06	5.73E+00	5.88E-01	
. 5	.673	3.22E-02	4.58E-02	5.13E-06	9.16E+00	1.08E+00	1.28E-01
6	.723	5.70E-02	9.37E-02	1.13E-05	1.52E+01	2.08E+00	2.68E-01
7	.777	8.11E-02	1.54E-01	2.00E-05	2.39E+01	3.73E+00	5.13E-01
8	.835	8.52E-02	1.87E-01	2.60E-05	3.30E+01	5.74E+00	8.33E-01
9	.897	7.98E-02	2.02E-01	3.02E-05	4.15E+01	7.90E+00	1.20E+00
10	.964	6.80E-02	1.99E-01	3.20E-05	4.88E+01	1.00E+01	1.60E+00
11	1.03	6.12E-02	2.07E-01	3.57E-05	5.53E+01	1.23E+01	2.04E+00
12	1.11	5.45E-02	2.13E-01	3.95E-05	6.11E+01	1.45E+01	2.52E+00
13	1.19	4.91E-02	2.21E-01	4.41E-05	6.64E+01	1.69E+01	3.07E+00
14	1.28	4.39E-02	2.28E-01	4.90E-05	7.11E+01	1.93E+01	3.67E+00
15	1.38	3.95E-02	2.37E-01	5.46E-05	7.53E+01	2.19E+01	4.34E+00
16	1.48	3.19E-02	2.21E-01	5.48E-05	7.87E+01	2.43E+01	5.01E+00
17	1.59	2.82E-02	2.26E-01	6.01E-05	8.17E+01	2.67E+01	5.75E+00
18	1.71	2.21E-02	2.04E-01	5.84E-05	8.41E÷01	2.89E-01	6.47E+00
19	1.84	1.89E-01	2.13E-01	6.53E-05	8.61E+01	3.11E+01	7.17E+00
20	1.98	1.68E-01	2.07E-01	6.84E-05	8.80E+01	3.34E+01	8.11E-00
21	2.12	1.88E-01	2.63E-01	9.34F-05	9.00E+01	3.62E-01	9.18E-00
() ()	2.18	3.84E-02	2.21E-01	8.42E-05	9.14E+01	9.86E+01	1.53E+01
23	2.45	1.31E-01	2.51E-01	1.03E-04	9.28E+01	4.12E+01	1.161+01
24	2.64	1.02E-01	2.24E-01	9.84E-05	6.36E+01	4.36E+01	1.28E+01
25	2.83	8.76E-03	2.22E-01	1.05E-04	9.48E+01	4.60E+01	11E-01
26	3.05	7.50E-03	2.28E-01	1.16E-04	9.57E÷01	4.85E+01	1.88E+01
· ·	3.27	6.12E-03	2.07E-01	1.13E-04	9.63E+01	5.07E+01	j.69E-01
28	3.52	4.08E-03	1.59E-01	9.34E-05	9.67E+01	5.24E+01	1.80E+01
29	2.78	3.48E-03	1.57E-01	9.88E-05	9.71E+01	5.41E+01	1.52E+01
30	4.06	3.00E-03	1.56E-01	1.06E-04	9.74E+01	5.57E+01	2.05E+01
31	4.37	4.08E-03	2.45E-01	1.78E-04		5.83E+01	2.27E+01
32	4.69	2.52E-03	1.75E-01	1.37E-04		6.02E+01	2.44E+01
33	5.04	2.64E-03	2.11E-01	1.78E-04		6.25E+01	2.66E+01
34	5.42	2.28E-03	2.11E-01	1.91E-04		6.47E+01	2.89E+01
	5.82	1.68E-03	1.79E-01	1.74E-04		6.67E+01	3.11E+01
3 <b>5</b>	6.26	1.56E-03	1.92E-01	2.01E-04	9.90E+01	6.87E÷01	3.36E+01
36 37	6.73	1.32E-03	1.88E-01	2.11E-04		7.07E+01	3.62E+01
37	7.23	1.56E-03		3.09E-04		7.35E+01	4.00E+01
38		9. (CE-04	1.82E-01	2.36E-04		7.54E+01	4.19E-01
39	7.77	6.0(E-04	1.32E-01	1.83E-04		7.69E+01	4.51E+01
40	8.35	4.80E-04		1.82E-04	-	7.82E+01	4.73E+01
41	8.97	7.2(E-04	2.10E-01	3.38E-04		8.04E+01	5.15E+01
42	9.64	3.60E-04	1.22E-01	2.10E-04	-	8.17E+01	5.41E+01
43	10.3		1.40E-01	2.61E-04		8.32E+01	5.73E+01
44	11.1	3.6GE-04 1.1GE-03		1.08E-03		8.90E+01	7.05E+01
45	11.9			5.35E-04		9.17E+01	7.71E+C1
46	12.8	4.80E-04		8.30E-04		9.55E+01	E.73E+01
47	13.8	6.00E-04		1.03E-03			1.00E+02
48	14.8	6.0CE-04					1.00E+02
>	15.4	0.005+00	9.33E+00 8	· · · · · · · ·	11002102		
TOTA	ITO:	8.3/E-01	T. COLTUU O	. 102-00			

FILE NAME: OUT5 7.007 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCE	NTRATIONS		CUMI	LATIVE %	
CHNI	DIA		SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	6.84E-03	4.25E-03	3.16E-07		5.01E-02	4.44E-03
ì	.504	4.32E-03	3.46E-03	2.91E-07	·1.25E+00	9.08E-02	8.53E-03
2	.542	6.48E-03	5.98E-03	5.41E-07	1.98E+00	1.61E-01	1.61E-02
3	.581	1.02E-02	1.08E-02	1.05E-06	3.12E+00	2.89E-01	3.09E-02
4	.625	1.69E-02	2.08E-02	2.16E-06	5.01E+00	5.34E-01	6.13E-02
5	.673	3.32E-02	4.73E-02	5.31E-06	8.73E+00	1.09E+00	1.36E-01
6	.723	5.52E-02	9.08E-02	1.09E-05	1.49E+01	2.16E+00	2.90E-01
7	.777	8.17E-02	1.55E-01	2.01E-05	2.41E+01	3.99E+00	5.72E-01
8	.835	8.42E-02	1.85E-01	2.57E-05	3.35E+01	6.17E+00	9.33E-01
9	.897	7.74E-02	1.96E-01	2.93E-05	4.22E+01	8.47E+00	1.35E+00
10	.964	7.06E-02	2.06E-01	3.32E-05	5.01E+01	1.09E+01	1.81E+00
11	1.03	5.70E-02	1.92E-01	3.33E-05	5.64E+01	1.32E+01	2.28E+00
12	1.11	5.32E-02	2.07E-01	3.85E-05	6.24E+01	1.56E+01	2.82E+00
13	1.19	4.49E-02	2.02E-01	4.03E-05	6.74E+01	1.80E+01	3.39E+00
		4.04E-02	2.10E-01	4.51E-05	7.20E+01	2.05E+01	4.02E+00
14	1.28		2.10E-01 2.25E-01	5.18E-05	7.61E+01	2.31E+01	4.75E+00
15	1.38	3.74E-02				2.57E+01	5.51E+00
16	1.48	3.18E-02	2.20E-01	5.46E-05	7.97E+01	2.82E+01	6.19E+00
17	1.59	2.59E-02	2.08E-01	5.52E-05			7.06E+00
18	1.71	2.06E-02	1.91E-01	5.46E-05	8.49E+01	3.04E+01	7.08E+00
19	1.84	1.78E-01	1.90E-01	5.82E-05	8.69E+01	3.26E+01	
20	1.68	1.42E-02	1.75E-01	5.77E-05	8.85E+01	3.47E+01	8.68E÷00
21	2.12	1.32E-02	1.88F-01	6.67E-05	9.00E+01	3.69E+01	8.82E+00
22	2.28	1.20E-02	2.07E-01	7.90E-08	9.14E-01	0.94E+01	1.07E÷01
23	2.45	1.18E-02	2.25E-01	9.24E-05	9.27E+01	4.10E+01	1.10E+01
24	2.61	1.03E-02	2.26E-01	9.90E-08	9.39E+01	4.47E+01	1.34E+(1
2.5	2.83	6.36E-03	1.61E-01	7.62E-05	9.4(E÷0)	4.66E÷01	1.48E+01
26	3.05	6.00E-03	1.86E-01	9.45E-05	9.53E-01	4.88E+01	1.fEE+()1
27	2.27	6.60E-03	2.23E-01	1.21E-04	9.60E÷01	5.14E+01	1.71E+01
28	3.52	6.24E-03	2.43E-01	1.43E-04	9.67E-01	5.48E+01	1.95E+01
2.8	3.78	4.92E-03	2.22E-01	1.40E-04	9.73E-01	5.69E+01	2.1fE+(1
30	4.06	3.72E-03	1.93E-01	1.81E-04	9.77E+01	5.91E+01	2.88E÷01
31	4.27	2.64E-03	1.59E-01	1.15E-04	9.8CE+01	6.10E+01	2.f0E+01
32	4.69	3.12E-03	2.16E-01	1.69E-04	9.83E+01	6.36E+01	2.73E+01
23	5.04	2.64E-03	2.11E-01	1.78E-04	9.86E+01	6.61E+01	1.98E±01
34	5.42	1.32E-03	1.22E-01	1.10E-04	9.88E+01	6.75E+01	3.14E+01
35	5.82	1.50E-03	1.92E-01	1.87E-04	9.90E+01	6.88E+01	3.40E+01
36	6.26	1.56E-03	1.92E-01	2.01E-04	9.92E+01	7.10E+01	3.68E+01
37	6.73	1.08E-03	1.54E-01	1.72E-04	9.93E-01	7.98E+01	3.93E+01
38	7.23	1.08E-03	1.78E-01	2.14E-04	9.91E+01	7.58E+01	4.23E+01
38	7.77	1.44E-03	2.73E-01	3.54E-04	9.96E+01	7.91E+01	4.72E+01
40	8.35	4.80E-04	1.05E-01	1.47E-04	9.96E+01	8.04E+01	4.93E+01
41	8.97	6.00E-04	1.52E-01	2.27E-04	9.97E+01	8.22E+01	5.25E+01
42	9.64	0.00E+00	0.00E+00	0.0CE+00	9.97E+01	8.22E+01	5.25E+01
43	10.3	1.20E-04	4.05E-02	7.00E-05	9.97E+01	8.27E+01	5.35E+01
44	11.1	2.40E-04	9.36E-02	1.74E-04	9.97E÷01	8.28E+01	5.59E+01
45	11.9	5.60E-04	2.70E-01	5.39E-04	9.98E÷01	8.69E+01	6.35E+01
46	12.8	4.80E-04	2.50E-01	5.35E-04	9.99E+01	8.99E+01	7.10E+01
47	13.8	6.00E-04	3.60E-01	8.30E-04	9.99E+01	9.41E+01	8.26E+01
48	14.8	7.20E-04	4.99E-01	1.24E-03	1.00E-02	1.0(E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA		8.93E-01 8	.49E+00 7.	12E-03			

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 7.008 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		,					
		CONCI	ENTRATIONS		CUMI	ULATIVE %	•
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	9.96E-03	6.19E-03	4.61E-07	8.44E-01	5.99E-02	5.88E-03
1	.504	5.88E-03	4.70E-03	3.96E-07	1.34E+00	1.06E-01	1.09E-02
2	.542	9.00E-03	8.31E-03	7.51E-07	2.11E+00	1.86E-01	2.05E-02
3	.581	1.36E-02	1.44E-02	1.40E-06	3.25E+00	3.26E-01	3.83E-02
4	.625	2.52E-02	3.09E-02	3.22E-06	5.39E+00	6.25E-01	7.94E-02
5	.673	4.74E-02	6.75E-02	7.57E-06	9.41E+00	1.28E+00	1.76E-01
6	.723	7.37E-02	1.21E-01	1.46E-05	1.57E+01	2.45E+00	3.62E-01
7	.777	1.00E-01	1.91E-01	2.47E-05	2.42E+01	4.30E+00	6.77E-01
8	.835	1.15E-01	2.52E-01	3.51E-05	3.39E+01	6.74E+00	1.13E+00
9	.897	1.06E-01	2.68E-01	4.02E-05	4.29E+01	9.34E+00	1.64E+00
10	.964	8.70E-02	2.54E-01	4.09E-05	5.02E+01	1.18E+01	2.16E+00
11	1.03	7.51E-02	2.54E-01	4.38E-05	5.66E+01	1.43E+01	2.72E+00
12	1.11	7.06E-C2	2.75E-01	5.11E-05	6.26E+01	1.69E+01	3.37E+00
13	1.19	f.02E-02	2.71E-01	5.41E-05	6.77E+01	1.96E+01	4.06E+00
14	1.28	5.36E-02	2.79E-01	5.98E-05	7.22E+01	2.23E+01	4.82E+00
15	1.38	4.80E-02	2.88E-01	6.64E-05	7.63E+01	2.50E+01	5.67E+0C
16	1.48	3.7°E-02	2.61E-01	6.47E-05	7.95E+01	2.76E+01	6.50E+00
17	1.59	2.49E-02	2.80E-01	7.44E-05	8.25E+01	3.03E+01	7.48E+00
18	1.71	2.88E-02	2.75E-01	7.87E-05	8.50E+01	3.30E+01	8.45E+00
10	1.84	2.48E-02	2.6FE-01	8.15E-05	8.71E+01	8.88E+01	9.48I+0C
20	1.68	2.00E-02	2.74E-01	9.04E-05	8.9(E+(1	8.82E+01	1.66E+01
11	2.12	1.10F-02	0.01E-01	1.07E-04	9.08E+01	4.11E+(1	1.20E-01
•	1.13	1.675-02	2.7:E-01	1.0EE-04	9.00E+01	4.85E-01	1.88E+01
13	1,45	1.47E-(2	2.76E-03	1.13E-04	9.34E+01	4.645+01	1.48E-01
				1.16E-04	9.44E+(1	4.90E+01	1.60E-01
24	2.61	1.10E-02	2.68E-01	1.10E-04	9.53E-01	5.15E+01	1.78E+01
25	1.53	1.02E-02	2.58E-01	1.23E-04	9.60E+01	5.38E+01	1.94E+01
2 A	8.05	8.18E-03	2.42E-01		9.65E+01	5.57E+01	1.542+01 2.07E+01
	3.27	6.70E-03	1.84E-01	1.06E-04	9.71E+01	5.84E+01	2.28E+01
28	3.52	7.08E-03	2.70E-01	1.62E-04		6.07E+01	2.47E+01
29	3.78	5.28E-03	2.38E-01	1.50E-04	9.78E+01		
30	4.06	4.80E-03	2.50E-01	1.69E-04	9.79E+01	6.31E+01	2.69E+01
31	4.67	3.48E-03	2.09E-01	1.52E-04	9.82E+01	6.51E+01	2.88E+01
3.2	4.09	3.84E-03	2.06E-01	2.08E-04	9.86E+01	6.77E+01	3.15E+01
33	₹.04	1.8(E-03	1.44E-01	1.21E-04	9.87E+01	6.91E+01	3.30E+01
34	5.42	2.64E-03	2.44E-01	2.21E-04	9.89E+01	7.18E+01	3.59E+01
35	5.82	1.92E-03	2.05E-01	1.99E-04	9.91E+01	7.34E+01	3.84E+01
36	6.26	2.16E-03	2.66E-01	2.78E-04	9.93E+01	7.60E+01	4.19E+01
37	6.73	2.40E-03	3.42E-01	3.83E-04	9.95E+01	7.93E+01	4.68E+01
38	7.23	1.08E-03	1.7EE-01	2.14E-04	9.96E+01	E.11E+01	4.96E+01
38	7.77	8.40E-04	1.59E-01	2.07E-04	9.97E+01	8.26E+01	5.22E+01
40	8.35	4.80E-04	1.05E-01	1.47E-04	9.97E+01	8.36E+01	5.41E+01
41	8.97	4.80E-04	1.22E-01	1.82E-04	9.97E+01	8.48E+01	5.64E+01
12	9.64	2.40E-04	7.02E-02	1.13E-04	9.98E+01	8.55E+01	5.78E+01
43	10.3	4.80E-04	1.62E-01	2.80E-04	9.98E+01	8.70E+01	6.14E+01
44	11.1	4.80E-04	1.87E-01	3.47E-04	9.98E+01	8.89E+01	6.58E+01
45	11.9	4.80E-04	2.16E-01	4.31E-04	9.99E+01	9.09E+01	7.13E+01
46	12.8	2.40E-04	1.25E-01	2.68E-04	9.99E+01	9.22E+01	7.47E+01
47	13.8	2.40E-04	1.44E-01	3.32E-04	9.99E+01	9.26E+01	7.90E+01
48	14.8	9.60E-04	6.66E-01	1.65E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	1.18E+00	1.03E+01 7.	84E-03	1		

FILE NAME: OUT5 7.009 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

#9 " "F

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

#### CUMULATIVE % CONCENTRATIONS SURFACE SURFACE MASS NUMBER CHNL DIA NUMBER 8.52E-03 5.26E-03 3.91E-07 1.08E+00 7.20E-02 6.47E-03 .486 3.65E-03 3.07E-07 1.66E+00 1.22E-01 .504 7.20E-03 6.65E-03 6.01E-07 2.57E+00 2.13E-01 2.15E-02 .542 3.56E-01 3.82E-02 9.84E-03 1.05E-02 1.01E-06 3.81E+00 .581 7.05E-02 1.87E-02 1.95E-06 6.12E-01 5.74E+00 1.56E-01 1.25E+00 9.86E+00 4.63E-02 5.19E-06 .673 3.25E-02 2.46E+00 3.33E-01 8.88E-02 1.07E-05 1.67E+01 5.40E-02 4.23E+00 6.11E-01 6.82E-02 1.29E-01 1.68E-05 2.53E+01 .777 7.46E-02 1.64E-01 2.28E-05 3.48E+01 6.47E+00 9.88E-01 .835 4.34E+01 8.83E+00 2.58E-05 1.72E-01 .897 6.80E-02 1.59E-01 5.03E÷01 1.10E+01 1.84E+00 2.56E-05 1.35E+01 2.36E+00 3.19E-05 5.72E+01 5.46E-02 1.84E-01 11 1.03 1.60E+01 2.91E+00 3.31E-05 6.30E+01 1.78E-01 4.57E-02 12 1.11 3.70E-05 6.82E+01 1.85E+01 3.52E+00 4.12E-02- 1.85E-01 13 1.19 2.10E+01 1.79E-01 3.83E-C5 7.26E+01 4.16E+00 3.43E-02 1.4 1.28 4.35E-05 7.66E+01 2.35E+C1 4.88E+00 1.89E-01 15 1.38 1.95E-01 4.82E-05 8.01E+01 2.62E+01 2.81E-02 16 1.48 5.14E-05 8.32E+01 2.88E÷01 17 1.93E-01 2.41E-02 1.59 8.54E+01 3.11E÷01 4.73E-05 1.79E-02 1.65E-01 1.71 8.74E4(1 3.34E+01 5.12E-05 1.67E-01 1.5(E-02 19 1.84 8.89E+01 3.54E+61 4.89E-05 1.48E-01 1.20E-02 1.982.8JE+01 1.01E+01 6.85F-(5 9.06E+01 1.06E-02 1.80E-01 21 2.12 5.47E-05 9.16I+61 4.(4E+01 1.((E-(2) 1.70E-01 7.09E-05 9.()F-01 4.07E+(1 1.78E-01 1.95E-01 9.42E+31 4.54E+018.67E-(5 24 2.64 9.6EE- 8 7.90E-05 9. FIE-61 4.77E+(1 1.81E+() 1.87E-01 6.50E-C3 9.87E+01 4.36E+01 ].64E+0] 8.03E-08 5.40E-03 1.58E-01 3.05 1.76E-01 7.30E-05 9.62E+01 F.17E+01 3.98E-03 1.34E-01 2.27 5.44E+01 1.18E-04 28 2.01E-01 9.86E-01 5.16E-03 3.52 9.TE-01 E.72E+01 1.30E+01 2.00E-01 1.26E-64 4.44E-03 9.30E-05 9.78E-01 5.91E+01 2.64E-03 1.37E-01 30 4.061.40E+01 6.07E + 018.92E-05 9.83E+01 31 1.22E-01 1.75E-01 1.37E-04 9.84E+01 6.31E+012.52E-03 32 4.69 6.50E+01 1.35E-01 1.13E-04 9.8(E÷01 5.04 1.68E-03 6.65E + 013.04E-01 1.11E-01 1.00E-04 9.8<sup>-</sup>E-01 3.4 5.42 1.20E-03 6.88E+01 35 5.82 1.07E-01 1.62E-04 9.89E÷01 1.56E-03 7.10E+01 1.70E-04 6.26 1.63E-01 9.91E+01 1.32E-03 7.36E+01 2.11E-04 9.93E + 016.73 1.22E-03 1.8SE-01 37 7.54E+01 9.94E+()1 8.40E-04 1.38E-01 1.66E-04 38 7.89E+01 4.75E+01 3.25E-04 9.9EE-01 1.32E-03 2.51E-01 3.60E-04 7.89E-02 1.10E-04 9.96E+01 8.00E+01 4.50E+01 3.60E-04 9.11E-02 1.26E-04 9.96E-01 8.12E+01 5.16E+01 41 8.97 4.80E-04 1.40E-01 2.26E-04 9.27E+01 8.31E+01 f.53E+01 42 9.646.00E-04 2.03E-01 3.50E-04 9.98E-01 8.59E+01 C411E+01 10.3 43 2.40E-04 9.05E-02 1.74E-04 9.98E+01 8.72E+01 0.40E+01 11.1 44 2.40E-04 1.09E-01 2.16E-04 9.98E-01 8.87E+01 6.76E+01 45 11.9 2.40E-04 1.25E-01 2.68E-04 9.99E+01 8.01E+01 7.20E+01 4.0 12.8 4.80E-04 1.88E-01 6.64E-04 9.88E-01 8.40E+01 8.10E-01 . 7 13.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02 1.00E+02 48 14.8 0.00E+00 (.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4 7.90E-01 7.31E+00 6.05E-03 TOTALS:

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 7.010 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCE	ENTRATIONS		CUMI	JLATIVE %	
CHNI	LDIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	1.10E-02	6.81E-03	5.05E-07		7.00E-02	7.07E-03
1	.504	5.64E-03	4.51E-03	3.80E-07	1.46E+00	1.16E-01	1.24E-02
2	.542	9.12E-03	8.42E-03	7.61E-07	2.26E+00	2.03E-01	2.30E-02
3	.581	1.49E-02	1.58E-02	1.53E-06		3.66E-01	4.45E-02
4	.625	2.58E-02	3.17E-02	3.30E-06		6.91E-01	9.06E-02
5	.673	4.81E-02	6.85E-02	7.68E-06	1.00E+01	1.40E+00	1.98E-01
6	.723	7.58E-02	1.25E-01	1.50E-05	1.67E+01	2.68E+00	4.09E-01
7	.777	1.01E-01	1.91E-01	2.48E-05	2.55E+01	4.64E+00	7.55E-01
8	.835	1.08E-01	2.37E-01	3.30E-05		7.08E+00	1.22E+00
9	.897	9.82E-02	2.49E-01	3.72E-05		9.64E+00	1.74E+00
10	.964	8.90E-02	2.60E-01	4.19E-05	5.13E+01	1.23E+01	2.32E+00
11	1.03	7.90E-02	2.67E-01	4.61E-05	5.82E+01	1.51E+01	2.97E+00
12	1.11	6.24E-02	2.43E-01	4.52E-05		1.76E+01	3.60E+00
13	1.19	6.19E-02	2.79E-01	5.56E-05		2.04E+01	4.38E+00
14	1.28	5.63E-02	2.93E-01	6.28E-05	7.40E+01	2.34E+01	5.26E+00
15	1.38	3.92E-02	2.36E-01	5.43E-05	7.74E+01	2.59E+01	6.02E+00
16	1.18	3.73E+02	2.59E-01	6.41E-05		2.85E+01	6.91E+00
17	1.59	3.14E+02					
			2.52E-01	6.70E-05		3.11E+01	7.85E+00
	1.71	2.30E-02	2.13E-01	0.09E-05	8.55E+01	3.33E+01	8.70E+00
19	1.84	2.06E-02	2.10E-01	6.77E-05	8.78E-01	3.56E+01	9.67E+00
20	1.98	2.00E-02	1.88E-(1	8.40E-05	8.91E+01	3.52E+01	1.08E+(1
21		1.85E-02	2.67E-01	9.24E-05	9.07E+01	4.09E+01	1.11E+01
	2.28	1.53E-(2	1.7(E-01	1.03E-04	9.21E-01	4.87E+01	1.30 <b>I</b> +01
13		1.86E-01	1.772-33	1.35E-(4	9.00E-01	4.8(E-01	:.8(E+(:
_ 1	2.51	1.242-(2	2.71E-01	1.19E-04	9.4.E-01	.91E+01	1.67E-61
2.5	2.83	1.04E-62	2.84E-01	1.25E-(4	9.8(E+0)	6.18E+1	J.88E-01
<u> </u>	3.(5 3.7	7.91E-00	2.82E-01	1.18E-04	9.60E+01	5.42E+61	2.01E-01
- '	· • <u>-</u> '	7.44E-03	1.51F-01	1.37E-04	9.67E-01	5.68E-01	2.20E+11
23	2.52	6.72E-03	C. 62E-61	1.54E-04			2.41E-01
25	2.78	1.8CE-03	2.16E-01	1.36E-C4		6.17E+01	2.61E+C1
3 (·	4.60	4.82E-03	1.25E-01	1.52E-04		6.40E+01	2.80E+(1
31	4.27	4.82E-03	2.59E-01	1.89E-04		6.67E+01	3.09E+01
32	.; .(;Q	2.64E-03	1.83E-01	1.48E-04		8.85E+01	3.29E+(1
22	5.04	1.80E-03	1.44E-01	1.21E-04	9.88E+01	7.00E+01	3.46E+01
34	5.42	1.92E-03	1.77E-01	1.60E-04		7.19E+01	3.68E+01
25	£.82	1.56E-03	1.67E-01	1.62E-04		7.36E+01	2.91E+01
3 G	5.26	2.16E-03	2.66E-01	2.7SE-04		7.63E+01	4.30E+01
0.5	€.73 - 63	1.44E-03	2.05E-01	2.30E-04		7.84E+01	4.62E+01
38	7.23	9.60E-04	1.58E-01	1.90E-04		8.00E+01	4.55E+(1
39	7.77	1.20E-03	2.28E-01	2.95E-04		8.24E+01	5.30E+01
40	8.35	1.08E-03	2.37E-01	3.3CE-04	9.97E+01	8.48E+01	5.76E+01
41	8.97	1.2(E-04	3.04E-02	4.55E-05		8.51E+01	5.82E+01
42	9.64	8.40E-04	2.46E-01	3.95E-04		8.76E+01	6.37E÷01
13	10.3	6.00E-04	2.03E-01	3.50E-04		8.97E+01	6.86E+()
44	11.1	1.20E-04	4.68E-02	8.69E-05		9.02E+01	6.99E÷01
45	11.9	4.80E-04	2.16E-01	4.31E-04		9.24E+01	7.59E+01
46	12.8	3.60E-04	1.87E-01	4.01E-04	9.99E+01	9.44E+01	8.15E+01
47	13.8	3.50E-04	2.16E-01	4.98E-04		9.66E+01	8.85E+01
18	14.8	4.80E-04	3.33E-01	8.24E-04	1.00E+02	1.00E+02	1.00E-02 1.00E+02
> TOT •	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	J. ひいときりる
TOTA	ILS:	1.14E+00 9	. / CE+UU /.	125-03			

FILE NAME: OUT5 10.000 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

#### CUMULATIVE % CONCENTRATIONS SURFACE SZŁK SURFACE MASS NUMBER NUMBER CHNL DIA 2.24E-02 1.40E-02 1.04E-06 3.87E+00 2.90E-01 2.35E-02 .486 1.40E-02 1.12E-02 9.45E-07 6.29E+00 5.24E-01 4.49E-02 .504 1.76E-02 1.63E-02 1.47E-06 9.33E+00 8.62E-01 7.81E-02 .542 2.34E-02 2.49E-02 2.41E-06 1.34E+01 1.38E+00 1.33E-01 2.82E-02 3.46E-02 3.61E-06 1.82E+01 2.10E+00 2.14E-01 4.01E-02 5.70E-02 6.40E-06 2.51E+01 3.28E+00 3.59E-01 4.13E-02 6.79E-02 8.19E-06 3.22E+01 4.69E+00 5.44E-01 5.05E-02 9.59E-02 1.24E-05 4.10E+01 6.69E+00 8.24E-01 .777 4.97E-02 1.09E-01 1.52E-05 4.95E+01 8.95E+00 1.17E+00 1.11E+01 1.51E+00 4.03E-02 1.02E-01 1.53E-05 5.65E+0l 1.32E+01 1.89E+00 3.55E-02 1.04E-01 1.67E-05 6.26E+01 1.52E+01 2.25E+00 6.73E+01 2.75E-02 9.28E-02 1.60E-05 1.03 11 7.16E+01 1.72E+01 2.66E+00 1.81E-05 2.50E-02 9.74E-02 1.91E+01 3.08E+00 7.52E+01 2.05E-02 9.24E-02 1.84E-05 1.19 2.10E+01 3.52E+00 1.98E-05 7.82E+01 1.78E-02 9.24E-02 1.28 1 1 1.63E-02 9.80E-02 2.26E-05 8.10E+01 2.31E+01 4.04E+00 1.5 1.38 2.49E+01 4.53E+00 2.18E-05 8.32E+01 1.27E-02 8.82E-02 16 1.22E-02 9.80E-02 2.61E-05 8.53E+01 2.69E+01 5.12E+00 1.59 2.79E-05 8.72E+01 2.90E+01 5.75E+00 1.06E-02 9.76E-02 1.71 13 1.09E-02 1.17E-C1 3.58E-05 8.90E+01 3.145+01 6.55E+00 1.84 19 3.36E+01 7.35E+00 1.07E-01 3.52E-05 9.05E+01 8.64E-03 9.00E-03 1.23E-01 4.55E-05 9.21E+013.63E÷01 9.38E+90 9.43E+00 9.34E-01 3.88E+01 1.66E-05 7.44E-03 1.22E-01 1.04E+01 9.43E+01 4.09E+01 4.20E-05 5.40E-03 1.02E-01 4.33E+01 1.15E+01 5.16E-03 1.13E-01 4.98E-05 9.52E+01 4.44E-03 1.12E-01 5.32E-05 4.56E+01 1.27E+01 9.591+01 2.83 9.652+01 4.75E÷01 3.24E-03 9.47E-02 4.82E-05 3.12E-03 1.05E-01 5.75E-05 9.705+014.98E+01 3.27 9.75E+01 5.20E+01 2.76E-03 1.03E-01 6.32E-05 23 3.52 1.75E+01 9.78E+01 4.43E-05 5.35E+01 1.56E-03 7.02E-02 1.68E-03 8.73E-02 5.92E-05 9.81E+01.5.53E+0130 1.98E+01 9.60E-04 5.76E-02 4.20E-05 9.82E+0l 5.65E+01 31 1.37 5.91E+01 2.20E+01 1.25E-01 9.77E-05 9.86E+01 1.80E-03 6.03E+01 2.31E+01 7.20E-04 5.76E-02 4.85E-05 9.87E+01 33 5.04 6.14E+01 2.42E+01 9.88E+01 5.01E-05 6.00E-04 5.55E-02 34 6.33E+01 2.62E+01 9.89E+01 8.40E-04 8.97E-02 8.71E-05 35 5.82 6.70E+01 3.04E+01 1.78E-01 1.85E-04 9.92E+01 1.44E-03 36 6.26 3.39E+01 9.93E+01 6.98E+01 1.53E-04 9.60E-04 1.37E-01 37 6.73 3.66E+01 6.00E-04 9.86E-02 1.19E-04 9.94E+01 7.19E+01 38 7.23 7.38E+01 3.92E+01 4.80E-04 9.11E-02 1.18E-04 9.95E+01 39 7.77 1.20E-04 2.63E-02 3.66E-05 9.95E+01 7.43E+01 4.01E+01 6.00E-04 1.52E-01 2.27E-04 9.96E+01 7.75E+01 4.52E+01 8.97 41 3.60E-04 1.05E-01 1.69E-04 9.97E+01 7.97E+01 4.90E+01 42 9.64 0.00E+00 0.00E+00 0.00E+00 9.97E+01 7.97E+01 4.90E+01 43 10.3 2.40E-04 9.36E-02 1.74E-04 9.98E+01 8.16E+01 5.29E+01 44 11.1 2.40E-04 1.08E-01 2.16E-04 9.98E+01 8.38E+01 5.78E+01 45 1.20E-04 6.24E-02 1.34E-04 9.98E+01 8.51E+01 6.08E+01 12.8 46 3.60E-04 2.16E-01 4.98E-04 9.99E+01 8.96E+01 7.21E+01 13.8 7.20E-04 4.99E-01 1.24E-03 1.00E+02 1.00E+02 1.00E+02 14.8 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4

5.80E-01 4.81E+00 4.43E-03

TOTALS:

#### TSI AERODYNAMIC PARTICLE SIZER

EFFIC. CORRECT.: DI

FILE NAME: OUT5 10.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1

CHNL DIA CONCENTRATIONS CUMULATIVE % NUMBER SURFACE **SSFW** NUMBER SURFACE MASS .486 2.96E-02 1.84E-02 1.37E-06 4.18E+00 2.73E-01 1.87E-02 .504 1.86E-02 1.49E-02 1.25E-06 6.80E+00 4.93E-01 3.58E-02 .542 2.24E-02 2.07E-02 1.87E-06 9.96E+00 7.99E-01 6.13E-02 .581 3.07E-02 3.27E-02 3.17E-06 1.43E+01 1.28E+00 .625 3.71E-02 4.55E-02 4.74E-06 1.95E+01 1.96E+00 4.60E-02 6.54E-02 5 .673 7.34E-06 2.60E+01 2.92E+00 5.23E-02 8.60E-02 .723 1.04E-05 3.34E+01 4.20E+00 6.37E-02 1.21E-01 .777 1.57E-05 4.24E+01 5.99E+00 6.25E-01 .835 5.29E-02 1.16E-01 1.62E-05 4.98E+01 7.70E+00 8.45E-01 5.44E-02 1.39E-01 2.06E-05 5.75E+01 9.74E+00 1.13E+00 9 .897 10 .961 3.82E-02 1.12E-01 1.79E-05 6.29E+01 1.14E+01 1.37E+00 1.73E-05 6.70E+01 1.29E+01 1.61E+00 11 1.03 2.96E-02 1.00E-01 12 1.11 2.82E-02 1.10E-01 2.04E-05 7.10E+01 1.45E+01 1.89E+00 13 1.19 2.52E-02 1.13E-01 2.26E-05 7.46E+01 1.62E+01 2.19E+00 1 ‡ 1.28 2.44E-02 1.27E-01 2.72E-05 7.80E+01 1.81E+01 2.56E+00 1.12E-01 2.57E-05 8.06E+01 1.97E+01 2.92E+00 15 1.38 1.86E-02 16 1.48 1.90E-02 1.31E-01 3.25E-05 8.33E+01 2.16E+01 3.36E+00 17 1.59 1.49E-02 1.19E-01 3.17E-05 8.54E+01 2.34E+01 3.79E+00 13 1.71 1.62E-02 1.50E-01 4.28E-05 8.77E+01 2.56E+01 4.38E+00 19 1.84 1.20E-02 1.282-01 3.94E-05 8.94E+01 2.75E+01 4.91E+00 1.98 1.16E-02 1.44E-01 4.74E-05 9.10E+01 2.96E+01 5.56E+00 2.12 7.32E-03 1.04E-01 3.70E-05 9.20E+01 3.12E+01 6.06E+00 2.23 1.38E-01 5.26E-05 9.32E+01 3.32E+01 6.78E+00 8.40E-03 23 2.456.48E-03 1.23E-01 5.04E-05 9.41E+01 3.50E+01 7.47E+00 21 2.64 5.96E-03 1.53E-01 6.72E-05 9.51E+01 3.73E+01 8.33E+00 252.834.32E-03 1.09E-01 5.17E-05 9.57E+01 3.89E+01 9.09E+00 26 3.05 3.84E-03 1.12E-01 5.71E-05 9.63E+01 4.06E+01 9.87E+00 27 3.27 1.13E-01 6.20E-05 9.68E+01 4.23E+01 1.07E+01 3.36E-03 28 3.52 2.16E-03 8.42E-02 4.94E-05 9.71E+01 4.35E+01 1.14E+01 29 3.78 2.04E-03 9.18E-02 5.79E-05 9.73E+01 4.49E+01 1.22E+01 4.06 30 1.31E-01 8.88E-05 9.77E+01 4.68E+01 1.34E+01 2.52E-03 31 4.37 1.01E-01 7.35E-05 9.79E+01 4.83E+01 1.44E+01 1.68E-03 32 4.69 1.08E-03 7.49E-02 5.86E-05 9.81E+01 4.94E+01 1.52E+01 33 1.35E-01 1.13E-04 9.83E+01 5.14E+01 1.67E+01 5.04 1.68E-03 5.42 1.22E-01 1.10E-04 9.85E+01 5.32E+01 1.82E+01 1.32E-03 35 1.68E-03 5.82 1.79E-01 1.74E-04 9.87E+01 5.58E+01 2.06E+01 1.78E-01 1.85E-04 9.90E+01 5.85E+01 2.31E+01 36 6.26 1.44E-03 37 6.73 1.20E-01 1.34E-04 9.91E+01 6.02E+01 2.50E+01 8.40E-04 9.86E-02 1.19E-04 9.92E+01 6.17E+01 2.66E+01 38 7.23 6.00E-04 7.77 1.37E-01 1.77E-04 9.93E+01 6.37E+01 2.90E+01 39 7.20E-04 6.00E-04 1.32E-01 1.83E-04 9.93E+01 6.57E+01 3.15E+013.60E-04 9.11E-02 1.36E-04 9.94E+01 6.70E+01 3.34E+01 4 I 8.97 3.60E-04 1.05E-01 1.69E-04 9.94E+01 6.86E+01 3.57E+01 42 9.64 3.60E-04 1.22E-01 2.10E-04 9.95E+01 7.04E+01 3.85E+01 10.3 43 4.80E-04 1.87E-01 3.47E-04 9.96E+01 7.31E+01 4.33E+01 44 11.1 6.00E-04 2.70E-01 5.39E-04 9.96E+01 7.71E+01 5.06E+01 11.9 45 12.8 8.40E-04 4.37E-01 9.36E-04 9.98E+01 8.36E+01 6.34E+01 46 47 13.8 6.00E-04 3.60E-01 8.30E-04 9.98E+01 8.89E+01 7.47E+01 1.08E-03 7.49E-01 1.85E-03 1.00E+02 1.00E+02 1.00E+02 48 14.8 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 7.09E-01 6.76E+00 7.33E-03 TOTALS:

FILE NAME: OUT5 10.002 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

#### CONCENTRATIONS CUMULATIVE % NUMBER SURFACE MASS NUMBER SURFACE MASS CHNL DIA 3.58E-02 2.22E-02 1.66E-06 3.33E+00 2.56E-01 2.71E-02 .486 2.22E-02 1.78E-02 1.49E-06 5.40E+00 4.60E-01 5.15E-02 2.65E-02 2.45E-02 2.21E-06 7.87E+00 7.42E-01 8.76E-02 .581 3.20E-02 3.41E-02 3.30E-06 1.09E+01 1.13E+00 1.42E-01 .625 4.50E-02 5.52E-02 5.75E-06 1.50E+01 1.77E+00 2.36E-01 .673 5.45E-02 7.75E-02 8.70E-06 2.01E+01 2.66E+00 3.78E-01 6.84E-02 1.12E-01 1.36E-05 2.65E+01 3.95E+00 5.99E-01 .723 7.66E-02 1.45E-01 1.88E-05 3.36E+01 5.63E+00 9.07E-01 7.61E-02 1.67E-01 2.32E-05 4.07E+01 7.55E+00 1.29E+00 .897 7.16E-02 1.81E-01 2.72E-05 4.74E+01 9.63E+00 1.73E+00 5.98E-02 1.75E-01 2.81E-05 5.29E+01 1.16E+01 2.19E+00 10 5.16E-02 1.74E-01 3.01E-05 5.77E+01 1.36E+01 2.68E+00 1.03 11 4.50E-02 1.76E-01 3.26E-05 6.19E+01 1.57E+01 3.21E+00 1.11 12 4.44E-02 2.00E-01 3.99E-05 6.61E+01 1.80E+01 3.86E+00 1.19 13 4.22E-02 2.20E-01 4.71E-05 7.00E+01 2.05E+01 4.63E+00 1.28 14 4.00E-02 2.40E-01 5.53E-05 7.37E+01 2.33E+01 5.54E+00 1.38 15 3.76E-02 2.60E-01 6.45E-05 7.72E+01 2.62E+01 6.59E+00 1.48 16 3.35E-02 2.68E-01 7.13E-05 8.03E+01 2.93E+01 7.75E+00 17 3.32E-02 3.07E-01 8.79E-05 8.34E+01 3.29E+01 9.19E+00 18 2.70E-02 2.88E-01 8.85E-05 8.59E+01 3.62E+01 1.06E+01 19 1.84 2.59E-02 3.20E-01 1.06E-04 8.84E+01 3.99E+01 1.24E+01 20 1.98 2.11E-02 3.01E-01 1.07E-04 9.03E+01 4.33E+01 1.41E+01 2.12 21 1.91E-02 3.14E-01 1.20E-04 9.21E+01 4.69E+01 1.61E+01 2.28 1.78E-02 3.37E-01 1.38E-04 9.38E+01 5.08E+01 1.83E+01 2.45 2.64 1.20E-02 2.63E-01 1.16E-04 9.49E+01 5.28E+01 2.02E+01 24 1.22E-02 3.10E-01 1.47E-04 9.60E+01 5.74E+01 2.26E+01 2.837.68E-03 2.25E-01 1.14E-04 9.67E+01 6.00E+01 2.45E+01 3.05 9.36E-03 3.16E-01 1.73E-04 9.76E+01 6.36E+01 2.73E+01 27 3.72E-03 1.45E-01 8.51E-05 9.79E+01 6.53E+01 2.87E+01 3.52 2.76E-03 1.24E-01 7.84E-05 9.82E+01 6.67E+01 3.00E+01 29 3.78 3.00E-03 1.56E-01 1.06E-04 9.85E+01 6.85E+01 3.17E+01 4.06 2.28E-03 1.37E-01 9.97E-05 9.87E+01 7.01E+01 3.33E+01 31 4.37 2.04E-03 1.41E-01 1.11E-04 9.89E+01 7.17E+01 3.51E+01 32 4.69 2.28E-03 1.83E-01 1.54E-04 9.91E+01 7.38E+01 3.76E+01 5.04 33 6.00E-04 5.55E-02 5.01E-05 9.92E+01 7.44E+01 3.84E+01 5.42 34 1.68E-03 1.79E-01 1.74E-04 9.93E+01 7.65E+01 4.13E+01 5.82 35 1.32E-03 1.63E-01 1.70E-04 9.94E+01 7.84E+01 4.41E+01 6.26 36 1.20E-03 1.71E-01 1.92E-04 9.95E+01 8.03E+01 4.72E+01 37 6.73 6.00E-04 9.86E-02 1.19E-04 9.96E+01 8.15E+01 4.91E+01 38 7.20E-04 1.37E-01 1.77E-04 9.97E+01 8.30E+01 5.20E+01 39 7.77 3.60E-04 7.89E-02 1.10E-04 9.97E+01 8.40E+01 5.38E+01 8.35 4.80E-04 1.22E-01 1.82E-04 9.97E+01 8.54E+01 5.68E+01 41 8.97 2.40E-04 7.02E-02 1.13E-04 9.98E+01 8.62E+01 5.86E+01 42 9.64 6.00E-04 2.03E-01 3.50E-04 9.98E+01 8.85E+01 6.43E+01 43 10.3 3.60E-04 1.40E-01 2.61E-04 9.99E+01 9.01E+01 6.86E+01 44 11.1 6.00E-04 2.70E-01 5.39E-04 9.99E+01 9.32E+01 7.74E+01 45 11.9 2.40E-04 1.25E-01 2.68E-04 9.99E+01 9.46E+01 8.18E+01 46 12.8 3.60E-04 2.16E-01 4.98E-04 1.00E+02 9.71E+01 8.99E+01 47 13.8 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 TOTALS: 1.07E+00 8.69E+00 6.12E-03

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 10.003 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC
DENSITY: 1

		CONCI	ENTRATIONS		Clini	ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
( CHND	.486	1.98E-02	1.22E-02	9.10E-07	2.38E+00	1.58E-01	1.66E-02
ì	.504	1.09E-02	8.74E-03	7.35E-07	3.69E+00	2.71E-01	3.00E-02
2	.542	1.45E-02	1.34E-02	1.21E-06	5.43E+00	4.44E-01	5.21E-02
3	.581	1.97E-02	2.09E-02	2.03E-06	7.80E+00	7.14E-01	8.91E-02
4	.625	2.44E-02	2.99E-02	3.11E-06	1.07E+01	1.10E+00	1.46E-01
5	.673	3.23E-02	4.59E-02	5.15E-06	1.46E+01	1.69E+00	2.40E-01
6	.723	4.68E-02	7.70E-02	9.28E-06	2.02E+01	2.69E+00	4.09E-01
. 7	.777	5.77E-02	1.10E-01	1.42E-05	2.72E+01	4.10E+00	6.68E-01
' 8		5.69E-02	1.10E-01 1.25E-01	1.74E-05	3.40E+01	5.71E+00	
9	.835 .897	5.36E-02	1.36E-01	2.03E-05	4.04E+01	7.47E+00	9.85E-01
				2.03E-05 2.17E-05			1.36E+00
10	.964	4.62E-02	1.35E-01		4.60E+01	9.21E+00	1.75E+00
11	1.03	4.43E-02	1.50E-01	2.58E-05	5.13E+01	1.11E+01	2.22E+00
12	1.11	4.20E-02	1.64E-01	3.04E-05	5.63E+01	1.33E+01	2.78E+00
13	1.19	4.02E-02	1.81E-01	3.61E-05	6.12E+01	1.56E+01	3.44E+00
14	1.28	3.76E-02	1.95E-01	4.19E-05	6.57E+01	1.81E+01	4.20E+00
15	1.38	3.24E-02	1.95E-01	4.48E-05	6.96E+01	2.06E+01	5.02E+00
16	1.48	3.02E-02	2.10E-01	5.19E-05	7.32E+01	2.33E+01	5.96E+00
17	1.59	2.89E-02	2.32E-01	6.16E-05	7.67E+01	2.63E+01	7.09E+00
18	1.71	2.69E-02	2.48E-01	7.10E-05	7.99E+01	2.95E+01	8.38E+00
19	1.84	2.84E-02	3.04E-01	9.33E-05	8.33E+01	3.35E+01	1.01E+01
20	1.98	2.15E-02	2.65E-01	8.75E-05	8.59E+01	3.69E+01	1.17E+01
21	2.12	1.85E-02	2.63E-01	9.34E-05	8.81E+01	4.03E+01	1.34E+01
22	2.28	1.64E-02	2.70E-01	1.03E-04	9.01E+01	4.38E+01	1.53E+01
23	2.45	1.46E-02	2.78E-01	1.14E-04	9.19E+01	4.74E+01	1.73E+01
24	2.64	1.26E-02	2.76E-01	1.22E-04	9.34E+01	5.09E+01	1.95E+01
25	2.83	9.84E-03	2.49E-01	1.18E-04	9.46E+01	5.41E+01	2.17E+01
26	3.05	9.96E-03	2.91E-01	1.48E-04	9.58E+01	5.79E+01	2.44E+01
27	3.27	5.64E-03	1.90E-01	1.04E-04	9.64E+01	6.04E+01	2.63E+01
28	3.52	5.04E-03	1.96E-01	1.15E-04	9.70E+01	6.29E+01	2.84E+01
29	3.78	5.16E-03	2.32E-01	1.47E-04	9.77E+01	6.59E+01	3.11E+01
30	4.06	3.00E-03	1.56E-01	1.06E-04	9.80E+01	6.79E+01	3.30E+01
31	4.37	3.60E-03	2.16E-01	1.57E-04	9.85E+01	7.07E+01	3.59E+01
32	4.69	2.04E-03	1.41E-01	1.11E-04	9.87E+01	7.25E+01	3.79E+01
33	5.04	1.08E-03	8.65E-02	7.27E-05	9.88E+01	7.37E+01	3.92E+01
34	5.42	1.56E-03	1.44E-01	1.30E-04	9.90E+01	7.55E+01	4.16E+01
35	5.82	2.04E-03	2.18E-01	2.12E-04	9.93E+01	7.83E+01	4.54E+01
36	6.26	1.32E-03	1.63E-01	1.70E-04	9.94E+01	8.04E+01	4.85E+01
37	6.73	1.08E-03	1.54E-01	1.72E-04	9.96E+01	8.24E+01	5.17E+01
38	7.23	4.80E-04	7.89E-02	9.51E-05	9.96E+01	8.34E+01	5.34E+ <b>Q</b> 1
39	7.77	6.00E-C4	1.14E-01	1.48E-04	9.97E+01	8.49E+01	5.61E+01
40	8.35	0.00E+00	0.00E+00	0.00E+00	9.97E+01	8.49E+01	5.61E+01
41	8.97	2.40E-04	6.08E-02	9.09E-05	9.97E+01	8.57E+01	5.78E+01
42	9.64	4.80E-04	1.40E-01	2.26E-04	9.98E+01	8.75E+01	6.19E+01
43	10.3	3.60E-04	1.22E-01	2.10E-04	9.98E+01	8.91E+01	6.57E+01
44	11.1	2.40E-04	9.36E-02	1.74E-04	9.98E+01	9.03E+01	6.85E+01
45	11.9	3.60E-04	1.62E-01	3.23E-04	9.99E+01	9.24E+01	7.48E+01
46	12.8	2.40E-04	1.25E-01	2.68E-04	9.99E+01	9.40E+01	7.97E+01
47	13.8	3.60E-04	2.16E-01	4.98E-04	1.00E+02	9.68E+01	8.87E+01
48	14.8	3.60E-04	2.50E-01	6.18E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	8.32E-01 7	74E+00 5.	48E-03			,

FILE NAME: OUT5 10.004 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC			CUM	U ATTUR W	
CUNI	DIA	NUMBER	ENTRATIONS SURFACE	MASS	NUMBER	JLATIVE % SURFACE	MASS
CHNL	.486	1.32E-02	8.17E-03	6.07E-07	2.14E+00	1.54E-01	1.61E-02
1	.504	7.08E-03	5.67E-03	4.77E-07	3.29E+00	•	2.87E-02
2	.542	8.76E-03	8.09E-03	7.31E-07	4.71E+00	4.15E-01	4.80E-02
3	.581	1.18E-02	1.25E-02	1.21E-06	6.62E+00	6.51E-01	8.01E-02
4	.625	1.60E-02	1.96E-02	2.04E-06	9.20E+00	1.02E+00	1.34E-01
5	.673	2.46E-02	3.50E-02	3.93E-06	1.32E+01	1.68E+00	2.38E-01
6	.723	3.37E-02	5.55E-02	6.69E-06	1.87E+01	2.73E+00	4.15E-01
7	.777	4.45E-02	8.45E-02	1.10E-05	2.59E+01	4.33E+00	7.05E-01
8	.835	4.66E-02	1.02E-01	1.42E-05	3.34E+01	6.26E+00	1.08E+00
9	.897	4.20E-02	1.06E-01	1.59E-05	4.02E+01	8.27E+00	1.50E+00
10	.964	4.06E-02	1.19E-01	1.91E-05	4.68E+01	1.05E+01	2.01E+00
11	1.03	3.64E-02	1.23E-01	2.12E-05	5.27E+01	1.28E+01	2.57E+00
12	1.11	3.13E-02	1.22E-01	2.27E-05	5.78E+01	1.52E+01	3.17E+00
13	1.19	2.96E-02	1.33E-01	2.66E-05	6.26E+01	1.77E+01	3.88E+00
14	1.28	2.95E-02	1.54E-01	3.29E-05	6.74E+01	2.06E+01	4.75E+00
15	1.38	2.69E-02	1.61E-01	3.72E-05	7.17E+01	2.36E+01	5.73E+00
16	1.48	2.46E-02	1.71E-01	4.22E-05	7.57E+01	2.69E+01	6.85E+00
17	1.59	2.30E-02	1.84E-01	4.91E-05	7.95E+01	3.03E+01	8.15E+00
18	1.71	1.99E-02	1.84E-01	5.26E-05	8.27E+01	3.38E+01	9.54E+00
19	1.84	1.42E-02	1.51E-01	4.64E-05	8.50E+01	3.67E+01	1.08E+C1
20	1.98	1.44E-02	1.78E-01	5.86E-05	8.73E+01	4.00E+01	1.23E+01
21 22	2.12	1.38E-02 1.25E-02	1.97E-01 2.05E-01	6.97E-05 7.82E-05	8.96E+01 9.16E+01	4.38E+01 4.76E+01	1.42E+01 1.62E+01
23	2.45	9.96E-03	1.89E-01	7.82E-05	9.32E+01	5.12E+01	1.83E+01
24	2.64	9.12E-03	2.00E-01	8.80E-05	9.47E+01	5.50E+01	2.06E+01
25	2.83	7.32E-03	1.85E-01	8.77E-05	9.59E+01	5.85E+01	2.29E+01
26	3.05	5.88E-03	1.72E-01	8.74E-05	9.68E+01	6.18E+01	2.53E+01
27	3.27	3.84E-03	1.30E-01	7.08E-05	9.75E+01	6.42E+01	2.71E+01
28	3.52	3.84E-03	1.50E-01	8.79E-05	9.81E+01	6.70E+01	2.95E+01
29	3.78	1.80E-03	8.10E-02	5.11E-05	9.84E+C1	6.86E+01	3.08E+01
30	4.06	1.20E-03	6.24E-02	4.23E-05	9.86E+01	6.98E+01	3.19E+01
31	4.37	1.56E-03	9.37E-02	6.82E-05	9.88E+01	7.15E+01	3.37E+01
32	4.69	1.44E-03	9.98E-02	7.82E-05	9.90E+01	7.34E+01	3.58E+01
3 <b>3</b>	5.04	6.00E-04	4.80E-02	4.04E-05	9.91E+01	7.43E+01	3.69E+01
34	5.42	8.40E-04	7.76E-02	7.02E-05	9.93E+01	7.58E+01	3.87E+01
35	5.82	8.40E-04	8.97E-02	8.71E-05	9.94E+01		.4.10E+01
36	6.26	4.80E-04	5.92E-02	6.18E-05		7.86E+01	4.27E+01
37	6.73	0.00E+00	0.00E+00	0.00E+00	9.95E+01		4.27E+01
38 ;	7.23	4.80E-04	7.89E-02	9.51E-05	9.96E+01	8.01E+01	4.52E+01
	7.77	1.20E-04	2.28E-02	2.95E-05	9.96E+01	8.05E+01	4.60E+01
	8.35	3.60E-04	7.89E-02	1.10E-04	9.96E+01	8.20E+01	4.89E+01
41	8.97	2.40E-04	6.08E-02	9.09E-05	9.97E+01	8.32E+01	5.13E+01
42	9.64	2.40E-04	7.02E-02	1.13E-04	9.97E+01	8.45E+01	5.43E+01
13 44	10.3	1.20E-04 3.60E-04	4.05E-02 1.40E-01	7.00E-05 2.61E-04	9.97E+01 9.98E+01	8.53E+01 8.79E+01	5.61E+01 6.30E+01
45	11.1	3.60E-04	1.40E-01 1.62E-01	3.23E-04	9.98E+01	9.10E+01	7.16E+01
46	12.8	4.80E-04	2.50E-01	5.35E-04	9.99E+01	9.57E+01	8.58E+01
47	13.8	2.40E-04	1.44E-01	3.32E-04	1.00E+02	9.84E+01	9.45E+01
48	14.8	1.20E-04	8.32E-02	2.06E-04	1.00E+02	1.00E+02	1.00E+02
<b>&gt;</b>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL			.29E+00 3.	-		11002102	4.002.02
. ~ 171		J.1.2 01 0		.02-00			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 10.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		DID. KAI		211101			
		CONCI	ENTRATIONS		CUMI	ULATIVE %	
CHNL	DT A	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
	.486	8.52E-03		3.94E-07		1.45E-01	1.23E-02
<		4.92E-03					
1	.504	6.60E-03	6.09E-03	5.51E-07	5.07E+00	•	3.99E-02
2 3	.542	8.64E-03		8.90E-07			6.78E-02
3	.581			1.53E-06			1.16E-01
4	.625	1.20E-02		2.53E-06	1.43E+01		1.95E-01
5	.673	1.58E-02		4.76E-06	2.04E+01	2.77E+00	3.44E-01
6 7	.723	2.40E-02		8.21E-06		4.50E+00	6.01E-01
7	.777	3.34E-02		1.01E-05			9.18E-01
8	.835	3.32E-02		1.01E-05			1.26E+00
9	.897	2.84E-02		1.08E-05		1.07E+01	1.66E+00
10	.964	2.75E-02					2.10E+00
11	1.03	2.44E-02		1.42E-05			2.59E+00
12	1.11	2.16E-02	• • • • • •	1.56E-05			3.19E+00
13	1.19	2.12E-02					3.19E+00
14	1.28	1.42E-02			7.19E+01		4.38E+CO
15	1.38	1.60E-02					5.16E+00
16	1.48	1.45E-02			7.96E+01		5.18E+00 5.91E+00
17	1.59	1.13E-02			8.25E+01		
18	1.71	1.03E-02		2.73E-05			6.76E+00
19	1.84	8.64E-03		2.83E-05			7.65E+00
20	1.98	6.84E-03		2.79E-05			8.52E+00
21	2.12	7.56E-03		3.82E-05			9.71E+00
22	2.28	4.68E-03		2.93E-05			1.06E+01
23	2.45	5.40E-03		4.20E-05			1.19E+01
24	2.64	4.44E-03		4.28E-05			1.30E+01
25	2.83	3.24E-03	8.20E-02	3.88E-05			1.45E+01
26	3.0£	2.88E-03	8.42E-02	4.28E-05			1.58E+01
27	3.27	1.80E-03	6.08E-02	3.32E-05			1.69E-01
28	3.52	2.76E-03	1.08E-01	6.32E-05			1.55E+01
29	3.78	1.44E-03	6.48E-02	4.09E-05			2.01E+01
30	4.06	1.20E-03	6.24E-02	4.23E-05	9.79E+01		2.15E+01
31	4.37	1.68E-03	1.01E-01	7.35E-05	9.84E+01		2.38E+01
32	4.69	4.80E-04	3.33E-02	2.61E-05	9.85E+01		2.46E+01
33	5.04	6.00E-04	4.80E-02	4.04E-05	9.86E+01	6.33E+01	2.58E+01
34	5.42	3.60E-04	3.33E-02	3.01E-05	9.87E+01		2.68E+01
35	5.82	1.44E-03	1.54E-01	1.49E-04	9.91E+01		3.14E+01
36	6.26	2.40E-04	2.96E-02	3.09E-05	9.92E+01		3.24E+01
37	6.73	6.00E-04	8.54E-02	9.58E-05	9.93E+01		3.54E+01
38	7.23	4.80E-04		9.51E-05	9.94E+01		3.84E+01
39	7.77	3.60E-04	6.83E-02	8.85E-05	9.95E+01	7.55E+01	4.12E+01
40	8.35	1.20E-04	2.63E-02	3.66E-05	9.95E+01	7.63E+01	4.23E+01
41	8.97	1.20E-04		4.55E-05	9.96E+01	7.71E+01	4.37E+01
42	9.64	0.00E+00		0.00E+00	9.96E+01	7.71E+01	4.37E+01
43	10.3	2.40E-04	•				4.81E+01
44	11.1	4.80E-04		3.47E-04			5.90E+01
45	11.9	0.00E+00		0.00E+00			5.90E+01
46	12.8	3.60E-04					7.15E+01
47	13.8	3.60E-04					8.71E+01
48	14.8	2.40E-04		4.12E-04			1.00E+02
	15.4	0.00E+00					1.00E+02
> TOT 4			3.66E+00 3		11002102		
TOTA	ILD:	3.20E-01	S. DUETUU S.	, 20L-00			

FILE NAME: OUT5 10.006 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME:

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

#### CONCENTRATIONS CUMULATIVE % NUMBER SURFACE **ZZAK** NUMBER CHNL DIA SURFACE MASS 7.08E-03 4.40E-03 3.28E-07 1.11E+00 6.91E-02 6.74E-03 . 136 .504 4.32E-03 3.46E-03 2.91E-07 1.79E+00 1.23E-01 1.27E-02 5.16E-03 4.76E-03 4.31E-07 2.60E+00 1.98E-01 6.00E-03 6.38E-03 6.18E-07 3.54E+00 .581 2.98E-01 1.18E-02 1.44E-02 1.50E-06 5.39E+00 .625 5.24E-01 1.55E-02 2.20E-02 2.47E-06 7.82E+00 .673 8.70E-01 1.16E-01 2.75E-02 4.52E-02 5.45E-06 .723 1.21E+01 1.58E+00 3.68E-02 7.00E-02 9.07E-06 .777 1.79E+01 2.68E+00 4.52E-02 9.92E-02 1.38E-05 2.50E+01 .835 4.23E+00 3.94E-02 9.97E-02 1.49E-05 3.12E+01 5.80E+00 .897 3.94E-02 1.15E-01 1.85E-05 3.74E+01 .961 7.60E+00 4.12E-02 1.39E-01 2.40E-05 4.39E+01 11 1.03 9.78E+00 3.54E-02 1.38E-01 2.56E-05 4.94E+01 12 1.11 1.195+01 1.19 3.30E-02 1.49E-01 2.96E-05 5.46E+01 1.43E+01 3.01E+00 13 14 1.28 3.41E-02 1.77E-01 3.80E-05 6.00E+01 1.71E+01 3.20E-02 1.92E-01 4.43E-05 6.50E+01 2.01E+01 15 1.38 3.41E-02 2.36E-01 5.85E-05 7.03E+01 1.43 2.38E+01 3.14E-02 2.52E-01 6.70E-05 7.53E+01 2.77E+01 7.28E+00 1.59 2.40E-02 2.22E-01 6.34E-05 7.91E+01 3.12E+01 1.84 2.10E-02 2.24E-01 6.89E-05 8.24E+01 3.47E+012.11E-02 2.60E-01 8.60E-05 8.57E+01 3.83E+01 1.93 2.12 1.45E-02 2.07E-01 7.34E-05 8.80E+01 4.21E+01 1.33E+01 2.28 1.58E-02 2.60E-01 9.93E-05 9.04E+01 4.61E+01 1.18E-02 2.23E-01 9.14E-05 9.23E+01 4.96E+01 2.452 4 1.09E-02 2.39E-C1 1.05E-C1 9.40E+01 2.64 5.34E+01 7.92E-03 2.00E-01 9.49E-05 9.52E+01 2.835.65E+01 6.96E-03 2.03E-01 1.03E-04 9.63E+01 5.97E+01 3.05 4.20E-03 1.42E-31 7.75E-05 9.70E+01 6.20E+01 3.273.52 4.44E-03 1.73E-01 1.02E-04 9.77E+01 6.47E+01 2.76E-03 1.24E-01 7.84E-05 9.81E+01 6.66E+01 3.78 30 4.06 1.92E-03 9.98E-02 6.77E-05 9.84E+01 6.82E+01 1.32E-03 7.93E-02 5.77E-05 9.86E+01 6.94E+01 31 4.37 4.99E-02 3.91E-05 32 4.69 7.20E-04 9.88E+01 7.02E+01 7.20E-04 5.76E-02 4.85E-05 9.89E+01 7.11E+01 33 5.04 1.44E-03 1.33E-01 1.20E-04 9.91E+01 7.32E+01 3.4 5.42 5.12E-02 4.98E-05 9.92E+01 7.40E+01 35 5.82 4.80E-04 4.44E-02 4.63E-05 36 6.26 3.60E-04 9.92E+01 7.47E+01 37 6.73 7.20E-04 7.63E+01 1.03E-01 1.15E-04 9.93E+01 7.23 6.00E-04 9.86E-02 1.19E-04 9.94E+01 7.79E+01 4.23E+01 3.60E-04 6.83E-02 8.85E-05 9.95E+01 7.89E+01 4.41E+01 4.80E-04 1.05E-01 1.47E-04 9.96E+01 8.06E+01 4.72E+01 3.60E-04 9.11E-02 1.36E-04 9.96E+01 8.20E+01 5.00E+01 8.97 3.60E-04 1.05E-01 1.69E-04 9.97E+01 8.37E+01 5.34E+01 42 9.64 2.40E-04 8.10E-02 1.40E-04 9.97E+01 8.49E+01 5.63E+01 10.3 4.80E-04 1.87E-01 3.47E-04 9.98E+01 8.79E+01 6.34E+01 44 11.1 2.40E-04 1.08E-01 2.16E-04 9.98E+01 8.96E+01 6.79E+01 11.9 4.80E-04 2.50E-01 5.35E-04 9.99E+01 9.35E+01 7.89E+01 46 12.8 0.00E+00 0.00E+00 0.00E+00 9.99E+01 9.35E+01 7.89E+01 47 13.8 48 14.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 TOTALS: 6.37E-01 6.38E+00 4.87E-03

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 10.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

		CONCE	ENTRATIONS		CUMI	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 486	6.72E-03			1.40E+00	9.77E-02	9.67E-03
1	.501	3.60E-03	2.88E-03	2.42E-07	2.16E+00	1.66E-01	1.73E-02
2	.512	4.56E-03	4.21E-03	3.80E-07	3.11E+00	2.65E-01	2.92E-02
3	.581	7.68E-03	8.16E-03	7.91E-07	4.71E+00	4.57E-01	5.40E-02
Ĭ	.625	1.16E-02	1.43E-02	1.49E-06	7.14E+00	7.93E-01	1.01E-01
5	.673	1.67E-02	2.37E-02	2.66E-06	1.06E+01	1.35E+00	1.84E-01
6	.723	2.62E-02	4.30E-02	5.19E-06	1.61E+01	2.36E+00	3.46E-01
7	.777	3.31E-02	6.29E-02	8.15E-06	2.30E+01	3.84E+00	6.02E-01
8	.835	3.94E-02	8.63E-02	1.20E-05	3.12E+01	5.87E+00	9.78E-01
9	.897	3.91E-02	9.91E-02	1.48E-05		8.20E+00	1.44E+00
10	.961	3.13E-02	9.16E-02	1.47E-05	4.60E+01	1.04E+01	1.90E+00
11	1.03	2.75E-02	9.28E-02	1.60E-05		1.25E+01	2.41E+00
12	1.11	2.71E-02	1.06E-01	1.96E-05		1.50E+01	3.02E+00
13	1.19	2.85E-02	1.29E-01	2.57E-05		1.81E+01	3.83E+00
1 1	1.23	2.40E-02	1.25E-01	2.68E-05		2.102+01	4.66E+00
15	1.38	2.085-02	1.25E-01	2.87E-05	7.27E+01	2.395+01	5.56E+00
16	1.18	1.80E-02	1.25E-01	3.09E-05	7.64E+01	2.692+01	6.53E+00
17	1.59	1.97E-02	1.58E-01	4.19E-05		3.06E+01	7.84E+00
		1.37E-02	1.26E-01	3.62E-05	8.34E+01	3.35E+01	8.98E+00
18	1.71	1.40E-02	1.50E-01	4.50E-05		3.715+01	1.04E+01
19	1.81	9.81E-03	1.21E-01	4.01E-05		3.99E+01	1.17E+01
20	1.98		1.332-01	4.73E-05		4.31E+01	1.325+01
21	$\frac{2.12}{2.00}$	9.352-03	1.38E-01	5.26E-05	9.21E+01	4.63E+01	1.48E+01
	2.28	3.10E-03				5.01E+01	1.69E+01
23	2.45	8.52E-03	1.62E-01	6.62E-05		5.33E+01	1.382+01
21	2.61	6.21E-03	1.37E-01	6.02E-05		5.57E+01	2.03E+01
2.5	2.83	3.982-03	1.00E-01	4.74E-05 5.35E-05	9.60E+01 9.68E+01	5.82E+01	2.19E+01
26	3.05	3.60E-03	1.05E-01		9.74E+01	6.04E+01	2.36E+01
27	3.27	2.88E-03	9.72E-02	5.31E-05 4.12E-05			2.49E+01
23	$\frac{3.52}{2.50}$	1.80E-03	7.02E-02	4.43E-05	9.81E+01	6.38E+01	2.63E+01
29	3.78	1.56E-03	7.02E-02	4.65E-05	9.83E+01	6.54E+01	2.77E+01
30	4.06	1.32E-03 1.20E-03	6.86E-02 7.20E-02	5.25E-05		6.71E+01	2.94E+01
31	4.37	8.40E-04	5.82E-02	4.56E-05		6.84E+01	3.08E+01
32	4.69	6.00E-04	4.80E-02	4.04E-05	9.89E+01	6.96E+01	3.21E+01
33	5.04	1.20E-04	1.11E-02	1.00E-05	9.89E+01	6.98E+01	3.24E+01
34	5.42	7.20E-04	7.69E-02	7.47E-05		7.16E+01	3.47E+01
35 36	5.82 6.26	6.00E-04	7.40E-02	7.72E-05		7.34E+01	3.71E+01
37	6.73	6.00E-04	8.54E-02	9.58E-05		7.54E+01	4.01E+01
38	7.23	4.80E-04	7.89E-02	9.51E-05		7.72E+01	4.31E+01
39	7.77	6.00E-04	1.14E-01	1.48E-04		7.99E+01	4.77E+01
40	8.35	1.20E-04	2.63E-02	3.66E-05			4.89E+01
41	8.97	4.80E-04	1.22E-01	1.82E-04	9.97E+01	8.34E+01	5.46E+01
	9.64	3.60E-04	1.05E-01	1.69E-04	9.97E+01	8.59E+01	5.99E+01
42		2.40E-04	8.10E-02	1.40E-04	9.98E+01	8.78E+01	6.43E+01
43	10.3 11.1	0.00E+00	0.00E+00	0.00E+00		8.78E+01	6.43E+01
44		1.20E-04	5.40E-02	1.08E-04	9.98E+01	8.90E+01	6.76E+01
45 46	11.9	4.80E-04	2.50E-01	5.35E-04	9.99E+01	9.49E+01	8.44E+01
46	12.8	3.60E-04	2.16E-01	4.98E-04	1.00E+02	1.00E+02	1.00E+02
47	13.8	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
48	14.8 15.4	0.00E+00	0.00E+00	0.00E+00		1.00E+02	1.00E+02
> TOTA			4.25E+00 3.		1.000106		_,,,,,,,
TOTA	LO:	7.136-01	1.60ETUU 3.	100.00			

FILE NAME: OUT5 10.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

				•			
	5.5.4		ENTRATIONS			ULATIVE %	
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<b>&lt;</b>	.486	5.76E-03	3.56E-03	2.65E-07	1.49E+00	9.56E-02	8.54E-03
1 2	.504	3.12E-03 3.24E-03	2.50E-03	2.10E-07	2.30E+00	1.63E-01	1.53E-02
3	.542 .581	3.96E-03	2.99E-03 4.21E-03	2.70E-07	3.13E+00	2.43E-01	2.40E-02
4	.625	5.64E-03	6.92E-03	4.08E-07	4.16E+00	3.56E-01	3.72E-02
5	.673	1.26E-02	1.79E-02	7.21E-07 2.01E-06	5.62E+00	5.42E-01	6.04E-02
6	.723	1.97E-02	3.24E-02	3.90E-06	8.88E+00 1.40E+01	1.02E+00	1.25E-01
7	.777	2.96E-02	5.63E-02	7.29E-06	2.16E+01	1.89E+00 3.40E+00	2.51E-01
8	.835	3.02E-02	6.63E-02	9.23E-06		5.18E+00	4.86E-01 7.84E-01
9	.897	3.46E-02	8.75E-02	1.31E-05	3.84E+01	7.53E+00	1.21E+00
10	.964	2.78E-02	8.14E-02	1.31E-05	4.56E+01	9.71E+00	1.63E+00
11	1.03	2.44E-02	8.23E-02	1.42E-05	5.19E+01	1.19E+01	2.09E+00
12	1.11	2.34E-02	9.13E-02	1.70E-05	5.79E+01	1.44E+01	2.63E+00
13	1.19	2.21E-02	9.94E-02	1.98E-05	6.37E+01	1.70E+01	3.27E+00
14	1.28	1.88E-02	9.80E-02	2.10E-05	6.85E+01	1.97E+01	3.95E+00
15	1.38	1.56E-02	9.37E-02	2.16E-05	7.26E+01	2.22E+01	4.65E+00
16	1.48	1.49E-02	1.03E-01	2.55E-05	7.64E+01	2.49E+01	5.47E+00
17	1.59	1.49E-02	1.19E-01	3.17E-05	8.03E+01	2.81E+01	6.49E+00
18	1.71	9.12E-03	8.43E-02	2.41E-05	8.26E+01	3.04E+01	7.27E+00
19	1.84	9.72E-03	1.04E-01	3.19E-05	8.51E+01	3.32E+01	8.30E+00
20	1.98	8.52E-03	1.05E-01	3.47E-05	8.73E-01	3.60E+01	9.42E+00
21	12.12	8.52E-03	1.21E-01	4.31E-05	8.95E+01	3.93E+01	1.08E+01
22	2.28	6.00E-03	9.86E-02	3.76E-05	9.11E+01	4.19E+01	1.20E+01
23	,2.45	6.60E-03	1.25E-01	5.13E-05	9.28E÷01	4.53E+01	1.37E+01
24	2.64	4.32E-03	9.47E-02	4.17E-05	9.39E+01	4.78E+01	1.50E+01
25	2.83	4.80E-03	1.22E-C1	5.75E-05	9.52E+01	5.11E+01	1.69E+01
	3.05	3.48E-03	1.02E-01	5.17E-05	9.61E+01	5.38E+01	1.85E+01
27	3.27	3.00E-03	1.01E-01	5.53E-05	9.68E+01	5.65E+01	2.03E+01
28	3.52	1.92E-03	7.49E-02	4.39E-05	9.73E+01	5.85E+01	2.17E+01
	3.78	1.44E-03	6.48E-02	4.09E-05	9.77E+01	6.03E+01	2.31E+01
30	1.06	1.56E-03	8.11E-02	5.50E-05	9.81E+01	6.24E+01	2.48E+01
31	4.37	1.20E-03	7.20E-02	5.25E-05	9.84E+01	6.44E+01	2.65E+01
32	4.69	4.80E-04	3.33E-02	2.61E-05	9.85E+01	6.53E+01	2.74E+01
33	5.04	7.20E-04	5.76E-02	4.85E-05	9.87E+01	6.68E+01	2.89E+01
34 35	5.42	6.00E-04	5.55E-02	5.01E-05	9.89E+01	6.83E+01	3.05E+01
	5.82	4.80E-04	5.12E-02	4.98E-05	9.90E+01	6.97E+01	3.21E+01
37	6.26	4.80E-04 7.20E-04	5.92E-02	6.18E-05	9.91E+01	7.13E+01	3.41E+01
38	7.23	3.60E-04	1.03E-01	1.15E-04	9.93E+01	7.40E+01	3.78E+01
	7.77	4.80E-04	5.92E-02	7.13E-05	9.94E+01	7.56E+01	4.01E+01
10	8.35	1.20E-04	9.11E-02 2.63E-02	1.18E-04	9.95E+01	7.81E+01	4.40E+01
41	8.97	3.60E-04	9.11E-02	3.66E-05 1.36E-04	9.96E+01	7.88E+01	4.51E+01
	9.64	1.20E-04	3.51E-02	5.64E-05	9.97E+01	8.12E+01	4.95E+01
	10.3	2.40E-04	8.10E-02	1.40E-04	9.97E+01 9.98E+01	8.21E+01	51.14E+01
44	11.1	1.20E-04	4.68E-02	8.69E-05	9.98E+01	8.43E+01 8.56E+01	5.59E+01 5.87E+01
_	11.9	0.00E+00	0.00E+00	0.00E+00	9.98E+01	8.56E+01	5.87E+01
	12.8	0.00E+00	0.00E+00	0.00E+00	9.98E+01	8.56E+01	5.87E+01
•	13.8	4.80E-04	2.88E-01	6.64E-04	9.99E+01	9.33E+01	8.01E+01
	14.8	3.60E-04	2.50E-01	6.18E-04	1.00E+02	1.00E+02	1.00E+02
	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL		3.87E-01 3					2 T C C L T C L

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 10.009 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CHNL DIA    NUMBER   SURFACE   NASS   NUMBER   SURFACE   NASS   SURFACE   NASS   NUMBER   SURFACE   NUMBER   NUMBER   NUMBER   NUMBER   NUMBER   NUM			CONCENTRATIO	N:C	Ct.At	'I ATIL'E •	
1	CHAIL	DIL					WICC
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8         .835         4.27E-02         9.37E-02         1.30E-05         2.49E+01         4.29E+00         7.13E-01           10         .961         4.31E-02         1.26E-01         2.52E-05         3.17E+01         5.99E+00         1.05E+00           11         1.03         3.71E-02         1.26E-01         2.03E-05         3.90E+01         8.03E+00         1.49E+00           12         1.11         3.77E-02         1.47E-01         2.73E-05         5.16E+01         1.26E+01         2.56E+00           13         1.19         3.17E-02         1.43E-01         2.85E-05         5.70E+01         1.50E+01         3.99E+00           15         1.38         3.07E-02         1.84E-01         4.25E-05         6.77E+01         2.10E+01         4.92E+00           16         1.48         2.65E-02         1.84E-01         4.25E-05         6.77E+01         2.10E+01         4.92E+00           17         1.50         2.46E-02         1.97E-01         5.80E-05         8.00E+01         3.07E+01         7.92E+00           18         1.71         2.20E-02         2.03E-01         5.80E-05         8.00E+01         3.07E+01         7.92E+00           19         1.73E-02         1.88E-01 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>							
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11						8.09E+00	1.49E+00
1.11   3.77E-02   1.47E-01   2.73E-05   5.16E+01   1.26E+01   3.18E+00   1.19   3.17E-02   1.43E-01   2.85E-05   5.70E+01   1.50E+01   3.18E+00   1.28   3.31E-02   1.72E-01   3.69E-05   6.25E+01   1.79E+01   3.99E+00   1.58   3.99E+00   1.59E+01   3.99E+00   1.58   3.99E+00   1.59E+00   1.59E+0						1.02E+01	1.97E+00
1.19					5.16E+01	1.26E+01	2.56E+00
11						1.505+01	3.18E+00
15         1.38         3.07E-02         1.84E-01         4.25E-05         6.77E+01         2.10E+01         4.92E+00           16         1.48         2.65E-02         1.84E-01         4.55E-05         7.22E+01         2.10E+01         5.92E+00           17         1.59         2.46E-02         1.97E-01         5.24E-05         7.63E+01         2.07E+01         7.06E+00           18         1.71         2.29E-02         2.03E-01         5.80E-05         8.00E+01         3.07E+01         8.33E+00           19         1.91         1.76E-02         1.30E-01         5.82E-05         8.30E+01         3.39E+01         9.60E+00           20         1.98         1.52E-02         2.17E-01         7.70E-05         8.82E-01         4.06E+01         1.26E+01           21         2.12         1.5EE-02         2.07E-01         7.97E-05         8.82E-01         4.06E+01         1.26E+01           22         2.23         1.27E-02         2.07E-01         7.97E-05         8.82E-01         4.06E+01         1.26E+01           22         2.23         1.26E-01         7.97E-05         9.39E-01         5.13E+01         1.44E+01         1.44E+01           21         2.63         3.62         3.52 </td <td></td> <td></td> <td></td> <td>01 3.69E-05</td> <td>6.25E+01</td> <td>1.79E+01</td> <td>3.99E+00</td>				01 3.69E-05	6.25E+01	1.79E+01	3.99E+00
16         1.48         2.65E-02         1.84E-01         4.55E-05         7.22E+01         2.16E+01         5.92E+00           17         1.59         2.46E-02         1.97E-01         5.24E-05         7.63E+01         2.73E+01         7.06E+00           19         1.71         2.20E-02         2.03E-01         5.80E-05         8.00E+01         3.07E+01         8.33E+00           20         1.98         1.52E-02         1.20E-01         5.82E-05         8.30E+01         3.39E+01         9.60E+00           21         2.12         1.52E-02         2.17E-01         7.70E-05         8.82E-01         1.06E+01         1.26E+01           22         2.28         1.27E-02         2.09E-01         7.97E-05         9.03E+01         4.4E+01         1.44E+01           23         2.15         1.24E-02         2.33E-01         9.61E-05         9.24E+31         4.80E+01         1.45E+01           24         2.44         9.00E-03         1.97E-01         8.68E-05         9.39E-01         5.17E+01         2.05E+01           25         2.33         8.04E-03         1.65E-01         7.30E-05         9.53E-01         5.47E+01         2.05E+01           26         2.05         5.64E-03         1.5					6.77E+01	2.10E+01	1.925+00
17         1.59         2.46E-02         1.97E-01         5.24E-05         7.63E+01         2.73E+01         7.06E+00           19         1.71         2.20E-02         2.03E-01         5.80E-05         8.00E+01         3.39E+01         9.60E+00           20         1.98         1.52E-02         1.88E-01         6.21E-05         8.36E+01         3.70E+01         1.10E+01           21         2.12         1.52E-02         2.17E-01         7.70E-05         8.82E-01         4.06E+01         1.26E+01           22         2.28         1.27E-02         2.04E-01         7.97E-05         9.03E+01         1.41E+01         1.44E+01           23         2.35         1.21E-02         2.35E-01         9.61E-05         9.24E+31         4.80E+01         1.44E+01           24         2.64         9.00E-03         1.97E-01         8.63E-05         9.39E-01         5.18E+01         1.84E+01           25         2.33         8.04E-03         2.04E-01         9.63E-05         9.53E-01         5.77E+01         2.05E+01           25         2.33         8.04E-03         1.34E-01         7.30E-05         9.63E-01         5.77E+01         2.39E+01           27         3.27         3.27         3.26E-			2.65E-02 1.84E-	01 4.55E-05	7.22E+01	2.10E+01	5.92E+00
19 1.71			2.46E-02 1.97E-	01 5.24E-05	7.63E+01	2.73E+01	7.06E+00
19	_		2.20E-02 2.03E-	01 5.80E-05	8.00E+01	3.07E+01	8.33E+00
21 2.12 1.52E-02 2.17E-01 7.70E-05 8.82E-01 1.06E+01 1.26E+01 22 2.28 1.27E-02 2.09E-01 7.97E-05 9.03E+01 4.1E+01 1.44E+01 23 2.15 1.21E-02 2.05E-01 9.61E-05 9.24E+01 4.80E+01 1.65E+01 21 2.64 9.09E-03 1.97E-01 8.68E-05 9.39E+01 5.13E+01 1.84E+01 23 2.33 8.04E-03 2.04E-01 9.63E-05 9.39E+01 5.13E+01 1.84E+01 25 2.33 8.04E-03 1.65E-01 8.38E-05 9.53E+01 5.47E+01 2.05E+01 26 2.05 5.64E-03 1.65E-01 8.38E-05 9.69E+01 5.74E+01 2.23E+01 27 3.27 3.96E-03 1.34E-01 7.30E-05 9.69E+01 5.74E+01 2.33E+01 23 3.52 3.24E-03 1.26E-01 7.42E-05 9.77E+01 6.18E+01 2.35E+01 29 3.78 1.68E-03 7.56E-02 4.77E-05 9.77E+01 6.30E+01 2.55E+01 30 4.06 1.20E-03 6.24E-02 4.23E-05 9.79E+01 6.41E+01 2.75E+01 31 4.37 1.92E-03 1.15E-01 8.40E-05 9.82E+01 6.41E+01 2.75E+01 32 4.69 1.44E-03 9.98E-02 7.82E-05 9.85E+01 6.77E+01 3.10E+01 33 5.04 1.56E-03 1.25E-01 1.05E-04 9.87E+01 6.97E+01 3.33E+01 34 5.42 6.00E-04 5.55E-02 5.01E-05 9.88E+01 7.07E+01 3.44E+01 35 5.82 7.20E-04 7.69E-02 7.47E-05 9.90E+01 7.19E+01 3.61E+01 38 7.23 6.00E-04 9.86E-02 7.67E-05 9.99E+01 7.37E+01 3.84E+01 39 7.77 9.60E-04 1.04E-01 1.08E-04 9.91E+01 7.37E+01 3.84E+01 40 8.35 7.20E-04 6.83E-02 7.67E-05 9.99E+01 7.48E+01 4.01E+01 39 7.77 9.60E-04 1.58E-01 2.20E-04 9.99E+01 7.95E+01 5.27E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.99E+01 7.48E+01 5.27E+01 42 9.64 3.60E-04 1.05E-01 1.69E-04 9.99E+01 7.95E+01 5.27E+01 43 10.3 4.80E-04 6.08E-02 9.09E-05 9.96E+01 8.31E+01 5.47E+01 44 11.1 6.00E-04 1.05E-01 1.69E-04 9.99E+01 8.21E+01 5.27E+01 45 11.9 1.20E-04 5.40E-02 1.08E-04 9.99E+01 9.34E+01 7.40E+01 47 13.8 2.40E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.63E+01 48 14.8 3.60E-04 1.44E-01 3.32E-04 9.99E+01 9.34E+01 7.62E+01 48 14.8 3.60E-04 6.24E-02 1.08E-04 9.99E+01 9.34E+01 7.00E+02 1			1.78E-02 1.30E-	01 5.82E-05	8.30E+01	3.39E+01	
21	20	1.98	1.52E-02 1.88E-	01 6.21E-05	8.56E+01	3.70E+01	
22 2.28 1.27E-02 2.09E-01 7.97E-05 9.03E+01 1.41E+01 1.44E+01 2.12E-02 2.35E-01 9.61E-05 9.24E+31 4.80E+01 1.65E+31 2.12E-01 2.55E+01 8.68E-05 9.39E-01 5.13E+01 1.84E+01 2.52E+01 2.513E+01 1.84E+01 2.52E+01 2.513E+01 1.84E+01 2.52E+01 2.513E+01 1.84E+01 2.52E+01 2.513E+01 2.05E+01 2.00E+02			1.52E-02 2.17E-	01 7.70E-05	8.825-01	1.05E+01	
23	13 13		1.27E-02 2.09E-	01 7.97E-05	9.03E+01		
2.93 8.01E-03 2.04E-01 9.63E-05 9.53E-01 5.47E+01 2.05E+01 2.6 3.05 5.64E-03 1.65E-01 8.38E-05 9.62E+01 5.74E+01 2.23E+01 2.7 3.27 3.96E-03 1.34E-01 7.30E-05 9.69E-01 5.77E+01 2.39E+01 2.39E+01 2.30E+01 2.30E+0		2.45	1.21E-02 2.35E-	01 9.61E-05	9.21E+01		
26	24	2.54	9.00E-03 1.97E-				
27       3.96E-03       1.34E-01       7.30E-05       9.69E-61       5.97E+01       2.39E+01         23       3.52       3.21E-03       1.26E-01       7.42E-05       9.74E+01       6.18E+01       2.55E+01         29       3.78       1.68E-03       7.56E-02       4.77E-05       9.77E+01       6.30E+01       2.66E+01         30       4.06       1.20E-03       6.24E-02       4.23E-05       9.79E+01       6.41E+01       2.75E+01         31       4.37       1.92E-03       1.15E-01       8.40E-05       9.82E+01       6.60E+01       2.93E+01         31       4.69       1.44E-03       9.98E-02       7.82E-05       9.85E+01       6.77E+01       3.10E+01         33       5.04       1.56E-03       1.25E-01       1.05E-04       9.87E+01       6.97E+01       3.33E+01         34       5.42       6.00E-04       5.55E-02       5.01E-05       9.88E+01       7.07E+01       3.44E+01         35       5.82       7.20E-04       7.69E-02       7.47E-05       9.90E+01       7.19E+01       3.61E+01         36       6.26       8.40E-04       1.04E-01       1.08E-04       9.91E+01       7.37E+01       3.84E+01         37       7.23 <td>25</td> <td>2.33</td> <td>8.04E-03 2.04E-</td> <td>• • • • • • •</td> <td></td> <td></td> <td></td>	25	2.33	8.04E-03 2.04E-	• • • • • • •			
3 3.52 3.21E-03 1.26E-01 7.42E-05 9.74E+01 6.18E+01 2.55E+01 3.78 1.68E-03 7.56E-02 4.77E-05 9.77E+01 6.30E+01 2.66E+01 3.0 4.06 1.20E-03 6.24E-02 4.23E-05 9.79E+01 6.41E+01 2.75E+01 3.1 4.37 1.92E-03 1.15E-01 8.40E-05 9.82E+01 6.60E+01 2.93E+01 3.2 4.69 1.44E-03 9.98E-02 7.82E-05 9.85E+01 6.77E+01 3.10E+01 3.3 5.04 1.56E-03 1.25E-01 1.05E-04 9.87E+01 6.97E+01 3.33E+01 3.5 42 6.00E-04 5.55E-02 5.01E-05 9.88E+01 7.07E+01 3.44E+01 3.5 5.82 7.20E-04 7.69E-02 7.47E-05 9.90E+01 7.19E+01 3.61E+01 3.6 6.26 8.40E-04 1.04E-01 1.08E-04 9.91E+01 7.37E+01 3.84E+01 3.7 6.73 4.80E-04 6.83E-02 7.67E-05 9.92E+01 7.48E+01 4.01E+01 3.9 7.23 6.00E-04 9.86E-02 1.19E-04 9.93E+01 7.65E+01 4.27E+01 3.9 7.77 9.60E-04 1.82E-01 2.36E-04 9.95E+01 7.95E+01 4.79E+01 4.89F 2.40E-04 6.08E-02 9.09E-05 9.96E+01 8.21E+01 5.27E+01 4.897 2.40E-04 6.08E-02 9.09E-05 9.96E+01 8.21E+01 5.27E+01 4.1 8.97 2.40E-04 6.08E-02 9.09E-05 9.96E+01 8.31E+01 5.47E+01 4.1 1.1 6.00E-04 1.62E-01 2.80E-04 9.98E+01 8.76E+01 5.84E+01 4.1 1.1 6.00E-04 2.34E-01 4.34E-04 9.99E+01 9.15E+01 7.40E+01 4.1 1.9 1.20E-04 5.40E-02 1.08E-04 9.99E+01 9.15E+01 7.40E+01 4.1 1.9 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.24E+01 7.40E+01 4.1 1.9 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.40E+01 4.2 8.1 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.40E+01 4.3 8.2 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.40E+01 4.3 8.2 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.58E+01 8.65E+01 4.2 8.1 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 4.2 8.1 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.58E+01 8.65E+01		3.05					
29       3.78       1.68E-03       7.56E-02       4.77E-05       9.77E+01       6.30E+01       2.66E+01         30       4.06       1.20E-03       6.24E-02       4.23E-05       9.79E+01       6.41E+01       2.75E+01         31       4.37       1.92E-03       1.15E-01       8.40E-05       9.82E+01       6.60E+01       2.93E+01         32       4.69       1.44E-03       9.98E-02       7.82E-05       9.85E+01       6.77E+01       3.10E+01         33       5.04       1.56E-03       1.25E-01       1.05E-04       9.87E+01       6.97E+01       3.33E+01         34       5.42       6.00E-04       5.55E-02       5.01E-05       9.88E+01       7.07E+01       3.44E+01         35       5.82       7.20E-04       7.69E-02       7.47E-05       9.90E+01       7.19E+01       3.61E+01         36       6.26       8.40E-04       1.04E-01       1.08E-04       9.91E+01       7.37E+01       3.84E+01         37       6.73       4.80E-04       6.83E-02       7.67E-05       9.92E+01       7.48E+01       4.01E+01         38       7.23       6.00E-04       9.86E-02       1.19E-04       9.93E+01       7.65E+01       4.27E+01         39 <td>27</td> <td>3.27</td> <td></td> <td></td> <td></td> <td></td> <td></td>	27	3.27					
30       4.06       1.20E-03       6.24E-02       4.23E-05       9.79E+01       6.41E+01       2.75E+01         31       4.37       1.92E-03       1.15E-01       8.40E-05       9.82E+01       6.60E+01       2.93E+01         32       4.69       1.44E-03       9.98E-02       7.82E-05       9.85E+01       6.77E+01       3.10E+01         33       5.04       1.56E-03       1.25E-01       1.05E-04       9.87E+01       6.97E+01       3.33E+01         34       5.42       6.00E-04       5.55E-02       5.01E-05       9.88E+01       7.07E+01       3.44E+01         35       5.82       7.20E-04       7.69E-02       7.47E-05       9.90E+01       7.19E+01       3.61E+01         36       6.26       8.40E-04       1.04E-01       1.08E-04       9.91E+01       7.37E+01       3.84E+01         37       6.73       4.80E-04       6.83E-02       7.67E-05       9.92E+01       7.48E+01       4.01E+01         38       7.23       6.00E-04       9.86E-02       1.19E-04       9.93E+01       7.65E+01       4.27E+01         39       7.77       9.60E-04       1.82E-01       2.36E-04       9.95E+01       7.95E+01       4.79E+01         40 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
31       4.37       1.92E-03       1.15E-01       8.40E-05       9.82E+01       6.60E+01       2.93E+01         32       4.69       1.44E-03       9.98E-02       7.82E-05       9.85E+01       6.77E+01       3.10E+01         33       5.04       1.56E-03       1.25E-01       1.05E-04       9.87E+01       6.97E+01       3.33E+01         34       5.42       6.00E-04       5.55E-02       5.01E-05       9.88E+01       7.07E+01       3.44E+01         35       5.82       7.20E-04       7.69E-02       7.47E-05       9.90E+01       7.19E+01       3.61E+01         36       6.26       8.40E-04       1.04E-01       1.08E-04       9.91E+01       7.37E+01       3.84E+01         37       6.73       4.80E-04       6.83E-02       7.67E-05       9.92E+01       7.48E+01       4.01E+01         38       7.23       6.00E-04       9.86E-02       1.19E-04       9.93E+01       7.65E+01       4.27E+01         39       7.77       9.60E-04       1.82E-01       2.36E-04       9.95E+01       7.95E+01       4.79E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.96E+01       8.31E+01       5.47E+01         42 <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>•</td> <td></td>					_	•	
32       4.69       1.44E-03       9.98E-02       7.82E-05       9.85E+01       6.77E+01       3.10E+01         33       5.04       1.56E-03       1.25E-01       1.05E-04       9.87E+01       6.97E+01       3.33E+01         34       5.42       6.00E-04       5.55E-02       5.01E-05       9.88E+01       7.07E+01       3.44E+01         35       5.82       7.20E-04       7.69E-02       7.47E-05       9.90E+01       7.19E+01       3.61E+01         36       6.26       8.40E-04       1.04E-01       1.08E-04       9.91E+01       7.37E+01       3.84E+01         37       6.73       4.80E-04       6.83E-02       7.67E-05       9.92E+01       7.48E+01       4.01E+01         38       7.23       6.00E-04       9.86E-02       1.19E-04       9.93E+01       7.65E+01       4.27E+01         39       7.77       9.60E-04       1.82E-01       2.36E-04       9.95E+01       7.95E+01       4.79E+01         40       8.35       7.20E-04       1.58E-01       2.20E-04       9.96E+01       8.21E+01       5.27E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.96E+01       8.31E+01       5.47E+01         42 <td></td> <td></td> <td><del></del></td> <td></td> <td>-</td> <td></td> <td></td>			<del></del>		-		
33 5.04 1.56E-03 1.25E-01 1.05E-04 9.87E+01 6.97E+01 3.33E+01 34 5.42 6.00E-04 5.55E-02 5.01E-05 9.88E+01 7.07E+01 3.44E+01 35 5.82 7.20E-04 7.69E-02 7.47E-05 9.90E+01 7.19E+01 3.61E+01 36 6.26 8.40E-04 1.04E-01 1.08E-04 9.91E+01 7.37E+01 3.84E+01 37 6.73 4.80E-04 6.83E-02 7.67E-05 9.92E+01 7.48E+01 4.01E+01 38 7.23 6.00E-04 9.86E-02 1.19E-04 9.93E+01 7.65E+01 4.27E+01 39 7.77 9.60E-04 1.82E-01 2.36E-04 9.95E+01 7.95E+01 4.79E+01 40 8.35 7.20E-04 1.58E-01 2.20E-04 9.96E+01 8.21E+01 5.27E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.96E+01 8.31E+01 5.47E+01 42 9.64 3.60E-04 1.05E-01 1.69E-04 9.97E+01 8.49E+01 5.84E+01 43 10.3 4.80E-04 1.62E-01 2.80E-04 9.98E+01 8.76E+01 6.45E+01 44 11.1 6.00E-04 2.34E-01 4.34E-04 9.99E+01 9.15E+01 7.40E+01 45 11.9 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.24E+01 7.63E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.58E+01 8.65E+01 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02 5 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02							
31 5.42 6.00E-04 5.55E-02 5.01E-05 9.88E+01 7.07E+01 3.44E+01 35 5.82 7.20E-04 7.69E-02 7.47E-05 9.90E+01 7.19E+01 3.61E+01 36 6.26 8.40E-04 1.04E-01 1.08E-04 9.91E+01 7.37E+01 3.84E+01 37 6.73 4.80E-04 6.83E-02 7.67E-05 9.92E+01 7.48E+01 4.01E+01 38 7.23 6.00E-04 9.86E-02 1.19E-04 9.93E+01 7.65E+01 4.27E+01 39 7.77 9.60E-04 1.82E-01 2.36E-04 9.95E+01 7.95E+01 4.79E+01 40 8.35 7.20E-04 1.58E-01 2.20E-04 9.96E+01 8.21E+01 5.27E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.96E+01 8.31E+01 5.47E+01 42 9.64 3.60E-04 1.05E-01 1.69E-04 9.97E+01 8.49E+01 5.84E+01 43 10.3 4.80E-04 1.62E-01 2.80E-04 9.98E+01 8.76E+01 6.45E+01 44 11.1 6.00E-04 2.34E-01 4.34E-04 9.99E+01 9.15E+01 7.40E+01 45 11.9 1.20E-04 5.40E-02 1.08E-04 9.99E+01 9.24E+01 7.63E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.34E+01 7.92E+01 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02						-	
35       5.82       7.20E-04       7.69E-02       7.47E-05       9.90E+01       7.19E+01       3.61E+01         36       6.26       8.40E-04       1.04E-01       1.08E-04       9.91E+01       7.37E+01       3.84E+01         37       6.73       4.80E-04       6.83E-02       7.67E-05       9.92E+01       7.48E+01       4.01E+01         38       7.23       6.00E-04       9.86E-02       1.19E-04       9.93E+01       7.65E+01       4.27E+01         39       7.77       9.60E-04       1.82E-01       2.36E-04       9.95E+01       7.95E+01       4.79E+01         40       8.35       7.20E-04       1.58E-01       2.20E-04       9.96E+01       8.21E+01       5.27E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.96E+01       8.31E+01       5.47E+01         42       9.64       3.60E-04       1.05E-01       1.69E-04       9.97E+01       8.49E+01       5.84E+01         43       10.3       4.80E-04       1.62E-01       2.80E-04       9.98E+01       8.76E+01       6.45E+01         44       11.1       6.00E-04       2.34E-01       4.34E-04       9.99E+01       9.15E+01       7.40E+01         45 <td></td> <td></td> <td>_</td> <td></td> <td></td> <td>• • • -</td> <td>•</td>			_			• • • -	•
36 6.26 8.40E-04 1.04E-01 1.08E-04 9.91E+01 7.37E+01 3.84E+01 37 6.73 4.80E-04 6.83E-02 7.67E-05 9.92E+01 7.48E+01 4.01E+01 38 7.23 6.00E-04 9.86E-02 1.19E-04 9.93E+01 7.65E+01 4.27E+01 39 7.77 9.60E-04 1.82E-01 2.36E-04 9.95E+01 7.95E+01 4.79E+01 40 8.35 7.20E-04 1.58E-01 2.20E-04 9.96E+01 8.21E+01 5.27E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.96E+01 8.31E+01 5.47E+01 42 9.64 3.60E-04 1.05E-01 1.69E-04 9.97E+01 8.49E+01 5.84E+01 43 10.3 4.80E-04 1.62E-01 2.80E-04 9.98E+01 8.76E+01 6.45E+01 41 11.1 6.00E-04 2.34E-01 4.34E-04 9.99E+01 9.15E+01 7.40E+01 45 11.9 1.20E-04 5.40E-02 1.08E-04 9.99E+01 9.24E+01 7.63E+01 4.50E+01 1.38 2.40E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 4.50E+01 1.38 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.34E+01 7.92E+01 4.50E+02 1.30E+02 1.00E+02 1.0					•		<del>-</del>
37 6.73 4.80E-04 6.83E-02 7.67E-05 9.92E+01 7.48E+01 4.01E+01 38 7.23 6.00E-04 9.86E-02 1.19E-04 9.93E+01 7.65E+01 4.27E+01 39 7.77 9.60E-04 1.82E-01 2.36E-04 9.95E+01 7.95E+01 4.79E+01 40 8.35 7.20E-04 1.58E-01 2.20E-04 9.96E+01 8.21E+01 5.27E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.96E+01 8.31E+01 5.47E+01 42 9.64 3.60E-04 1.05E-01 1.69E-04 9.97E+01 8.49E+01 5.84E+01 43 10.3 4.80E-04 1.62E-01 2.80E-04 9.98E+01 8.76E+01 6.45E+01 44 11.1 6.00E-04 2.34E-01 4.34E-04 9.99E+01 9.15E+01 7.40E+01 45 11.9 1.20E-04 5.40E-02 1.08E-04 9.99E+01 9.24E+01 7.63E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.58E+01 8.65E+01 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02					-		
38 7.23 6.00E-04 9.86E-02 1.19E-04 9.93E+01 7.65E+01 4.27E+01 39 7.77 9.60E-04 1.82E-01 2.36E-04 9.95E+01 7.95E+01 4.79E+01 40 8.35 7.20E-04 1.58E-01 2.20E-04 9.96E+01 8.21E+01 5.27E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.96E+01 8.31E+01 5.47E+01 42 9.64 3.60E-04 1.05E-01 1.69E-04 9.97E+01 8.49E+01 5.84E+01 43 10.3 4.80E-04 1.62E-01 2.80E-04 9.98E+01 8.76E+01 6.45E+01 44 11.1 6.00E-04 2.34E-01 4.34E-04 9.99E+01 9.15E+01 7.40E+01 45 11.9 1.20E-04 5.40E-02 1.08E-04 9.99E+01 9.24E+01 7.63E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.58E+01 8.65E+01 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02							_
39       7.77       9.60E-04       1.82E-01       2.36E-04       9.95E+01       7.95E+01       4.79E+01         40       8.35       7.20E-04       1.58E-01       2.20E-04       9.96E+01       8.21E+01       5.27E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.96E+01       8.31E+01       5.47E+01         42       9.64       3.60E-04       1.05E-01       1.69E-04       9.97E+01       8.49E+01       5.84E+01         43       10.3       4.80E-04       1.62E-01       2.80E-04       9.98E+01       8.76E+01       6.45E+01         44       11.1       6.00E-04       2.34E-01       4.34E-04       9.99E+01       9.15E+01       7.40E+01         45       11.9       1.20E-04       5.40E-02       1.08E-04       9.99E+01       9.24E+01       7.63E+01         46       12.8       1.20E-04       6.24E-02       1.34E-04       9.99E+01       9.34E+01       7.92E+01         47       13.8       2.40E-04       1.44E-01       3.32E-04       9.99E+01       9.58E+01       8.65E+01         48       14.8       3.60E-04       2.50E-01       6.18E-04       1.00E+02       1.00E+02       1.00E+02         > 15.							
40       8.35       7.20E-04       1.58E-01       2.20E-04       9.96E+01       8.21E+01       5.27E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.96E+01       8.31E+01       5.47E+01         42       9.64       3.60E-04       1.05E-01       1.69E-04       9.97E+01       8.49E+01       5.84E+01         43       10.3       4.80E-04       1.62E-01       2.80E-04       9.98E+01       8.76E+01       6.45E+01         44       11.1       6.00E-04       2.34E-01       4.34E-04       9.99E+01       9.15E+01       7.40E+01         45       11.9       1.20E-04       5.40E-02       1.08E-04       9.99E+01       9.24E+01       7.63E+01         46       12.8       1.20E-04       6.24E-02       1.34E-04       9.99E+01       9.34E+01       7.92E+01         47       13.8       2.40E-04       1.44E-01       3.32E-04       9.99E+01       9.58E+01       8.65E+01         48       14.8       3.60E-04       2.50E-01       6.18E-04       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02							
41 8.97 2.40E-04 6.08E-02 9.09E-05 9.96E+01 8.31E+01 5.47E+01 42 9.64 3.60E-04 1.05E-01 1.69E-04 9.97E+01 8.49E+01 5.84E+01 43 10.3 4.80E-04 1.62E-01 2.80E-04 9.98E+01 8.76E+01 6.45E+01 41.1 6.00E-04 2.34E-01 4.34E-04 9.99E+01 9.15E+01 7.40E+01 45 11.9 1.20E-04 5.40E-02 1.08E-04 9.99E+01 9.24E+01 7.63E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.58E+01 8.65E+01 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02			• • • • • • • • • • • • • • • • • • • •				
42 9.64 3.60E-04 1.05E-01 1.69E-04 9.97E+01 8.49E+01 5.84E+01 43 10.3 4.80E-04 1.62E-01 2.80E-04 9.98E+01 8.76E+01 6.45E+01 44 11.1 6.00E-04 2.34E-01 4.34E-04 9.99E+01 9.15E+01 7.40E+01 45 11.9 1.20E-04 5.40E-02 1.08E-04 9.99E+01 9.24E+01 7.63E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.58E+01 8.65E+01 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02						-	
10.3						<del>-</del>	
44 11.1 6.00E-04 2.34E-01 4.34E-04 9.99E+01 9.15E+01 7.40E+01 45 11.9 1.20E-04 5.40E-02 1.08E-04 9.99E+01 9.24E+01 7.63E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.58E+01 8.65E+01 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02			• • • • • •			- · ·	
45 11.9 1.20E-04 5.40E-02 1.08E-04 9.99E+01 9.24E+01 7.63E+01 46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.58E+01 8.65E+01 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02						_	
46 12.8 1.20E-04 6.24E-02 1.34E-04 9.99E+01 9.34E+01 7.92E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.58E+01 8.65E+01 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02			• • • • • •				
17 13.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.58E+01 8.65E+01 48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02						-	
48 14.8 3.60E-04 2.50E-01 6.18E-04 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02							8.65E+01
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02						_	1.00E+02
			• • • • • •	· -		1.00E+02	1.00E+02
			• • • • • • • • • • • • • • • • • • • •	• •			

FILE NAME: OUT5 10.010 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

<b>211</b> 23			ENTRATIONS			ULATIVE %	
CHN		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 486	9.96E-03	6.12E-03	4.54E-07	7.93E-01	4.11E-02	3.92E-03
1	.504	4.32E-03	3.46E-03	2.915-07	1.14E+00	6.43E-02	6.43E-03
2	.542	7.68E-03	7.09E-03	6.41E-07	1.75E+00	1.122-01	1.20E-02
3	.581	1.14E-02	1.21E-02	1.17E-06	2.66E+00	1.93E-01	2.21E-02
4 5	.625	1.58E-02	1.94E-02	2.03E-06	3.92E+00	3.24E-01	3.96E-02
5 6	.673	2.89E-02	4.12E-02	4.62E-06	6.22E+00	6.00E-01	7.95E-02
7	.723 .777	4.39E-02 7.14E-02	7.22E-02 1.36E-01	8.71E-06	9.725+00	1.08E+00	1.55E-01
8	.835	7.14E-02 7.96E-02	1.74E-01	1.76E-05	1.54E+01	1.99E+00	3.07E-01
9	.897	7.48E-02	1.89E-01	2.43E-05 2.83E-05	2.17E+01	3.17E+00	5.17E-01
10	.961	6.84E-02	2.00E-01	3.22E-05	2.77E+01	1.44E+00	7.61E-01
11	1.03	6.95E-02	2.35E-01	4.05E-05	3.31E+01	5.78E+00	1.04E+00
12	1.11	6.72E-02	2.62E-01	4.87E-05	3.87E+01 4.40E+01	7.35E+00	1.39E+00
13	1.19	5.81E-02	2.62E-01	5.22E-05	1.86E+01	9.11E+00	1.81E+00
14,	1.28	6.48E-02	3.37E-01	7.23E-05		1.09E+01	2.26E+00
15	1.38	5.71E-02	3.43E-01	7.23E-03 7.90E-05	5.385+01 5.84E+01	1.31E+01	2.89E+00
16	1.48	5.99E-02	4.15E-01	1.03E-04	6.31E+01	1.54E+01	3.57E+00
17	1.59	6.25E-02	5.01E-01	1.33E-04	6.81E+01	1.82E+01	1.16E+00
13	1.71	5.45E-02	5.01E-01	1.44E-01	7.24E+01	2.16E+01 2.50E+01	5.61E+00
19	1.84	5.15E-02	5.50E-01	1.69E-04	7.65E+01	2.83E+01	6.85E+00 8.31E+00
20	1.93	4.52E-02	5.58E-01	1.84E-04	8.01E+01	3.21E+01	9.90E+00
21	2.12	4.15E-02	5.91E-01	2.105-04	8.34E+01	3.645+01	1.17E+01
22	2.28	1.085-02	6.71E-01	2.56E-C4	8.67E+01	4.09E+01	1.39E+01
23	2.45	3.245-62	6.13E-01	2.528-04	8.93E÷01	4.50E+01	1.61E+01
21	2.64	2.33E-02	6.21E-01	2.735-04	9.15E+01	4.91E+01	1.85E+01
23	2.83	2.12E-02	5.38E-01	2.545-04	9.32E+01	5.28E÷01	2.07E+01
26	3.05	1.82E-02	5.33E-01	2.71E-04	9.47E+01	5.63E+01	2.30E+01
27	3.27	1.45E-02	4.94E-01	2.70E-04	9.58E+01	5.96E+01	2.535+01
29	3.52	1.10E-02	4.30E-01	2.53E-04	9.67E+01	6.25E+01	2.75E+01
29	3.78	8.16E-03	3.67E-01	2.325-04	9.74E+01	6.50E+01	2.95E+01
30	4.06	7.44E-03	3.87E-01	2.62E-04	9.80E+31	6.76E+01	3.18E+01
31	4.37	4.32E-03	2.59E-01	1.89E-04		6.93E+01	3.34E+01
32	4.69	3.24E-03	2.25E-01	1.76E-04	9.86E+01	7.08E+01	3.49E+01
33	5.04	2.52E-03	2.02E-01	1.70E-04	9.882+01	7.22E+01	3.64E+01
34	5.42	1.56E-03	1.44E-01	1.30E-04	9.89E+01	7.32E+01	3.75E+01
35	5.82	1.56E-03	1.67E-01	1.62E-04	9.90E+01	7.43E+01	3.89E+01
36	6.26	1.32E-03	1.63E-01	1.70E-04	9.91E+01	7.54E+01	4.04E+01
37	6.73	1.44E-03	2.05E-01	2.30E-04	9.92E+01	7.68E+01	4.24E+01
38	7.23	1.08E-03	1.78E-01	2.14E-04	9.93E+01	7.79E+01	4.42E+01
39	7.77	1.44E-03	2.73E-01	3.54E-04	9.94E+01	7.98E+01	4.73E+01
40	8.35	7.20E-04	1.58E-01	2.20E-04	9.95E+01	8.08E+01	4.92E+01
41	8.97	6.00E-04	1.52E-01	2.27E-04	9.95E+01	8.19E+01	5.12E+01
42	9.64	8.40E-04	2.46E-01	3.95E-04	9.96E+01	8.35E+01	5.46E+01
43	10.3	6.00E-04	2.03E-01	3.50E-04	9.97E+01	8.49E+01	5.76E+01
44	11.1	7.20E-04	2.81E-01	5.21E-04	9.97E+01	8.67E+01	6.21E+01
45	11.9	8.40E-04	3.78E-01	7.55E-04	9.98E+01	8.93E+01	6.86E+01
46	12.8	1.44E-03	7.49E-01	1.61E-03	9.99E+01	9.43E+01	8.25E+01
47	13.8	7.20E-04	4.32E-01	9.96E-04	1.00E+02	9.72E+01	9.11E+01
48	14.8	6.00E-04	4.16E-01	1.03E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	r2:	1.26E+00 1	.49E+01 1.	16E-02			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 10.011 01-01-1980

LAST CALIBRATION: 01-01-1930 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		DIG: WALL					
		CONCE	ENTRATIONS		CUM	ULATIVE %	
CHXI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 186		8.92E-03	6.64E-07	5.75E-01	2.87E-02	2.93E-03
ì	.501	8.40E-03	6.72E-03	5.65E-07	9.10E-01		5.43E-03
	.512	1.33E-02	1.23E-02	1.11E-06	1.44E+00	8.98E-02	1.03E-02
2 3	.581	1.86E-02	1.98E-02	1.92E-06	2.18E+00	1.53E-01	1.88E-02
4	.625	2.82E-02	3.46E-02	3.61E-06	3.31E+00		3.47E-02
•	.673	5.11E-02	7.27E-02	8.16E-06			7.07E-02
5 6 7	.723	7.43E-02	1.22E-01	1.47E-05	8.31E+00	8.91E-01	1.36E-01
7	.777	1.08E-01	2.05E-01	2.66E-05	1.26E+01	1.55E+00	2.53E-01
8	.835	1.20E-01	2.64E-01	3.67E-05	1.74E+01	2.40E+00	4.15E-01
9	.897	1.23E-01	3.12E-01	4.67E-05	2.23E+01	3.40E+00	6.21E-01
10	.961	1.27E-01	3.71E-01	5.96E-05	2.74E+01	4.59E+00	8.8 LE-01
11	1.03	1.19E-01	4.00E-01	6.92E-05	3.21E+01	5.83E+00	1.195+00
12	1.11	1.185-01	4.61E-01	8.552-05			1.57E+00
13	1.19	1.22E-01	5.48E-01	1.093-04	4.17E+01		2.05E+00
	1.28	1.30E-01	6.77E-01	1.452-04	4.695+01	1.13E+01	2.69E+00
1 4	1.38	1.32E-01	7.93E-01	1.835-04	5.22E÷01	1.38E+01	3.502+00
15		1.27E-01	8.83E-01	2.195-04			4.462+00
16	1.48	1.34E-01	1.07E+00	2.852-04			5.72E+00
17	1.59	1.28E-01	1.19E+00	3.39E-04		2.39E÷01	7.22E+00
18	1.71		1.13E+00	4.105-04		2.82E+01	9.035+00
19	1.81	1.252-01	1.46E+00	4.32E-C1			1.125+01
20	1.98	1.18E-01	1.41E+00	5.01E-04			1.3 \E+01
21	$\frac{2.12}{2.02}$	9.915-02		5.632-01	8.50E+01	1.22E+01	1.59E+01
22	2.23	9.06E-02	1.492+00	5.96E-04	8.802+01	1.69E÷01	1.85E+01
23	2.45	7.57E-02	1.46E+00	6.45E-01	9.072+01		2.14E+01
21	2.81	5.58E-02	1.46E+00	-	9.28E+01	5.102+01 5.38E+01	2.41E+01
2.3	2.33	5.17E-02	1.31E+00	6.19E-04	9.462+01	6.01E+01	2.70E+01
26	3.05	4.51E-02	1.32E+00	6.71E-04	9.59E+01		2.93E+01
27	3.27	3.37E-02	1.14E+00	5.22E-04		6.66E+01	3.21E+01
28	3.52	2.28E-02	8.892-01	•		6.91E+01	3.43E+01
29	3.78	1.76E-02	7.94E-01	5.01E-04		•	3.65E+01
30	1.06	1.43E-02	7.42E-01	5.03E-04		•	3.80E+01
31	4.37	7.44E-03	4.47E-01	3.25E-04			3.95E+01
32	1.69	6.36E-03	4.41E-01	3.45E-04	9.87E+01 9.88E+01		4.06E+01
33	5.04	3.60E-03	2.88E-01	2.42E-04	= =		4.21E+01
3 1	5.42	4.08E-03		3.41E-04			4.34E+01
35	5.82	3.00E-03		3.11E-04			4.49E+01
36	6.26	2.64E-03			9.92E+01 9.93E+01		4.64E+01
37	6.73	2.04E-03		3.26E-04			4.86E+01
38	7.23	2.52E-03		4.99E-04			5.11E+01
39	7.77	2.28E-03		5.61E-04		- · · · · · · · · · · · · · · · · · · ·	5.35E+01
40	8.35	1.80E-03	3.95E-01	5.49E-04			5.61E+01
41	8.97	1.56E-03	3.95E-01	5.91E-04		- · · · · · ·	5.96E+01
42	9.64	1.68E-03		7.90E-04			6.24E+01
43	10.3	1.08E-03		6.30E-04			6.62E+01
44	11.1	1.20E-03		8.69E-04			7.19E+01
45	11.9	1.44E-03		1.29E-03			8.19E+01
46	12.8	2.04E-03		2.27E-03			9.00E+01
47	13.8	1.32E-03		1.83E-03			1.00E+02
48	14.8	1.32E-03					1.00E+02
>	15.4	0.00E+00		0.00E+00	1.006702	1,005,05	
TOTA	LS:	2.51E+00	3.11E+01 2.	21E-U2			

FILE NAME: OUT5 10.012 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: DI

					CUM	TATTUE #	
			ENTRATIONS	W . C C		CLATIVE %	MASS
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	8.93E-03
<	. 135	1.43E-02	9.17E-03	6.83E-07	1.18E+00	7.75E-02	
1	. 50 +	9.24E-03		6.22E-07	1.92E+00	1.40E-01	1.71E-02
2	.542	1.33E-02		1.11E-06	2.98E+00	2.44E-01	3.16E-02
3	.581	1.70E-02	1.815-02	1.76E-06	4.34E+00	3.97E-01	5.46E-02
. 4	.625	2.27E-02	2.78E-02	2.90E-06	6.16E+00	6.32E-01	9.25E-02
5	.673	3.76E-02	5.35E-02	6.00E-06	9.16E+00	1.08E+00	1.71E-01
6	.723	5.64E-02		1.12E-05		1.87E+00	3.17E-01
7	.777	7.45E-02	1.42E-01	1.83E-05	1.96E+01	3.06E+00	5.57E-01
8	.835	7.97E-02	1.75E-01	2.43E-05	2.60E+01	4.51E+00	8.75E-01
· 9	.897	8.59E-02	2.18E-01	3.26E-05	3.295+01	6.39E+00	1.302+00
10	.964	8.02E-02		3.77E-05		8.36E+00	1.79E+00
11	1.03	6.80E-02	2.30E-01	3.97E-05	4.47E+01	1.03E+01	2.31E+00
12	1.11	6.61E-02	2.58E-01	4.79E-05	5.00E+01	1.25E+01	2.91E+00
13	1.19	6.82E-02	3.07E-01	6.12E-05	5.54E+01	1.51E+01	3.74E+00
14	1.23	6.10E-02		6.80E-05		1.78E+01	4.63E+00
1.5	1.33	6.13E-02		8.49E-05		2.09E+01	5.74E+00
16	1.48	5.21E-02	3.61E-01	8.94E-05	6.94E+01	2.39E+01	6.91E+00
17	1.59	5.35E-02	4.29E-01	1.14E-04	7.36E+01	2.75E+01	8.40E+00
18	1.71	4.66E-02	4.30E-01	1.23E-04		3.12E+01	1.00E+01
19	1.84	4.10E-02	4.38E-01	1.35E-04		3.49E+01	1.13E+01
20	1.98	1.20E-02	5.18E-01	1.71E-04		3.92E+01	1.40E+01
21	2.12	3.70E-02	5.26E-01	1.87E-04	8.69E+01	4.37E+01	1.645+01
20	2.28	3.41E-02	5.60E-01	2.14E-04	8.97E+01	4.81E+01	1.925+01
23	2.45	2.75E-02	5.225-01	2.14E-04		5.28E+01	2.205+01
24	2.51	2.03E-02	1.44E-01	1.96E-04		5.66E+01	2.46E+01
2.5	2.83	1.68E-02	4.25E-01	2.01E-04		6.02E+01	2.725+01
25	3.05	1.36E-02	3.96E-01	2.02E-04	9.592+01	6.35E+01	2.99E+01
27	3.27	1.31E-02	4.42E-01	2.41E-04		6.73E+01	3.30E+01
28	3.52	9.12E-03	3.56E-01	2.09E-04	9.77E+01	7.03E+01	3.57E+01
29	3.78	4.92E-03	2.22E-01	1.40E-04	9.81E+01		3.76E+01
30	4.06	4.92E-03	2.56E-01	1.73E-04			3.98E+01
31	4.37	3.72E-03	2.23E-01	1-63E-04	9.88E+01	7.62E+01	4.20E+01
32	4.69	3.12E-03	2.16E-01	1.69E-04	9.90E+01	7.80E+01	4.42E+01
33	5.04	1.56E-03	1.25E-01	1.05E-04		7.91E+01.	4.56E+01
3 1	5.42	1.80E-03	1.66E-01	1.50E-04			4.75E+01
35	5.82	1.44E-03	1.54E-01	1.49E-04		8.18E+01	4.95E+01
36	6.26	9.60E-04	1.18E-01	1.24E-04		8.28E+01	5.11E+01
37	6.73	7.20E-04	1.03E-01	1.15E-04		8.36E+01	5.26E+01
38	7.23	1.20E-03	1.97E-01	2.38E-04		8.53E+01	5.57E+01
39	7.77	9.60E-04	1.82E-01	2.36E-04		8.68E+01	5.88E+01
40	8.35	3.60E-04	7.89E-02	1.10E-04		8.75E+01	6.02E+01
41	8.97	2.40E-04	6.08E-02	9.09E-05		8.80E+01	6.14E+01
42	9.64	2.40E-04	7.02E-02	1.13E-04		8.86E+01	6.29E+01
43	10.3	2.40E-04	8.10E-02	1.40E-04		8.93E+01	6.47E+01
44	11.1	6:00E-04	2.34E-01	4.34E-04		9.13E+01	7.04E+01
45	11.9	3.60E-04		3.23E-04		9.26E+01	7.46E+01
46	12.8	9.60E-04	4.99E-01	1.07E-03		9.69E+01	8.86E+01
47	13.8	4.80E-04	2.88E-01	6.64E-04	1.00E+02	9.93E+01	9.73E+01
48	14.8	1.20E-04	8.32E-02	2.06E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00		0.00E+00	1.00E+02	1.00E+02	1.00E+02
ATOT	LS:	1.25E+00	1.18E+01 7	.65E-03			

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 10.013 01-01-1930

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		CONCE	NTRATIONS		CUMI	LATIVE %	
CHNI.	DIA		SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 186	1.01E-02		4.65E-07	1.33E+00	9.545-02	1.01E-02
· 1	.504	5.76E-03	4.61E-03	3.88E-07	2.09E+00	1.66E-01	1.85E-02
$\overline{2}$	.542	8.52E-03	7.87E-03	7.11E-07	3.22E+00	2.86E-01	3.40E-02
3	.581	1.24E-02	1.31E-02	1.27E-06	4.85E+00		6.17E-02
4	.625	1.72E-02	2.11E-02	2.19E-06	7.11E+00	8.08E-01	1.09E-01
5	.673	2.39E-02	3.40E-02	3.81E-06	1.03E+01	1.33E+00	1.92E-01
	.723	4.22E-02	6.95E-02	8.38E-06	1.58E+01	2.39E+00	3.75E-01
6 7	.777	5.58E-02	1.06E-01	1.37E-05	2.32E+01	4.00E+00	6.73E-01
8	.835	5.90E-02	1.29E-01	1.80E-05	3.10E+01	5.98E+00	1.07E+00
9	.897	5.48E-02	1.39E-01	2.08E-05	3.82E+01	8.10E+00	1.52E+00
10	.964	5.34E-02	1.565-01	2.51E-05	4.53E+01	1.05E+01	2.05E+00
11	1.03	5.27E-02	1.78E-01	3.07E-05	5.22E+01	1.32E+01	2.73E+00
12	1.11	4.38E-02	1.71E-01	3.17E-05	5.80E+01	1.58E+01	3.425+00
13	1.19	4.212-02	1.90E-01	3.78E-05	6.36E+01	1.87E+01	4.25E+00
11	1.28	3.72E-02	1.93E-01	4.15E-05	6.85E+01	2.17E+01	5.15E+00
1.5	1.38	2.89E-02	1.74E-01	4.00E-05	7.23E+01	2.43E+01	6.02E+00
16	1.13	3.04E-02	2.10E-01	5.21E-05	7.63E+01	2.75E+01	7.15E+00
17	1.59	2.59E-02	2.08E-01	5.52E-05	7.975+01	3.07E+01	8.35E+00
18	1.71	2.40E-02	2.22E-01	6.34E-05	8.29E-01	3.41E+01	9.73E+00
19	1.81	1.935-02	2.06E-01	6.34E-05	8.55E+01	3.725+01	1.115+01
20	1.93	1.73E-02	2.13E-01	7.04E-05	8.77E+01	1.05E+01	1.26E+01
21	2.12	1.56E-02	2.22E-01	7.88E-05	8.93E+01	4.39E+01	1.44E+01
22	2.23	1.40E-02	2.31E-01	8.80E-05	9.17E+01	1.745+01	1.635+01
23	2.45	1.20E-02	2.28E-01	9.33E-05	9.32E+01	5.09E+01	1.335+01
24	2.61	1.05E-02	2.31E-01	1.02E-01	9.162+01	5.41E+01	2.05E+01
2.5	2.83	7.44E-03	1.88E-01	8.91E-05	9.56E+01	5.73E+01	2.25E+01
26	3.05	6.13E-C3	1.89E-01	9.63E-05	9.652+01	6.02E+01	2.45E+01
27	3.27	5.88E-03		1.08E-04	9.72E+01	6.32E+01	2.69E+01
23	3.52	3.96E-03	1.54E-01	9.06E-05	9.78E+01	6.55E+01	2.89E+01
29	3.78	2.64E-03	1.19E-01	7.50E-05	9.81E+01	6.74E+01	3.05E+01
30	1.06	2.52E-03	1.31E-01	8.88E-05		6.91E+01	3.24E+01
31	4.37	1.56E-03	9.37E-02	6.82E-05	9.87E+01	7.08E+01	3.39E+01
32	4.69	1.56E-03	1.08E-01	8.47E-05	9.89E+01	7.24E+01	3.58E+01
33	5.04	1.44E-03	1.15E-01	9.70E-05	9.90E+01	7.42E+01	3.79E+01
3.4	5.42	6.00E-04	5.55E-02	5.01E-05	9.91E+01	7.50E+01	3.90E+01
35	5.82	1.20E-03	1.28E-01	1.24E-04	9,93E+01	7.70E+01	4.17E+01
36	6.26	8.40E-04	1.04E-01	1.08E-04	9.94E+01	7.86E+01	4.40E+01
37	6.73	3.60E-04	5.13E-02	5.75E-05	9.94E+01	7.94E+01	4.53E+01
38	7.23	1.08E-03	1.78E-01	2.14E-04	9.96E+01	8.21E+01	4.99E+01
39	7.77	3.60E-04	6.83E-02	8.85E-05	9.96E+01	8.31E+01	5.19E+01
40	8.35	3.60E-04	7.89E-02	1.10E-04	9.97E+01	8.43E+01	5.42E+01
41	8.97	7.20E-04	1.82E-01	2.73E-04	9.98E+01	8.71E+01	6.02E+01
42	9.64	2.40E-04	7.02E-02	1.13E-04	9.98E+01	8.82E+01	6.26E+01
43	10.3	1.20E-04	4.05E-02	7.00E-05	9.98E+01	8.88E+01	6.41E+01
44	11.1	0.00E+00	0.00E+00	0.00E+00	9.98E+01	8.88E+01	6.41E+01
45	11.9	4.80E-04	2.16E-01	4.31E-04	9.99E+01	9.21E+01	7.35E+01
46	12.8	2.40E-04	1.25E-01	2.68E-04	9.99E+01	9.40E+01	7.93E+01
47	13.8	2.40E-04	1.44E-01	3.32E-04	1.00E+02	9.62E+01	8.66E+01
48	14.8	3.60E-04	2.50E-01	6.18E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	7.58E-01 6	.55E+00 4.	60E-03			

FILE NAME: OUT5 10.014 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC	ENTRATIONS		CUM	ULATIVE %	
CHNL	DIA	NUMBER		MASS	NUMBER	SURFACE	MASS
<	. 486	7.41E-03		3.44E-07	8.73E-01	5.61E-02	5.63E-03
1	.504	4.56E-03		3.07E-07	1.41E+00	1.00E-01	1.07E-02
2	.512	7.68E-03	7.09E-03	6.41E-07	2.31E+00	1.87E-01	2.11E-02
3	.581	9.96E-03	1.06E-02	1.03E-06	3.48E+00	3.15E-01	3.79E-02
•	.625	1.15E-02	1.41E-02	1.47E-06	4.83E+00		6.20E-02
5	.673	1.82E-02	2.60E-02	2.91E-06			1.10E-01
6	.723	3.73E-02	6.14E-02	7.40E-06		1.55E+00	2.31E-01
6 7	.777	5.03E-02	9.55E-02	1.24E-05	1.72E+01	2.71E+00	4.33E-01
8	.335	6.35E-02	1.39E-01	1.94E-05		4.40E+00	7.50E-01
9	.897	6.59E-02	1.67E-01	2.50E-05	3.24E+01	6.432+00	1.16E+00
10	.964	6.10E-02	1.78E-01	2.87E-05		8.59E+00	1.63E+00
	1.03	5.50E-02	1.86E-01	3.21E-05	4.60E+01	1.085+01	2.15E+00
11		5.12E-02		3.71E-05		1.33E+01	2.76E+00
12	1.11	5.12E-02	• • • • •	4.51E-05		1.60E+01	3.50E+00
13	1.19	4.48E-02	2.33E-01	4.99E-05		1.83E+01	4.31E+00
1 1	1.23			5.80E-05		2.19E+01	5.26E+00
15	1.28	4.19E-02	2.52E-01			2.19E+01 2.52E+01	6.37E+00
16	1.48	3.94E-02		6.76E-05			
17	1.59	3.14E-02		6.70E-05			7.46E+00
18	1.71	2.95E-02	2.73E-01		7.93E+01		9.74E+00
19	1.84	2.72E-02	2.915-01	8.935-05	8.30E+01	3.515+01	1.02E+01
20	1.93	2.285-02	2.81E-01	9.28E-05	8.57E+01		1.17E+01
21	2.12	2.33E-02	3.325-01	1.185-04			1.36E+01
22	2.28	1.83E-02	3.10E-01	1.18E-C4		4.63E+01	1.565+01
23	2.45	1.63E-02	3.19E-01	1.31E-04	9.26E+01	5.02E+01	1.77E+01
21	2.61	1.45E-02	3.13E-C:	1.10E-01	9.43E+01		2.00E+01
25	2.83	9.24E-03		1.11E-04			2.18E+01
26	3.05	7.03E-03	2.07E-01	1.05E-04	9.62E+01	5.915+01	2.35E+01
27	3.27	6.72E-03	2.27E-01	1.24E-04	9.70E+01		2.56E+01
28	3.52	4.20E-03	1.64E-01	9.61E-05	9.75E+01		2.71E+01
29	3.78	4.20E-03	1.89E-01	1.19E-04	9.80E+01		2.91E+01
30	4.05	2.40E-03	1.25E-01	8.46E-05		6.80E+01	3.05E+01
31	4.37	2.28E-03	1.37E-01	9.97E-05	9.85E+01		3.21E+01
32	4.69	1.56E-03	1.08E-01	8.47E-05	9.87E+01		3.35E+01
33	5.04	1.68E-03	1.35E-01	1.13E-04	9.89E+01	7.26E+01	3.53E+01
3 1	5.42	1.44E-03	1.33E-01	1.20E-04	9.91E+01	7.42E+01	3.73E+01
35	5.82	1.20E-03	1.28E-01	1.24E-04	9.92E+01	7.58E+Q1	3.93E+01
36	6.26	9.60E-04	1.18E-01	1.24E-04	9.93E+01	7.72E+01	4.14E+01
37	6.73	1.20E-03	1.71E-01	1.92E-04	9.95E+01	7.93E+01	4.45E+01
38	7.23	8.40E-04	1.38E-01	1.66E-04	9.96E+01	8.09E+01	4.72E+01
39	7.77	1.20E-04	2.28E-02	2.95E-05	9.96E+01	8.12E+01	4.77E+01
40	8.35	1.20E-04	2.63E-02	3.66E-05	9.96E+01	8.15E+01	4.83E+01
41	8.97	3.60E-04	9.11E-02	1.36E-04	9.96E+01	8.27E+01	5.05E+01
42	9.64	6.00E-04	1.75E-01	2.82E-04	9.97E+01	8.48E+01	5.51E+01
43	10.3	2.40E-04	8.10E-02	1.40E-04	9.97E+01	8.58E+01	5.74E+01
44	11.1	2.40E-04	9.36E-02	1.74E-04	9.98E+01	8.69E+01	6.03E+01
45	11.9	6:00E-04	2.70E-01	5.39E-04	9.98E+01	9.02E+01	6.91E+01
46	12.8	3.60E-04	1.87E-01	4.01E-04	9.99E+01	9.25E+01	7.57E+01
47	13.8	4.80E-04	2.88E-01	6.64E-04	9.99E+01	9.60E+01	8.65E+01
48	14.8	4.80E-04	3.33E-01	8.24E-04	1.00E+02	1.00E+02	1.00E+02
· >	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA			8.23E+00 6.				- · · · · · · · ·
IOIN		0.005-01					

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 10 .015 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

CANL   DIA			CONCE	NTRATIONS		CUMU	LATIVE %	
4         486         7.32E-03         4.54E-03         3.38E-07         1.17E+00         8.1E-02         9.25E-03           1         .504         4.08E-03         3.32E-03         2.75E-07         1.82E+00         2.43E-01         2.68E-02           2         .542         5.76E-03         5.32E-03         8.81E-07         2.74E+00         2.43E-01         2.99E-02           3         .581         8.28E-03         8.80E-03         8.53E-07         4.06E+00         4.06E+01         5.33E-02           5         .673         1.79E-02         2.54E-02         2.85E-06         8.62E+00         1.12E+00         1.69E-01           6         .723         3.23E-02         5.31E-02         6.00E-06         1.38E+01         2.10E+00         3.44E-01           7         .777         4.43E-02         8.41E-02         1.09E-05         2.08E+01         3.66E+00         6.42E-01           8         .837         4.96E-02         1.26E-01         1.58E-05         2.88E+01         3.69E+00         1.58E+00           11         1.03         4.28E-02         1.43E-01         2.27E-05         4.42E+01         1.06E+01         2.83E+00           12         1.11         3.38E-02         1.43E-01 <td>CHNL</td> <td>DIA</td> <td></td> <td></td> <td>MASS</td> <td></td> <td></td> <td>MASS</td>	CHNL	DIA			MASS			MASS
1								
2 .542	1							
3 .581 8.28E-03 8.80E-03 8.53E-07 4.06E+00 6.49E-01 9.08E-02 5.625 1.07E-02 1.31E-02 6.5.77E+00 6.49E-01 9.08E-02 5.673 1.79E-02 2.54E-02 2.85E-06 8.62E+00 1.12E+00 1.69E-01 6.723 3.23E-02 5.31E-02 6.40E-06 1.38E+01 2.10E+00 3.44E-01 7.777 4.43E-02 8.41E-02 1.09E-05 2.08E+01 3.66E+00 6.43E-01 8.835 4.99E-02 1.09E-01 1.52E-05 2.88E+01 3.66E+00 6.43E-01 9.88E-02 1.09E-01 1.52E-05 2.88E+01 3.66E+00 6.43E-01 1.38E+00 9.887 4.96E-02 1.26E-01 1.88E-05 3.67E+01 8.02E+00 1.88E+00 1.08E+00 9.887 4.96E-02 1.26E-01 1.88E-05 3.67E+01 8.02E+00 1.38E+00 1.2 1.38E+00 1.2 1.26E-01 1.38E+01 2.22E-05 5.11E+01 1.33E+01 2.87E+00 11 1.03 4.28E-02 1.49E-01 2.77E-05 5.71E+01 1.33E+01 2.87E+00 11 1.03 4.28E-02 1.49E-01 2.77E-05 5.72E+01 1.30E+01 2.87E+00 11 1.23 3.07E-02 1.60E-01 3.18E-05 6.77E+01 1.90E+01 3.63E+00 11 1.23 3.07E-02 1.60E-01 3.18E-05 6.77E+01 1.90E+01 3.63E+00 11 1.23 3.07E-02 1.67E-01 3.85E-05 7.22E+01 2.50E+01 5.44E+00 15 1.38 2.78E-02 1.67E-01 3.85E-05 7.61E+01 2.82E+01 7.65E+00 17 1.52 1.97E-02 1.58E-01 4.19E-05 7.61E+01 2.82E+01 7.65E+00 17 1.52 1.97E-02 1.58E-01 4.19E-05 7.61E+01 2.82E+01 7.65E+00 17 1.52 1.97E-02 1.58E-01 4.19E-05 7.93E+01 3.11E+01 8.80E+00 18 1.71 2.17E-02 2.01E-01 3.74E-05 8.52E+01 3.43E+01 1.94E+01			5.76E-03	5.32E-03	4.81E-07			
1	3		8.28E-03					
5 .673 1.79E-02 2.54E-02 2.85E-06 8.62E+00 1.12E+00 1.69E-01 7.777 4.43E-02 8.41E-02 1.09E-05 2.08E+01 3.66E+00 6.43E-01 8.835 4.99E-02 1.09E-01 1.52E-05 2.08E+01 3.66E+00 6.43E-01 9.897 4.98E-02 1.26E-01 1.88E-05 3.67E+01 8.02E+00 1.58E+00 1.09E+03 4.98E-02 1.26E-01 1.88E-05 3.67E+01 8.02E+00 1.58E+00 1.09E+01 4.72E-02 1.38E-01 2.22E-05 4.42E+01 1.08E+01 2.18E+00 11 1.03 4.28E-02 1.49E-01 2.77E-05 5.72E+01 1.32E+01 2.38E+00 12 1.11 3.83E-02 1.49E-01 2.77E-05 5.72E+01 1.09E+01 4.50E+00 13 1.19 3.54E-02 1.59E-01 3.18E-05 5.72E+01 1.90E+01 4.50E+00 13 1.19 3.54E-02 1.59E-01 3.43E-05 6.77E+01 2.19E+01 5.44E+00 15 1.38 2.78E-02 1.60E-01 3.43E-05 6.77E+01 2.19E+01 5.44E+00 15 1.38 2.78E-02 1.60E-01 3.43E-05 6.77E+01 2.19E+01 5.44E+00 15 1.38 2.78E-02 1.60E-01 3.43E-05 7.22E+01 2.50E+01 6.49E+00 16 1.48 2.46E-02 1.71E-01 1.22E-05 7.61E+01 2.92E+01 6.49E+00 17 1.59 1.97E-02 1.58E-01 4.19E-05 7.93E-01 3.11E-01 1.04E+01 3.83E+00 13 1.11E-01 1.57E-02 1.63E-01 5.74E-05 8.27E+01 3.43E+01 1.04E+01 12 1.71E-01 1.22E-05 7.61E+01 2.92E+01 7.65E+00 13 1.11E-01 1.82E+01 1.94E+01 1.94E			1.07E-02					· · · · · · · · · ·
7         .777         4.43E-02         8.41E-02         1.09E-03         2.08E+01         3.66E+00         6.43E-01           9         .897         4.96E-02         1.26E-01         1.88E-05         3.67E+01         8.02E+00         1.08E+00           10         .961         4.72E-02         1.38E-01         2.22E-05         3.67E+01         8.02E+00         2.18E+00           11         1.03         4.28E-02         1.45E-01         2.50E-05         5.11E+01         1.33E-01         2.78E+00           12         1.11         3.83E-02         1.49E-01         2.77E-05         5.72E+01         1.60E+01         3.63E+00           13         1.19         3.54E-02         1.60E-01         3.43E-05         6.77E+01         1.90E+01         4.50E+00           14         1.28         3.07E-02         1.60E-01         3.43E-05         6.77E+01         2.19E+01         5.44E+00           15         1.38         2.78E-02         1.67E-01         3.83E-05         7.22E+01         2.50E+01         6.49E+00           15         1.48         1.67E-02         2.01E-01         3.74E-05         8.7EE+01         3.43E+01         1.04E+01           16         1.48         1.67E-02         1.58								<del>-</del>
7         .777         4.43E-02         8.41E-02         1.09E-03         2.08E+01         3.66E+00         6.43E-01           9         .897         4.96E-02         1.26E-01         1.88E-05         3.67E+01         8.02E+00         1.08E+00           10         .961         4.72E-02         1.38E-01         2.22E-05         3.67E+01         8.02E+00         2.18E+00           11         1.03         4.28E-02         1.45E-01         2.50E-05         5.11E+01         1.33E-01         2.78E+00           12         1.11         3.83E-02         1.49E-01         2.77E-05         5.72E+01         1.60E+01         3.63E+00           13         1.19         3.54E-02         1.60E-01         3.43E-05         6.77E+01         1.90E+01         4.50E+00           14         1.28         3.07E-02         1.60E-01         3.43E-05         6.77E+01         2.19E+01         5.44E+00           15         1.38         2.78E-02         1.67E-01         3.83E-05         7.22E+01         2.50E+01         6.49E+00           15         1.48         1.67E-02         2.01E-01         3.74E-05         8.7EE+01         3.43E+01         1.04E+01           16         1.48         1.67E-02         1.58	6							
8 .835	7							
9 .897								
10								
11       1.03       4.28E-02       1.49E-01       2.50E-05       5.11E+01       1.33E+01       2.87E+00         12       1.11       3.83E-02       1.49E-01       2.77E-05       5.72E+01       1.69E+01       3.63E+00         13       1.19       3.54E-02       1.69E-01       3.18E-05       6.28E+01       1.99E+01       5.4E+00         14       1.28       3.07E-02       1.60E-01       3.43E-05       6.77E+01       2.99E+01       5.4E+00         15       1.38       2.78E-02       1.67E-01       3.85E-05       7.22E+01       2.50E+01       6.49E+00         16       1.48       2.46E-02       1.71E-01       1.22E-05       7.61E+01       2.93E+01       7.65E+00         17       1.59       1.97E-02       2.01E-01       5.74E-05       8.27E+01       3.11E+01       8.80E+00         18       1.71       2.17E-02       2.01E-01       5.74E-05       8.27E+01       3.11E+01       8.80E+00         19       1.84       1.37E-02       1.63E-01       5.16E-05       8.76E+01       4.13E+01       1.4E+01         20       1.93       1.18E-02       1.79E-01       6.37E-05       8.76E+01       4.13E+01       1.3E+01         21								
12         1.11         3.83E-02         1.49E-01         2.77E-05         5.72E-01         1.60E+01         3.63E+00           13         1.19         3.54E-02         1.59E-01         3.18E-05         6.28E+01         1.90E+01         4.50E+00           15         1.38         2.78E-02         1.67E-01         3.43E-05         6.77E+01         2.39E+01         6.49E+00           16         1.48         2.46E-02         1.71E-01         1.22E-05         7.61E+01         2.35E+01         7.65E+00           17         1.59         1.97Z-02         1.53E-01         4.19E-05         7.93E+01         3.11E+01         8.80E+00           18         1.71         2.17E-02         2.01E-01         5.74E-05         8.27E+01         3.43E+01         1.04E+01           19         1.81         1.57E-02         1.68E-01         5.16E-05         8.52E+01         3.43E+01         1.04E+01           20         1.93         1.8EE-02         1.79E+01         6.01E-03         8.76E+01         4.13E+01         1.34E+01           21         2.12         1.26E-02         1.79E+01         6.37E-05         8.96E+01         4.16E+01         1.52E+01           22         2.3         1.739E-03         1.								
1.19								
1								
15								
16         1.48         2.46E-02         1.71E-01         1.22E-05         7.61E+01         2.82E+01         7.65E+00           17         1.59         1.97E-02         1.58E-01         4.19E-05         7.93E+01         3.11E+01         8.80E+00           19         1.84         1.57E-02         1.68E-01         5.74E-05         8.27E+01         3.48E+01         1.04E+01           20         1.93         1.18E-02         1.82E-01         6.01E-05         8.76E+01         4.13E+01         1.34E+01           21         2.12         1.26E-02         1.79E-01         6.37E-05         8.96E+01         4.13E+01         1.34E+01           21         2.12         1.26E-02         1.79E-01         7.14E-05         8.11E+01         4.81E+01         1.52E+01           22         2.28         1.11E-02         1.37E-01         7.56E-05         8.30E+01         4.38E+01         1.71E+01           23         2.43         9.72E-03         1.84E-01         7.99E-05         9.43E+01         5.49E+01         2.14E+01           24         2.61         9.23E-03         1.84E-01         7.99E-05         9.43E+01         5.49E+01         2.14E+01           25         2.83         7.30E-03         1.								
1.59								
18         1.71         2.17E-02         2.01E-01         5.74E-05         8.27E+01         3.48E+01         1.04E+01           19         1.84         1.57E-02         1.68E-01         5.16E-05         8.52E+01         3.79E+01         1.19E+01           20         1.93         1.48E-02         1.82E-01         6.01E-05         8.76E+01         4.13E+01         1.34E+01           21         2.12         1.26E-02         1.79E-01         6.07E-05         8.96E+01         4.46E+01         1.52E+01           22         2.28         1.1E-02         1.37E-01         7.14E-05         9.11E+01         4.81E+01         1.71E+01           23         2.45         9.72E-03         1.84E-01         7.56E-05         9.30E+01         5.15E+01         1.92E+01           24         2.61         9.28E-03         1.81E-01         7.99E-05         9.43E+01         5.49E+01         2.1EE+01           25         2.83         7.30E-03         1.97E-01         9.34E-05         9.55E+01         5.36E+01         2.40E+01           25         2.83         7.30E-03         1.57E-01         7.49E-05         9.57E+01         6.13E+01         2.40E+01           26         3.05         5.46E-03         1.5								
19								
20         1.93         1.18E-02         1.32E-01         6.01E-05         8.76E+01         4.13E+01         1.34E+01           21         2.12         1.26E-02         1.79E-01         6.37E-05         8.96E+01         4.46E+01         1.52E+01           22         2.28         1.11E-02         1.37E-01         7.14E-05         9.11E+)1         4.81E+01         1.71E+01           23         2.45         9.72E-03         1.84E-01         7.56E-05         9.30E+01         5.15E+01         1.92E+01           23         2.61         9.23E-03         1.97E-01         9.34E-03         5.49E+01         2.14E+01           25         2.83         7.90E-03         1.97E-01         9.34E-03         9.55E+01         5.36E+01         2.40E+01           26         3.05         5.04E-03         1.57E-01         7.49E-05         9.63E+01         6.41E+01         2.40E+01           28         3.52         3.84E-03         1.50E-01         8.79E-05         9.77E+01         6.41E+01         2.83E+01           29         3.78         3.60E-03         1.62E-01         1.02E-04         9.83E+01         6.99E+01         3.35E+01           30         4.06         1.68E-03         8.73E-02         5.								
21         2.12         1.26E-02         1.79E-01         6.37E-05         8.96E+01         4.46E+01         1.52E+01           22         2.28         1.11E-02         1.37E-01         7.14E-05         9.11E-01         4.81E+01         1.71E+01           2.3         2.43         9.72E-03         1.84E-01         7.56E-05         9.30E+01         5.15E+01         1.92E+01           2.1         2.61         9.28E-03         1.84E-01         7.56E-05         9.30E+01         5.15E+01         1.92E+01           2.5         2.83         7.80E-03         1.97E-01         9.34E-05         9.55E+01         5.86E+01         2.40E+01           2.5         2.83         7.80E-03         1.47E-01         7.49E-05         9.63E+01         6.13E+01         2.60E+01           2.7         3.27         4.56E-03         1.54E-01         8.41E-05         9.77E+01         6.49E+01         3.07E+01           2.8         3.52         3.84E-03         1.50E-01         8.79E-05         9.87E+01         6.49E+01         3.07E+01           2.9         3.78         3.60E-03         1.62E-01         1.02E-04         9.83E+01         6.99E+01         3.07E+01           3.0         4.06         1.68E-03			=					
22         2.28         1.11E-02         1.37E-01         7.14E-05         9.11E-01         4.81E+01         1.71E+01           23         2.45         9.72E-03         1.84E-01         7.56E-05         9.30E+01         5.15E+01         1.92E+01           21         2.61         9.28E-03         1.81E-01         7.99E-05         9.43E+01         5.15E+01         2.11E+01           25         2.83         7.90E-03         1.97E-01         9.34E-03         9.55E+01         5.86E+01         2.40E+01           26         3.05         5.04E-03         1.57E-01         7.49E-05         9.63E+01         6.13E+01         2.60E+01           27         3.27         4.56E-03         1.54E-01         8.41E-05         9.71E+01         6.41E+01         2.83E+01           29         3.78         3.60E-03         1.62E-01         1.02E-04         9.83E+01         6.99E+01         3.51E+01           30         4.06         1.68E-03         8.73E-02         5.92E-05         9.87E+01         7.29E+01         3.51E+01           31         4.37         1.20E-03         7.20E-02         5.25E-05         9.87E+01         7.4E+01         3.84E+01           32         4.69         1.20E-03         8.3								
23								
21         2.61         9.29E-03         1.81E-01         7.99E-05         9.43E+01         5.49E+01         2.14E+01           25         2.83         7.90E-03         1.97E-01         9.34E-05         9.53E-01         5.86E+01         2.40E+01           26         3.05         5.04E-03         1.47E-01         7.49E-05         9.63E+01         6.13E+01         2.60E+01           27         3.27         4.56E-03         1.54E-01         8.41E-05         9.71E+01         6.41E+01         2.83E+01           28         3.52         3.84E-03         1.50E-01         8.79E-05         9.77E+01         6.69E+01         3.07E+01           29         3.78         3.60E-03         1.62E-01         1.02E-04         9.83E+01         6.99E+01         3.35E+01           30         4.06         1.68E-03         8.73E-02         5.92E-05         9.87E+01         7.15E+01         3.66E+01           31         4.37         1.20E-03         7.20E-02         5.25E-05         9.87E+01         7.4E+01         3.6E+01           31         4.54         1.32E-03         1.22E-01         1.10E-04         9.92E+01         7.77E+01         3.84E+01           32         4.69         1.20E-04         8.97								
2.5         2.83         7.80E-03         1.97E-01         9.34E-05         9.55E-01         5.85E+01         2.40E+01           26         3.05         5.04E-03         1.47E-01         7.49E-05         9.63E+01         6.13E+01         2.60E+01           27         3.27         4.56E-03         1.54E-01         8.41E-05         9.71E+01         6.41E+01         2.83E+01           28         3.52         3.84E-03         1.50E-01         8.79E-05         9.77E+01         6.49E+01         3.07E+01           29         3.78         3.60E-03         1.62E-01         1.02E-04         9.83E+01         7.15E+01         3.35E+01           30         4.06         1.68E-03         8.73E-02         5.92E-05         9.85E+01         7.15E+01         3.51E+01           31         4.37         1.20E-03         7.20E-02         5.25E-05         9.87E+01         7.29E+01         3.66E+01           32         4.69         1.20E-04         5.76E-02         4.85E-05         9.90E+01         7.55E+01         3.97E+01           34         5.42         1.32E-03         1.22E-01         1.10E-04         9.92E+01         7.77E+01         4.72E+01           35         5.82         8.40E-04         8								
26 3.05 5.04E-03 1.47E-01 7.49E-05 9.63E+01 6.13E+01 2.60E+01 2.7 3.27 4.56E-03 1.54E-01 8.41E-05 9.71E+01 6.41E+01 2.83E+01 2.83E+01 3.52 3.84E-03 1.50E-01 8.79E-05 9.77E+01 6.69E+01 3.07E+01 3.78 3.60E-03 1.62E-01 1.02E-04 9.83E+01 6.99E+01 3.35E+01 3.07E+01 4.06 1.68E-03 8.73E-02 5.92E-05 9.85E+01 7.15E+01 3.51E+01 3.1 4.37 1.20E-03 7.20E-02 5.25E-05 9.87E+01 7.29E+01 3.66E+01 3.2 4.69 1.20E-03 8.32E-02 6.51E-05 9.89E+01 7.44E+01 3.84E+01 3.5 5.42 1.32E-03 1.22E-01 1.10E-04 9.92E+01 7.77E+01 4.27E+01 3.5 5.82 8.40E-04 8.97E-02 8.71E-05 9.94E+01 7.77E+01 4.27E+01 3.5 5.82 8.40E-04 8.97E-02 8.71E-05 9.95E+01 8.08E+01 4.72E+01 3.7 6.73 9.60E-04 1.37E-01 1.53E-04 9.96E+01 8.33E+01 5.14E+01 3.7 6.73 9.60E-04 1.97E-02 2.38E-05 9.96E+01 8.33E+01 5.14E+01 3.7 7.77 6.00E-04 1.97E-02 2.38E-05 9.96E+01 8.37E+01 5.21E+01 4.8 7.23 1.20E-04 1.97E-02 2.38E-05 9.96E+01 8.58E+01 5.61E+01 4.8 8.7 7.77 6.00E-04 1.14E-01 1.48E-04 9.97E+01 8.58E+01 5.61E+01 4.8 8.7 2.40E-04 6.08E-02 9.09E-05 9.98E+01 8.58E+01 5.61E+01 4.20E-04 8.10E-02 9.09E-05 9.98E+01 8.58E+01 5.61E+01 4.20E-04 4.68E-02 9.09E-05 9.98E+01 8.99E+01 6.40E+01 4.11.1 1.20E-04 4.68E-02 8.69E-05 9.98E+01 8.99E+01 6.40E+01 4.11.1 1.20E-04 4.68E-02 8.69E-05 9.98E+01 8.99E+01 6.64E+01 4.51E+01 13.8 2.40E-04 1.08E-01 2.16E-04 9.99E+01 9.19E+01 7.23E+01 4.28 2.40E-04 1.25E-01 2.68E-04 9.99E+01 9.42E+01 7.96E+01 4.28 2.40E-04 1.44E-01 3.32E-04 1.00E+02 9.69E+01 8.87E+01 1.00E+02 1.00E+02								
27								
28       3.52       3.84E-03       1.50E-01       8.79E-05       9.77E+01       6.69E+01       3.07E+01         29       3.78       3.60E-03       1.62E-01       1.02E-04       9.83E+01       6.99E+01       3.35E+01         3)       4.06       1.68E-03       8.73E-02       5.92E-05       9.85E+01       7.15E+01       3.51E+01         31       4.37       1.20E-03       7.20E-02       5.25E-05       9.87E+01       7.29E+01       3.66E+01         32       4.69       1.20E-03       8.32E-02       6.51E-05       9.89E+01       7.44E+01       3.84E+01         33       5.04       7.20E-04       5.76E-02       4.85E-05       9.90E+01       7.55E+01       3.97E+01         34       5.42       1.32E-03       1.22E-01       1.10E-04       9.92E+01       7.77E+01       4.27E+01         35       5.82       8.40E-04       8.97E-02       8.71E-05       9.94E+01       7.94E+01       4.51E+01         36       6.26       6.00E-04       7.40E-02       7.72E-05       9.95E+01       8.08E+01       4.72E+01         37       6.73       9.60E-04       1.37E-01       1.53E-04       9.96E+01       8.37E+01       5.21E+01         39 <td>0.7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	0.7							
29       3.78       3.60E-03       1.62E-01       1.02E-04       9.83E+01       6.99E+01       3.35E+01         30       4.06       1.68E-03       8.73E-02       5.92E-05       9.85E+01       7.15E+01       3.51E+01         31       4.37       1.20E-03       7.20E-02       5.25E-05       9.87E+01       7.29E+01       3.66E+01         32       4.69       1.20E-03       8.32E-02       6.51E-05       9.89E+01       7.44E+01       3.84E+01         33       5.04       7.20E-04       5.76E-02       4.85E-05       9.90E+01       7.55E+01       3.97E+01         34       5.42       1.32E-03       1.22E-01       1.10E-04       9.92E+01       7.77E+01       4.27E+01         35       5.82       8.40E-04       8.97E-02       8.71E-05       9.94E+01       7.94E+01       4.51E+01         36       6.26       6.00E-04       7.40E-02       7.72E-05       9.95E+01       8.08E+01       4.72E+01         37       6.73       9.60E-04       1.37E-01       1.53E-04       9.96E+01       8.37E+01       5.21E+01         39       7.77       6.00E-04       1.14E-01       1.48E-04       9.97E+01       8.58E+01       5.61E+01         40 <td>28</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	28							
3.0								
31       4.37       1.20E-03       7.20E-02       5.25E-05       9.87E+01       7.29E+01       3.66E+01         32       4.69       1.20E-03       8.32E-02       6.51E-05       9.89E+01       7.44E+01       3.84E+01         33       5.04       7.20E-04       5.76E-02       4.85E-05       9.90E+01       7.55E+01       3.97E+01         34       5.42       1.32E-03       1.22E-01       1.10E-04       9.92E+01       7.77E+01       4.27E+01         35       5.82       8.40E-04       8.97E-02       8.71E-05       9.94E+01       7.94E+01       4.51E+01         36       6.26       6.00E-04       7.40E-02       7.72E-05       9.95E+01       8.08E+01       4.72E+01         37       6.73       9.60E-04       1.37E-01       1.53E-04       9.96E+01       8.37E+01       5.21E+01         38       7.23       1.20E-04       1.97E-02       2.38E-05       9.96E+01       8.58E+01       5.61E+01         40       8.35       0.00E+00       0.00E+00       9.97E+01       8.58E+01       5.61E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.98E+01       8.69E+01       5.66E+01         42       9.64			*					
32       4.69       1.20E-03       8.32E-02       6.51E-05       9.89E+01       7.44E+01       3.84E+01         33       5.04       7.20E-04       5.76E-02       4.85E-05       9.90E+01       7.55E+01       3.97E+01         34       5.42       1.32E-03       1.22E-01       1.10E-04       9.92E+01       7.77E+01       4.27E+01         35       5.82       8.40E-04       8.97E-02       8.71E-05       9.94E+01       7.94E+01       4.51E+01         36       6.26       6.00E-04       7.40E-02       7.72E-05       9.95E+01       8.08E+01       4.72E+01         37       6.73       9.60E-04       1.37E-01       1.53E-04       9.96E+01       8.33E+01       5.14E+01         38       7.23       1.20E-04       1.97E-02       2.38E-05       9.96E+01       8.37E+01       5.21E+01         39       7.77       6.00E-04       1.14E-01       1.48E-04       9.97E+01       8.58E+01       5.61E+01         40       8.35       0.00E+00       0.00E+00       9.09E-05       9.98E+01       8.69E+01       5.61E+01         41       8.97       2.40E-04       3.51E-02       5.64E-05       9.98E+01       8.76E+01       6.40E+01         43 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
33       5.04       7.20E-04       5.76E-02       4.85E-05       9.90E+01       7.55E+01       3.97E+01         34       5.42       1.32E-03       1.22E-01       1.10E-04       9.92E+01       7.77E+01       4.27E+01         35       5.82       8.40E-04       8.97E-02       8.71E-05       9.94E+01       7.94E+01       4.51E+01         36       6.26       6.00E-04       7.40E-02       7.72E-05       9.95E+01       8.08E+01       4.72E+01         37       6.73       9.60E-04       1.37E-01       1.53E-04       9.96E+01       8.33E+01       5.14E+01         38       7.23       1.20E-04       1.97E-02       2.38E-05       9.96E+01       8.37E+01       5.21E+01         39       7.77       6.00E-04       1.14E-01       1.48E-04       9.97E+01       8.58E+01       5.61E+01         40       8.35       0.00E+00       0.00E+00       9.97E+01       8.58E+01       5.61E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.98E+01       8.69E+01       5.86E+01         42       9.64       1.20E-04       3.51E-02       5.64E-05       9.98E+01       8.76E+01       6.40E+01         43       10.3			• • -					
34       5.42       1.32E-03       1.22E-01       1.10E-04       9.92E+01       7.77E+01       4.27E+01         35       5.82       8.40E-04       8.97E-02       8.71E-05       9.94E+01       7.94E+01       4.51E+01         36       6.26       6.00E-04       7.40E-02       7.72E-05       9.95E+01       8.08E+01       4.72E+01         37       6.73       9.60E-04       1.37E-01       1.53E-04       9.96E+01       8.33E+01       5.14E+01         38       7.23       1.20E-04       1.97E-02       2.38E-05       9.96E+01       8.37E+01       5.21E+01         39       7.77       6.00E-04       1.14E-01       1.48E-04       9.97E+01       8.58E+01       5.61E+01         40       8.35       0.00E+00       0.00E+00       0.00E+00       9.97E+01       8.58E+01       5.61E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.98E+01       8.69E+01       5.86E+01         42       9.64       1.20E-04       3.51E-02       5.64E-05       9.98E+01       8.76E+01       6.40E+01         43       10.3       2.40E-04       8.10E-02       1.40E-04       9.99E+01       8.91E+01       6.40E+01         45 <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td>			•					
35								
36 6.26 6.00E-04 7.40E-02 7.72E-05 9.95E+01 8.08E+01 4.72E+01 37 6.73 9.60E-04 1.37E-01 1.53E-04 9.96E+01 8.33E+01 5.14E+01 38 7.23 1.20E-04 1.97E-02 2.38E-05 9.96E+01 8.37E+01 5.21E+01 39 7.77 6.00E-04 1.14E-01 1.48E-04 9.97E+01 8.58E+01 5.61E+01 40 8.35 0.00E+00 0.00E+00 0.00E+00 9.97E+01 8.58E+01 5.61E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.98E+01 8.69E+01 5.86E+01 42 9.64 1.20E-04 3.51E-02 5.64E-05 9.98E+01 8.76E+01 6.02E+01 43 10.3 2.40E-04 8.10E-02 1.40E-04 9.98E+01 8.91E+01 6.40E+01 44 11.1 1.20E-04 4.68E-02 8.69E-05 9.98E+01 8.99E+01 6.64E+01 45 11.9 2.40E-04 1.08E-01 2.16E-04 9.99E+01 9.19E+01 7.23E+01 46 12.8 2.40E-04 1.25E-01 2.68E-04 9.99E+01 9.42E+01 7.96E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 1.00E+02 9.69E+01 8.87E+01 48 14.8 2.40E-04 1.66E-01 4.12E-04 1.00E+02 1.00E+02 1.00E+02								
37 6.73 9.60E-04 1.37E-01 1.53E-04 9.96E+01 8.33E+01 5.14E+01 38 7.23 1.20E-04 1.97E-02 2.38E-05 9.96E+01 8.37E+01 5.21E+01 39 7.77 6.00E-04 1.14E-01 1.48E-04 9.97E+01 8.58E+01 5.61E+01 40 8.35 0.00E+00 0.00E+00 0.00E+00 9.97E+01 8.58E+01 5.61E+01 41 8.97 2.40E-04 6.08E-02 9.09E-05 9.98E+01 8.69E+01 5.86E+01 42 9.64 1.20E-04 3.51E-02 5.64E-05 9.98E+01 8.76E+01 6.02E+01 43 10.3 2.40E-04 8.10E-02 1.40E-04 9.98E+01 8.91E+01 6.40E+01 44 11.1 1.20E-04 4.68E-02 8.69E-05 9.98E+01 8.99E+01 6.64E+01 45 11.9 2.40E-04 1.08E-01 2.16E-04 9.99E+01 9.19E+01 7.23E+01 46 12.8 2.40E-04 1.25E-01 2.68E-04 9.99E+01 9.42E+01 7.96E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 1.00E+02 9.69E+01 8.87E+01 48 14.8 2.40E-04 1.66E-01 4.12E-04 1.00E+02 1.00E+02 1.00E+02								
38       7.23       1.20E-04       1.97E-02       2.38E-05       9.96E+01       8.37E+01       5.21E+01         39       7.77       6.00E-04       1.14E-01       1.48E-04       9.97E+01       8.58E+01       5.61E+01         40       8.35       0.00E+00       0.00E+00       9.97E+01       8.58E+01       5.61E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.98E+01       8.69E+01       5.86E+01         42       9.64       1.20E-04       3.51E-02       5.64E-05       9.98E+01       8.76E+01       6.02E+01         43       10.3       2.40E-04       8.10E-02       1.40E-04       9.98E+01       8.91E+01       6.40E+01         44       11.1       1.20E-04       4.68E-02       8.69E-05       9.98E+01       8.99E+01       6.64E+01         45       11.9       2.40E-04       1.08E-01       2.16E-04       9.99E+01       9.19E+01       7.23E+01         46       12.8       2.40E-04       1.25E-01       2.68E-04       9.99E+01       9.42E+01       7.96E+01         47       13.8       2.40E-04       1.44E-01       3.32E-04       1.00E+02       9.69E+01       8.87E+01         48       14.8								
39       7.77       6.00E-04       1.14E-01       1.48E-04       9.97E+01       8.58E+01       5.61E+01         40       8.35       0.00E+00       0.00E+00       0.00E+00       9.97E+01       8.58E+01       5.61E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.98E+01       8.69E+01       5.86E+01         42       9.64       1.20E-04       3.51E-02       5.64E-05       9.98E+01       8.76E+01       6.02E+01         43       10.3       2.40E-04       8.10E-02       1.40E-04       9.98E+01       8.91E+01       6.40E+01         44       11.1       1.20E-04       4.68E-02       8.69E-05       9.98E+01       8.99E+01       6.64E+01         45       11.9       2.40E-04       1.08E-01       2.16E-04       9.99E+01       9.19E+01       7.23E+01         46       12.8       2.40E-04       1.25E-01       2.68E-04       9.99E+01       9.42E+01       7.96E+01         47       13.8       2.40E-04       1.44E-01       3.32E-04       1.00E+02       9.69E+01       8.87E+01         48       14.8       2.40E-04       1.66E-01       4.12E-04       1.00E+02       1.00E+02       1.00E+02								
40       8.35       0.00E+00       0.00E+00       0.00E+00       9.97E+01       8.58E+01       5.61E+01         41       8.97       2.40E-04       6.08E-02       9.09E-05       9.98E+01       8.69E+01       5.86E+01         42       9.64       1.20E-04       3.51E-02       5.64E-05       9.98E+01       8.76E+01       6.02E+01         43       10.3       2.40E-04       8.10E-02       1.40E-04       9.98E+01       8.91E+01       6.40E+01         44       11.1       1.20E-04       4.68E-02       8.69E-05       9.98E+01       8.99E+01       6.64E+01         45       11.9       2.40E-04       1.08E-01       2.16E-04       9.99E+01       9.19E+01       7.23E+01         46       12.8       2.40E-04       1.25E-01       2.68E-04       9.99E+01       9.42E+01       7.96E+01         47       13.8       2.40E-04       1.44E-01       3.32E-04       1.00E+02       9.69E+01       8.87E+01         48       14.8       2.40E-04       1.66E-01       4.12E-04       1.00E+02       1.00E+02       1.00E+02								
41       8.97       2.40E-04       6.08E-02       9.09E-05       9.98E+01       8.69E+01       5.86E+01         42       9.64       1.20E-04       3.51E-02       5.64E-05       9.98E+01       8.76E+01       6.02E+01         43       10.3       2.40E-04       8.10E-02       1.40E-04       9.98E+01       8.91E+01       6.40E+01         44       11.1       1.20E-04       4.68E-02       8.69E-05       9.98E+01       8.99E+01       6.64E+01         45       11.9       2.40E-04       1.08E-01       2.16E-04       9.99E+01       9.19E+01       7.23E+01         46       12.8       2.40E-04       1.25E-01       2.68E-04       9.99E+01       9.42E+01       7.96E+01         47       13.8       2.40E-04       1.44E-01       3.32E-04       1.00E+02       9.69E+01       8.87E+01         48       14.8       2.40E-04       1.66E-01       4.12E-04       1.00E+02       1.00E+02       1.00E+02			0.00E+00		0.00E+00	9.97E+01	8.58E+01	5.61E+01
42       9.64       1.20E-04       3.51E-02       5.64E-05       9.98E+01       8.76E+01       6.02E+01         43       10.3       2.40E-04       8.10E-02       1.40E-04       9.98E+01       8.91E+01       6.40E+01         44       11.1       1.20E-04       4.68E-02       8.69E-05       9.98E+01       8.99E+01       6.64E+01         45       11.9       2.40E-04       1.08E-01       2.16E-04       9.99E+01       9.19E+01       7.23E+01         46       12.8       2.40E-04       1.25E-01       2.68E-04       9.99E+01       9.42E+01       7.96E+01         47       13.8       2.40E-04       1.44E-01       3.32E-04       1.00E+02       9.69E+01       8.87E+01         48       14.8       2.40E-04       1.66E-01       4.12E-04       1.00E+02       1.00E+02       1.00E+02								
43       10.3       2.40E-04       8.10E-02       1.40E-04       9.98E+01       8.91E+01       6.40E+01         44       11.1       1.20E-04       4.68E-02       8.69E-05       9.98E+01       8.99E+01       6.64E+01         45       11.9       2.40E-04       1.08E-01       2.16E-04       9.99E+01       9.19E+01       7.23E+01         46       12.8       2.40E-04       1.25E-01       2.68E-04       9.99E+01       9.42E+01       7.96E+01         47       13.8       2.40E-04       1.44E-01       3.32E-04       1.00E+02       9.69E+01       8.87E+01         48       14.8       2.40E-04       1.66E-01       4.12E-04       1.00E+02       1.00E+02       1.00E+02								
44       11.1       1.20E-04       4.68E-02       8.69E-05       9.98E+01       8.99E+01       6.64E+01         45       11.9       2.40E-04       1.08E-01       2.16E-04       9.99E+01       9.19E+01       7.23E+01         46       12.8       2.40E-04       1.25E-01       2.68E-04       9.99E+01       9.42E+01       7.96E+01         47       13.8       2.40E-04       1.44E-01       3.32E-04       1.00E+02       9.69E+01       8.87E+01         48       14.8       2.40E-04       1.66E-01       4.12E-04       1.00E+02       1.00E+02       1.00E+02								
45       11.9       2.40E-04       1.08E-01       2.16E-04       9.99E+01       9.19E+01       7.23E+01         46       12.8       2.40E-04       1.25E-01       2.68E-04       9.99E+01       9.42E+01       7.96E+01         47       13.8       2.40E-04       1.44E-01       3.32E-04       1.00E+02       9.69E+01       8.87E+01         48       14.8       2.40E-04       1.66E-01       4.12E-04       1.00E+02       1.00E+02       1.00E+02								
46 12.8 2.40E-04 1.25E-01 2.68E-04 9.99E+01 9.42E+01 7.96E+01 47 13.8 2.40E-04 1.44E-01 3.32E-04 1.00E+02 9.69E+01 8.87E+01 48 14.8 2.40E-04 1.66E-01 4.12E-04 1.00E+02 1.00E+02 1.00E+02								
47 13.8 2.40E-04 1.44E-01 3.32E-04 1.00E+02 9.69E+01 8.87E+01 48 14.8 2.40E-04 1.66E-01 4.12E-04 1.00E+02 1.00E+02 1.00E+02			-					
48 14.8 2.40E-04 1.66E-01 4.12E-04 1.00E+02 1.00E+02 1.00E+02								
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								-
TOTALS: 6.27E-01 5.40E+00 3.65E-03								

TOTALS:

#### TSI AERODYNAMIC PARTICLE SIZER

01-01-1980 FILE NAME: OUT5 10.016 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

> DIL. RATIO: 1:1 EFFIC. CORRECT.: DI

CUMULATIVE % CONCENTRATIONS SZAK NUMBER SURFACE **MASS** NUMBER SURFACE CHNL DIA 8.01E-03 4.96E-03 3.68E-07 1.03E+00 6.90E-02 6.38E-03 . 186 4.32E-03 3.46E-03 2.91E-07 1.58E+00 1.17E-01 1.14E-02 .504 7.08E-03 6.54E-03 5.91E-07 2.48E+00 2.08E-01 2.17E-02 8.64E-03 9.18E-03 8.90E-07 3.59E+00 3.36E-01 3.71E-02 1.43E-02 1.75E-02 1.83E-06 5.41E+00 5.80E-01 6.87E-02 2.28E-02 3.24E-02 3.64E-06 8.32E+00 1.03E+00 1.32E-01 .673 3.64E-02 5.98E-02 7.21E-06 1.30E+01 1.86E+00 2.57E-01 .723 5.26E-02 9.98E-02 1.29E-05 1.97E+01 3.25E+00 4.81E-01 .777 6.05E-02 1.33E-01 1.85E-05 2.74E+01 5.10E+00 8.01E-01 6.63E-02 1.69E-01 2.53E-05 3.59E+01 7.45E+00 1.24E+00 .837 5.56E-02 1.62E-01 2.61E-05 4.30E+01 9.71E+00 1.69E+00 .964 10 5.40E-02 1.82E-01 3.15E-05 4.99E+01 1.22E+01 2.24E+00 1.03 11 5.03E-02 1.96E-01 3.64E-05 5.63E+01 1.50E+01 2.87E+00 l.li 12 4.91E-02 2.21E-01 4.41E-05 6.26E+01 1.80E+01 3.63E+00 1.19 13 4.09E-02 2.13E-01 4.56E-05 6.73E+01 2.10E+01 4.42E+00 1.28 1 1 4.16E-02 2.50E-01 5.76E-05 7.32E+01 2.45E+01 5.42E+00 1.38 15 3.39E-02 2.35E-01 5.81E-05 7.75E+01 2.77E+01 6.43E+00 1.48 16 2.59E-02 2.08E-01 5.52E-05 8.08E+01 3.06E+01 7.39E+00 1.59 17 2.45E-02 2.26E-01 6.47E-05 8.39E+01 3.33E+01 8.51E+00 1.71 18 1.63E-02 1.79E-01 5.51E-05 8.61E+01 3.63E+01 9.46E+00 1.81 19 1.60E-02 1.97E-01 6.50E-05 8.81E+01 3.90E+01 1.06E+01 1.98 1.85E-02 2.65E-01 9.40E-05 9.05E+01 4.27E+01 1.22E+01 2.12 1.56E-02 2.56E-01 9.78E-05 9.25E+01 4.63E+01 1.39E+01 2.23 1.21E-02 2.30E-01 9.42E-05 9.40E+01 4.95E+01 1.55E+01 2.45 8.52E-03 1.87E-01 8.22E-05 9.51E+01 5.21E+01 1.70E+01 21 2.61 6.43E-03 1.64E-01 7.76E-05 9.59E+01 5.43E+01 1.83E+01 2.83 5.04E-03 1.47E-01 7.49E-05 9.66E+01 5.64E+01 1.96E+01 3.05 4.32E-03 1.46E-01 7.97E-05 9.71E+01 5.84E+01 2.10E+01 27 3.27 2.52E-03 9.82E-02 5.77E-05 9.74E+01 5.98E+01 2.20E+01 3.52 3.60E-03 1.62E-01 1.02E-04 9.79E+01 5.20E+01 2.38E+01 29 3.73 3.24E-03 1.68E-01 1.14E-04 9.83E+01 6.44E+01 2.57E+01 30 4.06 2.04E-03 1.22E-01 8.92E-05 9.86E+01 6.61E+01 2.73E+01 4.37 31 1.56E-03 1.08E-01 8.47E-05 9.88E+01 6.76E+01 2.88E+01 32 4.69 9.60E-04 7.69E-02 6.47E-05 9.89E+01 6.87E+01 2.99E+01 5.04 33 9.60E-04 8.87E-02 8.02E-05 9.90E+01 6.99E+01 3.13E+01 9.60E-04 1.02E-01 9.96E-05 9.91E+01 7.13E+01 3.30E+01 35 5.82 1.20E-03 1.48E-01 1.54E-04 9.93E+01 7.34E+01 3.57E+01 6.00E-04 8.54E-02 9.58E-05 9.94E+01 7.46E+01 3.73E+01 37 6.73 7.20E-04 1.18E-01 1.43E-04 9.95E+01 7.62E+01 3.98E+01 7.23 4.80E-04 9.11E-02 1.18E-04 9.95E+01 7.75E+01 4.18E+01 7.77 39 2.40E-04 5.26E-02 7.33E-05 9.96E+01 7.82E+01 4.31E+01 8.35 8.40E-04 2.13E-01 3.18E-04 9.97E+01 8.12E+01 4.86E+01 41 8.97 1.20E-04 3.51E-02 5.64E-05 9.97E+01 8.17E+01 4.96E+01 1.20E-04 4.05E-02 7.00E-05 9.97E+01 8.22E+01 5.08E+01 43 10.3 8.40E-04 3.27E-01 6.08E-04 9.98E+01 8.68E+01 6.13E+01 45 11.9 3.60E-04 1.62E-01 3.23E-04 9.98E+01 8.90E+01 6.70E+01 1.20E-04 6.24E-02 1.34E-04 9.99E+01 8.99E+01 6.93E+01 12.8 2.40E-04 1.44E-01 3.32E-04 9.99E+01 9.19E+01 7.50E+01 47 13.8 48 14.8 8.40E-04 5.82E-01 1.44E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 7.83E-01 7.19E+00 5.77E-03

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 10.017 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

~~~~			ENTRATIONS			JLATIVE %	
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	22KK
<	. 135	9.48E-03	5.90E-03	4.39E-07	1.21E+00	8.90E-02	9.62E-03
1	.504	5.76E-03	4.61E-03	3.88E-07	1.94E+00	1.58E-01	1.81E-02
2	.512	7.44E-03	6.87E-03	6.21E-07	2.89E+00	2.62E-01	3.17E-02
3	.581	1.03E-02	1.15E-02	1.11E-06	4.27E+00	4.35E-01	5.60E-02
ţ	.625	1.37E-02	1.68E-02	1.75E-06	6.01E+00	6.89E-01	9.43E-02
5	.673	2.83E-02	4.03E-02	4.52E-06	9.62E+00	1.30E+00	1.935-01
6	.723	4.16E-02	6.85E-02	8.26E-06	1.49E+01	2.33E+00	3.74E-01
7	.777	5.87E-02	1.11E-01	1.44E-05	2.24E+01	4.01E+00	6.90E-01
8	.835	5.95E-02	1.31E-01	1.82E-05	3.00E+01	5.98E÷00	1.09E+00
9	.897	6.20E-02	1.57E-01	2.35E-05	3.79E+01	8.35E+00	1.60E+00
10	.964	5.57E-02	1.63E-01	2.62E-05	4.50E+01	1.085+01	2.18E+00
11	1.03	5.12E-02	1.73E-01	2.99E-05	5.15E+01	1.34E+01	2.83E+00
12	1.11	4.87E-02	1.90E-01	3.53E-05	5.77E+01	1.63E+01	3.60E+00
13	1.19	4.25E-02	1.91E-01	3.82E-05	6.32E+01	1.925+01	4.44E+00
1 1	1.28	1.25E-02	2.21E-01	4.74E-05	6.86E+01	2.25E+01	5.48E+00
1.5	1.38	3.12E-02	1.87E-01	4.32E-05	7.26E+01	2.53E+01	6.42E+00
16	1.13	3.06E-02	2.12E-C1	5.25E-05	7.65E+01	2.85E+01	7.57E+00
17	1.59	2.82E-02	2.26E-01	6.01E-05	8.01E+01	3.19E+01	8.335+00
18	1.71	2.35E-02	2.17E-01	6.22E-05	8.31E+01	3.52E+01	1.02E+01
19	1.81	1.82E-02	1.95E-01	5.98E-05	8.54E+01	3.82E+01	1.16E+01
20	1.93	1.90E-02	2.22E-01	7.33E-05	8.77E+01	4.15E+01	1.32E+01
21	2.12	1.695-02	2.41E-0i	8.55E-05	8.98E+01	4.51E+01	1.505+01
22	2.23	1.34E-02	2.21E-01	8.42E-05	9.15E+01	1.85E+01	1.59E+01
23	2.15	1.11E-02	2.732-01	1.122-04	9.34E+01	5.282+01	1.93E+01
21	2.61	9.72E-03	2.13E-01	9.38E-05	9.16E+0i	5.58E÷01	2.14E+01
2.5	2.83	9.72E-03	2.46E-01	1.162-04	9.595+01	5.95E+01	2.39E+C1
25	3.05	5.88E-03	1.72E-01	8.74E-05	9.66E+01	6.212+01	2.58E+01
27	3.27	5.52E-03	1.86E-01	1.022-04	9.735+01	6.495+01	2.81E+01
28	3.52	4.56E-03	1.78E-01	1.04E-04	9.79E+01	6.76E+01	3.04E+01
29	3.78	3.72E-03	1.67E-01	1.06E-04		7.01E+01	3.27E+01
30	1.06	2.16E-03	1.12E-01	7.61E-05	9.86E+01	7.18E+01	3.43E+01
31	1.37	2.04E-03	1.225-01	8.92E-05	9.89E+01	7.37E+01	3.63E+01
32	4.69	1.08E-03	7.49E-02	5.86E-05	9.90E+01	7.482+01	3.76E+01
33	5.04	1.92E-03	1.54E-01	1.29E-04	9.93E+01	7.71E+01	4.04E+01
3 1	5.42	4.80E-04	4.44E-02	4.01E-05	9.93E+01	7.78E+01	4.13E+01
35	5.82	7.20E-04	7.69E-02	7.47E-05	9.94E+01	7.89E+01	4.29E+01
36	6.26	3.60E-04	4.44E-02	4.63E-05	9.95E+01	7.96E+01	4.39E+01
37	6.73	1.80E-04	6.83E-02	7.67E-05	9.95E+01	8.06E+01	4.56E+01
38	7.23	9.60E-04	1.58E-01	1.90E-04	9.97E+01	8.30E+01	4.98E+01
39	7.77	3.60E-04	6.83E-02	8.85E-05	9.97E+01	8.41E+01	5.17E+01
40	8.35	0.00E+00	0.00E+00	0.00E+00	9.97E+01	8.41E+01	5.17E+01
41	8.97	1.20E-04	3.04E-02	4.55E-05	9.97E+01	8.45E+01	5.27E+01
42	9.64	2.40E-04	7.02E-02	1.13E-04	9.98E+01	8.56E+01	5.52E+01
43	10.3	4.80E-04	1.62E-01	2.80E-04	9.98E+01	8.80E+01	6.13E+01
44	11.1	0.00E+00	0.00E+00	0.00E+00	9.98E+01	8.80E+01	6.13E+01
45	11.9	3.60E-04	1.62E-01	3.23E-04	9.99E+01	9.05E+01	6.84E+01
46	12.8	4.80E-04	2.50E-01	5.35E-04	9.99E+01	9.42E+01	8.01E+01
47	13.8	3.60E-04	2.16E-01	4.98E-04	1.00E+02	9.75E+01	9.10E+01
48	14.8	2.40E-04	1.66E-01	4.12E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL			.63E+00 4.				
			• •	— - <del>-</del>			

FILE NAME: OUT5 10.018 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC
DENSITY: 1

		CONC	ENTRATIONS			LATIVE %	
ÇHNL	A.I.D	NUMBER	SURFACE	SZŁK	NUMBER	SURFACE	MASS
<b>\</b> <	. 186	1.38E-02	8.54E-03	6.35E-07	1.56E+00	1.16E-01	1.27E-02
, 1	.504	7.56E-03	6.05E-03	5.09E-07	2.41E+00	1.93E-01	2.29E-02
12	.542	1.07E-02	9.86E-03	8.91E-07	3.62E+00	3.32E-01	4.07E-02
<b>§ 3</b>	.581	1.45E-02	1.54E-02	1.50E-06	5.26E+00	5.42E-01	7.07E-02
<b>.</b> •	.625	1.93E-02	2.37E-02	2.47E-06	7.45E+00	8.65E-01	1.20E-01
5	.673	3.06E-02	4.35E-02	4.88E-06	1.09E+01	1.46E+00	2.18E-01
	.723	4.92E-02	8.09E-02	9.76E-06	1.65E+01	2.56E+00	4.13E-01
6 7	.777	6.62E-02	1.26E-01	1.63E-05	2.39E+01	4.27E+00	7.40E-01
.8	.835	7.07E-02	1.55E-01	2.16E-05	3.19E+01	6.37E+00	1.17E+00
9	.897	7.13E-02	1.81E-01	2.70E-05	4.00E+01	8.83E+00	1.71E+00
10	.964	6.38E-02	1.87E-01	3.00E-05	4.72E+01	1.11E+01	2.31E+00
11	1.03	5.70E-02	1.92E-01	3.33E-05	5.36E+01	1.40E+01	2.98E+00
12	1.11	5.29E-02	2.06E-01	3.83E-05	5.96E+01	1.68E+01	3.75E+00
13	1.19	4.61E-02	2.07E-01	4.14E-05	6.48E+01	1.965+01	1.585+00
1,1	1.28	4.32E-02	2.25E-01	4.82E-05	6.97E+01	2.27E+01	5.54E+00
1 <sup>1</sup> .5	1.38	3.555-02	2.13E-01	4.92E-05	7.37E+01	2.562+01	6.53E+00
145	1.18	3.47E-02	2.40E-01	5.95E-05	7.77E+01	2.88E+01	7.72E+00
17	1.59	2.86E-02	2.29E-01	6.08E-05	3.09E+01	3.19E+01	8.91E+00
18	1.71	2.71E-02	2.51E-01	7.17E-05	8.39E+01	3.53E+01	1.04E+01
19	1.81	1.86E-02	1.995-01	6.10E-05	3.50E+01	3.80E+01	1.165+01
20	1.98	2.04E-02	2.52E-01	3.31E-05	8.81E+01	4.15E+01	1.33E+01
21	2.12	1.57E-02	2.24E-01	7.94E-03	9.015+01	4.45E+01	1.485+01
22	2.28	1.60E-02	2.62E-01	1.005-04	9.19E+01	4.81E+01	1.68E+01
	2.45	1.38E-02	2.62E-01	1.075-04	9.35E+01	5.185+01	1.90E+01
21	2.61	1.10E-02	2.42E-01	1.07E-04	9.47E+01	5.49E+01	2.11E+01
23	2.83	9.96E-03	2.52E-C1	1.192-04	9.595+01	5.845-01	2.35E+01
2 p	3.05	6.84E-03	2.00E-01	1.02E-04	9.66E+01	6.11E+91	2.56E+01
27	3.27	5.52E-03	1.86E-01	1.025-04	9.73E+01	6.35E+01	2.765+01
28	3.52	3.72E-03	1.45E-01	8.51E-05	9.77E+01		2.93E+01
29	3.78	3.84E-03	1.73E-01	1.092-04	9.81E+01	,	3.15E+01
30	4.06	2.64E-03	1.37E-01	9.30E-05		6.98E+01	3.33E+01
31	4.37	2.40E-03	1.44E-01	1.05E-04	9.87E+01	7.18E+01	3.54E+01
32	4.69	1.92E-03	1.33E-01	1.04E-04	9.89E+01	7.36E+01	3.75E+01
33	5.04	1.20E-03	9.61E-02	8.08E-05	9.90E+01	7.49E+01	3.92E+01
34	5.42	1.44E-03	1.33E-01	1.20E-04	9.92E+01	7.67E+01	4.16E+01
35	5.82	9.60E-04	1.02E-01	9.96E-05	9.93E+01	7.81E+01	4.36E+01
36	6.26	6.00E-04	7.40E-02	7.72E-05	9.94E+01	7.91E+01	4.51E+01
37	6.73	1.44E-03	2.05E-01	2.30E-04	9.95E+01	8.19E+01	4.97E+01
38	7.23	8.40E-04	1.38E-01	1.66E-04	9.96E+01	8.37E+01	5.30E+01
39	7.77	9.60E-04	1.82E-01	2.36E-04	9.97E+01	8.62E+01	5.78E+01
10	8.35	3.60E-04	7.89E-02	1.10E-04	9.98E+01	8.73E+01	6.00E+01
41	8.97	0.00E+00	0.00E+00	0.00E+00	9.98E+01	8.73E+01	6.00E+01
12		2.40E-04	7.02E-02	1.13E-04	9.98E+01	8.82E+01	6.22E+01
17	10.3	. 2.40E-04	8.10E-02	1.40E-04	9.98E+01	8.93E+01	6.50E+01
13 44 45	11.1	2.40E-04	9.36E-02	1.74E-04	9.99E+01	9.06E+01	6.85E+01
1 2	11.1	3.60E-04	1.62E-01	3.23E-04	9.99E+01	9.28E+01	7.50E+01
1 ¢		1.20E-04	6.24E-02	1.34E-04	9.99E+01	9.37E+01	7.77E+01
46	12.8	3.60E-04	2.16E-01	4.98E-04	1.00E+02	9.66E+01	8.76E+01
47	13.8	3.60E-04	2.16E-01 2.50E-01	6.18E-04	1.00E+02	1.00E+02	1.00E+02
48	14.8	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
<b>)</b>	15.4		7.36E+00 4.		1.006702	.,,,,,,,,	
TOTAL	<b>L</b> 2:	0.03F_A1	1.306700 4.	<b>フプレーリン</b>			

# APPENDIX D

Raw Data from the APS for the Grade efficiency Test and the Effect of Incident Velocity.

# Coded Experimental Data:

Out5 14 for "Dirty" Membrane at 321/min

Out5 16 for "Dirty" Membrane at 641/min

Out5 13 for "Clean" Membrane at 321/min

Out5 15 for "Clean" Membrane at 641/min

In5 13 for inlet at 321/min

In5 14 for inlet at 641/min

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 14.000 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

#### CUMULATIVE % CONCENTRATIONS MASS NUMBER SURFACE SURFACE MASS NUMBER CHNL DIA 6.00E-04 3.73E-04 2.78E-08 2.27E-01 4.34E-03 2.56E-04 .486 3.60E-04 2.88E-04 2.42E-08 3.62E-01 7.70E-03 4.79E-04 . 504 6.00E-04 5.54E-04 5.01E-08 5.89E-01' 1.41E-02 9.40E-04 9.60E-04 1.02E-03 9.89E-08 9.52E-01 2.60E-02 1.85E-03 .581 1.08E-03 1.33E-03 1.38E-07 1.36E+00 4.15E-02 3.12E-03 .625 3.12E-03 4.44E-03 4.98E-07 2.54E+00 9.32E-02 7.71E-03 .673 4.08E-03 6.71E-03 8.09E-07 4.08E+00 1.71E-01 1.52E-02 .723 6.12E-03 1.16E-02 1.51E-06 6.39E+00 3.07E-01 2.90E-02 .777 7.32E-03 1.61E-02 2.24E-06 9.15E+00 4.94E-01 4.96E-02 .835 8.52E-03 2.16E-02 3.23E-06 1.24E+01 7.45E-01 7.94E-02 .897 7.20E-03 2.11E-02 3.39E-06 1.51E+01 9.90E-01 1.11E-01 .964 10 9.24E-03 3.12E-02 5.39E-06 1.86E+01 1.35E+00 1.60E-01 1.03 11 1.10E-02 4.31E-02 8.00E-06 2.27E+01 1.86E+00 2.34E-01 1.11 12 1.07E-02 4.81E-02 9.60E-06 2.68E+01 2.42E+00 3.22E-01 1.19 13 1.46E-02 7.61E-02 1.63E-05 3.23E+01 3.30E+00 4.73E-01 1.28 14 1.19E-02 7.13E-02 1.64E-05 3.68E+01 4.13E+00 6.24E-01 1.38 15 1.30E-02 8.98E-02 2.22E-05 4.17E+01 5.18E+00 8.29E-01 1.48 16 1.67E-02 1.34E-01 3.55E-05 6.73E+00 1.16E+00 4.80E+01 17 1.59 1.22E-01 3.49E-05 5.30E+01 8.16E+00 1.48E+00 1.71 1.32E-02 18 1.40E-01 4.29E-05 5.79E+01 9.78E+00 1.87E+00 1.84 1.31E-02 1.55E-01 5.13E-05 6.27E+01 1.16E+01 2.35E+00 1.26E-02 1.98 1.74E-01 6.19E-05 6.73E+01 1.26E+01 2.92E+00 2.12 1.22E-02 7.20E+01 1.60E+01 3.64E+00 2.07E-01 7.90E-05 1.26E-02 9.24E-03 1.75E-01 7.18E-05 4.21E+00 7.5fE+01 1.81E+01 2.45 7.89E+01 2.04E+01 5.11E-00 9.00E-03 1.97E-01 8.68E-05 24 2.64 6.72E-03 1.70E-01 8.05E-05 8.15E+01 2.24E+01 5.85E+00 25 4.44E-03 1.30E-01 6.60E-05 8.31E+01 2.39E+01 26 3.05 3.27 5.88E-03 1.98E-01 1.08E-04 8.54E+01 2.62E+01 7.45E+00 27 4.32E-03 1.68E-01 9.89E-05 8.70E+01 2.81E+01 8.37E+00 28 3.52 29 3.00E-03 1.35E-01 8.52E-05 8.81E+01 2.97E+01 9.15E+00 3.78 3.24E-03 1.68E-01 1.14E-04 8.94E+01 3.17E+01 30 4.06 3.29E+01 1.09E+01 1.80E-03 1.08E-01 7.87E-05 9.00E+01 31 4.37 2.40E-03 1.66E-01 1.30E-04 9.09E+01 3.49E+01 1.21E+01 32 4.69 2.40E-03 1.92E-01 1.62E-04 9.18E+01 3.71E+01 1.36E+01 33 5.04 2.28E-03 2.11E-01 1.91E-04 9.27E+01 3.96E+01 1.54E+01 5.42 34 1.56E-03 1.67E-01 1.62E-04 9.33E+01 4.15E+01 1.69E+01 35 5.82 2.64E-03 3.25E-01 3.40E-04 9.43E+01 4.53E+01 2.00E+01 6.26 9.52E+01 4.91E+01 2.34E+01 37 2.28E-03 3.25E-01 3.64E-04 6.73 2.76E-03 4.54E-01 5.47E-04 9.62E+01 5.44E+01 2.84E+01 38 7.23 5.73E+01 3.14E+01 1.32E-03 2.51E-01 3.25E-04 9.67E+01 39 7.77 9.60E-04 2.10E-01 2.93E-04 9.71E+01 5.97E+01 3.41E+01 8.35 40 1.44E-03 3.65E-01 5.45E-04 9.76E+01 6.40E+01 3.91E+01 41 8.97 6.76E+01 1.08E-03 3.16E-01 5.08E-04 9.80E+01 42 9.64 9.82E+01 4.80E-04 1.62E-01 2.80E-04 6.95E+01 4.64E+01 43 10.3 6.00E-04 2.34E-01 4.34E-04 9.84E+01 7.23E+01 5.04E+01 44 11.1 1.20E-03 5.40E-01 1.08E-03 9.89E+01 7.85E+01 6.03E+01 45 11.9 46 12.8 6.00E-04 3.12E-01 6.69E-04 9.91E+01 8.22E+01 6.65E+01 47 13.8 1.44E-03 8.65E-01 1.99E-03 9.96E+01 9.22E+01 8.48E+01 48 14.8 9.60E-04 6.66E-01 1.65E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 TOTALS: 2.65E-01 8.59E+00 1.09E-02

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 14.001 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		DIL. RAI		Erric. (	JORRECI.: I	)1	
		CONC	ENTRATIONS		CI.AI	CLATIVE %	
CHVI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	1.20E-04		6.51E-09	5.07E-02		6.45E-05
ì	.504	3.60E-04		2.42E-08			3.05E-04
2	.542	6.00E-04		5.01E-08			8.01E-04
3	.581	8.40E-04		8.66E-08			1.66E-03
4	.625	8.40E-04		1.07E-07			2.72E-03
5	.673	1.92E-03		3.07E-07	1.98E÷00	7.19E-02	5.76E-03
6	.723	2.882-03		5.71E-07		1.33E-01	1.14E-02
6	.777	5.40E-03		1.33E-05		2.65E-01	2.465-02
Q	.835	8.04E-03		2.45E-06			4.89E-02
8 9	.897	6.36E-03	1.61E-02	2.41E-06			7.28E-02
10	.964	8.88E-03		4.18E-06	1.53E+01	1.03E+00	1.14E-01
11	1.03	9.96E-03		5.81E-06		1.47E+00	1.72E-01
12	1.11	1.03E-02		7.48E-06		1.99E+00	2.46E-01
13	1.13	1.102-02		9.92E-06		2.63E+00	3.44E-01
14	1.13	1.43E-02	7.43E-02	1.59E-C5		3.585+00	5.02E-01
15		1.26E-02		1.74E-05			6.75E-01
	1.38		_	2.31E-05			9.04E-01
16 17	1.48	1.34E-02 1.28E-02		2.74E-05			1.17E+00
	1.59						1.50E÷00
18	1.71	1.22E-02	1.13E-01	3.23E-05			1.892+00
19	1.34	1.205-02	1.28E-01	3.912-05		1.20E+01	2.3 (E-00
20	1.93	1.13E-02	1.395-01	4.59E-05	7.03E+01	1.39E+01	2.83E+00
21	2.12	1.03E-02	1.47E-01	5.49E-05		1.57E+01	3.40E+00
22	2.23	8.762-03	1.44E-01	5.83E-05			3.982+00
23	2.45	7.58E-03					4.682+00
2 4	2.51	7.32E-03		7.06E-C5			5.24E+00
25	2.83	1.682-03	1.18E-01	5.61E-05		2.31E+01	6.00E+00
26	3.05	5.16E-03	1.51E-01	7.67E-05	8.45E÷01		6.61E+00
27	3.27	3.36E-03	1.13E-01	5.77E-05	8.59E+01 8.70E+01	•	7.19E+00
23	3.52	2.52E-03	9.82E-02	• • • • • •	8.79E+01	2.71E+01	7.19E+00 7.79E+00
29	3.78	2.162-03	9.72E-02	6.14E-05 7.61E-05	8.88E+01	2.71E+01 2.85E+01	8.55E+00
30	4.06	2.16E-03	1.12E-01		8.98E+01	3.04E+01	9.59E+00
31	4.37	2.40E-03	1.44E-01	1.05E-04		3.23E+01	1.08E+01
32	4.69	2.16E-03	1.50E-01	1.17E-04	9.07E+01	3.42E+01	1.20E+01
33	5.04	1.80E-03	1.44E-01	1.21E-04	9.15E+01	3.65E+01	1.35E+01
34	5.42	1.92E-03	1.77E-01	1.60E-04	9.23E+01	4.04E+01	1.65E+01
35	5.82	2.88E-03	3.07E-01	2.99E-04		4.33E+01	1.88E+01
36	6.26	1.80E-03	2.22E-01	2.32E-04	9.43E+01	4.59E+01	2.11E+01
37	6.73	1.44E-03	2.05E-01	2.30E-04		5.05E+01	2.53E+01
38	7.23	2.16E-03	3.55E-01	4.28E-04		5.46E+01	2.94E+01
39	7.77	1.68E-03	3.19E-01	4.13E-04		5.59E+01	3.09E+01
40	8.35	4.80E-04	1.05E-01	1.47E-04			3.36E+01
41	8.97	7.20E-04	1.82E-01	2.73E-04	9.70E+01	5.83E+01	3.92E+01
42	9.64	1.20E-03	3.51E-01	5.64E-04	9.75E+01	6.28E+01 6.65E+01	4.40E+01
43	10.3	8.40E-04	2.84E-01	4.90E-04	9.79E+01 9.83E+01	7.13E+01	5.09E+01
44	11.1	9.60E-04	3.74E-01	6.95E-04	9.83E+01 9.88E+01	7.13E+01 7.89E+01	6.27E+01
45	11.9	1.32E-03	5.94E-01	1.19E-03	9.88E+01 9.93E+01	8.62E+01	7.46E+01
46	12.8	1.08E-03	5.61E-01	1.20E-03		9.36E+01	8.78E+01
47	13.8	9.60E-04	5.76E-01	1.33E-03	1.00E+02	1.00E+02	1.00E+02
48	14.8	7.20E-04	4.99E-01	1.24E-03 0.00E+00	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00		1.002702	1.005702	
TOTA	T2:	2.31E-01	7.77E+00 1.	OIE-02			

FILE NAME: OUT5 14.002 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		DIL. KAI		211101			
		CONCI	ENTRATIONS		CUM	ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
	.486	2 AOF-OA	1.34E-04	9.48E-09		2.38E-03	1.25E-04
<	.504	1.20E-04	9.60E-05	8.08E-09	2.32E-01		2.31E-04
1		3.60E-04	3.32E-04	3.00E-08	4.64E-01	9.99E-03	
2	.542	6.00E-04		6.18E-08			
3	.581	7.20E-04		9.21E-08	1.32E+00		
4	.625		1.88E-03	2.11E-07	2.17E+00		_
5	.673	1.32E-03	3.75E-03	4.52E-07	3.64E+00		
6	.723	2.28E-03	5.93E-03	7.68E-07	5.65E+00		
7	.777	3.12E-03		1.14E-06			
8	.835	3.72E-03	8.16E-03		1.11E+01		
9	.897	4.80E-03	1.22E-02	1.82E-06		8.58E-01	
10	.964	4.92E-03	1.44E-02	2.31E-06			1.33E-01
11	1.03	5.52E-03	1.86E-02	3.22E-06	1.79E+01	1.19E+00	2.00E-01
12	1.11	6.96E-03	2.71E-02	5.04E-06			
13	1.19	8.16E-03	3.67E-02	7.33E-06	2.76E+01		
14	1.28	9.36E-03	4.87E-02	1.04E-05		3.19E+00	
15	1.38	6.24E-03	3.75E-02	8.64E-06	3.77E+01	3.85E+00	
16	1.48	8.76E-03	6.07E-02	1.50E-05			
17	1.59	8.76E-03	7.01E-02	1.87E-05		6.17E+00	
18	1.71	7.68E-03	7.10E-02	2.03E-05	5.39E+01	7.43E+00	1.26E+00
19	1.84	7.44E-03	7.94E-02	2.44E-05	5.87E+01	8.84E+00	1.58E+00
20	1.98	7.92E-03	9.77E-02	3.22E-05		1.06E+01	2.00E+00
21	2.12	7.56E-03	1.08E-01	3.82E-05	6.87E+01	1.25E+01	
22	2.28	5.16E-03	8.48E-02	3.23E-05	7.21E+01	1.40E+01	
23	2.45	5.64E-03	1.07E-01	4.38E-05	7.57E+01	1.59E+01	3.51E+00
24	2.64	4.92E-03	1.08E-01	4.75E-05	7.89E+01	1.78E+01	4.13E+00
25	2.83	3.24E-03	8.20E-02	3.88E-05	8.10E÷01	(1.93E+01	4.84E+00
26	3.05	2.28E-03	6.67E-02	3.39E-05	8.24E+01	2.04E+01	5.09E+00
27	3.27	2.76E-03	9.32E-02	5.09E-05	8.42E+01	2.21E+01	5.76E+00
28	3.52	2.16E-03	8.42E-02	4.94E-05	8.56E+01	√2.36E÷01	6.41E+00
29	3.78	1.44E-03	6.48E-02	4.09E-05	8.65E+01	· 2.47E+01	6.95E+00
30	4.06	2.88E-03	1.50E-01	1.02E-04	8.84E+01	2.74E+01	8.28E+00
31	4.37	8.40E-04	5.04E-02	3.67E-05	8.89E+01	2.83E+01	8.77E+00
32	1.69	1.32E-03	9.15E-02	7.17E-05	8.98E+01	2.99E+01	9.71E+00
33	5.04	1.68E-03	1.35E-01	1.13E-04	9.09E+01	3.23E+01	1.12E+01
34	5.42	1.20E-03	1.11E-01	1.00E-04	9.16E+01	3.43E+01	1.25E+01
35	5.82	1.68E-03	1.79E-01	1.74E-04	9.27E+01	3.74E+01	1.48E+01
36	6.26	1.08E-03	1.33E-01	1.39E-04	9.34E+01	3.98E+01	1.66E+01
37	6.73	7.20E-04	1.03E-01	1.15E-04	9.39E+01	4.16E+01	1.82E+01
38	7.23	7.20E-04	1.18E-01	1.43E-04	9.43E+01	4.37E+01	2.00E+01
39	7.77	1.20E-03	2.28E-01	2.95E-04		4.78E+01	2.39E+01
40	8.35	1.32E-03	2.89E-01	4.03E-04	9.60E+01		2.92E+01
		1.08E-03	2.73E-01	4.09E-04	9.67E+01	5.78E+01	3.46E+01
41	8.97		2.73E-01 2.81E-01	4.51E-04	9.73E+01	6.27E+01	4.05E+01
42	9.64	9.60E-04	2.84E-01	4.90E-04			4.70E+01
43	10.3	8.40E-04		3.47E-04			5.16E+01
44	11.1	4.80E-04	1.87E-01				6.01E+01
45	11.9	7.20E-04	3.24E-01	6.47E-04	9.86E+01		7.06E+01
46	12.8	7.20E-04	3.74E-01	8.03E-04	9.91E+01		
47	13.8	7.20E-04	4.32E-01	9.96E-04			8.37E+01
48	14.8	7.20E-04	4.99E-01	1.24E-03			1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	1.55E-01	5.64E+00 7.	60E-03			

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 14.003 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		DIL. KATI	0: 1:1	EFFIC.	CORRECT.: 1	)1	
		CONCE	ENTRATIONS		CI'MI	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	7.20E-04	4.56E-04	3.43E-08		8.81E-03	4.82E-04
ì	.504	6.00E-04	4.80E-04	4.04E-08	9.67E-01	1.81E-02	1.05E-03
2	.542	8.40E-04	7.76E-04	7.01E-08	1.58E+00	3.31E-02	2.04E-03
3	.581	9.60E-04	1.02E-03	9.89E-08	2.29E+00	5.28E-02	3.43E-03
4	.625	1.08E-03	1.33E-03	1.38E-07	3.08E+00	7.84E-02	5.37E-03
5	.673	4.80E-04	6.83E-04	7.66E-08	3.43E+00	9.16E-02	6.45E-03
6	.723	2.28E-03	3.75E-03	4.52E-07	5.10E+00	1.64E-01	1.28E-02
7	.777	3.00E-03	5.70E-03	7.38E-07	7.30E+00	2.74E-01	2.32E-02
8	.835	3.24E-03	7.10E-03	9.89E-07	9.67E+00	4.11E-01	3.71E-02
9	.897	3.72E-03	9.42E-03	1.41E-06	1.24E+01	5.94E-01	5.69E-02
10	.964	3.72E-03	1.09E-02	1.75E-06	1.51E+01	8.04E-01	8.16E-02
11	1.03	5.88E-03	1.99E-02	3.43E-06	1.94E+01	1.19E+00	1.30E-01
12	1.11	4.20E-03	1.64E-02	3.04E-06	2.25E+01	1.50E+00	1.73E-01
13	1.19	6.36E-03	2.86E-02	5.71E-06	2.72E+01	2.06E+00	2.53E-01
14	1.28	5.52E-03	2.87E-02	6.16E-06	3.12E+01	2.61E+00	3.40E-01
15	1.38	6.36E-03	3.82E-02	8.80E-06	3.59E+01	3.35E+00	4.63E-01
16	1.48	7.08E-03	4.91E-02	1.22E-05	4.11E+01	4.30E+00	6.34E-01
17	1.59	6.48E-03	5.19E-02	1.38E-05	4.58E+01	5.30E+00	8.29E-01
18	1.71	7.68E-03	7.10E-02	2.03E-05	5.15E+01	6.67E+00	1.11E+00
19	1.84	7.08E-03	7.56E-02		5.66E+01	8.13E+00	1.44E+00
20	1.98	6.36E-03	7.84E-02	2.59E-05	6.13E+01	9.65E+00	1.80E+00
21	2.12	5.76E-03	8.20E-02	2.91E-05	6.55E+01	1.12E+01	2.21E+00
22	2.28	6.96E-03	1.14E-01	4.36E-05	7.06E+01	1.34E+01	2.83E+00
23	2.45	4.80E-03	9.11E-02		7.41E+01	1.52E+01	3.35E+00
24	2.64	3.00E-03	6.58E-02	2.89E-05	7.63E+01	1.65E+01	3.76E+00
25	2.83	2.64E-03	6.68E-02	3.16E-05	7.85E+01	1.78E+01	4.20E+00
26	3.05	2.16E-03	6.31E-02	3.21E-05		1.90E+01	4.66E+00
27	3.27	2.40E-03	8.10E-02	4.43E-05	8.16F+01	2.06E+01	5.28E+00
28	3.52	2.64E-03	1.03E-01	6.04E-05	8.36E+01	2.25E+01	6.13E+00
29	2.78	2.88E-03	1.30E-01	8.18E-05		2.50E+01	7.18E+00
30 31	4.06	1.80E-03	9.36E-02	6.34E-05	8.70E÷01	2.69E+01	8.17E+00
32	4.37	2.04E-03 1.68E-03	1.22E-01	8.92E-05	8.85E+01 8.97E+01	2.92E+01	9.43E+00
33	4.69 5.04	1.56E-03	1.16E-01 1.25E-01	9.12E-05 1.05E-04	9.09E+01	3.15E+01 3.39E+01	1.07E+01 1.22E+01
34	5.42	1.68E-03	1.55E-01	1.40E-04	9.21E+01	3.69E+01	1.42E+01
35	5.82	1.08E-03	1.15E-01	1.40E-04	9.29E+01	3.91E+01	1.57E+01
36	6.26	1.32E-03	1.63E-01	1.70E-04	9.38E+01	4.23E+01	1.81E+01
37	6.73	7.20E-04	1.03E-01	1.15E-04	9.44E+01	4.42E+01	1.97E+01
38	7.23	9.60E-04	1.58E-01	1.90E-04	9.51E+01	4.73E+01	2.24E+01
39	7.77	7.20E-04	1.37E-01	1.77E-04	9.56E+01	4.99E+01	2.49E+01
40	8.35	7.20E-04	1.58E-01	2.20E-04	9.61E+01	5.30E+01	2.80E+01
41	8.97	8.40E-04	2.13E-01	3.18E-04	9.67E+01	5.71E+01	3.25E+01
42	9.64	3.60E-04	1.05E-01	1.69E-04	9.70E+01	5.91E+01	3.49E+01
43	10.3	6.00E-04	2.03E-01	3.50E-04	9.74E+01	6.30E+01	3.98E+01
44	11.1	4.80E-04	1.87E-01	3.47E-04	9.78E+01	6.67E+01	4.47E+01
45	11.9	8.40E-04	3.78E-01	7.55E-04	9.84E+01	7.40E+01	5.53E+01
	12.8	4.80E-04	2.50E-01	5.35E-04	9.83E+01	7.88E+01	6.28E+01
47	13.8	7.20E-04	4.32E-01	9.96E-04	9.93E+01	8.71E+01	7.68E+01
48	14.8	9.60E-04	6.66E-01	1.65E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.0CE+02	1.00E+02	1.00E+02
TOTAL			.17E+00 7.				

FILE NAME: OUT5 14.004 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		001101			CIVI	ATTUR #	
01111	D.T.A		ENTRATIONS		NUMBER	ULATIVE % SURFACE	MASS
CHNL		NUMBER 1.20E-04	SURFACE 8.32E-05	MASS 6.51E-09	8.99E-02	1.32E-03	7.11E-05
<b>〈</b>	.486 .504	2.40E-04	1.92E-04		2.70E-01		2.47E-04
1 2	.542	4.80E-04	4.43E-04		6.29E-01	1.14E-02	6.85E-04
3	.581	7.20E-04	7.65E-04		1.17E+00	2.35E-02	1.49E-03
4	.625	7.20E-04	8.84E-04		1.71E+00	3.76E-02	2.50E-03
5	.673	1.56E-03	2.22E-03				5.22E-03
6	.723	1.56E-03	2.57E-03		4.05E+00	1.13E-01	8.60E-03
7	.777	2.64E-03	5.01E-03		6.03E+00	1.93E-01	1.57E-02
8	.835	2.52E-03	5.53E-03		7.91E+00	2.81E-01	2.41E-02
9	.897	3.48E-03	8.81E-03		1.05E+01	4.20E-01	3.85E-02
10	.964	3.36E-03	9.83E-03		1.30E+01	5.76E-01	5.58E-02
11	1.03	3.84E-03	1.30E-02	2.24E-06	1.59E+01	7.82E-01	8.02E-02
12	1.11	5.52E-03	2.15E-02	4.00E-06	2.01E+01	1.12E+00	1.24E-01
13	1.19	5.64E-03	2.54E-02		2.43E+01	1.53E+00	1.79E-01
14	1.28	7.20E-03	3.74E-02		2.97E+01	2.12E+00	2.67E-01
15	1.38	6.72E-03	4.04E-02	9.30E-06	3.47E+01	2.76E+00	3.68E-01
16	1.48	5.88E-03	4.08E-02	1.01E-05	3.91E+01	3.41E+00	4.79E-01
17	1.59	6.36E-03	5.09E-02		4.39E+01	4.22E+00	6.27E-01
18	1.71	7.44E-03	6.88E-02	1.97E-05	4.95E+01	5.31E+00	8.41E-01
19	1.84	6.24E-03	6.66E-02	2.05E-05	5.41E+01	6.36E+00	1.06E+00
20	1.98	5.28E-03	6.51E-02	2.15E-05	5.81E+01	7.40E+00	1.30E+00
21	2.12	5.04E-03	7.18E-02	2.55E-05	6.19E+01	8.53E+00	1.58E+00
22	2.48	5.52E-03	9.07E-02		6.60E+01	9.97E+00	1.96E+00
23	2.45	4.80E-03	9.11E-02	3.73E-05	6.96E-01	1.14E+01	2.36E+00
24	2.64	2.88E-03	6.31E-02	2.78E-05	7.18E+01	1.24E+01	2.67E+00
25	2.83	3.36E-03	8.51E-02		7.43E+01.		3.11E+00
26	3.05	3.84E-03	1.12E-01	5.71E-05	7.72E+01	1.56E+01	3.73E+00
	3.27	3.00E-03	1.01E-01	5.53E-05	7.94E+01	1.72E+01	4.33E+00
28	3.52	2.28E-03	8.89E-02		8.11E+01	1.86E+01	4.90E+00
29	3.78	1.44E-03	6.48E-02	4.09E-05	8.22E+01	1.96E+01	5.35E+00
30	4.06	1.92E-03	9.98E-02	6.77E-05	8.30E+01	2.12E+01	6.09E+00
31	4.37	1.56E-03	9.37E-02	6.82E-05	8.48E+01	. 2.27E+01	6.83E+00
32	4.69	2.04E-03	1.41E-01	1.11E-04	8.63E+01	2.49E+01	8.04E+00
33	5.04	1.80E-03	1.44E-01	1.21E-04	8.77E+01	2.72E+01	9.37E+00
34	5.42	1.68E-03	1.55E-01	1.40E-04	8.89E+01	2.97E+01	1.09E+01
35	5.82	9.60E-04	1.02E-01	9.96E-05	8.97E+01	3.13E+01	1.20E+01
36	6.26	1.80E-03	2.22E-01	2.32E-04	9.10E+01	3.48E+01	1.45E+01
37	€.73	8.40E-04	1.20E-01	1.34E-04	9.16E+01	3.67E+01	1.60E+01
38	7.23	1.68E-03	2.76E-01	3.33E-04	9.29E+01	4.11E+01	1.96E+01
39	7.77	1.20E-03	2.28E-01	2.95E-04	9.38F+01	4.47E+01	2.28E+01
40	8.35	1.32E-03	2.89E-01	4.03E-04	9.48E+01	4.93E+01	2.72E+01
41	8.97	3.60E-04	9.11E-02	1.36E-04	9.51E+01	5.07E+01	2.87E+01
42	9.64	1.20E-03	3.51E-01	5.64E-04	9.60E+01	5.63E+01	3.49E+01
13	10.3	6.00E-04	2.03E-01	3.50E-04	9.64E+01	5.95E+01	3.87E+01
44	11.1	7.20E-04	2.81E-01	5.21E-04	9.69E+01	5.40E+01	4.44E+01
15	11.9	1.20E-03	5.40E-01	1.08E-03	9.78E+01	7.25E+01	5.€2E+01
46	12.8	1.08E-03	5.61E-01	1.20E-03	9.87E+01	8.14E+01	6.93E+01
47	13.8	8.40E-04	5.04E-01	1.16E-03	9.93E+01	8.94E+01	8.20E+01
48	14.8	9.60E-04	6.66E-01	1.65E-03	1.00E+02	1.00E+02	1.00E+02
<b>&gt;</b>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	.5:	1.33E-01 6	3.30E+00 9.	16E-C3			

#### TSI AERODYNAMIC PARTICLE SIZER

EFFIC. CORRECT.: D1

FILE NAME: OUT5 14.005 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1

CUMULATIVE % CONCENTRATIONS SURFACE MASS NUMBER SURFACE MASS CHNL DIA NUMBER 9.60E-04 5.90E-04 4.37E-08 6.98E-01 8.91E-03 4.40E-04 .486 7.20E-04 5.76E-04 4.85E-08 1.22E+00 1.76E-02 9.28E-04 .504 3.60E-04 3.32E-04 3.00E-08 1.48E+00 2.26E-02 1.23E-03 .542 4.80E-04 5.10E-04 4.95E-08 1.83E+00 3.03E-02 1.73E-03 8.40E-04 1.03E-03 1.07E-07 2.44E+00 4.59E-02 2.81E-03 1.56E-03 2.22E-03 2.49E-07 3.58E+00 7.94E-02 5.32E-03 1.92E-03 3.16E-03 3.81E-07 4.97E+00 1.27E-01 9.15E-03 .723 3.48E-03 6.61E-03 8.56E-07 7.50E+00 2.27E-01 1.78E-02 1.05E-02 1.47E-06 1.10E+01 3.86E-01 3.25E-02 4.80E-03 4.56E-03 1.15E-02 1.73E-06 1.43E+01 5.60E-01 4.99E-02 4.56E-03 1.33E-02 2.14E-06 1.76E+01 7.61E-01 7.15E-02 10 4.80E-03 1.62E-02 2.80E-06 2.11E+01 1.01E+00 9.97E-02 11 1.69E-02 3.13E-06 2.43E+01 1.26E+00 1.31E-01 12 4.32E-03 2.92E-02 5.82E-06 2.90E+01 1.70E+00 1.90E-01 6.48E-03 13 7.68E-03 3.99E-02 8.57E-06 3.46E+01 2.30E+00 2.76E-01 14 6.60E-03 3.96E-02 9.13E-06 3.94E+01 2.90E+00 3.68E-01 15 4.49E-02 1.11E-05 4.41E+01 3.58E+00 4.50E-01 6.48E-03 7.80E-03 6.25E-02 1.66E-05 4.97E+01 4.52E+00 6.47E-01 17 5.16E-03 4.77E-02 1.36E-05 5.35E+01 5.24E+00 5.28E-03 5.64E-62 1.73E-05 5.73E+01 6.09E+00 19 6.85E+00 5.03E-02 1.06E-05 6.03E+01 4.08E-03 4.44E-03 6.32E-02 2.24E-05 6.35E+01 7.81E+00 21 7.89E-02 3.01E-05 6.70E+01 9.00E+00 4.80E-03 7.06E-02 2.89E-05 6.97E+01 1.01E+01 3.72E-03 2.45 7.03E-02 3.36E-05 7.23E+01 1.12E+01 1.28E+00 2.643.48E-03 1.06E-01 5.03E-05 7.53E+01 1.26E+01 2.83 4.20E-03 1.3SE+01 6.31E-02 3.21E-05 7.69E+01 3.05 2.16E-03 7.70E-02 4.20E-05 7.85E+01 1.49E+01 2.18E-03 1.08E-01 6.32E-05 8.05E+01 1.66E+01 4.17E+00 3.522.76E-03 8.64E-02 5.45E-05 8.19E+01 1.79E+01 3.78 1.92E-03 6.24E-02 4.23E-05 8.28E+01 1.88E+01 4.06 1.20E-03 1.68E-03 1.01E-01 7.35E-05 8.40E+01 2.03E+01 5.89E+00 4.37 1.16E-01 9.12E-05 8.53E+01 2.21E+01 1.68E-03 1.63E-01 1.37E-04 8.67E+01 2.46E+01 2.04E-03 5.64 2.00E-01 1.81E-04 8.83E+01 2.76E+01 1.00E+01 5.42 2.16E-03 2.82E-01 2.74E-04 9.02E+01 3.18E+01 1.28E+01 2.64E-03 5.82 1.63E-01 1.70E-04 9.12E+01 3.43E+01 1.45E+01 1.32E-03 3.76E+01 2.22E-01 2.49E-04 9.23E+01 37 6.73 1.56E-03 9.29E+01 3.97E+01 1.87E÷01 7.23 1.38E-01 1.66E-04 8.40E-04 9.39E+01 4.35E+01 7.77 1.32E-03 2.51E-01 3.25E-04 1.58E-01 2.20E-04 9.44E+01 4.59E+01 2.41E+01 7.20E-04 8.35 2.73E-01 4.09E-04 9.52E+01 5.00E+01 1.08E-03 41 8.97 9.55E+01 5.16E+01 1.05E-01 1.69E-04 3.00E+01 3.60E-04 42 6.00E-04 2.03E-01 3.50E-04 9.59E+01 5.47E+01 3.35E+01 10.3 43 2.81E-01 5.21E-04 9.64E+01 5.89E+01 3.87E+01 7.20E-04 1.68E-03 7.56E-01 1.51E-03 9.76E+01 7.03E+01 5.39E+01 46 12.8 8.40E-04 4.37E-01 9.36E-04 9.83E+01 7.69E+01 6.34E+01 47 13.8 1.44E-03 8.65E-01 1.99E-03 9.93E+01 9.00E+01 8.34E+01 48 14.8 9.60E-04 6.66E-01 1.65E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 TOTALS: 1.38E-01 6.62E+00 9.93E-03



FILE NAME: OUT5 14.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCE	ENTRATIONS		CUMU	LATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	7.20E-04	4.35E-04	3.20E-08	6.85E-01	8.91E-03	4.75E-04
1	.504	4.80E-04	3.84E-04	3.23E-08	1.14E+00	1.68E-02	9.56E-04
2	.542	3.60E-04	3.32E-04	3.00E-08	1.48E+00	2.36E-02	1.40E-03
3	.581	4.80E-04	5.10E-04	4.95E-08	1.94E+00	3.40E-02	2.14E-03
4	.625	3.60E-04	4.42E-04	4.60E-08	2.28E+00	4.31E-02	2.82E-03
5	.673	1.20E-03	1.71E-03	1.92E-07	3.42E+00	7.80E-02	5.67E-03
6	.723	1.68E-03	2.76E-03	3.33E-07	5.02E+00	1.35E-01	1.06E-02
7	.777	2.40E-03	4.56E-03	5.91E-07	7.31E+00	2.28E-01	1.94E-02
8	.835	2.28E-03	5.00E-03	6.96E-07	9.47E+00	3.30E-01	2.98E-02
9	.897	2.76E-03	6.99E-03	1.05E-06	1.21E+01	4.73E-01	4.53E-02
10	.964	3.60E-03	1.05E-02	1.69E-06	1.55E+01	6.89E-01	7.05E-02
11	1.03	3.96E-03	1.34E-02	2.31E-06	1.93E+01	9.63E-01	1.05E-01
12	1.11	3.4EE-03	1.36E-02	2.52E-06	2.26E+01	1.24E+00	1.42E-01
13	1.19	4.08E-03	1.84E-02	3.67E-06	2.65E+01	1.62E+00	1.97E-01
14	1.28	4.44E-03	2.31E-02	4.95E-06	3.07E+01	2.09E+00	2.70E-01
15	1.38	5.64E-03	3.39E-02	7.80E-06	3.61E+01	2.78E+00	3.86E-01
16	1.48	4.20E-03	2.91E-02	7.21E-06	4.01E+01	3.38E+00	4.94E-01
17	1.59	6.48E-03	5.19E-02	1.38E-05	4.62E+01	4.44E+00	6.99E-01
18	1.71	4.32E-03	3.99E-02	1.14E-05	5.03E+01	5.26E+00	8.69E-01
19	1.84	3.60E-03	3.84E-02	1.18E-05	5.38E+01	6.04E+00	1.04E+00
20	1.98	3.96E-03	4.88E-02	1.61E-05	5.75E+01	7.04E+00	1.28E+00
21	2.12	4.20E-03	5.98E-02	2.12E-05	6.15E+01	8.27E+00	1.60E-00
22	2.28	2.64E-03	4.34E-02	1.65E-05	6.40E+01	9.16E+00	1.85E+00
23	2.45	3.12E-03	5.92E-02	2.43E-(5	6.70E+01	1.042+01	2.21E+00
24	2.64	3.36E-03	7.36E-02	3.24E-05	7.02E+01	1.19E+01	1.69E+00
25	2.83	2.52E-03	6.38E-02	3.02E-05	7.26E+01	1.32E+01	3.14E+00
26	3.05	3.00E-03	8.77E-02	4.46E-05	7.55E+01	1.50E+01	3.80E+00
27	3.27	2.28E-03	7.70E-02	4.20E-05	7.76E+01	1.66E+01	4.42E+00
28	3.52	1.92E-03	7.49E-02	4.39E-05	7.95E+01	1.81E+01	5.08E+00
29	3.78	1.56E-03	7.02E-02	4.43E-05	8.09E+01	1.95E+01	5.74E+00
30	4.06	1.44E-03	7.49E-02	5.08E-05	8.23E+01	2.11E+01	6.49E+00
31	4.37	1.80E-03	1.08E-01	7.87E-05	8.40E+01	2.33E+01	7.66E+00
32	4.69	1.20E-03	8.32E-02	6.51E-05	8.52E+01	2.50E+01	8.63E+00
33	5.04	1.20E-03	9.61E-02	8.08E-05	8.63E+01	2.69E+01	9.83E+00
34	5.42	1.32E-03	1.22E-01	1.10E-04	8.76E+01	2.94E+01	1.15E+01
35	5.82	2.04E-03	2.18E-01	2.12E-04	8.95E+01	3.39E+01	1.46E+01
36	6.26	1.44E-03	1.78E-01	1.85E-04	9.09E+01	3.75E+01	1.74E+01
37	6.73	7.20E-04	1.03E-01	1.15E-04	9.16E+01	3.96E+01	1.91E+01
38	7.23	8.40E-04	1.38E-01	1.66E-04	9.24E+01	4.24E+01	2.16E+01
<b>39</b>	7.77	1.44E-03	2.73E-01		9.37E+01	4.80E+01	2.68E+01
40	8.35	9.60E-04		2.93E-04	9.46E+01	5.24E+01	3.12E+01
41	8.97	1.20E-03	3.04E-01	4.55E-04	9.58E+01	5.86E+01	3.79E+01
42	9.64	4.80E-04	1.40E-01	2.26E-04	9.62E+01	6.14E+01	4.13E÷01
43	10.3	7.20E-04	2.43E-01	4.20E-04	9.69E+01	6.64E+01	4.75E+01
44	11.1	1.08E-03		7.82E-04	9.79E+01	7.50E+01	5.92E+01
45	11.9	3.60E-04	1.62E-01	3.23E-04	9.83E+01	7.84E+01	€.40E+01
46	12.8	8.40E-04	4.37E-01	9.36E-04	9.91E+01	8.73E+01	7.79E+01
47	13.8	4.80E-04	2.88E-01	6.64E-04	9.95E+01	9.32E+01	8.78E+01
48	14.8	1.80E-04	3.33E-01	8.24E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E÷02
TOTAL	ւ5:	1.00E-01 4	.89E+00 6.	3E-03			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 14.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

•				<b>~</b> 11		
		ENTRATIONS	W . 00		ULATIVE %	MACC
CHNL DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE 4.49E-03	MASS 2.37E-04
< .486	3.60E-04	2.18E-04	1.60E-08	3.53E-01		5.97E-04
1 .504	3.60E-04	2.88E-04	2.42E-08	7.06E-01 1.18E+00		1.19E-03
2 .542	4.80E-04	4.43E-04	4.00E-08 6.18E-08	1.76E+00		2.11E-03
3 .581	6.00E-04	6.38E-04	1.53E-07	2.94E+00		4.39E-03
4 .625	1.20E-03	1.47E-03	2.11E-07	4.24E+00		7.52E-03
5 .673	1.32E-03 1.32E-03	1.88E-03 2.17E-03	2.62E-07	5.53E+00		1.14E-02
6 .723	2.52E-03	4.79E-03	6.20E-07	8.00E+00		2.06E-02
7 .777	2.32E-03 2.28E-03	5.00E-03	6.96E-07	1.02E+01	3.48E-01	3.10E-02
8 .835 9 .897	1.56E-03	3.95E-03	5.91E-07	1.18E+01	4.30E-01	3.97E-02
	2.64E-03	7.72E-03	1.24E-06	1.44E+01	5.89E-01	5.82E-02
	4.08E-03	1.38E-02	2.38E-06	1.84E+01	8.73E-01	9.35E-02
	3.60E-03	1.40E-02	2.61E-06	2.19E+01	1.16E+00	1.32E-01
	3.96E-03	1.78E-02	3.56E-06	2.58E+01	1.53E+00	1.85E-01
13 1.19 14 1.28	3.48E-03	1.81E-02	3.88E-06	2.92E+01	1.90E+00	2.43E-01
	4.08E-03	2.45E-02	5.65E-06	3.32E+01	2.41E+00	
15 1.38	4.32E-03	2.99E-02	7.41E-06	3.74E+01	3.03E+00	4.37E-01
16 1.48	5.40E-03	4.32E-02	1.15E-05	4.27E+01	3.92E+00	6.08E-01
17 1.59	4.68E-03	4.33E-02	1.24E-05	4.73E+01		7.91E-01
18 1.71	4.08E-03	4.36E-02	1.34E-05			9.90E-01
19 1.84 20 1.98	4.08E-03	5.03E-02	1.66E-05	5.58E+01	6.75E+00	1.24E+00
	4.08E-03	5.81E-02	2.06E-05			1.54E+00
21 2.12	2.88E-03		1.80E-05			1.81E+00
22 2.28 23 1.45	3.36E-03	6.38E-02	2.61E-05			2.20E+00
<del></del> ·	2.88E-03	6.31E-02	2.78E-05			1.61E+00
24 2.64	2.76E-03		3.31E-05			3.10E+00
25 2.83	2.16E-03		3.21E-05			3.58E+00
26 3.05 27 3.27	2.10E-03 2.40E-03		4.43E-05	7.54E+01	1.60E+01	4.24E+00
			6.04E-05			5.13E+00
		• • • • • •	3.75E-05			5.69E+00
29 3.78 30 4.06	3.00E-03		1.06E-04	8.22E+01		7.26E+00
31 4.37	2.04E-03		8.92E-05	8.42E+01	2.50E+01	8.59E+00
32 4.69			1.04E-04	8.61E+G1		1.01E+01
33 5.04	1.32E-03		8.89E-05			1.15E+01
34 5.42	1.56E-03		1.30E-04	8.89E+01		1.34E+01
35 5.82	1.80E-03		1.87E-04	9.07E÷01		1.62E+01
36 6.26			6.18E-05			1.71E+01
37 6.73	9.60E-04		1.53E-04			1.94E+01
38 7.23	9.60E-04	1.58E-01	1.90E-04			2.22E+01
39 7.77	7.20E-04	1.37E-01	1.77E-04	9.38E+01		2.48E+01
40 8.35			1.83E-04			2.75E+01
41 8.97	6.00E-04	1.52E-01	2.27E-04			3.09E+01
42 9.64	8.40E-04	2.46E-01	3.95E-04			3.68E+01
43 10.3	9.60E-04		5.60E-04	9.67E+01		4.51E+01
44 11.1	7.20E-04		5.21E-04	9.74E+01		5.28E+01
45 11.9	9.60E-04		8.62E-04	-		6.56E+01
46 12.8		2.50E-01	5.35E-04			7.36E+01
47 13.8	8.40E-04		1.16E-03	9.96E+01		9.08E+01
48 14.8			6.18E-04	1.00E+02		1.00E+02
> 15.4	0.00E+00		0.0CE+00			1.00E+02
TOTALS:		4.85E+00 6.				

FILE NAME: OUT5 14.009 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

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CHNL DIA ( .486			CONCE	CATE ATTONC		CIIMI	JLATIVE %	
\$\begin{array}{c c c c c c c c c c c c c c c c c c c	CUNI D	NT A			MASS			MASS
1,504								
1.					=			
1.581								
4         .625         4.80E-04         5.89E-04         6.14E-08         2.43E+00         5.07E-02         3.41E-03           5         .673         6.00E-04         8.54E-04         9.58E-08         3.15E+00         7.21E-02         5.11E-03           6         .723         9.60E-04         1.58E-03         1.90E-07         4.29E+00         1.12E-01         8.50E-03           7         .777         1.68E-03         3.19E-03         4.13E-07         6.29E+00         1.92E-01         1.59E-02           8         8.35         2.04E-03         4.47E-03         8.19E-07         1.13E+01         4.42E-01         4.16E-02           10         9.64         1.68E-03         4.91E-03         7.90E-07         1.33E+01         4.42E-01         4.16E-02           11         1.03         3.36E-03         1.13E-02         1.96E-06         1.73E+01         8.60E-01         9.06E-02           12         1.11         3.03         3.26E-03         1.40E-02         3.08E-06         3.29E+01         1.23E+00         2.17E-01           14         1.28         2.76E-03         1.30E-02         3.08E-06         3.29E+01         2.13E+00         2.27E-01           15         1.36         2.76E-03 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
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16			_					3.25E-01
17 1.59 5.28E-03 4.23E-02 1.12E-05 4.54E+01 4.32E+00 6.69E-01 18 1.71 4.20E-03 3.86E-02 1.11E-05 5.04E+01 5.31E+00 6.69E-01 19 1.84 3.48E-03 3.71E-02 1.44E-05 5.45E+01 6.24E+00 1.07E+00 20 1.98 2.64E-03 3.26E-02 1.07E-05 5.45E+01 7.06E+00 1.26E+00 21 2.12 2.64E-03 7.76E-02 1.33E-06 6.66E+01 7.06E+00 1.26E+00 22 2.28 2.86E-02 4.72E-02 1.80E-05 6.4EE+01 9.19E-00 1.50E+00 23 2.45 2.04E-03 2.76E-02 1.80E-05 6.4EE+01 1.02E+01 1.16E+00 24 2.64 2.26E-03 2.67E-02 1.80E-05 6.91E+01 1.02E+01 1.16E+00 25 2.83 2.40E-03 6.08E-02 2.20E-05 6.91E+01 1.02E+01 1.12E+00 25 2.83 2.40E-03 6.08E-02 2.87E-05 7.22E+01 1.29E+01 2.49E+00 26 3.05 8.40E-04 2.46E-02 1.25E-05 7.22E+01 1.26E+01 2.23E+06 27 3.27 2.16E-03 7.29E-02 3.98E-05 7.3EE+01 1.54E+01 2.3E+00 28 3.52 2.04E-03 7.29E-02 4.67E-05 7.8EE+01 1.74E+01 3.94E+00 29 3.78 8.40E-04 3.78E-02 3.98E-05 7.8EE+01 1.74E+01 3.94E+00 29 3.78 8.40E-04 3.78E-02 2.39E-05 7.9EE+01 1.83E+01 5.20F+00 30 4.06 1.80E-03 9.36E-02 6.34E-05 8.14E+01 2.07E+01 6.38E+01 31 4.37 1.80E-03 7.49E-02 6.34E-05 8.3EE+01 2.34E+01 5.20F+00 32 4.69 1.06E-03 7.49E-02 8.02E-05 8.46E+01 2.59E+01 6.28E+01 35 5.82 7.20E-04 7.69E-02 7.47E-05 8.85E+01 2.34E+01 6.28E+01 36 6.26 1.32E-03 1.54E-01 1.29E-04 8.71E+01 2.92E+01 1.11E+01 34 5.42 9.60E-04 8.87E-02 8.02E-05 8.85E+01 2.34E+01 1.25E+01 37 6.73 8.40E-04 1.20E-01 1.34E-04 9.07E+01 2.74E+01 1.69E+01 39 7.77 1.20E-03 2.28E-01 2.99E-04 9.07E+01 3.38E+01 1.3EE+01 40 8.35 3.60E-04 7.89E-02 1.10E-04 9.3EE+01 5.26E+01 3.00E+01 41 8.97 4.80E-04 1.20E-01 1.34E-04 9.56E+01 5.26E+01 3.20E+01 41 8.97 4.80E-04 1.20E-01 1.82E-04 9.60E+01 5.46E+01 3.20E+01 41 1.1 3.60E-04 7.89E-02 7.00E-05 9.6EE+01 6.38E+01 3.20E+01 41 1.1 3.60E-04 7.89E-02 1.10E-04 9.56E+01 6.38E+01 3.20E+01 41 1.1 3.60E-04 4.05E-02 7.00E-05 9.6EE+01 6.18E+01 3.20E+01 41 1.1 3.60E-04 4.05E-02 7.00E-05 9.6EE+01 6.18E+01 3.20E+01 42 9.64 3.60E-04 4.99E-01 1.07E-03 9.89E+01 8.41E+01 7.28E+01 43 10.3 1.20E-04 4.05E-02 7.00E-05 9.6EE+01 6.18E+01 5.37E+01 45 11.9 6.00E-04 4.05E-02 7.00E-05 9.6EE+01 6.18E+01 5.37E+01 45 12								
1.71							4.33E+00	6.69E-01
19							5.31E+00	8.56E-01
20         1.98         2.64E-03         3.26E-02         1.07E-05         5.77E+01         7.06E+00         1.26E+06           21         2.12         2.64E-03         3.76E-02         1.33E-05         6.06E+01         8.06E+00         1.50E+06           22         2.28         2.86E-03         4.77E-02         1.89E-05         6.4EE+01         9.19E-00         1.82E+06           23         2.45         2.04E-03         3.60E-02         2.20E-05         6.91E+01         1.49E+01         2.49E+02           25         2.83         2.40E-03         6.06E-02         2.20E-05         6.91E+01         1.49E+01         2.49E+02           26         3.05         8.40E-04         2.46E-02         1.25E-05         7.22E+01         1.29E+01         2.01E+00           27         3.27         2.16E-03         7.29E-02         3.98E-05         7.58E+01         1.54E+01         4.77E+00           29         3.78         8.40E-04         3.78E-02         2.39E-05         7.93E+01         1.71E+01         4.77E+00           29         3.78         8.40E-03         7.49E-02         2.36E+05         8.43E+01         2.57E+01         5.73E+00           31         4.37         1.80E-03         7.						5.48E+01	6.24E+00	1.07E+00
21 2.12 2.64E-03 2.76E-32 1.33E-05 6.08E+01 8.0CE+00 1.50E+20 22 2.28							7.06E+00	1.26E+00
22         1.28         2.86F-C3         4.73F-C2         1.80F-C5         6.42F+C1         9.19F-C0         1.82F+CC           23         2.45         2.04F-C3         2.87F-C2         1.59F-C5         6.67F+C1         1.02F+C1         1.10F+C6           24         2.64         2.28F-O3         3.00F-C2         2.20F-O5         6.91F+O1         1.14F+O1         2.49F+C0           25;         2.83         2.40F-O3         6.08F-O2         2.87F-O5         7.22F+O1         1.29F+O1         2.01F+D0           26         3.05         8.40F-O4         2.46F-O2         1.25F-O5         7.32F+O1         1.54F+O1         3.23F+O0           27         3.27         2.16E-O3         7.29F-O2         3.98F-O5         7.58F+O1         1.54F+O1         3.94F+O0           28         3.52         2.04E-O3         7.95F-O2         4.67F-O5         7.83F+O1         1.74F+O1         4.77F+C0           29         3.78         8.40E-O4         3.78F-O2         2.39F-O5         7.92F+O1         1.83F+O1         5.20F+O0           30         4.06         1.80E-O3         1.08F+O1         7.87F+O5         8.35F+O1         2.34F+O1         5.26F+O1           31         4.59         1.08E+O1         7							8.0(E+00	1.50E+00
2.45								1.82E+00
24         2.64         2.28E-03         5.00E-02         2.20E-05         6.94E+01         1.14E+03         2.49E+00           25         2.83         2.40E-03         6.08E-02         2.87E-05         7.22E+01         1.29E+01         2.01E+00           26         3.05         8.40E-04         2.46E-02         1.28E-05         7.32E+01         1.54E+01         3.28E+00           27         3.27         2.16E-03         7.29E-02         3.98E-05         7.58E+01         1.54E+01         4.77E+00           29         3.78         8.40E-04         3.78E-02         2.39E-05         7.93E+01         1.83E+01         5.20F-00           30         4.06         1.86E-03         9.36E-02         6.34E-05         8.14E+01         2.07E+01         6.38E+02           31         4.37         1.80E-03         1.08E-01         7.87E-05         8.35E+01         2.34E+01         7.73F+00           32         4.69         1.08E-03         7.49E-02         5.86E-05         8.48E+01         2.57E+01         6.73E+00           33         5.04         1.92E-03         1.54E-01         1.29E-05         8.24E+01         2.34E+01         7.73F+00           34         5.42         9.60E-04         8.						6.67E+01	1.02E±01	1.10E+00
25   2.83						6.91E+01	1.14E+01	2.49E+00
26         3.05         8.40E-04         2.46E-02         1.25E-05         7.32E+01         1.36E+01         2.23E+05           27         3.27         2.16E-03         7.29E-02         3.98E-05         7.5EE+01         1.54E+01         3.94E+06           28         3.52         2.04E-03         7.95E-02         4.67E-05         7.83E+01         1.74E+01         4.77E+05           29         3.78         8.40E-04         3.78E-02         2.39E-05         7.93E+01         1.83E+01         5.20E+06           30         4.06         1.80E-03         9.36E-02         6.34E-05         8.14E+01         2.07E+01         6.38E+02           31         4.37         1.80E-03         1.08E-01         7.87E-05         8.35E+01         2.34E+01         6.73E+00           32         4.69         1.08E-03         7.49E-02         5.86E-05         8.48E+01         2.57E+01         8.77E+00           33         5.04         1.92E-03         1.54E-01         1.29E-04         8.71E+01         2.92E+01         1.11E+01           34         5.42         9.60E-04         8.87E-02         8.02E-05         8.83E+01         3.3E+01         1.38E+01           35         5.82         7.20E-04         7.6								2.01E+00
27 3.27 2.16E-03 7.29E-02 3.98E-05 7.58E+01 1.54E+01 3.94E+00 28 3.52 2.04E-03 7.95E-02 4.67E-05 7.83E+01 1.74E+01 4.77E+00 29 3.78 8.40E-04 3.78E-02 2.39E-05 7.93E+01 1.83E+01 5.20F-00 30 4.06 1.80E-03 9.36E-02 6.34E-05 8.14E+01 2.07E+01 6.38E+00 31 4.37 1.80E-03 1.08E-01 7.87E-05 8.35E+01 2.34E+01 7.73E+00 32 4.69 1.06E-03 7.49E-02 5.86E-05 8.48E+01 2.57E+01 6.77E+00 33 5.04 1.92E-03 1.54E-01 1.29E-04 8.71E+01 2.92E+01 1.11E+01 34 5.42 9.60E-04 8.87E-02 8.02E-05 8.83E+01 3.14E+01 1.25E+01 35 5.82 7.20E-04 7.69E-02 7.47E-05 8.91E+01 3.33E+01 1.38E+01 3.38E+01 3.38E+01 3.38E+01 3.38E+01 3.38E+01 3.50E+01 3.5								3.23E+00
28       3.52       2.04E-G3       7.95E-O2       4.67E-O5       7.83E+O1       1.74E+O1       4.77E+O3         29       3.78       8.40E-O4       3.78E-O2       2.39E-O5       7.93E+O1       1.83E+O1       5.20E+OC         30       4.06       1.80E-O3       9.36E-O2       6.34E-O5       8.14E+O1       2.07E+O1       5.33E+CO         31       4.37       1.80E-O3       1.08E-O1       7.87E-O5       8.25E+O1       2.34E+O1       7.73E+CO         32       4.69       1.08E-O3       7.49E-O2       5.86E-O5       8.48E+O1       2.57E+O1       7.74E+O3         33       5.04       1.92E-O3       1.54E-O1       1.29E-O4       8.71E+O1       2.92E+O1       1.11E+O1         34       5.42       9.60E-O4       8.87E-O2       8.02E-O5       8.83E+O1       3.14E+O1       1.25E+O1         35       5.82       7.20E-O4       7.69E-O2       7.47E-O5       8.91E+O1       3.33E+O1       1.38E+O1         36       6.26       1.32E-O3       1.63E-O1       1.70E-O4       9.07E+O1       2.74E+O1       1.69E+O1         37       6.73       8.40E-O4       1.20E-O1       1.34E-O4       9.17E+O1       4.04E+O1       1.93E+O1         39 <td></td> <td></td> <td></td> <td></td> <td></td> <td>7.58E+01</td> <td>1.54E+01</td> <td>3.94E+00</td>						7.58E+01	1.54E+01	3.94E+00
29							1.74E+01	4.77E+00
30       4.06       1.80E-03       9.36E-02       6.34E-05       8.14E+01       2.07E+01       6.38E+00         31       4.37       1.80E-03       1.08E-01       7.87E-05       8.35E+01       2.34E+01       7.73E+00         32       4.69       1.08E-03       7.49E-02       5.86E-05       8.48E+01       2.57E+01       8.77E+00         33       5.04       1.92E-03       1.54E-01       1.29E-04       8.71E+01       2.92E+01       1.11E+01         34       5.42       9.60E-04       8.87E-02       8.02E-05       8.83E+01       3.14E+01       1.25E+01         35       5.82       7.20E-04       7.69E-02       7.47E-05       8.91E+01       3.33E+01       1.38E+01         36       6.26       1.32E-03       1.63E-01       1.70E-04       9.07E+01       2.74E+01       1.69E+01         37       6.73       8.40E-04       1.20E-01       1.34E-04       9.17E+01       4.04E+01       1.93E+01         38       7.23       1.56E-03       2.56E-01       3.09E-04       9.36E+01       4.68E+01       2.48E+01         39       7.77       1.20E-03       2.28E-01       2.95E-04       9.50E+01       5.26E+01       3.00E+01         40 <td></td> <td></td> <td></td> <td></td> <td>2.39E-05</td> <td>7.93E+01</td> <td>1.83E+01</td> <td>5.20F+00</td>					2.39E-05	7.93E+01	1.83E+01	5.20F+00
31       4.37       1.80E-03       1.08E-01       7.87E-05       8.35E+01       2.34E+01       7.73E+00         32       4.69       1.08E-03       7.49E-02       5.86E-05       8.48E+01       2.58E+01       8.77E+00         33       5.04       1.92E-03       1.54E-01       1.29E-04       8.71E+01       2.92E+01       1.11E+01         34       5.42       9.60E-04       8.87E-02       8.02E-05       8.83E+01       3.14E+01       1.25E+01         35       5.82       7.20E-04       7.69E-02       7.47E-05       8.91E+01       3.33E+01       1.3EE+01         36       6.26       1.32E+03       1.63E-01       1.70E-04       9.07E+01       2.74E+01       1.69E+01         37       6.73       8.40E-04       1.20E-01       1.34E-04       9.17E+01       4.04E+01       1.93E+01         38       7.23       1.56E-03       2.56E-01       3.09E-04       9.36E+01       4.68E+01       2.48E+01         39       7.77       1.20E-03       2.28E-01       2.95E-04       9.50E+01       5.26E+01       3.20E+01         40       8.35       3.60E-04       7.89E-02       1.10E-04       9.54E+01       5.46E+01       3.22E+01         42 <td></td> <td></td> <td></td> <td>9.36E-02</td> <td>6.34E-05</td> <td>8.14E+01</td> <td>2.07E+01</td> <td>6.33E+00</td>				9.36E-02	6.34E-05	8.14E+01	2.07E+01	6.33E+00
32       4.69       1.08E-03       7.49E-02       5.86E-05       8.48E+01       2.57E+01       8.77E+00         33       5.04       1.92E-03       1.54E-01       1.29E-04       8.71E+01       2.92E+01       1.11E+01         34       5.42       9.60E-04       8.87E-02       8.02E-05       8.E3E+01       3.14E+01       1.25E+01         35       5.82       7.20E-04       7.69E-02       7.47E-05       8.91E+01       3.33E+01       1.36E+01         36       6.26       1.32E-03       1.63E-01       1.70E-04       9.07E+01       2.74E+01       1.69E+01         37       6.73       8.40E-04       1.20E-01       1.34E-04       9.17E+01       4.04E+01       1.93E+01         38       7.23       1.56E-03       2.56E-01       3.09E-04       9.36E+01       4.68E+01       2.48E+01         39       7.77       1.20E-03       2.28E-01       2.95E-04       9.50E+01       5.26E+01       3.00E+01         40       8.35       3.60E-04       7.89E-02       1.10E-04       9.54E+01       5.76E+01       3.22E+01         42       9.64       3.60E-04       1.05E-01       1.69E-04       9.64E+01       6.03E+01       3.82E+01         43 <td></td> <td></td> <td>1.80E-03</td> <td>1.08E-01</td> <td>7.87E-05</td> <td>8.35E+01</td> <td>2.34E+01</td> <td>7.73E+00</td>			1.80E-03	1.08E-01	7.87E-05	8.35E+01	2.34E+01	7.73E+00
33       5.04       1.92E-03       1.54E-01       1.29E-04       8.71E+01       2.92E+01       1.11E+01         34       5.42       9.60E-04       8.87E-02       8.02E-05       8.83E+01       3.14E+01       1.25E+01         35       5.82       7.20E-04       7.69E-02       7.47E-05       8.91E+01       3.33E+01       1.38E+01         36       6.26       1.32E-03       1.63E-01       1.70E-04       9.07E+01       3.74E+01       1.69E+01         37       6.73       8.40E-04       1.20E-01       1.34E-04       9.17E+01       4.04E+01       1.93E+01         38       7.23       1.56E-03       2.56E-01       3.09E-04       9.36E+01       4.68E+01       2.48E+01         39       7.77       1.20E-03       2.28E-01       2.95E-04       9.50E+01       5.26E+01       3.00E+01         40       8.35       3.60E-04       7.89E-02       1.10E-04       9.54E+01       5.46E+01       3.20E+01         41       8.97       4.80E-04       1.22E-01       1.82E-04       9.60E+01       5.76E+01       3.52E+01         42       9.64       3.60E-04       1.05E-01       1.69E-04       9.64E+01       6.03E+01       3.82E+01         43 <td></td> <td></td> <td>1.08E-03</td> <td>7.49E-02</td> <td>5.86E-05</td> <td>8.48E+01</td> <td>2.58E+01</td> <td>8.77E+00</td>			1.08E-03	7.49E-02	5.86E-05	8.48E+01	2.58E+01	8.77E+00
34       5.42       9.60E-04       8.87E-02       8.02E-05       8.83E+01       3.14E+01       1.25E+01         35       5.82       7.20E-04       7.69E-02       7.47E-05       8.91E+01       3.33E+01       1.38E+01         36       6.26       1.32E-03       1.63E-01       1.70E-04       9.07E+01       3.74E+01       1.69E+01         37       6.73       8.40E-04       1.20E-01       1.34E-04       9.17E+01       4.04E+01       1.93E+01         38       7.23       1.56E-03       2.56E-01       3.09E-04       9.36E+01       4.68E+01       2.48E+01         39       7.77       1.20E-03       2.28E-01       2.95E-04       9.50E+01       5.26E+01       3.00E+01         40       8.35       3.60E-04       7.89E-02       1.10E-04       9.54E+01       5.46E+01       3.20E+01         41       8.97       4.80E-04       1.22E-01       1.82E-04       9.60E+01       5.76E+01       3.52E+01         42       9.64       3.60E-04       1.05E-01       1.69E-04       9.64E+01       6.03E+01       3.82E+01         43       10.3       1.20E-04       4.05E-02       7.00E-05       9.66E+01       6.13E+01       3.95E+01         44 <td></td> <td></td> <td>1.92E-03</td> <td>1.54E-01</td> <td>1.29E-04</td> <td>8.71E+01</td> <td>2.92E+01</td> <td>1.11E+01</td>			1.92E-03	1.54E-01	1.29E-04	8.71E+01	2.92E+01	1.11E+01
35       5.82       7.20E-04       7.69E-02       7.47E-05       8.91E+01       3.33E+01       1.38E+01         36       6.26       1.32E-03       1.63E-01       1.70E-04       9.07E+01       -3.74E+01       1.69E+01         37       6.73       8.40E-04       1.20E-01       1.34E-04       9.17E+01       4.04E+01       1.93E+01         38       7.23       1.56E-03       2.56E-01       3.09E-04       9.36E+01       4.68E+01       2.48E+01         39       7.77       1.20E-03       2.28E-01       2.95E-04       9.50E+01       5.26E+01       3.00E+01         40       8.35       3.60E-04       7.89E-02       1.10E-04       9.54E+01       5.46E+01       3.20E+01         41       8.97       4.80E-04       1.22E-01       1.82E-04       9.60E+01       5.76E+01       3.52E+01         42       9.64       3.60E-04       1.05E-01       1.69E-04       9.64E+01       6.03E+01       3.82E+01         43       10.3       1.20E-04       4.05E-02       7.00E-05       9.66E+01       6.13E+01       3.95E+01         44       11.1       3.60E-04       1.40E-01       2.61E-04       9.77E+01       7.16E+01       5.37E+01         45 </td <td></td> <td></td> <td>9.60E-04</td> <td>8.87E-02</td> <td>8.02E-05</td> <td>8.83E+01</td> <td>3.14E+01</td> <td>1.25E+01</td>			9.60E-04	8.87E-02	8.02E-05	8.83E+01	3.14E+01	1.25E+01
36       6.26       1.32E-03       1.63E-01       1.70E-04       9.07E+01       -3.74E+01       1.69E+01         37       6.73       8.40E-04       1.20E-01       1.34E-04       9.17E+01       4.04E+01       1.93E+01         38       7.23       1.56E-03       2.56E-01       3.09E-04       9.36E+01       4.68E+01       2.48E+01         39       7.77       1.20E-03       2.28E-01       2.95E-04       9.50E+01       5.26E+01       3.00E+01         40       8.35       3.60E-04       7.89E-02       1.10E-04       9.54E+01       5.46E+01       3.20E+01         41       8.97       4.80E-04       1.22E-01       1.82E-04       9.60E+01       5.76E+01       3.52E+01         42       9.64       3.60E-04       1.05E-01       1.69E-04       9.64E+01       6.03E+01       3.82E+01         43       10.3       1.20E-04       4.05E-02       7.00E-05       9.66E+01       6.13E+01       3.95F+01         44       11.1       3.60E-04       1.40E-01       2.61E-04       9.76E+01       6.48E+01       4.41E+01         45       11.9       6.00E-04       2.70E-01       5.39E-04       9.77E+01       7.16E+01       5.37E+01         46 </td <td></td> <td></td> <td></td> <td></td> <td>7.47E-05</td> <td>8.91E+01</td> <td>3.33E+01</td> <td>1.38E+01</td>					7.47E-05	8.91E+01	3.33E+01	1.38E+01
38       7.23       1.56E-03       2.56E-01       3.09E-04       9.36E+01       4.68E+01       2.48E+01         39       7.77       1.20E-03       2.28E-01       2.95E-04       9.50E+01       5.26E+01       3.00E+01         40       8.35       3.60E-04       7.89E-02       1.10E-04       9.54E+01       5.46E+01       3.20E+01         41       8.97       4.80E-04       1.22E-01       1.82E-04       9.60E+01       5.76E+01       3.52E+01         42       9.64       3.60E-04       1.05E-01       1.69E-04       9.64E+01       6.03E+01       3.82E+01         43       10.3       1.20E-04       4.05E-02       7.00E-05       9.66E+01       6.13E+01       3.95E+01         44       11.1       3.60E-04       1.40E-01       2.61E-04       9.70E+01       6.48E+01       4.41E+01         45       11.9       6.00E-04       2.70E-01       5.39E-04       9.77E+01       7.16E+01       5.37E+01         46       12.8       9.60E-04       4.99E-01       1.07E-03       9.89E+01       8.41E+01       7.28E+01         47       13.8       3.60E-04       2.16E-01       4.98E-04       9.93E+01       8.96E+01       8.17E+01         48 <td><b>36</b> 6</td> <td>.26</td> <td>1.32E-03</td> <td>1.63E-01</td> <td>1.70E-04</td> <td>9.07E+01</td> <td>.3.74E+01</td> <td>1.69E+01</td>	<b>36</b> 6	.26	1.32E-03	1.63E-01	1.70E-04	9.07E+01	.3.74E+01	1.69E+01
39 7.77 1.20E-03 2.28E-01 2.95E-04 9.50E+01 5.26E+01 3.00E+01 40 8.35 3.60E-04 7.89E-02 1.10E-04 9.54E+01 5.46E+01 3.20E+01 41 8.97 4.80E-04 1.22E-01 1.82E-04 9.60E+01 5.76E+01 3.52E+01 42 9.64 3.60E-04 1.05E-01 1.69E-04 9.64E+01 6.03E+01 3.82E+01 43 10.3 1.20E-04 4.05E-02 7.00E-05 9.66E+01 6.13E+01 3.95E+01 44 11.1 3.60E-04 1.40E-01 2.61E-04 9.70E+01 6.48E+01 4.41E+01 45 11.9 6.00E-04 2.70E-01 5.39E-04 9.77E+01 7.16E+01 5.37E+01 46 12.8 9.60E-04 4.99E-01 1.07E-03 9.89E+01 8.41E+01 7.28E+01 47 13.8 3.60E-04 2.16E-01 4.98E-04 9.93E+01 8.96E+01 8.17E+01 48 14.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02 5 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02	37 6	.73	8.40E-04	1.20E-01	1.34E-04	9.17E+01	4.04E+01	1.93E+01
40 8.35 3.60E-04 7.89E-02 1.10E-04 9.54E+01 5.46E+01 3.20E+01 41 8.97 4.80E-04 1.22E-01 1.82E-04 9.60E+01 5.76E+01 3.52E+01 42 9.64 3.60E-04 1.05E-01 1.69E-04 9.64E+01 6.03E+01 3.82E+01 43 10.3 1.20E-04 4.05E-02 7.00E-05 9.66E+01 6.13E+01 3.95E+01 44 11.1 3.60E-04 1.40E-01 2.61E-04 9.76E+01 6.48E+01 4.41E+01 45 11.9 6.00E-04 2.70E-01 5.39E-04 9.77E+01 7.16E+01 5.37E+01 46 12.8 9.60E-04 4.99E-01 1.07E-03 9.89E+01 8.41E+01 7.28E+01 47 13.8 3.60E-04 2.16E-01 4.98E-04 9.93E+01 8.96E+01 8.17E+01 48 14.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02	38 7	.23	1.56E-03	2.56E-01	3.09E-04	9.36E+01	4.68E+01	2.48E÷01
41 8.97 4.80E-04 1.22E-01 1.82E-04 9.60E+01 5.76E+01 3.52E+01 42 9.64 3.60E-04 1.05E-01 1.69E-04 9.64E+01 6.03E+01 3.82E+01 43 10.3 1.20E-04 4.05E-02 7.00E-05 9.66E+01 6.13E+01 3.95E+01 44 11.1 3.60E-04 1.40E-01 2.61E-04 9.70E+01 6.48E+01 4.41E+01 45 11.9 6.00E-04 2.70E-01 5.39E-04 9.77E+01 7.16E+01 5.37E+01 46 12.8 9.60E-04 4.99E-01 1.07E-03 9.89E+01 8.41E+01 7.28E+01 47 13.8 3.60E-04 2.16E-01 4.98E-04 9.93E+01 8.96E+01 8.17E+01 48 14.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02	39 7	.77	1.20E-03	2.28E-01	2.95E-04	9.50E+01	5.26E+01	3.00E+01
42       9.64       3.60E-04       1.05E-01       1.69E-04       9.64E+01       6.03E+01       3.82E+01         43       10.3       1.20E-04       4.05E-02       7.00E-05       9.66E+01       6.13E+01       3.95E+01         44       11.1       3.60E-04       1.40E-01       2.61E-04       9.70E+01       6.48E+01       4.41E+01         45       11.9       6.00E-04       2.70E-01       5.39E-04       9.77E+01       7.16E+01       5.37E+01         46       12.8       9.60E-04       4.99E-01       1.07E-03       9.89E+01       8.41E+01       7.28E+01         47       13.8       3.60E-04       2.16E-01       4.98E-04       9.93E+01       8.96E+01       8.17E+01         48       14.8       6.00E-04       4.16E-01       1.03E-03       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02	40 8	3.35	3.60E-04	7.89E-02	1.10E-04	9.54E+01	5.46E+01	3.20E+01
43 10.3 1.20E-04 4.05E-02 7.00E-05 9.66E+01 6.13E+01 3.95E+01 44 11.1 3.60E-04 1.40E-01 2.61E-04 9.76E+01 6.48E+01 4.41E+01 45 11.9 6.00E-04 2.70E-01 5.39E-04 9.77E+01 7.16E+01 5.37E+01 46 12.8 9.60E-04 4.99E-01 1.07E-03 9.89E+01 8.41E+01 7.28E+01 47 13.8 3.60E-04 2.16E-01 4.98E-04 9.93E+01 8.96E+01 8.17E+01 48 14.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02	41 8	.97	4.80E-04	1.22E-01	1.82E-04	9.60E+01	5.76E+01	3.52E+01
44 11.1 3.60E-04 1.40E-01 2.61E-04 9.76E+01 6.48E+01 4.41E+01 4.5 11.9 6.00E-04 2.70E-01 5.39E-04 9.77E+01 7.16E+01 5.37E+01 4.5 12.8 9.60E-04 4.99E-01 1.07E-03 9.89E+01 8.41E+01 7.28E+01 4.7 13.8 3.60E-04 2.16E-01 4.98E-04 9.93E+01 8.96E+01 8.17E+01 4.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02			3.60E-04	1.05E-01	1.69E-04	9.64E+01	6.03E+01	
45 11.9 6.00E-04 2.70E-01 5.39E-04 9.77E+01 7.16E+01 5.37E+01 46 12.8 9.60E-04 4.99E-01 1.07E-03 9.89E+01 8.41E+01 7.28E+01 47 13.8 3.60E-04 2.16E-01 4.98E-04 9.93E+01 8.96E+01 8.17E+01 48 14.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02	43 1	0.3	1.20E-04	4.05E-02	7.00E-05	9.66E+01	6.13E+01	3.95E+01
46 12.8 9.60E-04 4.99E-01 1.07E-03 9.89E+01 8.41E+01 7.28E+01 47 13.8 3.60E-04 2.16E-01 4.98E-04 9.93E+01 8.96E+01 8.17E+01 48 14.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02			3.60E-04	1.40E-01	2.61E-04	9.70E+01	6.48E+01	
47 13.8 3.60E-04 2.16E-01 4.98E-04 9.93E+01 8.96E+01 8.17E+01 48 14.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02	45 1	1.9	6.00E-04	2.70E-01	5.39E-04			
48 14.8 6.00E-04 4.16E-01 1.03E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02		2.8	9.60E-04	4.99E-01	1.07E-03			
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02	47 1	3.8	3.60E-04	2.16E-01	4.98E-04			
	48 1	4.8	6.00E-04	4.16E-01	1.03E-03	1.00E+02	_	
TOTALS: 8.39E-02 3.98E+00 5.61E-03	> 1	5.4				1.00E+02	1.00E+02	1.00E+02
	TOTALS	<b>S</b> :	8.39E-02 3	3.98E+00 5.	61E-03			

Mile:

*i* .

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 16.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 20 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCI	ENTRATIONS		CUMI	JLATIVE %	
CHNL	DTA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 186	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00
ì	.504	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	.542	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	.581	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	.625	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	.673	3.00E-03	4.27E-03	4.79E-07	9.26E-01	5.18E-02	7.70E-03
6	.723	0.00E+00	0.00E+00	0.00E+00	9.26E-01	5.18E-02	7.70E-03
7	.777	9.00E-03	1.71E-02	2.21E-06	3.70E+00	2.59E-01	4.33E-02
	.835	3.00E-03	6.58E-03	9.16E-07	4.63E+00	3.39E-01	5.80E-02
8		3.00E-03	7.50E-03	1.14E-06	5.56E+00		
9	.897				9.26E+00	4.31E-01	7.63E-02
10	. 964	1.20E-02	3.51E-02	5.04E-06		8.f6E-01	1.67E-01
11	1.03	1.50E-02	5.07E-02		1.39E+01	1.47E+00	3.08E-01
12	1.11	1.50E-02	5.85E-02	1.09E-05	1.85E+01	2.18E+00	4.82E-01
13	1.19	0.00E+00	0.00E+00	0.00E+00	1.85E+01	2.18E+00	4.82E-01
1.4	1.28	9.00E-03	4.68E-02	1.00E-05	2.13E÷01	2.75E+00	6.44E-01
15	1.08	6.00E-03	3.60E-02	8.30E-06	2.31E+01	3.18E+00	7.77E-01
1 (	1.48	1.20E-02	9.32E-02	2.00E-05	2.09E+01	4.19E+00	1.11E+00
17	1.59	0.00E-00	2.40E-01	5.09E-05	2.61E-01	7.33E+60	2.14E+00
1 8	1. 1	1.50E-01	1.09E=01	3.5(E-15	4.07E+01	8.79E+00	2.77E+00
19	1.54	9.00F-00	9.01E-02	1.90E-05	4.00E+01	9.95E+00	3.25 <b>E</b> +00
20	1.58	1.40E-01	1.87E-11	9,775-46	f.(%E+(%1	1.88E-01	(.81E+(0
11	2.12	9.00F-03	1.1-E- 1	1.57F-05	0.07E+0:	1.F1E-01	7.57 <b>5</b> ÷67
	2.25	1.20F-02	1.971-(1	7.5 <b>15-</b> 05	5.71E+01		707-11
-	1. 5	2.10E-02	1.60E-01	1.67E-14	8.10F-01	1.1 E-11	3 · 5 + 1 %
24	2. (;	1.7(E-02	0.19E-01	1.48E-01	0.88 <b>E</b> +01	2.00E-11	1.17 <b>F</b> +/1
1.5	2.83	1.50E-02	3.80E-01	1.805-04	7,25E+01	J. ( FE+( ]	: ( <del>T -</del> : :
<u>.</u> 6.	₹ . f:	1.50E-01	4.09E-01	2,13E-04	7.78E-01	1.01E+01	1.82F461
27	2.27	1.50E-02	F. ( (E-01	2.77E-04	8.14E-01	4.14E-01	1.1(E-()
29	3.73	3.00E-03	1.17E-01	6.87E-05	8.88E-01	4.88E+01	0.87E+01
, c	; . TR	2.10E-02	9.48E-01	F.97E-04	8.98E+01	5.02E+01	0.00E-01
30	1.05	9.00E-03	4.08E-01	3.17E-04	9.20E+01	6.09E+01	3.81E+01
3 ]	1	0.00E+00	0.00I+00	0.00E-00	9.26E+01	6.09E+01	0.848+01
32	4.69	0.00E+00	0.00E+00	0.00E-00	9.20E+01	6.09E+01	0.81E+01
33	·	3.00E-03	2.40E-01	2.02E-04	9.35E+01	5.28E±01	1.17E+01
1	8.42	1.20E-02	1.11E+00	1.00E-03	9.72E÷01	7.73E+01	5.78E+01
35	5.82	0.00E+00	0.00E+00	0.00E+00	9.72E+01	7.70E+01	E.79E-01
26	6.26	0.00E-00	0.00E+00	0.00E+00	9.72E+01	7.735+01	f.75E+01
37	£.70	3.00E-03	4.27E-01	4.79E-04	9.81E+01	8.25E÷01	6.57E+01
38	7.23	0.00E+00	0.00E-00	0.00E-00	9.81E+01	8.2FE+01	0.55F+01
39	7.77	3.00E-03	5.70E-01	7.38E-04	9.91E-01	8.34E+01	7.7(E+01
10	8.85	0.00E+00	0.00E+00	0.00E+00	9.91E+01	€.94E+01	7.78E+01
11	8.97	0.00E+00	0.00E+00	0.00E+00	9.91E+01	8.84E+01	7.70E+01
42	9.64	3.00E-03	8.77E-01	1.41E-03	1.00E+02	1.00E+02	1.00E+02
13	10.3	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.005+02	1.00E+02
4.4	11.1	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
14 15	11.1	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
16	12.8	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+62
4 7	13.8	0.00E+00	0.00E+00	0.00E+00	1.00E+02		1.00E+02
18					_	1.00E±02	
	14.8	0.00E+00	0.00E+00	0.00E+00	1.00E-02	1.00E+02	1.00E+02
, TOTAL	15.4	0.00E+00	0.00E+00	0.00E+00	1.0(E+02	1.00E+02	1.00E+02
こうしょ	•. •	3.24E-01 8	・こじとさいり だ・	ニレニーじじ			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 16.002 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

	CONCE	NTRATIONS		CUMU	LATIVE %	
CHNL DIA	NUMBER	SURFACE	MASS		SURFACE	MASS
< .486			6.51E-09			5.30E-05
1 .504		2.88E-04	2.42E-08	2.14E-01		2.50E-04
2 .542		6.65E-04	6.01E-08	5.35E-01	1.14E-02	7.39E-04
3 .581		8.93E-04	8.66E-08	9.09E-01	2.13E-02	1.44E-03
4 .62		1.18E-03	1.23E-07	1.34E+00		2.44E-03
5 .673		3.07E-03	3.45E-07	2.30E+00		5.25E-03
6 .723		5.13E-03	6.19E-07	3.69E+00	1.25E-01	1.03E-02
7 .77		9.12E-03	1.18E-06	5.83E+00	2.26E-01	1.99E-02
8 .83	١,	1.68E-02	2.34E-06	9.25E+00	4.12E-01	3.90E-02
9 .897	'	1.55E-02	2.32E-06	1.20E÷01	5.83E-01	5.79E-02
10 .964		2.98E-02	4.80E-06	1.65E+01	9.13E-01	9.69E-02
11 1.03		3.40E-02	5.88E-06	2.10E+01	1.29E+00	1.45E-01
12 1.11		2.15E-02	4.00E-06	2.35E+01	1.53E+00	1.77E-01
13 1.19			8.30E-06	2.76E+01	1.99E+00	2.45E-01
1: 1.28		4.87E-02	1.04E-05	3.18E+01	2.52E+00	3.30E-01
15 1.25		f.02E-02	1.30E-05	3.59E+01	3.15E+00	4.25E-01
		7.82E-02	•	4.00E-01	3.98E+00	E.80E-01
		6.60E-02	3.76E-05		1.69E+00	7.27E-01
1.5		7.21E-02	2.08E-08		5.48E+CO	8.65E-01
19 1.7		1.04E-01	3.19E-0F	F.21E+61	6.65E-00	1.1(1+ (
1.8	8.72E-01	1.18E-01	3.91E-15	5.04E+01	T.51E-00	1.4 E-1
			5.18E-05	9.11E-01	10-33:	
11 1.11		195-01	4.88E-08	6.47E-(:	1.1 E-01	2.11
22 2.23		1. <b>18 1-</b> 11	7.7(E-(?	( , T, E = ( )	1.15F-01	
		1.1.E-11	9.60E-0E		1.41E-11	
		1.80E-01	9.100E-00	7.42E-01	1.6. E+31	<del>.</del>
		1.64E+01		7.73E-01	1.87E-01	E
	6.80E-00 6.14E-08	1.08E-01 2.11E-01	1.08E-04		2.08E+01	5.81E+ 0
		1.11E-01	1.18E-04	8.04E-01	2.31E+(1	6.78E+67
1.5		1.94E-01	1.20E-04	8.43E-01	2.52E+01	7.77E+00
19			1.27E-04	8.59E-01	2.73E+01	S.81E+00
30		1.87E-01 1.95E-01	1.42E-04	8.78E+01	2.95E+01	9.96E+0
4.5		2.25E-01	1.76E-04	8.88E+01	3.19E+01	1.14E+01
32 1.6			2.26E-04	9.03E-01	3.49E+01	1.02E+01
02 [.6-		2.68E-01		9.17E+01	3.82E+01	1.54E+01
31 5.43		3.00E-01	2.71E-04		4.03E+01	1.76E+01.
0.5 7.83		1.92E-01	1.87E-04	9.35E-01	4.33E+01	1.92E+01
36 6.29		2.66E-01	2.78E-04		4.59E+01	2.14E+01
37 6.73		2.29E-01	2.68E-04		4.83E+01	2.85E-01
38 7.23		2.17E-01	2.62E-04			2.67E+01
3.9 7.7		2.96E-01	3.84E-04			2.80E+01
40 8.3		2.10E-01	2.93E-04		5.39E+01	3.31E+C1
11 8.9		3.34E-01	5.00E-04	9.65E÷01	5.76E+01	
42 9.6		2.46E-01	3.95E-04		6.00E+01	3.63E+01
42 10.		2.43E-01	4.20E-04		6.30E+01	3.98E+01 4.5;E+01
44 11.		3.74E-01	€.95E-04	9.76E+01		
15 11.		7.02E-01	1.40E-03		7.49E+01	5.08E+01. 6.77E+01
46 12.			1.34E-03		8.18E+01	7.99E+01
47 13.			1.49E-03		8.90E+01	1.00E+02
18 14.			2.47E-03		1.00E+02	1.00E+02
> 15.		0.00E+00	0.00E+00	1.00E+02	1.3CE+02	1.001732
TOTALS:	2.24E-01	9.05E+00 1.	23E-02			

FILE NAME: OUT5 16.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		60):01			CIIMI	HATTUE &	
CHAIL	DTA	NUMBER	ENTRATIONS SURFACE	MASS	NUMBER	JLATIVE % SURFACE	MASS
CHNL	. DIA .486	2.40E-04	1.55E-04	1.18E-08	3.99E-02	9.83E-04	7.21E-05
1	.504	3.60E-04	2.88E-04	2.42E-08	9.97E-02		2.21E-04
2	.542	1.20E-03	1.11E-03	1.00E-07	2.99E-01		8.34E-04
3	.581	1.44E-03	1.53E-03	1.48E-07	5.39E-01	1.95E-02	1.74E-03
4	.625	2.04E-03	2.50E-03	2.61E-07	8.78E-01	3.54E-02	3.34E-03
5	.673	4.08E-03	5.81E-03	6.51E-07	1.56E+00	7.21E-02	7.33E-03
6	.723	6.60E-03	1.09E-02	1.31E-06	2.65E+00	1.41E-01	1.54E-02
7	.777	1.20E-02	2.28E-02	2.95E-06	4.65E+00	2.85E-01	3.35E-02
8	.835	1.76E-02	3.87E-02	5.39E-06	7.58E+00	5.30E-01	6.65E-02
9	.897	2.29E-02	5.81E-02	8.69E-06	1.14E+01	8.98E-01	1.20E-01
10	. 964	2.32E-02	€.77E-02	1.09E-05	1.52E+01	1.33E+00	1.86E-01
11	1.03	1.98E-02	6.69E-02	1.16E-05	1.85E+01	1.75E+00	2.57E-01
12	1.11	2.18E-02	8.52E-02	1.58E-05	2.22E+01	2.29E+00	3.54E-01
13	1.19	2.41E-02	1.09E-01	2.17E-05	2.62E+01	2.98E+00	4.87E-01
1.4	1.28	2.87E-02	1.49E-01	3.20E-05	3.09E+01	3.92E+00	6.83E-01
15	1.38	2.94E-02	1.77E-01	4.07E-05	3.58E÷01	E.04E÷00	9.33E-01
16	1.48	2.81E-02	1.97E-01	4.88E-05	4.00E+01	6.19E+00	1.00E+00
17	1.59	2.76E-02	2.21E-01	5.88E-05	4.51E÷01	7.09E+00	1.88E+00
. c	1.71	2.16E-02	2.27F-(1	€.50E-(5	4.82E+01	9.18E+00	1.6:E+6
1 6	1.84	2.21E-31	1.89E-01	7.95E-05	8.80E+01	1.08E-01	2.48E-00
20		2.02E-72	2.00E-01	1.19E-04	F.81F+01	1.6(E+1)	O.LIF+CC
r: •	- •		4.27E-01	: . <b>: :::-</b>	(.01E+01	1.88E+0	1:F-0
;	2.28	2.7.1- 2	: 3E-31	;. <b>-::-</b> (;	6.76E+01	1.84E-01	f.14E+11
		2.60	1,00E-01	2.048-04	7,205+63		• • • • • • • • • • • • • • • • • • •
<b>'</b> :	• • • •	2	8.08E-01	2.87E-14	7.01E-01	1.525+01	7,147-(1
_:	2.82	1.60E-01	4.88E-01	2.00E-04	7.90E+01	2.93E+01	<b>F</b> -34
26	;; ; ; <del>;</del>	1.8(E-(2	8.81E-01	3.48E-04	8.02E+(1	3.20E÷01	
_		1.81E-02	5.14E-01	2.81E-04	8.57E+01	(.:EE-01	1.0115-01
18	2.52	1.31E-02	5.10E-01	2.99E-04	8.79E+01	0.90E+01	1.505-01
٠, ن	0.78	1.20E-02	5.40E-01	3.41E-(4	9.99E+01	4.28E+01	1.71E+01
3.0	4.0€	9.71E-03	5.05E-01	2.43E-04	9.1EE+01	4.57E+01	1.92E+(1
.7 1	1.37	8.40E-03	E.04E-01	3.67E-04	9.29E+01	4.88E+01	2.142-01
32	;.59	6.30E-03	4.41E-01	3.45E-04	9.38E+01	5.17E÷01	2.8(E+01
33	5.64	5.40E-03	4.32E-01	3.64E-04	9.48E÷01	5.34E-01	1.58E+01
34	5.12	4.92E-03	4.55E-01	4.11E-04	9.57E+01	5.70E+01	2.8(E+(1
38	5.82	3.72E-03	3.97E-01	3.86E-04	9.63E+01	5.98E÷01	3.07E+01
3.6	6.25	1.56E-03	1.92E-01	2.01E-04	9.65E+01	6.1CE+01	3.192+01
37	6.73	2.96E-03	5.64E-01	6.32E-04	9.72E÷01	6.46E+01	3.58E+01
38	7.23	3.00E-03	4.93E-01	5.95E-04	9.77E+01	6.77E+01	2.54E+01
39	7.77	2.28E-03	4.33E-01	5.61E-04	9.81E+01	7.04E+01	4.28E+01
40	8.35	1.92E-03	4.21E-01	5.86E-04	9.84E+01	7.31E+01	1.01E+01
41	8.97	1.50E-03	4.56E-01	6.82E-04	9.87E+01	7.60E÷01	5.06E+01
42	9.64	1.32E-03	3.86E-01	6.20E-04	9.89E+01	7.81E+01	
43	10.3	9.60E-04	3.24E-01	5.60E-04	9.91E÷01	8.05E+01	5.78F+01
44	11.1	8.40E-04	3.27E-01	6.08E-04	9.92E÷01	8.20E+01	0.10E+01
45	11.9	1.32E-03	5.94E-01	1.19E-03	9.94E+01	8.53E+01	6.88E+01
46	12.8	1.08E-03	5.61E-01	1.20E-03	9.90E+01	8.99E±01	7.82E+(1
17	13.8	7.20E-04	4.32E-01	9.96E-04	9.97E+01	9.26E±01	5.23E+01
48	14.8	1.68E-03	1.16E+00	2.88E-03	1.00E+02	1.00E+02	1.0(E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	£5:	6.02E-01	.58E+01 1.	67E-02			

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 16.004 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		CONC	CNTDATIONS		CI'M	JLATIVE %	
CHAIL	DIA	NUMBER	ENTRATIONS SURFACE	MASS	NUMBER	SURFACE	MASS
CHVL	.486	4.80E-04		2.25E-08	1.39E-01		1.78E-04
ì	.504	2.40E-04		1.62E-08	2.09E-01	–	3.05E-04
2	.542	1.80E-04	4.43E-04	4.00E-08			6.21E-04
3	.581	1.32E-03	1.40E-03	1.36E-07			1.69E-03
4	.625	1.08E-03	1.33E-03	1.38E-07	1.04E+00		2.78E-03
5	.673	3.48E-03	4.95E-03	5.56E-07	2.06E+00		7.17E-03
Ğ	.723	3.84E-03	6.32E-03	7.62E-07	3.17E+00		1.32E-02
7	.777	7.56E+03	1.44E-02	1.86E-06	5.36E+00	2.69E-01	2.79E-02
8	.835	8.52E-03	1.87E-02	2.60E-06	7.84E+00	4.40E-01	4.84E-C2
9	. 297	1.12E-02	2.83E-02	4.23E-06	1.J1E+01	6.99E-01	8.18E-02
10	.904	1.09E-02	3.19E-02	5.14E-06	1.42E+01	9.92E-01	1.22E-01
11	1.03	1.04E-02	3.53E-02	6.09E-06	1.73E+01		1.70E-01
12	1.11	1.31E-02		9.48E-06	2.11E+01		2.45E-01
13	1.19	1.22E-02		1.10E-05	2.40E+01		3.32E-01
14	1.28	1.88E-02	7.18E-02	1.54E-00	2.8CE+01		4.68E-01
35	18	1.50E-02	9.01E-02	1.08E-05	3.20F+01	:.T==00	6.17E-01
16		1.19E-01	1.03E-01	2.5E=05	3.78E-01		8.19E-01
: -		1.005-02	1.22E-()	0.50E-05	4.21E+01		1.10E+00
	: :	1.521-02	1.8(E=(1	4.08E-05	4.68E-01	7.00E+00	1.18E+00
		1.81E-02		6.00E-06			1.83E+0(
-		1.52E-02	1.88E-01	6.21E-45	5.88E+01	1.(FE-01	2.01E+00
-:	22	1.44E-02	2.05E-01	7.28F-18	5.98E+01	1.2.5+01	
6 / ·	2.25	1.51E-12	2.52E-01	9.00E-08	6.40E+01	1,475-01	0.05E+00
10	2. :	1.81E-02		1.18E-04	6.872-01	7.7(E+6)	
	2.14	1.00E-02	3.68E-01	1.00E-04	7.88E-01		7.84E-00
1.5		1.00E-02	3.40E-01	1.01E-04	7.7-E-03	2.08E-01	
20	0.05	9.24E-03	2.70E-01	1.07E-04	8.00E-01	1.60E+03	1.19E-11
_		6.70E-03		1.82E-04	8.26E-01	2.90T+01	9.17E+00 1.10E+01
29	3.51	9.64E-03	3.87E-01	1.98E-04	8.81E-01 8.71E-01		1.16E-01
20	1. Th	7.96E-03		1.98E-04 2.41E-04	E.91E-01	8.81E+01	1.48E+01
30	:.00 :	0.84E-03	3.86E-01 3.03E-01	2.20E-04	9.06E-01	4.10E+01	1.62E-01
21	1.07	7.(4E+03	3.88E-01	2.80E-04	9.21E+01	4.48E+C1	1.84E+01
32 33	1.58	E.16E-03	3.78E-01	2.15E-04		4.77E+01	2.09E+01
34	E. 42	2.76E-03	2.55E-01	2.31E-04		5.00E+01	2.28E+01
35	£.£2	2.16E-03	2.31E-01	2.24E-04	9.48E+01		2.48E+01
3.6	(.26	3.00E-03	3.70E-01	3.86E-04	9.57E-01	5.80E+01	2.70E+01
37	€.70	1.16E-03	3.08E-01	3.45E-04			3.03E-01
38	7.23	1.92E-03	3.16E-01	3.81E-04	· · · · · · · · ·		3.33E+01
2.8	7.77	1.88E-03	3.19E-01	4.13E-04			3.66E+01
40	8.35	9.60E-04	2.10E-01	2.93E-04	9.77E+01	6.61E+01	3.89E+01
41	8.97	8.40E-04	2.13E-01	3.18E-04		5.81E+01	4.14E+C1
42	9.64	4.80E-04	1.40E-01	2.26E-04		6.94E+01	4.32E+01
43	10.3	1.68E-03	5.67E-01	9.80E-04		7.45E+01	5.09E+01
44	11.1	9.60E-04	3.74E-01	6.95E-04	9.88E+01	7.80E+01	5.64E+01
45	11.3	9.60E-04	4.32E-01	8.62E-04	9.91E+01	9.19E+01	6.32E+01
45	12.8	4.80E-04	2.50E-01	5.35E-04	9.92E+01	8.4CE+01	6.74E+01
47	13.8	1.20E-03	7.20E-01	1.66E-03		9.08E-01	8.05E+01
48	14.8	1.44E-03	9.98E-01	2.47E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	3.45E-01	1.09E+01 1.	27E-02			

FILE NAME: OUT5 16.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

					CUM	'1 ATTIE W	
			ENTRATIONS	V4.66		JLATIVE % SURFACE	MASS
CHNL		NUMBER	SURFACE	MASS	NUMBER 1.32E-01	2.76E-03	1.85E-04
<	.486	4.80E-04	3.01E-04	2.25E-08	2.64E-01	6.29E-03	4.51E-04
1	.504	4.80E-04		3.23E-08		8.33E-03	6.16E-04
2	.542	2.40E-04	2.22E-04	2.00E-08	3.30E-01	1.65E-02	1.33E-03
3	.581	8.40E-04	8.93E-04	8.66E-08	5.60E-01	3.82E-02	3.35E-03
4	.625	1.92E-03	2.36E-03	2.46E-07	1.09E+00		
5	.673	2.76E-03	3.93E-03	4.41E-07	1.85E+00	7.43E-02	6.98E-03
6	.723	4.80E-03	7.89E-03	9.52E-07	3.16E+00	1.47E-01	1.48E-02
7	.777	6.72E-03	1.28E-02	1.65E-06	5.01E+00	2.64E-01	2.84E-02
8	.835	9.24E-03	2.03E-02	2.82E-06	7.55E+00	4.50E-01	5.17E-02
9	.897	1.10E-02	2.80E-02	4.18E-06	1.06E+01	7.07E-01	8.62E-02
10	. 964	1.21E-02	3.54E-02	5.70E-06	1.39E+01	1.03E+00	1.33E-01
11	1.03	1.24E-02	4.17E-02	7.21E-06	1.73E+01	1.42E+00	1.93E-01
12	1.11	1.48E-02	5.76E-02	1.07E-05	2.14E+01	1.9EE+00	2.81E-01
13	1.19	1.52E-02		1.37E-05	2.55E+C1	2.58E+00	3.93E-01
14	1.28	1.58E-02	8.24E-02	1.77E-05	2.99E+01	3.33E+00	5.39E-01
15	1.38	1.46E-02	8.79E-02	2.03E-05	3.39E+01	1.14E+00	7.06E-01
16	1.18	1.61E-02	1.11E-01	2.76E-05	3.83E+01	5.17E+00	9.88E-01
17	1.59	1.63E-02	1.31E-01	3.48E-05	4.28E+01	6.27E+00	1.00E+00
38	1.71	1.64E-02	1.82E-01	4.34E-05	4.73E+01	7.78E+00	1.58E+00
: 0	1.84	1.70E-02	1.82E-01	5.59E-05	5.20E+01	94E+00	2.04E÷00
20	1.98	1.00E-02	1.97E-01	6.50E-05	F.04E+01	1.12E+01	2.57E+01
21	1.32	1.78E-02	2.81E+01	8.91E-05	6.12E÷01	1.88E-01	3.31F+00
<i>(</i> ) ()	2.18	1.72E-02	2.82E-01	:.08E-04	e.com-or	1.01E-01	1.19E+((
<i>(</i> -1)	2.45	1.51E-01	2.87E-91	1.18E-04	7.0;E+(1	1.88E+01	1.14 E-17
24	2. 1	1.FIE-02		1.40E-04	7.43E-01	2.182-71	
	2.80	1.19E-02	0.01E-01	1.42E-04	7.755-11		7, 14E+
26	3.05	1.01E-02	2.88E-01	1.5CE-04	8.00E+(1	1.70E-01	€ E - 1
	2.27	1.20E-02	4.077-01	C.21E-04	8.00E-01	F+31	:. (E-0:
28		1.01E-02	3.90E-01	2.31E-04		(. F+(1	
28	2.78	7.68E-03	3.46E-31	2.18E-04	8.88E-01	C.TEE+1	: . 4 ( E - 1 :
30	4.00	6.12E-13	3.12E-01	2.1GE-04		: . C "F=01	
31	1.17	1.08E-08	2.81E-01	2.65E-04	9.14E-01	4 E = 1	1.78E-01
32	1.09	0.72E-03	1.8:E-01	2.02E-04		;.(™E+01	1. E   E - C
21	F. (4	3.60E-63	2.66E-()	2.42E-04		3.3(E-01	1.14E-(1
: i	5.42	4.(SE-08	3.77E-01	0.41E-04		7.1:E-11	2.;(E-C)
. 5	$\mathbb{R}$ , $\mathbb{R}^2$	1.81E-03	1.89E-01	2.61E-04	9.83E+01	F.3(E+01	1.63E+61
· ·	0.26	2.F2E-03	3.11E-01	2.24E-04		5.73E-01	2.91E+(1
, . · <del>-</del>	7.7	2.28E-03	(.1 <b>:</b> E-01	3.64E-04	9.66E-01	6.01E-01	3.21E+01
÷ (*)	7.20	1.00E-03	1.17E-01	2.62E-04		6.21F+01	3.41E+61
.: 🍎		2.40E-03	4.56E-01	5.90E-04	9.76E÷01	6.62E÷01	9.01E+(1
iO	3.35	8.4CE-04	1.84E-01	2.56E-04		0.80E+01	1.12E+01
41	8.97	1.08E-03	2.70E-01	4.09E-04	9.81E÷(:1	7.05E+01	4.48E+61
42	9.64	9.60E-04	2.81E-01	4.51E-04	9.84E+01	7.31E+01	4.83E+01
43	10.3	1.08E-03	3.65E-01	6.30E-04			5.35E+01
4.1	11.1	8.40E-04	3.27E-01	6.08E-04			5.85E+01
	;1.9	9.60E-04	4.32E-01	8.62E-04			6.56E+C1
4 E	12.8	1.08E-03	5.61E-01	1.20E-03		8.90E+01	7.87E-01
17	13.8	9.60E-04	F.70E-01	1.33E-03		9.39E+01	8.54E-01
48	14.8	9.60E-04	6.66E-01	1.65E-03			1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	3.64E-01	1.09E-01 1.	.21E-02			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 16.006 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

6.511.1	5.5.1		ENTRATIONS			CLATIVE %	
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
•	. 196	0.00E+00 0.00E+00	C.00E+00	C.0CE+00	0.00E÷00		0.005+00
1	.504		0.00E÷00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
-	.512	3.60E-01	3.32E-04	3.00E-08	1.75E-01	5.17E-03	4.41E-04
3	.581	4.80E-04	5.10E-04	4.95E-08	4.08E-01	1.39E-02	1.17E-03
5	.025 .673	3.60E-04 1.32E-03	4.42E-04 1.88E-03	4.60E-08 2.11E-07	5.83E-01 1.23E+00	2.11E-02	1.84E-03
5 6	.723	2.04E-03	2.35E-03	1.05E-07	2.22E+00	5.20E-02	1.94E-03
7:	. 77	3.24E-03	6.15E-03	7.97E-07	3.79E+00	1.07E-01 2.08E-01	1.09E-02 2.26E-02
3	.835	1.80E-03	1.05E-02	1.472-06	6.13E+00	3.81E-01	4.41E-02
ġ	. 237	6.72E-03	1.707-02	2.55E-06	9.39E+00	6.61E-01	8.16E-C2
10	961	5.88E-03	1.72E-02	2.77E-06	1.23E+01	9.4 iE-C1	1.22E-01
11	1.03	8.04E-03	2.72E-02	4.69E-06	1.62E+01	1.39E+00	1.915-01
12	1.11	8.01E-03	2.11E-02	5.822-06	2.01E+01	1.91E+00	2.77E-01
13	1.13	1.12E-02	5.03E-02	1.00E-05	2.55E+01	2.70E-00	4.24E-01
1	1.28	6.60E-03	3.43E-02	7.36E-06	2.87E-01	3.20E+00	5.32F-01
	: . 2.5	9.965-03	5.98E-02	1.38E-05	3.352+0:	4.245-00	7.35E-01
• •	1.18	8.285-03	F. 71E-02	1.425-05	3.76E+01	5.22E+00	9.11E-01
-	1.53	8.60E-03	7.597-02	2.057-05	1.223-01	5.495+00	1.2(5+00
		9.72E-03	8.99E-01	2.57E-05	1.70E+01	7.83E+00	1.62E+30
• .		8.817-00	3.005-00	2.83E-05	3.002-00	9.192+00	2.01E+00
		1.022-02	1.202-01	1.18E-03	€.81E+01	1.13E+01	2.67E+00
•		3.81E-13	1.172-01	4.977-05	8.092-01	1.075-01	0.082+00
		9.72E-0.	05-01	5.31E-08	6.515-01	1.802-01	1.18E+00
- 1		1.102-02	2.10%-01	3.38E-35	4E-:	1.983-01	5.40E+00
_ ;	2	8.16E-00	1.735-01	7.87E-05	7.1:E-(1	2.285+61	6.53E+00
		7.445-03	1.362-01	8.915-05	7.89E+01	2.332-01	7.89E+00
		6.72E-03	1.96E-Ci	9.935-05	8.13E-01	2.89E+01	9.26E+00
-		8.482-03	2.192-01	1.19E-04	8.445-01	3.23E+01	1.11E+01
23	3.52	3.24E-03	1.26E-0:	7.42E-05	8.60E-01	0.48E+01	1.22E+01
	- <b>-</b> 8	1.36E-03	2.03E-01	1.30E-04	8.82E-01	3.7.5+01	1.415+01
	1.08	3.72E-03	1.93E-01	1.31E-04	9.00E-01	1.1:E+01	1.60E+01
.3 1	1.37	3.72E-03	2.23E-01	1.63E-04	9.18E-01	4.485+01	1.84E+01
32	1.69	1.68E-03	1.16E-01	9.12E-05	9.26E+01	4.67E+01	1.98E+01
	5.94	2.04E-03	1.63E-01	1.37E-04	9.36E÷01	4.94E+01	2.18E+01
21	5.42	2.76E-03	2.55E-01	2.31E-04	9.50E+C1	5.36E+01	2.52E+01
3.5	5.82	1.56E-03	1.67E-01	1.62E-04	9.57E+01	5.63E+01	2.76E+01
	6.26	1.56E-03	1.92E-01	2.01E-04	9.65E+01	5.95E+01	3.05E+01
37	6.73	1.08E-03	1.54E-01	1.72E-04	9.70E+01	6.20E+01	3.30E+01
38	7.23	6.00E-04	9.86E-02	1.19E-04	9.73E+01	6.36E+01	3.48E+01
39	7.77	6.00E-04	1.14E-01	1.48E-04	9.76E+01	6.55E+01	3.70E+01
10	8.35	3.60E-04	7.89E-02	1.10E-04	9.78E+01	6.68E+01	3.86E+01
41	8.97	9.60E-04	2.43E-01	3.64E-04	9.82E+01	7.08E+01	4.39E+01
42	9.64	3.60E-04	1.05E-01	1.69E-04	9.84E+01	7.25E+01	4.64E+01
	10.3	6.00E-04	2.03E-01	3.50E-04	9.87E+01	7.58E+01	5.15E+01
4.4	11.1	2.40E-04	9.36E-02	1.74E-04	9.88E+01	7.74E+01	5.41E+01
	11.9	6.00E-04	2.70E-01	5.39E-04	9.91E+01	8.18E+01	6.20E+01
46	12.8	2.40E-04	1.25E-01	2.68E-04	9.92E+01	8.39E+01	6.59E+01
	13.8	1.08E-03	6.48E-01	1.49E-03	9.98E+01	9.45E+01	8.79E+01
48	14.8	4.80E-04	3.33E-01	8.24E-04	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	.S:	2.06E-01 6	.08E+00 6.	81E-03			

FILE NAME: OUT5 16.007 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1 DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		DID. ICATA					
		CONCE	ENTRATIONS		CUMU	LATIVE %	
~****	57.4	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
CHNL			2.90E-04	2.12E-08		5.21E-03	3.18E-04
<b>&lt;</b>	.486	4.80E-04	0.00E+00	0.00E+00	2.83E-01	5.21E-03	3.18E-04
1	.504	0.00E+00		2.00E-08	4.24E-01	9.20E-03	6.18E-04
2	.512	2.40E-04	2.22E-04		6.36E-01	1.61E-02	1.17E-03
3	.581	3.60E-04	3.83E-04	3.71E-08	1.06E+00	3.20E-02	2.55E-03
4	.625	7.20E-04	8.84E-04	9.21E-08	_	7.81E-02	6.86E-03
5	.673	1.80E-03	2.56E-03	2.87E-07	2.12E+00		1.22E-02
6	.723	1.80E-03	2.96E-03	3.57E-07	3.18E+00	1.31E-01	2.33E-02
7	.777	3.00E-03	5.70E-03	7.38E-07	4.95E+00	2.34E-01	
8	.835	5.16E-03	1.13E-02	1.58E-06	7.99E+00	4.37E-01	1.69E-02
9	.897	3.84E-03	9.73E-03	1.46E-06	1.02E+01	6.12E-01	6.87E-02
10	.964	6.36E-03	1.86E-02	2.99E-06	1.40E+01	9.47E-01	1.14E-01
11	1.03	6.12E-03		3.57E-06	1.76E+01	1.32E+00	1.67E-01
12	1.11	7.56E-03		5.48E-06	2.20E+01	1.85E+00	2.49E-01
13	1.19	8.16E-03	•	7.33E-06	2.69E+01	2.51E+00	3.59E-01
		9.52E-03	4.42E-02	9.50E-06	3.19E+01	3.31E+00	5.01E-01
1.4	1.28	6.60E-03	3.96E-02	9.13E-06	3.58E+01	4.02E+00	f.08E-01
15	1.08		4.99E-02	1.24E-08	4.00E+01	1.92E+00	9,18E-01
16	1.18	7.20E-03		1.89E-08	4.8CE+01	6.20E+00	1.11E-00
: 7	3.59	8.88E-08	7.11E-02	1.87E-05	1.9/E+01	7.88E+66	1.05E+00
18	1.71	7.08E-08	6.51E-02		5.81E-01	5.6(E+1)	
13	1.81	f.CfE-(f	0.79E-02	2.09E-05		1.01E-01	1.11 <u>E</u> -00
20	1.68	6.81 <b>E-</b> 08	8.48E-02	2.795-(5	8.71E-01	1.23E-/:	
2 3	<u> </u>	7.8( <b>E</b> -08	1.11E-01	0.94E-05	0.162-01		0.17E+00
12	2.26	0.00E-00	9.8(E-02	3.70E-01	6.58E-61	1.88E+11	
23	2.15	€ . : € <b>E -</b> : €	1.21E-(1	4.94E-08	0.80E+01	1.01E+11	.: ::: <u>E</u> +:::
<b>:</b> ;	2.01	7.8(E-08	1.71E-(1	7.88E-08	7.86E+11	1.91E+71	
2.5	2.80	1.80E-08	1.22E-01	5.7€E-(5		2.108-1	6.0(E-00
· ;	3.05	5.40E-03		8.03E-05		0.42E+(1	7.10E-00
	2.27	F. TEE-03		:.(6E-04	8.00E-01	2.77E+01	8.79E+10
5	3.52	\$.48E-03		7.97E-05			8.86E+00
29	(.78	4.91E-03		1.40E-04			1.23E+(1
	4.06	3.0CE-03		1.06E-04		3.08E+01	1.87E-01
30		1.44E-03		6.30E-05		3.85E+01	1.48F+01
31	4.37	1.32E-03		7.17E-05			1.57E+01
3.2	1.69			9.70E-05		4.22E+01	1.71E÷01
33	5.04	1.44E-03		1.81E-04			1.98E+01
3.4	5.42	2.16E-03		1.24E-04			1.17E+01
35	E.82	1.20E-03					2.47E+01
36	6.26	1.56E-03		2.01E-04			2.78E+01
37	€.73	1.31E-03		2.11E-04			3.18E+01
38	7.23	1.32E-03		2.62E-04			0.3:E+01
39	7.77	3.50E-04		8.8FE-05			3.59E+01
40	8.35	6.00E-04		1.83E-04			
41	8.97	2.40E-04	6.08E-02	9.09E-05			2.72E÷01
42	9.64	8.40E-04	2.46E-01	3.95E-04			4.31E+01
43	10.3	4.80E-04		2.80E-04			4.78E+01
4 4	11.1	3.60E-04		2.61E-04			f.12E+01
45	11.9	9.60E-04		8.62E-04			€.42E+01
45	12.8	9.60E-04		1.07E-03	8 9.95E+01		8.02E+01
47	13.8	3.60E-04		4.98E-04	9.97E+01		8.77E+01
48	14.8	4.80E-04		8.24E-04			1.00E+02
, ,	15.4	0.00E+00		0.00E+00		1.00E+02	1.60E+02
			5.56E+00 6	-			
TOT	, ro:	1. (CE-01	0100E 700 0	, <u></u>			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 16.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCE	NTRATIONS		CUM	ULATIVE %	
CHNL D	TA		SURFACE	MASS	NUMBER	SURFACE	MASS
	486	4.80E-04	3.01E-04	2.25E-08	1.67E-01	3.27E-03	
	504	3.60E-04	2.88E-04	2.42E-08			
	5.12	7.20E-04			2.92E-01	6.40E-03	4.29E-04
			6.65E-04	6.01E-08	5.43E-01	1.36E-02	9.79E-04
	581	9.60E-04	1.02E-03	9.89E-08	8.77E-01	2.47E-02	1.89E-03
	625	1.32E-03	1.62E-03	1.69E-07	1.34E+00	1.24E-02	3.43E-03
	673	2.76E-03	3.93E-03	4.41E-07	2.30E+00	8.51E-02	7.47E-03
	723	3.60E-03	5.92E-03	7.14E-07	3.55E+00	1.49E-01	1.40E-02
	777	5.52E-03	1.05E-02	1.36E-06	5.47E+00	2.63E-01	2.65E-02
	835	7.80E-03	1.71E-02	2.38E-06	8.18E+00	1.50E-01	4.83E-02
9.	897	9.48E+03	2.40E-02	3.59E-06	1.15E+01	7.11E-01	8.13E-02
19 .	964	9.60E-03	2.81E-02	4.52E-06	1.48E+01	1.02E+00	1.23E-01
11 1	.03	9.60E-03	3.24E-02	5.60E-06	1.82E+01	1.37E+00	1.74E-01
12 1	. 1 1	9.84E-03	3.84E-02	7.13E-06	2.16E+01	1.79E+00	2.39E-01
	. 19	1.12E-02	5.03E-02	1.00E-05	2.55E+01	2.23E+00	
	.28	1.30E-02	6.74E-02	1.45E-05	3.00E+01	3.07E+00	
	. 08	1.42E-02	8.80E-02	1.96E-05	3.49E+01	0.072+00 0.89E+00	0.44E-01
	. 15	1.14E-02	7.90E-02	1.96E-05	3.85E÷01	1.8fE+00	E.23E-01
	. 7 9	3.84E-02	1.08E-01	2.80E-05	4.35E-01	6.02E+00	
	;	1.485-01	1.02F-01	3.77E-05	4.85E-01		
	. 5 1	1.025-02	1.41E-11	4.82E-05	5.81E-01	7.14 <b>E</b> +00	1.48E+00
		9.81E-00	1.11E-01			9. 9E+01	1.80E-00
		1.08E-02		4.01 <b>E-</b> 05 0.97 <b>E-</b> 05	5.(5E-01	:.: " <b>!-!!</b>	<u>10</u> ±+00
7.7	. 1 1 . 1 8	1.00E-01	1.1.E-/1	8.50E-05	6.10E-01	1.1 E+11	1.80E-00
	• - :	1.749- 2			6.61E-01	1.1.E-11	0.01E-01
	. :	9.81 <b>E-</b> 01		1.11E-05	6.97E-01	1.7.E-11	1.16 <b>5-</b> 0.
• .	•		1.18E-01	1.01E-08	7.32E-01	I.8 (E-01	J. 24E+51
		8.45E-08	1.00E-01	1.1 <sub>4</sub> E-(4	7.08E-01	1.1.E-01	6.28E-06
	-	9.86 <b>E</b> -60	1.91E-01	1.49E-04	7.89E-01	2.52E+01	7.84 <b>E</b> -08
	• - •	6.14E-33	0.12E-01	1.70E-04	8.31E+31	2.8(E-(1	9.00E+60
	. : :	7.01E-00	2.85E-01	1.8EE-04	8.57E-01	3.17E+01	
	. 7.5	5.02E-08	2.49E-01	1.57E-04	8.76E+01	3.44E-0.1	1.22E+01
	.06	4.56E-03	2.37E-C1	1.61E-04	8.92E+01	3.70E+01	1.87E+01
		4.44E-03	2.67E-01	1.94E-04	9.07E+01	6.69E+01	1.54E+01
22 4.	. € 9	4.08E-03	2.83E-01	2.22E-04	9.22E+01	4.29E+01	1.75E+01
	. 04	0.00E-03	2.40E-01	2.02E-04	9.32E+01	4.88E+01	1.93E+01
	. 42	2.64E-03	2.44E-01	2.21E-04	9.41E+01	4.82E+01	2.13E+01
	. 52	2.64E-03	2.82E-01	2.74E-04	9.50E+01	5.13E+01	2.08E+01
	. 26	1.10E-03	1.48E-01	1.54E-04	9.54E+01	5.29E+01	2.53E+01
	. 73	1.80E-03	2.56E-01	2.87E-04	9.61E+01	5.67E+01	2.79E+G1
	. 23	1.44E-03	2.37E-01	2.85E-04	9.66E+01	5.81E+01	3.05E+01
	. 7.7	1.32E-03	2.51E-01	3.25E-04	9.70E+01	6.10E+01	3.35E+01
	.35	1.08E-03	2.37E-01	3.30E-04	9.74E+01	6.3FE+01	3.65E+01
	97	7.20E-04	1.82E-01	2.73E-04	9.77E+01	6.55E+01	3.90E+01
42 9.	€4	8.40E-04	2.46E-01	3.95E-04	9.80E+01	6.82E+01	4.26E+01
	1.3	8.40E-04	2.84E-01	4.90E-04	9.82E+01	7.13E+01	4.71E+01
	. 1	€.00E-04	2.34E-01	4.34E-04	9.85E+01	7.38E+01	5.11E+01
	. 9	1.80E-03	8.10E-01	1.62E-03	9.91E+01	8.10E+01	6.88E-01
	3.8	9.GOE-04	4.99E-01	1.07E-03	9.94E+01	8.81E+01	7.58E+01
47 13	2.6	7.10E-04	4.32E-01	9.96E-04	9.97E+01	9.13E+01	8.49E+01
48 14	3.8	9.60E-04	6.66E-01	1.65E-03	1.00E+02	1.00E+62	1.00E+02
	. i	0.00E±00	0.30E+00	0.00E+00	1.0CE+02	1.00E+02	1.00E+02
TOTALS:		2.87E-01 9.					· ·

FILE NAME: OUT5 16.009 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

			ENTRATIONS		CUM	L'LATIVE %	
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	3.60E-04	2.18E-04	1.60E-08	3.54E-01	5.40E-03	3.07E-04
1	.504	3.60E-04	2.88E-04	2.42E-08	7.08E-01	1.25E-02	7.72E-04
2	. 542	3.60E-04	3.32E-04	3.00E-08	1.06E+00	2.08E-02	1.35E-03
3	.581	2.40E-04	2.55E-04	2.47E-08	1.30E+00	2.71E-02	1.82E-03
4	.625	1.20E-04	1.47E-04	1.53E-08	1.42E+00	3.08E-02	2.12E-03
5	.673	6.00E-04	8.54E-04	9.58E-08	2.01E+00	5.20E-02	3.95E-03
• 6	.723	1.56E-03	2.57E-03	3.09E-07	3.54E+00	1.16E-01	9.89E-03
7	.777	1.20E-03	2.28E-03	2.95E-07	4.72E+00	1.72E-01	1.56E-02
8	.835	2.76E-03	6.05E-03	8.43E-07	7.44E+00	3.22E-01	3.17E-02
9	.897	3.60E-03	9.12E-03	1.36E-06	1.10E+01	5.49E-01	5.79E-02
10	.964	2.88E-03	8.42E-03	1.35E-06	1.38E+01	7.58E-01	8.39E-02
11	1.03	3.24E-03	1.09E-02	1.89E-06	1.70E+01	1.03E+00	1.20E-01
12	1.11	3.96E-03	1.54E-02	2.87E-06	2.09E+01	1.41E+00	1.75E-01
13	1.19	4.08E-03		3.67E-06	2.49E+01	1.87E+00	2.45E-01
14	1.28	3.36E-03	1.75E-02	3.75E-06	2.82E+01	2.30E+00	3.17E-01
1 5	1.28	4.44E-03	2.67E-02	6.14E-06	3.26E+01	2.96E+00	
16	1.48	5.28E-03	3.66E-02	9.06E-06	3.78E+01		4.35E-01
17	1.59	3.84E-03	3.07E-02	\$.18E-06		3.87E+00	6.03E-01
: [5	1.71	4.80E-03	4.14E-02		4.16E+01	4.64E÷00	7.6FE-01
: <u>9</u>	1.84	4.80E-00	4.97E-02	1.27E-08	4.63F+01	5.74E+00	1.01E+00
<u></u>	1.98	1.08E-03	5.03E-02	1.50E-05	5.(SF+01	6.8:E+00	1.30E+00
•. •	2.32	1.20E-03		1.66E-05	8.48E+01	E.18E+00	1.F1E+60
	2.28		5.88E-02	2.12E-05	5.89E-31	9. %F+(0)	2.01E-(1
	2.43	3.50E-03	6.51E-02	1.48E-08	0.282-01	: . : ( <b>:</b> + ^ :	2. F( E-00
<b>-</b> C		4.44E-00	20-33E-32	2.48F-08	6.74E-11	1.23F+61	0.10E+07
4.5	1.01	0.12E-08	0.84E-02	0.01E-08	1.01E+01	1.53E+01	7.7 (E-6)
	1.83	1.02E-03	1.09E-01	5.17E-05	7.48E+01	1.78E+01	1.78E+06
26	( , ( 5	2.76E-03	8.07E-02	4.10E-05	7.72E+01	1.88E+01	f.61E+60
	2.27	2.82E-03	8.f1E-02	4.68E-05	7.97E-01	2.19E+01	6.41E-00
28	2.50	2.40E-03	9.36E-02	5.49E-05	8.21E-01	1.92E+01	7.48E+00
	7.78	1.65E-03	7.76E-02	4.77E-05	8.37E+01	1.81E-01	8.28E+00
30 31	4.56	1.32E-03	5.8CE-02	4.65E-05	8.50E-(1	2.78E+01	9.27E+00
31	37	1.80E-03	1.08E-01	7.87E-05	8.68E+01	3.0fE+01	1.08E+01
32	4.69	1.44E-03	9.9SE-02	7.82E-05	8.82E±01	3.00E+01	1.23E-01
	5.04	2.16E-03	1.78E-01	1.45E-04	9.03E+01	3.73E±01	1.51E+(:1
04	5.42	1.32E-03	1.22E-01	1.10E-04	9.16E-01	4.00E+01	1.72E+01
	5.82	8.40E-04	8.97E-02	8.71E-05	9.24E+01	4.25E+01	1.85E+01
	0.26	1.08E-03	1.33E-01	1.39E-04	9.35E+01	4.58E+01	2.1fE+01
	6.73	7.20E-04	1.03E-01	1.15E-04	9.42E+01	4.84E+01	2.37E+01
	7.23	1.32E-03	2.17E-01	2.62E-04	9.55E+01	5.37E+01	2.87E+01
	7.77	1.20E-04	2.28E-02	2.95E-05	9.56E+01	5.43E+01	2.93E+01
	8.35	4.80E-04	1.05E-01	1.47E-04	9.61E+01	E.09E+01	3.21E+01
	8.97	3.60E-04	9.11E-02	1.36E-04	9.65E+01	5.92E+01	3.47E+01
	9.64	4.80E-04	1.40E-01	2.26E-04	9.69E+01	6.27E+01	3.91E+01
	10.3	7.20E-04	2.43E-01	4.20E-04	9.76E+01	6.87E÷01	1.71E+01
	11.1	3.60E-04	1.40E-01	2.61E-04	9.80E+01	7.22E+01	5.21E+01
	11.9	7.20E-04	3.24E-01	6.47E-04	9.87E-01	8.01E+01	6.45E÷01
	12.8	3.60E-04	1.87E-01	4.01E-04	9.91E-01	8.48E+01	7.22E+01
	13.8	6.00E-04	3.60E-01	8.30E-04	9.96E-01	9.38E+01	8.81E+01
48	14.8	3.60E-04	2.50E-01	6.18E-04	1.00E+02	1.00E+02	1.00E+02
	15.4	0.00E+00	0.00E-00	0.00E+00	1.00E-02	1.00E+02	1.00E+02
TOTAL	S:	1.02E-01 4				1 · · · · · · · · · · · · · · · · · · ·	1.0(27(C
				-12 00			

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 16.010 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: I DIL. RATIO: I:I EFFIC. CORRECT.: DI

			ENTRATIONS			JLATIVE %	
	DIA.	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<b>&lt;</b>	.486	3.60E-04	2.18E-04		•		1.40E-04
1	.501	3.60E-04	2.88E-04	2.12E-08			
2	.542	4.80E-04	4.43E-04	4.00E-08		1.04E-02	7.00E-04
3	.581	8.40E-04	8.93E-04	8.66E-08	8.07E-01	2.01E-02	1.46E-03
1	.625	1.68E-03	2.06E-03	2.15E-07	1.47E+00	4.26E-02	3.33E-03
5	.673	1.56E-03	2.22E-03	2.19E-07	2.09E+00	6.69E-02	5.50E-03
6	.723	2.10E-03	3.95E-03	1.76E-07	3.04E+00	1.10E-01	9.66E-03
7	.777	5.10E-03	1.03E-02	1.33E-06	5.18E+00	2.22E-01	2.13E-02
8	.835	6.60E-03	1.45E-02	2.02E-06	7.79E+00	3.80E-01	3.88E-02
9	.897	8.01E-03	2.01E-02	3.05E-06	1.106+01	6.02E-01	6.54E-02
10	. 964	8.52E-03	2.49E-02	1.01E-06	1.43E+01	8.74E-01	1.00E-01
11.	1.03	8.28E-03	2.80E-02	1.83E-06	1.76E+01	1.18E+00	1.43E-01
12	1.11	8.16E-03	3.18E-02	5.91E-06	2.08E+01	1.53E+00	1.94E-01
13	1.19	8.52E-03	3.81E-02	7.65E-06	2.12E+01	1.95E+00	2.61E-01
11	1.28	8.76E-03	4.56E-02	9.77E-06	2.77E+01	2.44E+00	3.46E-01
15	1.38	1.21E-02	7.42E-02	1.71E-05	3.26E+01	3.25E+00	4.95E-01
16	1.18	1.03E-02	7.15E-02	1.77E-05	3.67E+01	1.03E+00	6.50E-01
17	1.59	1.19E-02	9.51E-02	2.53E-05	1.14E+01	5.07E+00	8.71E-01
18	1.71	1.31E-02	1.21E-01	3.1GE-05	1.65E+01	6.39E+00	1.17E+00
19	1.81	1.01E-02	1.08E-01	3.31E-05	5.05E+01	7.57E+00	1.46E+00
20	1.98	1.01E-02	1.29E-01	1.05E-05	5.17E+01	8.97E+00	1.83E+00
21	2.12	1.14E-02	1.62E-01	5.76E-05	5.92E+01	1.07E+01	2.33E+00
2::	2.28	1.31E-02	2.15E-01	8.COE-05	6.43E+01	1.31E+01	3.05E+00
23	3.15	9.81E-03	1.87E-01	7.65E-05	6.82E+01	1.51E+01	3.72E+00.
24	2.61	9.84E-03	2.16E-01	9.49E-05	7.21E+01	1.75E+01	4.55E+00.
25	2.83	8.88E-03	2.25E-01	1.06E-01	7.56E+01	1.99E+01	5.47E+00
26	3.05	7.80E-03	2.28E-01	1.1GE-01	7.87E+01	2.21E+01	6.49E+00
27	3.27	6.36E-03	2.15E-01	1.17E-04	8.12E+01	2.48E+01	7.51E+00
28	3.53	5.88E-03	2.29E-01	1.35E-04	8.36E+01	2.73E+01	8.68E+00
29	3.78	5.16E-03	2.32E-01	1.171:-01	8.56E+01	2.98E+01	9.96E+00
30	1.06	2.76E-03	1.43E-01	9.73E-05	8.67E+01	3.14E+01	1.08E+01
31	4.37	5.40E-03	3.24E-01	2.36E-01	8.88E+01	3.49E+01	1.29E+01
32	4.69	3.24E-03	2.25E-01	1.76E-04	9.01E+01	3.74E+01	1.44E+01
33	5.04	3.84E-03	3.07E-01	2.59E-04	9.16E+01	4.07E+01	1.67E+01
34	5.42	3.84E-03	3.55E-01	3.21E-04	9.32E+01	4.46E+01	1.95E+01"
35	5.82	1.56E-03	1.67E-01	1.62E-04	9.38E+01	4.64E+01	2.09E+01
36	6.26	1.56E-03	1.92E-01	2.01E-04	9.44E+01	4.85E+01	2.26E+01
37	6.73	1.14E-03	2.05E-01	2.30E-04	9.50E+01	5.08E+01	2.46E+01
38	7.23	1.92E-03	3.16E-01	3.81E-04	9.57E+01	5.42E+01	2.80E+01
39	7.77	7.20E-04	1.37E-01	1.778-04	9.60E+01	5.57E+01	2.95E+01
40	8.35	1.32E-03	2.89E-01	4.03E-04	9.65E+01	5.89E+01	3.30E+01
11	8.97	1.56E-03	3.95E-01	5.91E-04	9.72E+01	6.32E+01	3.82E+01
42	9.64	1.56E-03	4.56E-01	7.33E-01	9.78E+01	6.82E+01	4.46E+01
13	10.3	7.20E-04	2.43E-01	1.20E-04	9.81E+01	7.08E+01	4.82E+01
44	11.1	7.20E-01	2.81E-01	5.21E-04	9.83E+01	7.39E+01	5.28E+01
45	11.9	7.20E-04	3.24E-01	6.47E-04	9.86E+01	7.74E+01	5.84E+01
46	12.8	1.08E-03	5.61E-01	1.20E-03	9.91E+01	8.35E+01	6.89E+01
47	13.8	1.68E-03	1.01E+00	2.32E-03	9.97E+01	9.46E+01	8.92E+01
48	14.8	7.20E-04	4.99E-01	1.24E-03	1.00E+02	1.00E+02	1.00E+02
>	15.1	0.006+00	0.00E+00	0.008+00	1.00E+02	1.00E+02	1.00E+02
ΤΟΤΛΙ			9.16E+00 1.		- · · · · · · · · · · · · · · ·	= : : : : = = : = = = = = = = = = = = =	
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#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 13.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		2220 10000				-	
		CONCI	ENTRATIONS		CUMI	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486		9.74E-04	7.28E-08	3.75E-01	6.40E-03	3.40E-04
ì	.504		9.60E-04	8.08E-08		1.27E-02	
2	.542					2.29E-02	
3	.581	2.40E-03		2.47E-07	1.64E+00		
			4.42E-03				
4	.625		6.49E-03	•			8.08E-03
5	.673						
6 7	.723		1.16E-02				1.46E-02
7	.777	9.00E-03					2.50E-02
<b>9</b> 8	.835	1.14E-02					4.12E-02
	.897	1.61E-02			1.41E+01		
10	.964	1.58E-02			1.79E+01		
11:	1.03	1.70E-02				1.41E+00	1.51E-01
12	1.11		7.77E-02				
13:	1.19		7.94E-02				
14	1.28	2.15E-02	1.12E-01	2.40E-05	3.61E+01		
15	1.38	2.12E-02	1.28E-01	2.94E-05	4.13E+01	4.02E+00	5.42E-01
16	1.48	2.52E-02	1.75E-01	4.33E-05	4.73E+01	5.17E+00	7.44E-01
17	1.59	2.24E-02	1.80E-01	4.78E-05	5.27E+01	6.35E+00	9.67E-01
18	1.71		1.64E-01	4.69E-05	5.70E+01	7.42E+00	1.19E+00
19.	1.84	2.05E-02	2.19E-01	6.73E-05	5.19E+01	8.86E+00	1.50E+00
20	1.98	1.70E-02	2.10E-01	6.94E-05	6.60E+01	1.02E+01	1.82E+00
21	2.12		2.50E-01	9.22E-05	7.04E+01	1.20E+01	2.26E+00
22	2.28			8.27E-05	7.35E-01	1.34E+01	2.64E+00
23	2.45			9.14E-05	7.64E+01	1.48E+01	3.07E+00
24	2.64			8.68E-05	7.85E+01	1.61E+01	3.47E+00
25	2.83			9.34E-05		1.74E+01	3.91E+00
26	3.05	7.92E-03		1.18E-04		1.90E+01	4.46E+00
27	3.27	7.44E-03	2.51E-01	1.37E-04	8.41E+01.	2.06E+01	5.10E+00
28.	3.52		2.48E-01	1.46E-04			5.78E+00
29	3.78	4.32E-03	1.94E-01	1.23E-04	8.67E+01		6.36E+00
30	4.06	4.8CE-03	2.50E-01	1.69E-04	8.78E+01	2.52E+01	7.15E-00
31	4.37	4.56E-03	2.74E-01	1.99E-04	8.89E+01	2.70E+01	8.08E+00
32	4.69			2.15E-04			9.08E+00
33	5.04			2.83E-04	9.09E+01		1.04E+01
34	5.42	3.96E-03	3.66E-01	3.31E-04	9.18E+01	3.34E+01	1.20E+01
35 <sup>°</sup> √	5.82	4.56E-03		4.73E-04	9.29E+01	3.66E+01	1.42E+01
<b>36</b>	6.26	2.52E-03		3.24E-04	9.35E+01	3.86E+01	1.57E+01
37	6.73	3.24E-03	4.61E-01	5.17E-04		4.16E+01	1.81E+01
38		3.84E-03		7.61E-04	9.52E+01	4.58E+01	2.16E+01
3 <b>9</b> -'	7.23		6.31E-01				2.10E+01 2.43E+01
	7.77	2.28E-03	4.33E-01	5.61E-04	9.58E+01	4.86E+01	
40	8.35	1.80E-03	3.95E-01	5.49E-04		5.12E+01	2.68E+01
41	8.97	1.92E-03		7.27E-04	9.67E+01		3.02E+01
42	9.64	1.20E-03	3.51E-01	5.64E-04	9.69E+01	5.67E+01	3.29E+01
43	10.3	1.32E-03		7.70E-04	9.73E+01	5.96E+01	3.65E+01
44 '	11.1	1.68E-03		1.22E-03	9.77E+01	6.39E+01	4.21E+01
45	11.9		1.19E+00		9.83E+01	7.18E+01	5.32E+01
46	12.8	2.16E-03	1.12E+00	2.41E-03	9.88E+01	7.91E+01	6.45E+01
47	13.8	2.52E-03	1.51E+00	3.49E-03	9.94E+01	8.91E+01	8.08E+01
48	14.8		1.66E+00	4.12E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	4.16E-01 ]	.52E+01 2.	14E-02			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 13.002 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

CHNL DIA NUMBER SURFACE   MASS   NUMBER SURFACE   MASS   NUMBER SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   MASS   NUMBER   SURFACE   NUMBER   NUMBER   SURFACE   NUMBER   SURFACE   NUMBER   NUMBER   SURFAC			CONC	CATTO A TO LONG		CUM	U ATTUE W	
1	CUNI	DIA			MACC			MACC
1			• • • • • • • • • • • • • • • • • • • •					
1.68E-03							•	
3         .581         2.84E-03         2.71E-03         2.72E-07         2.13E+00         8.70E-02         3.29E+03           5         .6673         5.88E-03         8.37E-03         9.39E-07         5.01E+00         1.53E-01         1.16E-02           6         .723         8.64E-03         1.42E-02         1.71E-06         7.56E+00         2.65E-01         2.15E-02           7         .777         8.40E-03         1.60E-02         2.07E-06         1.26E+01         5.42E-01         4.91E-02           8         .835         8.76E-02         2.95E-02         2.441E-06         1.61E+01         7.74E-01         7.47E-02           10         .964         1.42E-02         4.46E-02         7.70E-06         2.42E+01         1.45E+00         1.58E-01           12         1.11         1.38E-02         5.38E-02         1.20E-05         2.83E+01         1.88E+00         2.90E-01           13         1.19         1.42E-02         8.34E-02         1.27E-05         3.24E+01         3.94E+00         2.96E-01           14         1.28         1.62E-02         1.16E-01         2.56E-05         4.27E+01         3.92E+00         5.43E-01           15         1.38         1.52E-02         1.46E			•					
4         .625         3.84E-03         4.71E-03         4.91E-07         3.27E+00         8.76E-02         6.14E-03           5         .673         5.86E-03         1.42E-02         1.71E-06         7.56E+00         2.55E-01         2.15E-02           7         .777         8.40E-03         1.60E-02         2.07E-06         1.00E+01         3.91E-01         3.35E-02           8         .835         8.76E-03         1.92E-02         2.67E-06         1.00E+01         3.91E-01         3.35E-02           9         .897         1.16E-02         2.95E-02         2.44IE-06         1.61E+01         7.74E-01         7.47E-02           11         1.03         1.32E-02         4.46E-02         7.70E-06         2.42E+01         1.45E+00         1.58E-01           12         1.11         1.38E-02         5.38E-02         1.00E-05         2.83E+01         1.88E+00         2.16E-01           13         1.19         1.42E-02         6.38E-02         1.27E-05         3.72E+01         3.04E+00         3.95E-01           14         1.28         1.62E-02         8.43E-02         1.81E-05         3.72E+01         3.04E+00         3.95E-01           15         1.38         1.85E-02         1.11E-								
5         .673         5.88E-03         8.37E-03         9.39E-07         5.01E+00         1.53E-01         2.15E-02           7         .777         8.40E-03         1.60E-02         2.07E-06         1.00E+01         3.91E-01         3.35E-02           8         .835         8.76E-03         1.92E-02         2.67E-06         1.26E+01         5.42E-01         4.91E-02           10         .964         1.42E-02         4.14E-02         6.66E-06         2.02E+01         1.10E+00         1.13E-01           11         1.03         1.32E-02         4.14E-02         6.66E-06         2.02E+01         1.45E+00         1.58E-01           12         1.11         1.38E-02         5.38E-02         1.00E-05         2.83E+01         1.88E+00         2.16E-01           13         1.19         1.42E-02         6.38E-02         1.27E-05         3.24E+01         2.38E+00         2.96E-01           14         1.28         1.66E-02         1.16E-01         2.56E-05         4.27E+01         3.92E+00         3.43E-01           15         1.38         1.3ED-02         1.05E-01         2.79E-05         5.15E+01         5.66E+00         8.72E-01           16         1.48         1.6ED-02         1.40E								
6         .723         8.64E-03         1.42E-02         1.71E-06         7.56E+00         2.65E-01         2.15E-02           8         .835         8.76E-03         1.69E-02         2.67E-06         1.26E+01         5.42E-01         4.91E-02           9         .897         1.16E-02         2.95E-02         4.41E-06         1.61E+01         7.74E-01         7.4TE-02           10         .964         1.42E-02         4.46E-02         7.70E-06         2.93E+01         1.10E+00         1.13E-01           11         1.03         1.32E-02         5.38E-02         1.00E-05         2.83E+01         1.45E+00         1.58E-01           12         1.11         1.38E-02         5.38E-02         1.00E-05         2.83E+01         1.88E+00         2.90E-01           14         1.28         1.62E-02         8.43E-02         1.81E-05         3.72E+01         3.94E+00         2.90E-01           15         1.38         1.85E-02         1.16E-01         2.88E-05         4.77E+01         3.94E+00         5.43E-01           16         1.48         1.62E-02         1.6E-01         2.88E-05         4.77E+01         3.94E+00         5.73E-01           17         1.59         1.31E-02         1.40E-								
7         .777         8.40E-03         1.60E-02         2.07E-06         1.00E+01         3.91E-01         4.35E-02           9         .897         1.16E-02         2.95E-02         4.41E-06         1.61E+01         7.74E-01         7.47E-02           10         .964         1.42E-02         4.14E-02         6.66E-06         2.03E+01         1.10E+00         1.58E-01           11         1.03         1.32E-02         4.46E-02         7.70E-06         2.42E+01         1.48E+00         1.58E-01           12         1.11         1.38E-02         5.38E-02         1.00E-05         2.83E+01         1.88E+00         2.16E-01           13         1.19         1.42E-02         6.38E-02         1.27E-05         3.24E+01         2.38E+00         2.90E-01           14         1.28         1.66E-02         1.11E-01         2.56E-05         4.27E+01         3.04E+00         2.90E-01           15         1.38         1.85E-02         1.16E-01         2.79E-05         5.15E+01         5.66E+00         7.71E-01           16         1.48         1.66E-02         1.46E-01         4.06E-05         5.60E+01         3.72E+01         5.43E-06           17         1.52E-01         1.31E-02								
8         .835         8.76E-03         1.92E-02         2.67E-06         1.26E+01         5.42E-01         4.91E-02           10         .964         1.42E-02         2.95E-02         4.41E-06         1.61E+01         7.74E-01         7.47E-02           11         1.03         1.32E-02         4.46E-02         7.70E-06         2.42E+01         1.45E+00         1.58E-01           12         1.11         1.38E-02         5.38E-02         1.00E-05         2.83E+01         1.86E+00         2.16E-01           13         1.19         1.42E-02         6.38E-02         1.27E-05         3.24E+01         2.38E+00         2.90E-01           14         1.28         1.62E-02         8.43E-02         1.81E-05         3.72E+01         3.92E+00         5.43E-01           15         1.38         1.85E-02         1.11E-01         2.56E-05         4.27E+01         3.92E+00         5.43E-01           16         1.48         1.66E-02         1.06E-01         2.79E-05         5.15E+01         5.66E+00         7.71E-01           17         1.59         1.31E-02         1.40E-01         4.00E-05         5.60E+01         6.76E+00         7.10E-00           18         1.71         1.51E-02         1.4								
9								
10								
11								
1.11								
13         1.19         1.42E-02         6.38E-02         1.27E-05         3.24E+01         2.38E+00         2.90E-01           14         1.28         1.62E-02         8.43E-02         1.81E-05         3.72E+01         3.04E+00         3.95E-01           15         1.38         1.85E-02         1.11E-01         2.56E-05         4.27E+01         3.92E+00         5.43E-01           16         1.48         1.66E-02         1.16E-01         2.79E-05         5.15E+01         5.66E+00         2.72E-01           17         1.59         1.31E-02         1.40E-01         4.00E-05         5.60E+01         6.76E+00         1.10E+00           19         1.84         1.32E-02         1.41E-01         4.23E-05         5.99E+01         7.87E+00         1.36E+00           20         1.98         1.21E-02         1.49E-01         4.93E-05         6.35E+01         9.05E+00         1.6EE+00           21         2.12         1.06E-02         1.50E-01         5.34E-05         6.36E+01         1.07E+01         1.5EE+00           22         2.28         1.4E-02         1.86E-01         7.14E-05         7.28E+01         1.31E+01         2.37E+00           23         2.45         9.46E-03         2.8								
1.28								
15         1.38         1.85E-02         1.11E-01         2.56E-05         4.27E+01         3.92E+00         5.43E-01           16         1.48         1.68E-02         1.16E-01         2.88E-05         4.77E+01         4.83E+00         7.11E-01           17         1.59         1.31E-02         1.40E-01         4.00E-05         5.5E+01         6.76E+00         1.10E+00           18         1.71         1.51E-02         1.40E-01         4.00E-05         5.60E+01         6.76E+00         1.10E+00           19         1.84         1.32E-02         1.41E-01         4.93E-05         6.35E+01         9.05E+00         1.64E+00           20         1.98         1.21E-02         1.50E-01         5.34E-05         6.66E+01         1.02E+01         1.55E+00           21         2.12         1.06E-02         1.50E-01         7.14E-05         7.00E+01         1.37E+00         2.37E+00           23         2.45         9.48E-03         1.80E-01         7.14E-05         7.28E+01         1.48E+01         2.79E+00           24         2.64         9.96E-03         2.18E-01         7.47E-05         7.26E+01         1.50E+01         3.35E+00           25         2.83         6.24E-03         1.5								
16       1.48       1.68E-02       1.16E-01       2.88E-05       4.77E+01       4.83E+00       7.11E-01         17       1.59       1.31E-02       1.05E-01       2.79E-05       5.15E+01       5.66E+00       2.72E-01         18       1.71       1.51E-02       1.40E-01       4.00E-05       5.60E+01       6.7EE+00       1.26E+00         19       1.84       1.32E-02       1.41E-01       4.32E-05       5.99E+01       7.87E+00       1.26E+00         20       1.98       1.21E-02       1.49E-01       4.93E-05       6.35E+01       9.05E+00       1.64E+00         21       2.12       1.06E-02       1.50E-01       5.34E-05       6.35E+01       1.02E+01       1.25E+00         22       2.28       1.14E-02       1.67E-01       7.14E-05       7.00E+01       1.31E+01       2.37E+00         23       2.45       9.48E-03       1.80E-01       7.37E-05       7.28E+01       1.31E+01       2.37E+00         24       2.64       9.96E-03       2.18E-01       9.61E-05       7.28E+01       1.31E+01       2.37E+00         25       2.83       6.24E-03       1.58E-01       7.47E-05       7.6E+01       1.60E+01       3.58E+00         26 <td></td> <td></td> <td>• .</td> <td></td> <td></td> <td></td> <td></td> <td></td>			• .					
17         1.59         1.31E-02         1.05E-01         2.79E-05         5.15E+01         5.66E+00         8.72E-01           18         1.71         1.51E-02         1.40E-01         4.00E-05         5.60E+01         6.76E+00         1.10E+00           19         1.84         1.32E-02         1.41E-01         4.93E-05         5.99E+01         7.87E+00         1.26E+00           20         1.98         1.21E-02         1.49E-01         4.93E-05         6.35E+01         9.05E+00         1.64E+00           21         2.12         1.66E-02         1.50E-01         5.34E-05         6.66E+01         1.02E+01         1.55E+60           22         2.28         1.4E-02         1.87E-01         7.14F-05         7.00E+01         1.37E+01         2.79E+00           24         2.64         9.96E-03         2.18E+01         9.61E-05         7.28E+01         1.31E+01         2.79E+00           25         2.83         6.24E-03         1.58E+01         7.47E-05         7.76E+01         1.48E+01         3.55E+00           26         3.05         8.40E-03         2.46E+01         1.25E-04         8.01E+01         1.80E+01         4.51E+00           27         3.27         5.76E-03         2.4								
18         1.71         1.51E-02         1.40E-01         4.00E-05         5.60E+01         6.76E+00         1.10E+00           19         1.84         1.32E-02         1.41E-01         4.32E-05         5.99E+01         7.87E+00         1.26E+00           20         1.98         1.21E-02         1.49E-01         4.93E-05         6.35E+01         7.87E+00         1.64E+00           21         2.12         1.06E-02         1.50E-01         5.34E-05         6.66E+01         1.02E+01         1.49E+00           22         2.28         1.14E-02         1.87E-01         7.14E-05         7.00E+01         1.31E+01         2.37E+00           24         2.64         9.96E-03         2.18E-01         9.61E-05         7.28E+01         1.31E+01         2.79E+00           25         2.83         6.24E-03         1.58E-01         7.47E-05         7.76E+01         1.61E+01         3.75E+00           26         3.05         8.40E-03         2.46E-01         1.25E-04         8.01E+01         1.80E+01         4.51E+00           27         3.25         6.00E-03         2.34E-01         1.37E-04         8.36E+01         2.14E+01         5.93E+00           28         3.78         5.52E-03         2.								
19 1.84 1.32E-02 1.41E-01 4.32E-05 5.99E+01 7.87E+00 1.36E+00 20 1.98 1.21E-02 1.49E-01 4.93E-05 6.35E+01 9.05E+00 1.64E+00 21 2.12 1.06E-02 1.50E-01 5.34E-05 6.66E+01 1.02E+01 1.55E+00 22 2.28 1.14E-02 1.87E-01 7.14E-05 7.00E+01 1.17E+01 2.37E+00 23 2.45 9.48E-03 1.80E-01 7.37E-05 7.28E+01 1.51E+01 2.79E+00 24 2.64 9.96E-03 2.18E-01 7.47E-05 7.28E+01 1.51E+01 2.79E+00 25 2.83 6.24E-03 1.58E-01 7.47E-05 7.76E+01 1.61E+01 3.75E+00 26 3.05 8.40E-03 2.46E-01 1.25E-04 8.01E+01 1.80E+01 4.51E+00 27 3.27 5.76E-03 1.94E-01 1.06E-04 8.18E+01 1.96E+01 5.13E+00 28 3.52 6.00E-03 2.34E-01 1.37E-04 8.36E+01 2.14E+01 5.93E+00 29 3.78 5.52E-03 2.49E-01 1.57E-04 8.52E+01 2.34E+01 5.93E+00 30 4.06 3.48E-03 1.81E-01 1.23E-04 8.62E+01 2.48E+01 7.55E+00 31 4.37 3.84E-03 2.31E-01 1.68E-04 8.74E+01 2.66E+01 8.52E+00 32 4.69 4.92E-03 3.41E-01 2.67E-04 8.68E+01 2.93E+01 1.01E+01 33 5.04 4.68E-03 3.75E-01 3.15E-04 9.02E+01 3.29E+01 1.01E+01 34 5.42 3.24E-03 3.00E-01 2.71E-04 9.02E+01 3.27E+01 1.19E+01 36 6.26 3.12E-03 3.85E-01 4.02E-04 9.32E+01 3.77E+01 1.57E+01 37 6.73 3.36E-03 4.78E-01 5.37E-04 9.42E+01 4.68E+01 1.80E+01 38 7.23 1.80E-03 2.96E-01 3.57E-04 9.42E+01 4.68E+01 1.80E+01 40 8.35 1.80E-03 3.95E-01 3.57E-04 9.42E+01 4.69E+01 2.32E+01 41 8.97 1.32E-03 3.34E-01 5.00E-04 9.47E+01 4.69E+01 2.32E+01 41 8.97 1.32E-03 3.95E-01 6.08E-04 9.57E+01 5.19E+01 2.80E+01 41 8.97 1.32E-03 3.95E-01 5.49E-04 9.62E+01 5.50E+01 3.12E+01 41 8.97 1.32E-03 3.34E-01 5.00E-04 9.62E+01 5.50E+01 3.12E+01 42 9.64 1.44E-03 4.21E-01 6.77E-04 9.71E+01 6.09E+01 3.81E+01 43 10.3 2.52E-03 8.51E-01 1.47E-03 9.78E+01 6.09E+01 3.81E+01 44 11.1 8.40E-04 3.27E-01 6.08E-04 9.80E+01 7.02E+01 5.01E+01 45 11.9 1.56E-03 9.37E-01 1.40E-03 9.94E+01 8.95E+01 6.83E+01 47 13.8 1.56E-03 9.37E-01 1.40E-03 9.94E+01 8.95E+01 6.68E+01 47 13.8 1.56E-03 9.37E-01 1.40E-03 9.94E+01 8.95E+01 6.68E+01 48 1.54E-03 1.33E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
1.98								
21 2.12 1.06E-02 1.50E-01 5.34E-05 6.66E+01 1.02E-01 1.95E+00 22 2.28 1.14E-02 1.87E-01 7.14E-05 7.00E+01 1.17E+01 2.37E+00 23 2.45 9.48E-03 1.80E-01 7.37E-05 7.28E+01 1.51E+01 2.37E+00 24 2.64 9.96E-03 2.18E-01 9.61E-05 7.58E+01 1.48E+01 3.35E+00 25 2.83 6.24E-03 1.58E-01 7.47E-05 7.76E+01 1.61E+01 3.79E+00 26 3.05 8.40E-03 2.46E-01 1.25E-04 8.01E+01 1.80E+01 4.51E+00 27 3.27 5.76E-03 1.94E-01 1.06E-04 8.18E+01 1.96E+01 5.93E+00 28 3.52 6.00E-03 2.34E-01 1.37E-04 8.36E+01 2.14E+01 5.93E+00 29 3.78 5.52E-03 2.49E-01 1.57E-04 8.52E+01 2.34E+01 6.84E+00 30 4.06 3.48E-03 1.81E-01 1.23E-04 8.52E+01 2.34E+01 6.84E+00 31 4.37 3.84E-03 2.31E-01 1.68E-04 8.74E+01 2.66E+01 8.52E+00 32 4.69 4.92E-03 3.41E-01 2.67E-04 8.88E+01 2.93E+01 1.01E+01 33 5.04 4.68E-03 3.75E-01 3.15E-04 9.02E+01 3.22E+01 1.19E+01 34 5.42 3.24E-03 3.00E-01 2.71E-04 9.12E+01 3.46E+01 1.35E+01 35 5.82 3.72E-03 3.97E-01 3.86E-04 9.23E+01 4.08E+01 1.57E+01 36 6.26 3.12E-03 3.85E-01 4.02E-04 9.32E+01 4.08E+01 1.57E+01 37 6.73 3.36E-03 4.78E-01 5.37E-04 9.42E+01 4.69E+01 1.57E+01 39 7.77 3.36E-03 8.38E-01 4.02E-04 9.32E+01 4.08E+01 1.57E+01 40 8.35 1.80E-03 2.96E-01 3.57E-04 9.47E+01 4.69E+01 2.32E+01 41 8.97 1.32E-03 3.34E-01 5.00E-04 9.66E+01 5.76E+01 3.12E+01 42 9.64 1.44E-03 4.21E-01 6.77E-04 9.77E+01 5.79E+01 3.81E+01 43 10.3 2.52E-03 3.95E-01 5.49E-04 9.66E+01 5.76E+01 3.12E+01 41 8.97 1.32E-03 3.34E-01 5.00E-04 9.66E+01 5.76E+01 3.12E+01 41 8.97 1.32E-03 3.34E-01 5.00E-04 9.66E+01 5.76E+01 3.12E+01 41 8.97 1.32E-03 3.34E-01 5.00E-04 9.66E+01 5.76E+01 3.81E+01 42 9.64 1.44E-03 4.21E-01 6.77E-04 9.77E+01 5.77E+01 5.82E+01 41 1.1 8.60E-04 3.27E-01 6.08E-04 9.80E+01 5.76E+01 5.01E+01 41 8.97 1.32E-03 7.02E-01 1.40E-03 9.85E+01 7.57E+01 5.82E+01 42 9.64 1.44E-03 4.21E-01 6.76E-04 9.78E+01 5.00E+01 5.00E+01 43 10.3 2.52E-03 8.51E-01 1.47E-03 9.90E+01 8.21E+01 6.83E+01 44 11.1 8.60E-04 3.27E-01 6.08E-04 9.80E+01 7.57E+01 5.82E+01 45 11.9 1.56E-03 7.02E-01 1.40E-03 9.98E+01 7.57E+01 5.82E+01 46 12.8 1.56E-03 7.02E-01 1.40E-03 9.98E+01 7.57E+01 5.82E+01 4								
22         2.28         1.14E-02         1.87E-01         7.14E-05         7.00E+01         1.17E+01         2.37E+00           23         2.45         9.48E-03         1.80E-01         7.37E-05         7.28E+01         1.51E+01         2.79E+00           24         2.64         9.96E-03         2.18E-01         9.61E-05         7.58E+01         1.48E+01         3.35E+00           25         2.83         6.24E-03         1.58E-01         7.47E-05         7.76E+01         1.61E+01         3.79E+00           26         3.05         8.40E-03         2.46E-01         1.25E-04         8.01E+01         1.80E+01         4.51E+00           28         3.52         6.00E-03         2.34E-01         1.37E-04         8.36E+01         2.14E+01         5.93E+00           29         3.78         5.52E-03         2.49E-01         1.57E-04         8.52E+01         2.34E+01         5.84E+00           30         4.06         3.48E-03         1.81E-01         1.23E-04         8.62E+01         2.34E+01         5.52E+00           31         4.37         3.84E-03         3.75E-01         3.68E-04         2.93E+01         2.93E+01         1.19E+01           33         5.62         3.22E-03         3.								
23								
24         2.64         9.96E-03         2.18E-01         9.61E-05         7.58E+01         1.48E+01         3.35E+00           25         2.83         6.24E-03         1.58E-01         7.47E-05         7.76E+01         1.61E+01         3.75E+00           26         3.05         8.40E-03         2.46E-01         1.25E-04         8.01E+01         1.80E+01         4.51E+00           27         3.27         5.76E-03         1.94E-01         1.06E-04         8.18E+01         2.14E+01         5.93E+00           29         3.78         5.52E-03         2.49E-01         1.57E-04         8.52E+01         2.34E+01         6.84E+00           30         4.06         3.48E-03         1.81E-01         1.23E-04         8.62E+01         2.48E+01         7.55E+00           31         4.37         3.84E-03         2.31E-01         1.68E-04         8.74E+01         2.66E+01         8.52E+00           32         4.69         4.92E-03         3.41E-01         2.67E-04         8.68E+01         2.93E+01         1.01E+01           33         5.62         3.72E-03         3.97E-01         3.15E-04         9.02E+01         3.2E+01         1.19E+01           34         5.42         3.24E-03         3.0								
2.83								
26       3.05       8.40E-03       2.46E-01       1.25E-04       8.01E+01       1.80E+01       4.51E+00         27       3.27       5.76E-03       1.94E-01       1.06E-04       8.18E+01       1.96E+01       5.13E+00         28       3.52       6.00E-03       2.34E-01       1.37E-04       8.36E+01       2.14E+01       5.93E+00         29       3.78       5.52E-03       2.49E-01       1.57E-04       8.52E+01       2.34E+01       6.64E+00         30       4.06       3.48E-03       1.81E-01       1.23E-04       8.62E+01       2.34E+01       7.55E+00         31       4.37       3.84E-03       2.31E-01       1.68E-04       8.74E+01       2.66E+01       8.52E+00         32       4.69       4.92E-03       3.41E-01       2.67E-04       8.68E+01       2.93E+01       1.01E+01         33       5.04       4.68E-03       3.75E-01       3.15E-04       9.02E+01       3.22E+01       1.19E+01         34       5.42       3.24E-03       3.00E-01       2.71E-04       9.12E+01       3.46E+01       1.35E+01         35       5.82       3.72E-03       3.97E-01       3.86E-04       9.23E+01       3.77E+01       1.57E+01         36 <td></td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td>				•				
27       3.27       5.76E-03       1.94E-01       1.06E-04       8.18E+01       1.96E+01       5.13E+00         28       3.52       6.00E-03       2.34E-01       1.37E-04       8.36E+01       2.14E+01       5.93E+00         29       3.78       5.52E-03       2.49E-01       1.57E-04       8.52E+01       2.34E+01       6.84E+00         30       4.06       3.48E-03       1.81E-01       1.22E-04       8.62E+01       2.48E+01       7.55E+00         31       4.37       3.84E-03       2.31E-01       1.68E-04       8.74E+01       2.66E+01       8.52E+00         32       4.69       4.92E-03       3.41E-01       2.67E-04       8.88E+01       2.93E+01       1.01E+01         33       5.04       4.68E-03       3.75E-01       3.15E-04       9.02E+01       3.22E+01       1.19E+01         34       5.42       3.24E-03       3.00E-01       2.71E-04       9.12E+01       3.46E+01       1.35E+01         35       5.82       3.72E-03       3.97E-01       3.86E-04       9.23E+01       3.77E+01       1.57E+01         36       6.26       3.12E-03       3.85E-01       4.02E-04       9.32E+01       4.08E+01       1.80E+01         37 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
28								
29       3.78       5.52E-03       2.49E-01       1.57E-04       8.52E+01       2.34E+01       5.84E+00         30       4.06       3.48E-03       1.81E-01       1.22E-04       8.62E+01       2.48E+01       7.55E+00         31       4.37       3.84E-03       2.31E-01       1.68E-04       8.74E+01       2.66E+01       8.52E+00         32       4.69       4.92E-03       3.41E-01       2.67E-04       8.68E+01       2.93E+01       1.01E+01         33       5.04       4.68E-03       3.75E-01       3.15E-04       9.02E+01       3.22E+01       1.19E+01         34       5.42       3.24E-03       3.00E-01       2.71E-04       9.12E+01       3.46E+01       1.35E+01         35       5.62       3.72E-03       3.97E-01       3.86E-04       9.23E+01       3.77E+01       1.57E+01         36       6.26       3.12E-03       3.85E-01       4.02E-04       9.32E+01       4.08E+01       1.80E+01         37       6.73       3.36E-03       4.78E-01       5.37E-04       9.47E+01       4.69E+01       2.32E+01         38       7.23       1.80E-03       3.95E-01       5.49E-04       9.57E+01       5.19E+01       2.80E+01         40 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
30       4.06       3.48E-03       1.81E-01       1.23E-04       8.62E+01       2.48E+01       7.55E+00         31       4.37       3.84E-03       2.31E-01       1.68E-04       8.74E+01       2.66E+01       8.52E+00         32       4.69       4.92E-03       3.41E-01       2.67E-04       8.68E+01       2.93E+01       1.01E+01         33       5.04       4.68E-03       3.75E-01       3.15E-04       9.02E+01       3.22E+01       1.19E+01         34       5.42       3.24E-03       3.00E-01       2.71E-04       9.12E+01       3.46E+01       1.35E+01         35       5.82       3.72E-03       3.97E-01       3.86E-04       9.23E+01       3.77E+01       1.57E+01         36       6.26       3.12E-03       3.85E-01       4.02E-04       9.32E+01       4.08E+01       1.80E+01         37       6.73       3.36E-03       4.78E-01       5.37E-04       9.42E+01       4.45E+01       2.12E+01         38       7.23       1.80E-03       2.96E-01       3.57E-04       9.47E+01       4.69E+01       2.32E+01         40       8.35       1.80E-03       3.95E-01       5.49E-04       9.57E+01       5.19E+01       2.80E+01         40 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
31       4.37       3.84E-03       2.31E-01       1.68E-04       8.74E+01       2.66E+01       8.52E+00         32       4.69       4.92E-03       3.41E-01       2.67E-04       8.88E+01       2.93E+01       1.01E+01         33       5.04       4.68E-03       3.75E-01       3.15E-04       9.02E+01       3.22E+01       1.19E+01         34       5.42       3.24E-03       3.00E-01       2.71E-04       9.12E+01       3.46E+01       1.35E+01         35       5.82       3.72E-03       3.97E-01       3.86E-04       9.23E+01       3.77E+01       1.57E+01         36       6.26       3.12E-03       3.85E-01       4.02E-04       9.32E+01       4.08E+01       1.80E+01         37       6.73       3.36E-03       4.78E-01       5.37E-04       9.42E+01       4.45E+01       2.12E+01         38       7.23       1.80E-03       2.96E-01       3.57E-04       9.47E+01       4.69E+01       2.32E+01         40       8.35       1.80E-03       3.95E-01       5.49E-04       9.57E+01       5.19E+01       2.80E+01         41       8.97       1.32E-03       3.34E-01       5.00E-04       9.66E+01       5.76E+01       3.41E+01         42 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
32       4.69       4.92E-03       3.41E-01       2.67E-04       8.68E+01       2.93E+01       1.01E+01         33       5.04       4.68E-03       3.75E-01       3.15E-04       9.02E+01       3.22E+01       1.19E+01         34       5.42       3.24E-03       3.00E-01       2.71E-04       9.12E+01       3.46E+01       1.35E+01         35       5.82       3.72E-03       3.97E-01       3.86E-04       9.23E+01       3.77E+01       1.57E+01         36       6.26       3.12E-03       3.85E-01       4.02E-04       9.32E+01       4.08E+01       1.80E+01         37       6.73       3.36E-03       4.78E-01       5.37E-04       9.42E+01       4.45E+01       2.12E+01         38       7.23       1.80E-03       2.96E-01       3.57E-04       9.47E+01       4.69E+01       2.32E+01         39       7.77       3.36E-03       6.38E-01       8.26E-04       9.57E+01       5.19E+01       2.80E+01         40       8.35       1.80E-03       3.95E-01       5.49E-04       9.62E+01       5.50E+01       3.12E+01         41       8.97       1.32E-03       3.34E-01       5.00E-04       9.66E+01       5.76E+01       3.41E+01         42 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
33       5.04       4.68E-03       3.75E-01       3.15E-04       9.02E+01       3.22E+01       1.19E+01         34       5.42       3.24E-03       3.00E-01       2.71E-04       9.12E+01       3.46E+01       1.35E+01         35       5.82       3.72E-03       3.97E-01       3.86E-04       9.23E+01       3.77E+01       1.57E+01         36       6.26       3.12E-03       3.85E-01       4.02E-04       9.32E+01       4.08E+01       1.80E+01         37       6.73       3.36E-03       4.78E-01       5.37E-04       9.42E+01       4.45E+01       2.12E+01         38       7.23       1.80E-03       2.96E-01       3.57E-04       9.47E+01       4.69E+01       2.32E+01         40       8.35       1.80E-03       6.38E-01       8.26E-04       9.57E+01       5.19E+01       2.80E+01         41       8.97       1.32E-03       3.34E-01       5.00E-04       9.62E+01       5.50E+01       3.41E+01         42       9.64       1.44E-03       4.21E-01       6.77E-04       9.71E+01       6.09E+01       3.81E+01         43       10.3       2.52E-03       8.51E-01       1.47E-03       9.78E+01       6.76E+01       4.66E+01         44 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
34       5.42       3.24E-03       3.00E-01       2.71E-04       9.12E+01       3.46E+01       1.35E+01         35       5.82       3.72E-03       3.97E-01       3.86E-04       9.23E+01       3.77E+01       1.57E+01         36       6.26       3.12E-03       3.85E-01       4.02E-04       9.32E+01       4.08E+01       1.80E+01         37       6.73       3.36E-03       4.78E-01       5.37E-04       9.42E+01       4.45E+01       2.12E+01         38       7.23       1.80E-03       2.96E-01       3.57E-04       9.47E+01       4.69E+01       2.32E+01         39       7.77       3.36E-03       6.38E-01       8.26E-04       9.57E+01       5.19E+01       2.80E+01         40       8.35       1.80E-03       3.95E-01       5.49E-04       9.62E+01       5.50E+01       3.12E+01         41       8.97       1.32E-03       3.34E-01       5.00E-04       9.66E+01       5.76E+01       3.41E+01         42       9.64       1.44E-03       4.21E-01       6.77E-04       9.71E+01       6.09E+01       3.81E+01         43       10.3       2.52E-03       8.51E-01       1.47E-03       9.78E+01       6.76E+01       4.66E+01         45 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
35       5.82       3.72E-03       3.97E-01       3.86E-04       9.23E+01       3.77E+01       1.57E+01         36       6.26       3.12E-03       3.85E-01       4.02E-04       9.32E+01       4.08E+01       1.80E+01         37       6.73       3.36E-03       4.78E-01       5.37E-04       9.42E+01       4.45E+01       2.12E+01         38       7.23       1.80E-03       2.96E-01       3.57E-04       9.47E+01       4.69E+01       2.32E+01         39       7.77       3.36E-03       6.38E-01       8.26E-04       9.57E+01       5.19E+01       2.80E+01         40       8.35       1.80E-03       3.95E-01       5.49E-04       9.62E+01       5.50E+01       3.12E+01         41       8.97       1.32E-03       3.34E-01       5.00E-04       9.66E+01       5.76E+01       3.41E+01         42       9.64       1.44E-03       4.21E-01       6.77E-04       9.71E+01       6.09E+01       3.81E+01         43       10.3       2.52E-03       8.51E-01       1.47E-03       9.78E+01       6.76E+01       4.66E+01         44       11.1       8.40E-04       3.27E-01       6.08E-04       9.80E+01       7.57E+01       5.82E+01         45 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
36 6.26 3.12E-03 3.85E-01 4.02E-04 9.32E+01 4.08E+01 1.80E+01 37 6.73 3.36E-03 4.78E-01 5.37E-04 9.42E+01 4.45E+01 2.12E+01 38 7.23 1.80E-03 2.96E-01 3.57E-04 9.47E+01 4.69E+01 2.32E+01 39 7.77 3.36E-03 6.38E-01 8.26E-04 9.57E+01 5.19E+01 2.80E+01 40 8.35 1.80E-03 3.95E-01 5.49E-04 9.62E+01 5.50E+01 3.12E+01 41 8.97 1.32E-03 3.34E-01 5.00E-04 9.66E+01 5.76E+01 3.41E+01 42 9.64 1.44E-03 4.21E-01 6.77E-04 9.71E+01 6.09E+01 3.81E+01 43 10.3 2.52E-03 8.51E-01 1.47E-03 9.78E+01 6.76E+01 4.66E+01 4.11.1 8.40E-04 3.27E-01 6.08E-04 9.80E+01 7.02E+01 5.01E+01 45 11.9 1.56E-03 7.02E-01 1.40E-03 9.85E+01 7.57E+01 5.82E+01 46 12.8 1.56E-03 8.11E-01 1.74E-03 9.90E+01 8.21E+01 6.83E+01 47 13.8 1.56E-03 9.37E-01 2.16E-03 9.94E+01 8.95E+01 8.09E+01 48 14.8 1.92E-03 1.33E+00 3.30E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
37 6.73 3.36E-03 4.78E-01 5.37E-04 9.42E+01 4.45E+01 2.12E+01 38 7.23 1.80E-03 2.96E-01 3.57E-04 9.47E+01 4.69E+01 2.32E+01 39 7.77 3.36E-03 6.38E-01 8.26E-04 9.57E+01 5.19E+01 2.80E+01 40 8.35 1.80E-03 3.95E-01 5.49E-04 9.62E+01 5.50E+01 3.12E+01 41 8.97 1.32E-03 3.34E-01 5.00E-04 9.66E+01 5.76E+01 3.41E+01 42 9.64 1.44E-03 4.21E-01 6.77E-04 9.71E+01 6.09E+01 3.81E+01 43 10.3 2.52E-03 8.51E-01 1.47E-03 9.78E+01 6.76E+01 4.66E+01 4.11 8.40E-04 3.27E-01 6.08E-04 9.80E+01 7.02E+01 5.01E+01 45 11.9 1.56E-03 7.02E-01 1.40E-03 9.85E+01 7.57E+01 5.82E+01 46 12.8 1.56E-03 8.11E-01 1.74E-03 9.90E+01 8.21E+01 6.83E+01 47 13.8 1.56E-03 9.37E-01 2.16E-03 9.94E+01 8.95E+01 8.09E+01 48 14.8 1.92E-03 1.33E+00 3.30E-03 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02								
38       7.23       1.80E-03       2.96E-01       3.57E-04       9.47E+01       4.69E+01       2.32E+01         39       7.77       3.36E-03       6.38E-01       8.26E-04       9.57E+01       5.19E+01       2.80E+01         40       8.35       1.80E-03       3.95E-01       5.49E-04       9.62E+01       5.50E+01       3.12E+01         41       8.97       1.32E-03       3.34E-01       5.00E-04       9.66E+01       5.76E+01       3.41E+01         42       9.64       1.44E-03       4.21E-01       6.77E-04       9.71E+01       6.09E+01       3.81E+01         43       10.3       2.52E-03       8.51E-01       1.47E-03       9.78E+01       6.76E+01       4.66E+01         44       11.1       8.40E-04       3.27E-01       6.08E-04       9.80E+01       7.02E+01       5.01E+01         45       11.9       1.56E-03       7.02E-01       1.40E-03       9.85E+01       7.57E+01       5.82E+01         46       12.8       1.56E-03       8.11E-01       1.74E-03       9.90E+01       8.21E+01       6.83E+01         47       13.8       1.56E-03       9.37E-01       2.16E-03       9.94E+01       8.95E+01       8.09E+01         48 <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td>				_				
39       7.77       3.36E-03       6.38E-01       8.26E-04       9.57E+01       5.19E+01       2.80E+01         40       8.35       1.80E-03       3.95E-01       5.49E-04       9.62E+01       5.50E+01       3.12E+01         41       8.97       1.32E-03       3.34E-01       5.00E-04       9.66E+01       5.76E+01       3.41E+01         42       9.64       1.44E-03       4.21E-01       6.77E-04       9.71E+01       6.09E+01       3.81E+01         43       10.3       2.52E-03       8.51E-01       1.47E-03       9.78E+01       6.76E+01       4.66E+01         44       11.1       8.40E-04       3.27E-01       6.08E-04       9.80E+01       7.02E+01       5.01E+01         45       11.9       1.56E-03       7.02E-01       1.40E-03       9.85E+01       7.57E+01       5.82E+01         46       12.8       1.56E-03       8.11E-01       1.74E-03       9.90E+01       8.21E+01       6.83E+01         47       13.8       1.56E-03       9.37E-01       2.16E-03       9.94E+01       8.95E+01       8.09E+01         48       14.8       1.92E-03       1.33E+00       3.30E-03       1.00E+02       1.00E+02       1.00E+02         > 15.								
40       8.35       1.80E-03       3.95E-01       5.49E-04       9.62E+01       5.50E+01       3.12E+01         41       8.97       1.32E-03       3.34E-01       5.00E-04       9.66E+01       5.76E+01       3.41E+01         42       9.64       1.44E-03       4.21E-01       6.77E-04       9.71E+01       6.09E+01       3.81E+01         43       10.3       2.52E-03       8.51E-01       1.47E-03       9.78E+01       6.76E+01       4.66E+01         44       11.1       8.40E-04       3.27E-01       6.08E-04       9.80E+01       7.02E+01       5.01E+01         45       11.9       1.56E-03       7.02E-01       1.40E-03       9.85E+01       7.57E+01       5.82E+01         46       12.8       1.56E-03       8.11E-01       1.74E-03       9.90E+01       8.21E+01       6.83E+01         47       13.8       1.56E-03       9.37E-01       2.16E-03       9.94E+01       8.95E+01       8.09E+01         48       14.8       1.92E-03       1.33E+00       3.30E-03       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
41       8.97       1.32E-03       3.34E-01       5.00E-04       9.66E+01       5.76E+01       3.41E+01         42       9.64       1.44E-03       4.21E-01       6.77E-04       9.71E+01       6.09E+01       3.81E+01         43       10.3       2.52E-03       8.51E-01       1.47E-03       9.78E+01       6.76E+01       4.66E+01         44       11.1       8.40E-04       3.27E-01       6.08E-04       9.80E+01       7.02E+01       5.01E+01         45       11.9       1.56E-03       7.02E-01       1.40E-03       9.85E+01       7.57E+01       5.82E+01         46       12.8       1.56E-03       8.11E-01       1.74E-03       9.90E+01       8.21E+01       6.83E+01         47       13.8       1.56E-03       9.37E-01       2.16E-03       9.94E+01       8.95E+01       8.09E+01         48       14.8       1.92E-03       1.33E+00       3.30E-03       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
42       9.64       1.44E-03       4.21E-01       6.77E-04       9.71E+01       6.09E+01       3.81E+01         43       10.3       2.52E-03       8.51E-01       1.47E-03       9.78E+01       6.76E+01       4.66E+01         44       11.1       8.40E-04       3.27E-01       6.08E-04       9.80E+01       7.02E+01       5.01E+01         45       11.9       1.56E-03       7.02E-01       1.40E-03       9.85E+01       7.57E+01       5.82E+01         46       12.8       1.56E-03       8.11E-01       1.74E-03       9.90E+01       8.21E+01       6.83E+01         47       13.8       1.56E-03       9.37E-01       2.16E-03       9.94E+01       8.95E+01       8.09E+01         48       14.8       1.92E-03       1.33E+00       3.30E-03       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02					5.49E-04			
43       10.3       2.52E-03       8.51E-01       1.47E-03       9.78E+01       6.76E+01       4.66E+01         44       11.1       8.40E-04       3.27E-01       6.08E-04       9.80E+01       7.02E+01       5.01E+01         45       11.9       1.56E-03       7.02E-01       1.40E-03       9.85E+01       7.57E+01       5.82E+01         46       12.8       1.56E-03       8.11E-01       1.74E-03       9.90E+01       8.21E+01       6.83E+01         47       13.8       1.56E-03       9.37E-01       2.16E-03       9.94E+01       8.95E+01       8.09E+01         48       14.8       1.92E-03       1.33E+00       3.30E-03       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
44       11.1       8.40E-04       3.27E-01       6.08E-04       9.80E+01       7.02E+01       5.01E+01         45       11.9       1.56E-03       7.02E-01       1.40E-03       9.85E+01       7.57E+01       5.82E+01         46       12.8       1.56E-03       8.11E-01       1.74E-03       9.90E+01       8.21E+01       6.83E+01         47       13.8       1.56E-03       9.37E-01       2.16E-03       9.94E+01       8.95E+01       8.09E+01         48       14.8       1.92E-03       1.33E+00       3.30E-03       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02		9.64	1.44E-03	4.21E-01	6.77E-04	9.71E+01	6.09E+01	3.81E+01
45 11.9 1.56E-03 7.02E-01 1.40E-03 9.85E+01 7.57E+01 5.82E+01 46 12.8 1.56E-03 8.11E-01 1.74E-03 9.90E+01 8.21E+01 6.83E+01 47 13.8 1.56E-03 9.37E-01 2.16E-03 9.94E+01 8.95E+01 8.09E+01 48 14.8 1.92E-03 1.33E+00 3.30E-03 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
46 12.8 1.56E-03 8.11E-01 1.74E-03 9.90E+01 8.21E+01 6.83E+01 47 13.8 1.56E-03 9.37E-01 2.16E-03 9.94E+01 8.95E+01 8.09E+01 48 14.8 1.92E-03 1.33E+00 3.30E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02			8.40E-04	3.27E-01	6.08E-04	9.80E+01		
47 13.8 1.56E-03 9.37E-01 2.16E-03 9.94E+01 8.95E+01 8.09E+01 48 14.8 1.92E-03 1.33E+00 3.30E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02	45	11.9	1.56E-03	7.02E-01	1.40E-03	9.85E+01	7.57E+01	
48 14.8 1.92E-03 1.33E+00 3.30E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02		12.8	1.56E-03	8.11E-01	1.74E-03	9.90E+01	8.21E+01	6.83E+01
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02	47	13.8	1.56E-03	9.37E-01	2.16E-03	9.94E+01	8.95E+01	
	48	14.8	1.92E-03	1.33E+00	3.30E-03	1.00E+02	1.00E+02	1.00E+02
TOTALS: 3.38E-01 1.27E+01 1.72E-02	>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
	TOTAL	LS:	3.38E-01	1.27E+01 1.	72E-02			

FILE NAME: OUT5 13.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CUMULATIVE % CONCENTRATIONS MASS SURFACE MASS NUMBER SURFACE NUMBER CHNL DIA 1.56E-03 9.63E-04 7.15E-08 5.88E-01 8.67E-03 4.58E-04 .486 7.20E-04 5.76E-04 4.85E-08 8.60E-01 1.39E-02 7.68E-04 1.08E-03 9.97E-04 9.01E-08 1.27E+00 2.28E-02 1.35E-03 1.44E-03 1.53E-03 1.48E-07 1.81E+00 3.66E-02 2.30E-03 2.28E-03 2.80E-03 2.92E-07 2.67E+00 6.18E-02 4.16E-03 5.16E-03 7.34E-03 8.24E-07 4.62E+00 1.28E-01 9.44E-03 4.80E-03 7.89E-03 9.52E-07 6.43E+00 1.99E-01 1.55E-02 .723 5.88E-03 1.12E-02 1.45E-06 8.64E+00 2.99E-01 2.48E-02 .777 7.92E-03 1.74E-02 2.42E-06 1.16E+01 4.56E-01 4.03E-02 9.24E-03 2.34E-02 3.50E-06 1.51E+01 6.67E-01 6.27E-02 .897 8.64E-03 2.53E-02 4.06E-06 1.84E+01 8.94E-01 8.87E-02 .964 10 1.10E-02 3.73E-02 6.44E-06 2.25E+01 1.23E+00 1.30E-01 11 9.24E-03 3.60E-02 6.69E-06 2.60E+01 1.55E+00 1.73E-01 12 9.60E-03 4.32E-02 8.63E-06 2.96E+01 1.94E+00 2.28E-01 13' 1.25E-02 6.49E-02 1.39E-05 3.43E+01 2.53E+00 3.17E-01 1.28 14 1.24E-02 7.42E-02 1.71E-05 3.90E+01 3.20E+00 4.27E-01 15 1.45E-02 1.01E-01 2.49E-05 4.45E+01 4.10E+00 5.86E-01 1.48 1.19E-02 9.51E-02 2.53E-05 4.90E+01 4.96E+00 7.49E-01 17 1.59 1.16E-02 1.08E-01 3.08E-05 5.33E+01 5.93E+00 9.46E-01 1.71 18 1.03E-02 1.10E-01 3.38E-05 5.72E+01 6.92E+00 1.16E+00 19 1.07E-02 1.32E-01 4.35E-05 6.13E+01 8.10E+00 1.44E+00 1.98 8.52E-03 1.21E-01 4.31E-05 6.45E+01 9.20E+00 1.72E+00 2.12 1.02E-02 1.68E-01 6.39E-05 6.83E+01 1.07E+01 2.13E+00; 2.28 6.60E-03 1.25E-01 5.13E-05 7.08E+01 1.18E+01 1.45E+00 2.45 6.24E-03 1.37E-01 6.02E-05 7.32E+01 1.31E+01 2.84E+05 5.76E-03 1.46E-01 6.90E-05 7.53E+01 1.44E+01 3.28E+00 5.76E-03 1.68E-01 8.56E-05 7.75E+01 1.59E+01 3.83E+00 5.88E-03 1.98E-01 1.08E-04 7.97E+01 1.77E+01 4.52E+00 4.08E-03 1.59E-01 9.34E-05 8.13E+01 1.91E+01 5.12E+00 28 4.56E-03 2.05E-01 1.30E-04 8.30E+01/ 2.10E+01 5.95E+00 29 3.78 4.68E-03 2.43E-01 1.65E-04 8.48E+01 2.31E+01 7.01E+00 4.06 3.84E-03 2.31E-01 1.68E-04 8.62E+01 2.52E+01 8.08E+00 31 4.37 3.12E-03 2.16E-01 1.69E-04 8.74E+01 2.72E+01 9.17E+00 32 4.69 2.88E-03 2.31E-01 1.94E-04 8.85E+01 2.92E+01 1.04E+01 33 5.04 3.18E+01 1.21E+01 3.12E-03 2.88E-01 2.61E-04 8.96E+01 3.53E+01 1.45E+01 3.60E-03 3.84E-01 3.73E-04 9.10E+01 35 5.82 3.72E-03 4.59E-01 4.79E-04 9.24E+01 3.94E+01 1.75E+01 6.26 4.27E+01 2.01E+01 2.52E-03 3.59E-01 4.02E-04 9.33E+01 37 6.73 3.36E-03 5.52E-01 6.66E-04 9.46E+01 4.76E+01 2.44E+01 7.23 38 1.80E-03 3.42E-01 4.43E-04 9.53E+01 5.07E+01 2.72E+01 39 7.77 1.80E-03 3.95E-01 5.49E-04 9.60E+01 5.43E+01 3.07E+01 40 7.20E-04 1.82E-01 2.73E-04 9.62E+01 5.59E+01 3.25E+01 41 8.97 1.44E-03 4.21E-01 6.77E-04 9.68E+01 5.97E+01 3.68E+01 42 1.44E-03 4.86E-01 8.40E-04 9.73E+01 6.41E+01 4.22E+01 43 6.00E-04 2.34E-01 4.34E-04 9.76E+01 6.62E+01 4.50E+01 11.1 11.9 1.32E-03 5.94E-01 1.19E-03 9.81E+01 7.15E+01 5.26E+01. 1.68E-03 8.73E-01 1.87E-03 9.87E+01 7.94E+01 6.46E+01 46 12.8 47 13.8 1.32E-03 7.92E-01 1.83E-03 9.92E+01 8.65E+01 7.63E+01 48 14.8 2.16E-03 1.50E+00 3.71E-03 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02

TOTALS: 2.65E-01 1.11E+01 1.56E-02

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 13.004 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC
DENSITY: 1

		CONCI	ENTRATIONS		CUM	II ATTUE &	
CHNL	DTA	NUMBER	SURFACE	MASS	NUMBER	ULATIVE % SURFACE	MASS
CHND <	.486	1.32E-03	8.08E-04	5.97E-08		7.26E-03	3.82E-04
ì	.504	8.40E-04	6.72E-04	5.65E-08	7.55E-01	1.33E-02	7.44E-04
2	.542	1.44E-03	1.33E-03	1.20E-07	1.26E+00	2.53E-02	1.51E-03
3	.581	1.92E-03	2.04E-03	1.98E-07	1.93E+00	4.36E-02	2.78E-03
4	.625	2.04E-03	2.50E-03	2.61E-07	2.64E+00	6.61E-02	4.45E-03
5	.673	5.04E-03	7.17E-03	8.05E-07	4.40E+00	1.31E-01	9.60E-03
6	.723	5.64E-03	9.28E-03	1.12E-06	6.38E+00	2.14E-01	1.68E-02
7	.777	8.40E-03	1.60E-02	2.07E-06	•	3.57E-01	3.00E-02
8	.835	1.04E-02	2.29E-02	3.19E-06	1.30E+01	5.63E-01	5.04E-02
9	.897	9.00E-03	2.28E-02	3.41E-06	1.61E+01	7.68E-01	7.23E-02
10	.964	1.16E-02	3.40E-02	5.47E-06	2.02E+01	1.07E+00	1.07E-01
11	1.03	1.62E-02	5.47E-02	9.45E-06		1.57E+00	1.68E-01
12	1.11	1.64E-02	6.41E-02	1.19E-05	3.16E+01	2.14E+00	2.44E-01
13	1.19	1.54E-02	6.92E-02	1.38E-05	3.70E+01	2.76E+00	3.32E-01
14	1.28	1.40E-02	7.30E-02	1.57E-05	4.19E+01	3.42E+00	4.33E-01
15	1.38	1.51E-02	9.08E-02	2.09E-05		4.24E+00	5.67E-01
16	1.48	1.18E-02	8.15E-02	2.02E-05	5.13E+01	4.97E+00	6.96E-01
17	1.59	1.21E-02	9.70E-02	2.58E-05	5.55E+01	5.84E+00	8.61E-01
18	1.71	1.09E-02	1.01E-01	2.89E-05	5.93E+01	6.75E+00	1.05E+00
19	1.84	1.08E-02	1.15E-01	3.54E-05		7.79E+00	1.27E+00
20	1.98	9.48E-03	1.17E-01	3.86E-05	6.64E+01	8.84E+00	1.52E+00
21	2.12	8.04E-03	1.14E-01	4.06E-05	6.92F+01	9.87E+00	1.78E+00
22	2.28	8.40E-03	1.38E-01	5.26E-05	7.21E+01	1.11E+01	2.12E+00
23	2.45	7.20E-03	1.37E-01	5.60E-05		1.23E+01	2.48E+00
24	2.64	5.88E-03	1.29E-01	5.67E-05	7.67E+01	1.35E+01	2.84E+00
25	2.83	4.20E-03	1.06E-01	5.03E-05	7.82E+01	1.45E+01	3.16E+00
26	3.05	5.28E-03	1.54E-01	7.85E-05	8.00E+01	1.58E+01	3.66E+00
27	3.27	5.76E-03	1.94E-01	1.06E-04	8.20E+01	1.76E+01	4.34E+00
28	3.52	4.32E-03	1.68E-01	9.89E-05	8.36E+01	1.91E+01	4.98E+00
29	3.78	3.48E-03	1.57E-01	9.88E-05	8.48E+01	2.05E+01	5.61E+00
30	4.06	4.08E-03	2.12E-01	1.44E-04	8.62E+01	2.24E+01	6.53E+00
31	4.37	3.36E-03	2.02E-01	1.47E-04	8.74E+01	2.42E+01	7.47E+00
32	4.69	3.36E-03	2.33E-01	1.82E-04	8.85E+01	2.63E+01	8.64E+00
33	5.04	2.88E-03	,2.31E-01	1.94E-04	8.96E+01	2.84E+01	9.88E+00
34	5.42	3.72E-03	3.44E-01	3.11E-04	9.09E+01	3.15E+01	1.19E+01
35	5.82	2.04E-03	2.18E-01	2.12E-04	9.16E+01	3.34E+01	1.32E+01
36	6.26	2.64E-03	3.25E-01	3.40E-04	9.25E+01	3.64E+01	1.54E+01
37	6.73	2.64E-03	3.76E-01	4.22E-04	9.34E+01	3.98E+01	1.81E+01
38	7.23	2.64E-03	4.34E-01	5.23E-04	9.43E+01	4.37E+01	2.15E+01
39	7.77	1.80E-03	3.42E-01	4.43E-04	9.50E+01	4.67E+01	2.43E+01
40	8.35	1.68E-03	3.68E-01	5.13E-04	9.56E+01	5.00E+01	2.76E+01
41	8.97	1.80E-03	4.56E-01	6.82E-04	9.62E+01	5.41E+01	3.19E+01
42	9.64	1.08E-03	3.16E-01	5.08E-04	9.66E+01	5.70E+01	3.52E+01
43	10.3	1.68E-03	5.67E-01	9.80E-04	9.71E+01	6.21E+01	4.15E+01
44	11.1	1.68E-03	6.55E-01	1.22E-03	9.77E+01	6.80E+01	4.92E+01
45	11.9	1.80E-03	8.10E-01	1.62E-03	9.84E+01	7.52E+01	5.96E+01
46	12.8	1.80E-03	9.36E-01	2.01E-03	9.90E+01	8.37E+01	7.24E+01
47	13.8	1.92E-03	1.15E+00	2.66E-03	9.97E+01	9.40E+01	8.94E+01
48	14.8	9.60E-04	6.66E-01	1.65E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	2.86E-01 1	.11E+01 1.	56E-02			

TOTALS:

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 13.005 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		DID. MAIL	0. 1 .1	Lillo			
		CONCE	NTRATIONS		CUM	ULATIVE %	
<b></b>	D.T.A		SURFACE	MASS	NUMBER	SURFACE	MASS
CHNL			8.08E-04	5.97E-08	5.88E-01	8.78E-03	4.62E-04
<	.486	1.32E-03		4.85E-08			8.37E-04
1	.504	7.20E-04	5.76E-04				1.53E-03
2	.542	1.08E-03	9.97E-04	9.01E-08	1.39E+00	•	2.87E-03
3	.581	1.68E-03	1.79E-03	1.73E-07	2.14E+00	4.53E-02	
4	.625	2.52E-03	3.09E-03	3.22E-07			5.37E-03
5	.673	2.88E-03	4.10E-03	4.60E-07	4.54E+00		8.92E-03
6	.723	5.28E-03	8.68E-03	1.05E-06	6.89E+00	2.18E-01	1.70E-02
7	.777	6.24E-03	1.19E-02	1.54E-06	9.67E+00	3.46E-01	2.89E-02
8	.835	6.96E-03	1.53E-02	2.13E-06	1.28E+01	5.12E-01	4.54E-02
9	.897	8.04E-03	2.04E-02	3.05E-06		7.33E-01	6.89E-02
10	.964	8.64E-03	2.53E-02	4.06E-06	2.02E+01	1.01E+00	1.00E-01
11	1.03	1.01E-02	3.40E-02	5.88E-06	2.47E+01	1.38E+00	1.46E-01
12	1.11	8.88E-03	3.46E-02	6.43E-06	2.86E+01	1.75E+00	1.96E-01
13	1.19	8.28E-03	3.73E-02	7.44E-06	3.23E+01	2.16E+00	2.53E-01
14	1.28	7.80E-03	4.06E-02	8.70E-06	3.58E+01	2.60E+00	3.21E-01
15	1.38	1.20E-02	7.21E-02	1.66E-05	4.11E+01	3.38E+00	4.49E-01
16	1.48	1.06E-02	7.32E-02	1.81E-05	4.58E+01	4.18E+00	5.89E-01
17	1.59	8.76E-03	7.01E-02	1.87E-05	4.97E+01	4.94E+00	7.34E-01
18	1.71	1.16E-02	1.08E-01	3.08E-05	5.49E+01	6.11E+00	9.72E-01
19	1.84	7.44E-03	7.94E-02	2.44E-05	5.82E+01	6.97E+00	1.16E+00
20	1.98	7.08E-03	8.73E-02	2.88E-05	6.14E+01	7.92E+00	1.38E+00
21	2.12	9.60E-03	1.37E-01	4.85E-05	6.57E+01		1.76E+00
22	2.28	6.00E-03	9.86E-02	3.76E-05	6.83E+01	1.05E+01	2.05E+00
23	2.45	6.60E-03	1.25E-01	5.13E-05	7.13E+01	1.18E+01	2.45E+0C
24	2.64	6.00E-03	1.32E-01	5.79E-05	7.39E+01	1.33E+01	2.89E+00
	2.83	5.52E-03	1.40E-01	6.61E-05	7.64E÷01	1.48E+01	
25	3.05	5.52E-03	1.61E-01	8.20E-05	7.88E+01	1.65E+01	4.04E+00
26					8.07E+01	1.80E+01	4.61E+00
27	3.27	4.08E-03	1.38E-01	7.52E-05	8.25E+01	1.98E+01	5.37E+00
28	3.52	4.20E-03	1.64E-01	9.61E-05	• . •	1.88F+01 2.18E+01	6.16E+00
29	2.78	4.08E-03	1.84E-01	1.16E-04	8.43E+01		
30	4.06	2.76E-03	1.43E-01	9.73E-05	8.EEE+01	2.34E+01	7.02E+00
31	4.37	3.00E-03	1.80E-01	1.31E-04	3.65E+01	2.53E+01	8.03E+00
. 32	4.69	2.16E-03	1.50E-01	1.17E-04	8.79E+01	2.69E+01	8.94E+00
33	5.04	2.28E-03	1.83E-01	1.54E-04	8.89E+01	2.89E+01	1.01E+01
34	5.42	3.12E-03	2.88E-01	2.61E-04	9.03E+01	3.21E+01	1.21E+01
35	5.82	2.64E-03	2.82E-01	2.74E-04	9.15E+01	3.51E+01	1.43E+01
36	6.26	2.16E-03	2.66E-01	2.78E-04	9.24E+01	3.8CE+01	1.64E+01
37	6.73	2.16E-03	3.08E-01	3.45E-04	9.34E+01	4.14E+01	1.91E+01
38	7.23	2.28E-03	3.75E-01	4.52E-04	9.44E+01	4.54E+01	2.26E+01
39	7.77	1.44E-03	2.73E-01	3.54E-04	9.50E+01	4.84E+01	2.53E+01
40	8.35	9.60E-04	2.10E-01	2.93E-04	9.55E+01	5.07E+01	2.76E+01
41	8.97	9.60E-04	2.43E-01	3.64E-04	9.59E+01	5.33E+01	3.04E+01
42	9.64	1.68E-03	4.91E-01	7.90E-04	9.66E+01	5.87E+01	3.65E+01
43	10.3	1.32E-03	4.46E-01	7.70E-04	9.72E+01	6.35E+01	4.25E+01
44	11.1	9.60E-04	3.74E-01	6.95E-04	9.76E+01	6.76E+01	4.78E+01
45	11.9	1.32E-03	5.94E-01	1.19E-03	9.82E+01	7.40E+01	5.70E+01
46	12.8	1.20E-03	6.24E-01	1.34E-03	9.88E+01	8.0EE+01	6.74E+01
47	13.8	1.56E-03	9.37E-01	2.16E-03	9.95E+01	9.10E+01	8.41E+01
48	14.8	1.20E-03	8.32E-01	2.06E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.0CE+02	1.00E+02	1.00E+02
TOTAL	<b>c</b> .	2 255-01 0	215400 1	205-02			

2.25E-01 9.21E+00 1.29E-02

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 13.006 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		DID: KAI		211101		•	
		CONC	ENTRATIONS		CUMI	ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	9.60E-04	5.90E-04	4.37E-08		7,59E-03	4.06E-04
1	.504	3.60E-04	2.88E-04	2.42E-08	7.12E-01	1:13E-02	6.31E-04
2	.542	7.20E-04	6.65E-04	6.01E-08	1.10E+00	1.98E-02	1.19E-03
3	.581	1.56E-03	1.66E-03	1.61E-07	1.94E+00	4.11E-02	2.68E-03
4	.625	2.52E-03	3.09E-03	3.22E-07	3.30E+00	8.09E-02	5.68E-03
5	.673	2.64E-03	3.76E-03	4.21E-07	4.73E+00	1.29E-01	9.59E-03
6 7	.723	3.24E-03	5.33E-03	6.43E-07	6.48E+00	1.98E-01	1.56E-02
7	.777	3.24E-03	6.15E-03	7.97E-07	8.23E+00	2.77E-01	2.30E-02
8 9	.835	6.60E-03	1.45E-02	2.02E-06	1.18E+01		4.17E-02
	.897	6.84E-03	1.73E-02	2.59E-06			6.58E-02
10	.964	6.84E-03	2.00E-02	3.22E-06	1.92E+01	9.43E-01	9.57E-02
11	1.03	6.36E-03	2.15E-02	3.71E-06		1.22E+00	1.30E-01
12	1.11	7.56E-03	2.95E-02	5.48E-06			1.81E-01
13	1.19	6.00E-03	2.70E-02	5.39E-06		1.94E+00	2.31E-01
14	1.28	9.96E-03	5.18E-02	1.11E-05	3.53E+01	2.61E+00	3.34E-01
15	1.38	6.00E-03	3.60E-02	8.30E-06	3.85E+01	3.07E+00	4.11E-01
16	1.48	9.60E-03	6.66E-02	1.65E-05			5.65E-01
17	1.59	8.40E-03	6.73E-02	1.79E-05		4.79E+00	7.31E-01
18	1.71	7.68E-03	7.10E-C2	2.03E-05		5.71E+00	
19	1.84	8.28E-03	8.84E-02	2.72E-05		6.84E+00	
20	1.98	6.60E-03	8.14E-02	2.69E-05		7.89E+00	1.42E+00
21	2.12	F.64E-03	8.03E-02	2.85E-05		8.92E+00	1.69E+00
22	2.28	4.92E-03	8.09E-02	3.08E-05		9.96E+00	1.97E+00
23	2.45	5.40E-03	1.02E-01	4.20E-05		1.13E+01	1.36E+00
24	2.64	4.32E-03	9.47E-02	4.17E-05		1.25E+01	2.75E+00
25	2.83	5.40E-03	1.37E-01	6.47E-05		1.43E+01	2.35E+60
26	3.05	5.04E-03	1.47E-01	7.49E-05	7.70E+01	1.61E+01	4.05E+00
27	3.27	5.28E-03	1.78E-01	9.74E-05	7.99E+01	1.84E+01	4.95E+00
28	3.52	2.04E-03	7.95E-02	4.67E-05	8.10E+01	1.95E+01	5.38E+00
56	3.78	3.48E-03	1.57E-01	9.88E-05	8.28E+01	2.15E+01	6.30E+00
30	1.06	3.00E-03	1.56E-01	1.06E-04	8.45E+01	2.35E+01	7.29E+00
31	4.37	3.00E-03	1.80E-01	1.31E-04	8.61E+01	2.58E+01	8.50E+00
32	4.69	3.36E-03	2.33E-01	1.82E-04	8.79E+01	2.88E+01	1.02E+01
33	5.04	2.52E-03	2.02E-01	1.70E-04	8.92E+01	3.14E+01	1.18E+01
34	5.42	2.40E-03	2.22E-01	2.01E-04	9.05E+01	3.42E+01 3.62E+01	1.36E+01 1.50E+01
35	5.82	1.44E-03	1.54E-01	1.49E-04	9.13E+01	3.89E+01	1.70E+01
36 37	6.26	1.68E-03	2.07E-01	2.16E-04 2.68E-04	9.22E+01 9.31E+01	4.19E+01	1.70E+01 1.95E+01
37	6.73 7.23	1.68E-03 2.40E-03	2.39E-01 3.95E-01	4.76E-04	9.44E+01	4.70E+01	2.39E+01
38 39	7.77	1.20E-03	2.28E-01	2.95E-04	9.51E+01	4.99E+01	2.67E+01
40	8.35	6.00E-04	1.32E-01	1.83E-04	9.54E+01	5.16E+01	2.84E+01
41	8.97	1.08E-03	2.73E-01	4.09E-04	9.60E+01	5.51E+01	3.22E+01
42	9.64	9.60E-04	2.81E-01	4.51E-04	9.65E+01	5.87E+01	3.64E+01
13	10.3	9.60E-04	3.24E-01	5.60E-04	9.70E+01	6.29E+01	4.16E+01
44	11.1	1.08E-03	4.21E-01	7.82E-04	9.76E+01	6.83E+01	4.88E+01
45	11.9	8.40E-04	3.78E-01	7.55E-04	9.81E+01	7.32E+01	5.59E+01
46	12.8	2.04E-03	1.06E+00	2.27E-03	9.92E+01	8.68E+01	7.70E+01
47	13.8	6.00E-04	3.60E-01	8.30E-04	9.95E+01	9.14E+01	8.47E+01
18	14.8	9.60E-04	6.66E-01	1.65E-03	1.00E+02	1.00E+G2	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL			7.78E+00 1.				
/ 1	- <b>-</b> •						

FILE NAME: OUT5 13.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC			CHM	!! ATTYE ₩	
<b></b>	D.T.A		ENTRATIONS	MACC	NUMBER	JLATIVE % SURFACE	MASS
CHNL		NUMBER	SURFACE	MASS 5 025-08	6.92E-01	9.12E-03	4.61E-04
<b>&lt;</b>	.486	1.08E-03	6.74E-04	5.03E-08 4.04E-08	1.08E+00	1,56E-02	8.31E-04
1	.504	6.00E-04	4.80E-04		1.38E+00		
2	.542	4.80E-04	4.43E-04	4.00E-08	2.23E+00	2:16E-02	1.20E-03 2.44E-03
3	.581	1.32E-03	1.40E-03	1.36E-07		4.06E-02	
4	.625	1.92E-03	2.36E-03 3.42E-03	2.46E-07 3.83E-07	3.46E+00 5.00E+00	7.25E-02	4.69E-03 8.21E-03
5	.673	2.40E-03 3.36E-03	5.53E-03	6.66E-07	7.15E+00	1.19E-01 1.93E-01	1.43E-02
6	.723	3.96E-03	7.52E-03	9.75E-07	9.68E+00	2.95E-01	2.32E-02
7	.777	3.96E-03	8.68E-03	1.21E-06	1.22E+01	4.13E-01	3.43E-02
8 9	.835 .897	5.28E-03	1.34E-02	2.00E-06	1.56E+01	5.94E-01	5.27E-02
	.964	6.84E-03	2.00E-02	3.22E-06	2.00E+01	8.64E-01	8.22E-02
10 11	1.03	5.16E-03	1.74E-02	3.01E-06	2.33E+01	1.10E+00	1.10E-01
12	1.11	7.44E-03	2.90E-02	5.39E-06	2.81E+01	1.49E+00	1.59E-01
13	1.19	5.76E-03	2.59E-02	5.18E-06	3.17E+01	1.84E+00	2.07E-01
14	1.28	6.24E-03	3.25E-02	6.96E-06		2.28E+00	2.70E-01
15	1.38	6.84E-03	4.11E-02	9.47E-06	4.01E+01	2.84E+00	3.57E-01
16	1.48	5.64E-03	3.91E-02	9.68E-06	4.37E+01	3.37E+00	4.46E-01
17	1.59	6.72E-03	5.38E-02	1.43E-05	4.80E+01	4.10E+00	5.77E-01
- 18	1.71	6.00E-03	5.55E-02	1.59E-05	5.19E+01	1.85E+00	7.22E-01
19	1.84	5.76E-03	6.15E-02	1.89E-05	5.56E+01	5.68E+00	8.96E-01
20	1.98	5.40E-03	6.66E-02	2.20E-05	5.90E+01	6.58E+00	1.10E+00
21	2.12	5.04E-03	7.18E-02	2.58E-05	6.23E+01	7.55F+00	1.33E+00
22	2.28	5.40E-03	S.88E-02	3.38E-05	6.57E+01	8.7FE+00	1.64E+00
23	2.45	6.12E-03	1.16E-01	4.76E-05	6.98E+01	1.03E+01	2.08E+00
24	2.64	5.16E-03	1.13E-01	4.98E-05	7.29E+01	1.19E+G1	2.53E+00
25	2.83	2.76E-03	6.99E-02	3.31E-05	7.47E+01	1.28E+01	2.84E+00
26	3.05	3.36E-03	9.82E-02	4.99E-35	7.69E+01	1.41E+01	3.29E+00
27	3.27	2.76E-03	9.32E-02	5.09E-05	7.86E+01	,1.54E+01	3.76E+G0
28	3.52	2.64E-03	1.03E-01	6.04E-05	· · ·	√1.68E+01	4.31E+00
29	3.78	3.24E-03	1.46E-01	9.20E-05		1.88E÷01	5.16E+00
30	4.06	1.44E-03	7.49E-02	5.08E-05	8.33E+01	1.98E÷01	5.62E+00
. 31	4.37	1.S2E-03	1.15E-01	8.40E-05	8.46E+01	2.13E+01	6.39E+C0
32	4.69	2.28E-03	1.58E-01	1.24E-04		2.35E+01	7.53E+00
33	5.04	2.40E-03	1.92E-01	1.62E-04	8.75E+01	2.61E+01	9.01E+00
34	5.42	2.04E-03	1.89E-01	1.70E-C4	8.89E+01	2.86E+01	1.06E+01
35	5.82	1.68E-03	1.79E-01	1.74E-04	8.99E+01	3.10E+01	1.22E+01
36	6.26	1.56E-03	1.92E-01	2.01E-04		3.37E+01	1.40E+01
37	6.73	1.08E-03	1.54E-01	1.72E-04		3.57E+01	1.56E+01
38	7.23	1.44E-03	2.37E-01	2.85E-04		3.89E+01	1.82E+01
39 40	7.77 8.35	2.04E-03 8.40E-04	3.87E-01 1.84E-01	5.02E-04 2.56E-04	9.39E+01	4.42E+01 4.67E+01	2.28E+01 2.52E+01
41	8.97	1.20E-03	3.04E-01	4.55E-04	9.44E+01 9.52E+01	5.08E+01	2.93E+01
42	9.64	1.20E-03	3.51E-01	5.64E-04	9.59E+01	5.55E+01	3.45E+01
43	10.3	7.20E-04	2.43E-01	4.20E-04	9.64E+01	5.88E+01	3.83E+01
44	11.1	4.80E-04	1.87E-01	3.47E-04	9.67E+01	6.13E+01	4.15E+01
45	11.9	1.44E-03	6.48E-01	1.29E-03	9.76E+01	7.01E+01	5.34E+01
	12.8	1.56E-03	8.11E-01	1.74E-03	9.86E+01	8.11E+01	6.93E+01
47	13.8	1.08E-03	6.48E-01	1.49E-03	9.93E+01	8.99E+01	8.30E+01
48	14.8	1.08E-03	7.49E-01	1.85E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+62
TOTAL			.39E+00 1				

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 13.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

. 18.

		201101	SMAD A MI ONC		CUMI	JLATIVE %	
~****	574		ENTRATIONS	MASS	NUMBER	SURFACE	MASS
CHNL		NUMBER	SURFACE 7.57E-04	5.68E-08	7.49E-01	1.05E-02	5.34E-04
<	.486	1.20E-03	8.64E-04	7.27E-08	1.42E+00	2.24E-02	1.22E-03
1	.504	1.08E-03	1.11E-03	1.00E-07	2.17E+00	3.78E-02	2.16E-03
2	.542	1.20E-03	1.11E-03 1.28E-03	1.00E-07	2.92E+00	5.54E-02	3.32E-03
3	.581	1.20E-03	1.77E-03	1.84E-07	3.82E+00	7.99E-02	5.06E-03
4	.625	1.44E-03	4.61E-03	5.17E-07	5.84E+00	1.44E-01	9.92E-03
5	.673	3.24E-03 3.84E-03	6.32E-03	7.62E-07	8.24E+00	2.31E-01	1.71E-02
6	.723	4.92E-03	9.34E-03	1.21E-06	1.13E+01	3.60E-01	2.85E-02
7	.777	3.36E-03	7.37E-03	1.03E-06	1.34E+01	4.62E-01	3.81E-02
8	.835 .897	5.40E-03	1.37E-02	2.05E-06	1.68E+01	6.52E-01	5.74E-02
9	.964	6.24E-03	1.83E-02	2.93E-06	2.07E+01	9.04E-01	8.50E-02
10		6.60E-03	2.23E-02	3.85E-06	_	1.21E+00	1.21E-01
11	1.03	6.72E-03	2.62E-02	4.87E-06	2.90E÷01	1.58E+00	1.67E-01
12	1.11	7.44E-03	3.35E-02	6.68E-06	3.36E+01	2.04E+00	2.30E-01
13		8.40E-03	4.37E-02	9.37E-06	3.89E+01	2.64E+00	3.18E-01
14	1.28	6.24E-03	3.75E-02	8.64E-06		3.16E+00	3.99E-01
15	1.38	6.12E-03	4.24E-02	1.05E-05		3.75E+00	
16	1.48	6.84E-03	5.48E-02	1.46E-05	5.09E+01	4.51E+00	6.35E-01
17	1.59	6.24E-03	5.77E-02	1.65E-05	5.48E+01	5.31E+00	7.90E-01
18	1.71		5.64E-02	1.73E-05		6.09E+00	9.53E-01
19	1.84	5.28E-03		2.25E-05			·
20	1.98	5.52E-03	6.81E-02	2.24E-05		7.90E+00	1.38E+00
21	2.12	4.44E-03	6.32E-02	2.63E-05		8.88E-00	1.62E+00
22	2.28	4.20E-03	6.90E-02				1.97E+00
23	2.45	4.68E-03	20-333.8	3.64E-05			2.41E+CC
24	2.64	4.92E-03	1.08E-01	4.75E-05		1.29E+01	2.85E+00
25	2.83	3.84E-03	9.72E-02	4.60E-05		1.42E+01	3.30E+00
26	3.05	3.24E-03		4.82E-05			3.88E+00
27	3.27	3.36E-03	1.13E-01	6.20E-05			1.48E+00
28	2.52	2.76E-03		6.32E-05			5.18E+00
29	3.78	2.64E-03		7.50E-05		2.08E+01	6.02E+00
30	4.06	2.52E-03		8.88E-05		_	6.41E+00
31	4.37	9.60E-04	5.76E-02	4.20E-05			7.45E+00
32	4.69	2.04E-03		1.11E-04			9.36E+00
33	5.04	3.00E-03		2.02E-04			1.08E+01
34	5.42	1.80E-03		1.50E-04			1.19E+01
35	5.82	1.20E-03		1.24E-04			1.13E+01 1.48E+01
36	6.26	2.40E-03		3.09E-04			1.77E+01
37	6.73	1.92E-03		3.07E-04			2.00E+01
38	7.23	1.20E-03		2.38E-04			2.36E+01
39	7.77	1.56E-03		3.84E-04			2.63E+01
40	8.35	9.60E-04		2.93E-04			3.10E+01
41	8.97	1.32E-03		5.00E-04			3.37E+01
42	9.64	6.00E-04		2.82E-04			
43	10.3	7.20E-04	_	4.20E-04			3.76E+01 4.26E+01
44	11.1	7.20E-04		5.21E-04			
45	11.9	1.20E-03		1.08E-03			5.27E+01
46	12.8	8.40E-04		9.36E-04			6.15E+01
47	13.8	1.32E-03		1.83E-03			7.87E+01
48	14.8	1.32E-03		2.27E-03			1.00E+02
>	15.4	0.00E+00		0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	1.60E-01	7.22E+00 1.	06E-02			

1. S. S.

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 13.009 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCEN	TRATIONS		CUMU	LATIVE %	
~****	DT 4		URFACE	MASS		SURFACE	MASS
CHNL		9.60E-04	6.02E-04	4.50E-08	5.68E-01	8.83E-03	4.87E-04
<	.486	9.60E-04	7.68E-04	6.46E-08	1.14E+00	2.01E-02	1.19E-03
1	.504	1.08E-03	9.97E-04	9.01E-08	1.78E+00	3.48E-02	2.16E-03
2	.542	1.68E-03	1.79E-03	1.73E-07	2.77E+00	6.10E-02	4.03E-03
3	.581	1.88E-03	2.36E-03	2.46E-07	3.91E+00	9.56E-02	6.69E-03
4	. 625		3.76E-03	4.21E-07	5.47E+00	1.51E-01	1.12E-02
5	.673	2.64E-03	5.72E-03	6.90E-07	7.53E+00	2.35E-01	1.87E-02
6	.723	3.48E-03	7.98E-03	1.03E-06	1.00E+01	3.52E-01	2.99E-02
7	.777	4.20E-03	1.42E-02	1.98E-06	1.38E+01	5.61E-01	5.13E-02
8	.835	6.48E-03	1.70E-02	2.55E-06	1.78E+01	8.11E-01	7.88E-02
9	.897	6.72E-03	1.70E-02 1.72E-02	2.77E-06	2.13E+01	1.06E+00	1.09E-01
10	. 964	5.88E-03	2.19E-02	3.78E-06	2.51E+01	1.38E+00	1.50E-01
11	1.03	6.48E-03		5.82E-06	2.99E+01	1.85E+00	2.13E-01
12	1.11	8.04E-03	3.14E-02 2.59E-02	5.18E-06	3.33E+01	2.23E+00	2.69E-01
13	1.19	5.76E-03		1.00E-05	3.86E+01	2.91E+00	3.77E-01
14	1.28	9.00E-03	4.68E-02	9.96E-06	4.29E+01	3.55E+00	4.85E-C1
15	1.38	7.20E-03	4.32E-02	1.46E-05	4.79E+01	4.42E+00	6.43E-01
16	1.48	8.52E-03	5.91E-02	1.18E-05	5.12E+01	5.06E+00	7.70E-61
17	1.59	5.52E-03	4.42E-02		5.53E+01	5.99E+00	9.66E-01
18	1.71	6.84E-03	6.32E-02	1.81E-05	5.92E+01	7.03E+00	1.20E+60
19	1.84	6.60E-03	7.04E-02	2.16E-05		8.09E+00	1.46E+00
20	1.98	5.88E-03	7.25E-02	2.39E-05		9.20E+00	1.75E-30
21	2.12	5.28E-03	7.52E-02	2.67E-05		1.07E+01	2.17E+60
12	2.28	6.24E-03	1.03E-01	3.91E-05		1.19E+01	1.54E+00
23	2.45	4.44E-03	2.43E-02	3.45E-05	7.21E+01		2.80E+00
2.4	2.64	3.00E-03	6.58E-02	2.89E-05		1.29E+01	
25	2.83	3.00E-03	7.59E-02	3.59E-05		1.40E-01	0.15E+0.
26	3.05	3.96E-03	1.16E-01	5.89E-05		1.57E+01	3.88E+10
27	3.27	2.76E-03	9.32E-02	5.09E-05	7.95E+01	1,71E+01	4.43E+(0
28	3.52	3.72E-03	1.45E-01	8.51E-05		1,52E+01	5.88E+00 5.88E+00
29	3.78	1.50E-03	7.02E-02	4.43E-05		2°.03E+01	6.83E+00
30	4.06	1.80E-03	9.36E-02	6.34E-05		2.16E+01	6.52E+00
31	4.37	2.76E-03	1.66E-01	1.21E-04		2.41E+01	7.82E+00
32	4.69	2.7EE-03	1.91E-01	1.50E-04		2.69E+01	9.45E+00
33	5.04	2.16E-03	1.73E-01	1.45E-04	8.84E+01	2.94E+01	1.10E+01
34	5.42	2.04E-03	1.89E-01	1.70E-04	8.9EE+01	3.22E+01	1.29E+01
35	5.82	1.80E-03	1.92E-01	1.87E-04		3.50E+Q1	1.49E+01
36	6.26	1.68E-03	2.07E-01	2.16E-04		3.80E+01	1.72E+31
37	6.73	2.40E-03	3.42E-01	3.83E-04	9.30E+01	4.31E+01	2.14E+01
38	7.23	2.28E-03	3.75E-01	4.52E-04		4.86E+01	2.63E+01
39	7.77	1.68E-03	3.19E-01	4.13E-04		5.32E+01	3.07E+01
40	8.35	1.08E-03	2.37E-01	3.30E-04		5.67E+01	3.43E+01
41	8.97	9.60E-04	2.43E-01	3.64E-04		6.03E+01	3.82E+01
42	9.64	1.20E-03	3.51E-01	5.64E-04		6.54E+01	4.43E+01
43	10.3	1.08E-03	3.65E-01	6.30E-04		7.08E+01	5.11E+01
44	11.1	1.20E-04	4.68E-02	8.69E-05		7.15E+01	5.21E+01
45	11.9	8.40E-04	3.78E-01	7.55E-04		7.70E+01	6.02E+01
46	12.8	4.80E-04	2.50E-01	5.35E-04		8.07E+01	6.60E+01
47	13.8	1.08E-03	6.48E-01	1.49E-03		9.02E+01	8.22E+01
48	14.8	9.60E-04	6.66E-01	1.65E-03			1.00E+C2
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA		1.69E-01 6	.81E+00 9.	.25E-03			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 13.010 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		CONC	ENTRATIONS		CUMI	JLATIVE %	
CHNL D	TA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
	486	7.20E-04	4.56E-04	3.43E-08	4.34E-01	5.74E-03	2.87E-04
	504	7.20E-04	5.76E-04	4.85E-08	8.68E-01	1.30E-02	6.93E-04
	542	6.00E-04	5.54E-04	5.01E-08	1.23E+00	2.00E-02	1.11E-03
	581	9.60E-04	1.02E-03	9.89E-08	1.81E+00	3.28E-02	1.94E-03
	625	1.56E-03	1.91E-03	1.99E-07	2.75E+00	5.70E-02	3.61E-03
	673	2.64E-03	3.76E-03	4.21E-07	4.34E+00	1.04E-01	7.14E-03
	723	3.36E-03	5.53E-03	6.66E-07	6.37E+00	1.74E-01	1.27E-02
	777	4.08E-03	7.75E-03	1.00E-06	8.83E+00	2.72E-01	2.11E-02
8 .	835	5.04E-03	1.11E-02	1.54E-06	1.19E+01	4.11E-01	3.40E-02
9 .8	897	6.72E-03	1.70E-02	2.55E-06	1.59E+01	6.25E-01	5.54E-02
10 .	964	5.76E-03	1.68E-02	2.71E-06	1.94E+01	8.37E-01	7.81E-02
11 1	.03	6.72E-03	2.27E-02	3.92E-06	2.34E+01	1.12E+00	1.11E-01
12 1	.11	7.20E-03	2.81E-02	5.22E-06	2.78E+01	1.48E+00	1.55E-01
13 1	.19	5.16E-03	2.32E-02	4.64E-06	3.09E+01	1.77E+00	1.93E-01
14 1	.28	7.08E-03	3.68E-02	7.90E-06	3.52E+01	2.23E+00	2.60E-01
15 1	.38	6.96E-03	4.18E-02	9.63E-06	3.94E+01	2.76E+00	3.40E-01
	. ; 3	7.20E-03	4.99E-02	1.24E-05	4.37E+01	3.39E+00	4.44E-01
17 1	. 79	7.68E-03	6.15E-02	1.64E-05	4.83E+01	4.16E+00	5.81E-01
18 1	.71	8.40E-03	7.77E-02	2.22E-05	5.34E+01	5.14E+00	7.67E-01
	. ٤ -1	6.72E-03	7.17E-02	2.20E-05	5.75E+01	6.05E+00	9.51E-01
	34.	4.80E-03	5.92E-02	1.95E-05	6.03E+01	6.79E+00	1.12E+00
	.12	5.28E-03	7.52E-02	2.67E-05	6.3E+01	7.74E+00	1.34E+00
	.28	4.80E-03	7.89E-02	3.01E-05	6.64E+01	8.73E+00	1.59E+00
	. 45	5.16E-03	9.79E-02	4.01E-05	6.95E+01	9.97E+00	1.93E+00
	. 04	5.16E-03	1.13E-01	4.98E-05	7.26E+01	1.14E+01	0.04E+00
	.83	3.72E-03	9.42E-02	4.46E-05	7.49E+01	1.26E+01	2.72E+00
	.05	2.40E-03	7.02E-02	3.57E-05	7.63E+01	1.38E+01	3.02E+60
	. 27	5.16E-03	1.74E-01	9.52E-C5	7.95E+01	1.57E+61	1.81E+00
	.52	2.40E-03	9.36E-02	5.49E-05	8.09E+01	1.68E+01	4.27E+00
	.78	1.58E-03	7.56E-02	4.77E-05		1.78E+01	4.67E+00
	. 66	2.28E-03	1.19E-01	8.04E-05	8.33E+01	1.93E+01	5.35E+00
	. 37	1.40E-03	1.44E-01	1.05E-04	8.47E+01	2.11E+01	6.23E+00
	.69	2.04E-03	1.41E-01	1.11E-04	8.60E+01	2.29E+01	7.15E+00
	. 64	2.04E-03	1.63E-01	1.37E-04		2.49E+01	8.30E+00
	.42	2.40E-03	2.22E-01	2.01E-04	8.86E+01	2.77E+01	9.99E+00
	. 82 . 26	2.04E+03	2.18E-01 2.22E-01	2.12E-04	8.99E+01	3.05E+01	1.18E+01
	. 73	1.80E-03 1.80E-03	2.56E-01	2.32E-04 2.87E-04	9.10E+01 9.20E+01	3.33E+01 3.65E+01	1.37E+01
	. 23	1.68E-03	2.76E-01	3.33E-04		4.00E+01	1.61E+01 1.89E+01
	. 7 7	1.20E-03	2.28E-01	2.95E-04	9.3EE+01	4.28E+01	2.14E+01
	. 35	1.20E-03	2.63E-01	3.66E-04	9.45E+01	4.62E+01	2.44E+01
	97	6.00E-04	1.52E-01	2.27E-04	9.49E+01	4.81E+01	2.63E+01
	64	1.44E-03	4.21E-01	6.77E-04	9.57E+01	5.34E+01	3.20E+01
	0.3	7.20E-04	2.43E-01	4.20E-04	9.62E+01	5.64E+01	3.55E+01
	1.1	1.08E-03	4.21E-01	7.82E-04	9.68E+01	6.17E+01	4.21E+01
	1.9	9.60E-04	4.32E-01	8.62E-04	9.74E+01	6.72E+01	4.93E+01
	2.8	1.80E-03	9.36E-01	2.01E-03	9.85E+01	7.90E+01	6.61E+01
	2.8	8.40E-04	5.04E-01	1.16E-03	9.90E+01	8.53E+01	7.58E+01
	1.8	1.68E-03	1.16E+00	2.88E-03	1.00E+02	1.00E+02	1.00E+02
	5.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTALS:			.94E+00 1.				

FILE NAME: OUT5 15.001 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC
DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCI	ENTRATIONS		CIIMI	11 ATIVE V	
CHYI	DIA	NUMBER	ENTRATIONS SURFACE	MASS	NUMBER	ULATIVE % SURFACE	MASS
CHNL		2.96E-02	1.84E-02	1.37E-06	1.76E-01	5.14E-03	3.65E-04
<b>〈</b>	.486 .504	1.82E-02	1.46E-02	1.23E-06	2.84E-01	9.21E-03	6.92E-04
1 2	.542	3.48E-02	3.21E-02	2.90E-06	4.90E-01	1.82E-02	1.46E-03
3	.581	6.00E-02	6.38E-02	6.18E-06	8.45E-01	3.60E-02	3.11E-03
4	.625	9.62E-02	1.18E-01	1.23E-05	1.42E+00	6.89E-02	6.38E-03
5	.673	1.68E-01	2.39E-01	2.68E-05	2.41E+00	1.36E-01	1.35E-02
6	.723	3.02E-01	4.96E-01	5.99E-05	4.20E+00	2.74E-01	2.94E-02
7	.777	4.96E-01	9.41E-01	1.22E-04	7.14E+00	5.37E-01	6.19E-02
8	.835	7.01E-01	1.54E+00	2.14E-04	1.13E+01	9.65E-01	1.19E-01
9	.897	8.06E-01	2.04E+00	3.05E-04	1.61E+01	1.53E+00	2.00E-01
10	.961	8.46E-01	2.47E+00	3.98E-04	2.11E+01	2.22E+00	3.06E-01
11	1.03	8.64E-01	2.92E+00	5.04E-04	2.62E+01	3.04E+00	4.40E-01
12	1.11	9.03E-01	3.52E+00	6.35E-04	3.15E+01	4.02E+00	6.14E-01
13	1.19	9.09E-01-	4.09E+00	8.17E-04	3.69E+01	5.16E+00	8.31E-01
14	1.28	9.18E-01	4.78E+00	1.02E-03	4.24E+01	6.50E+00	1.10E+00
15	1.18	8.84E-01	5.31E+00	1.22E-03	4.76E+01	7.98E+00	1.48E+00
16	1.48	8.38E-01	5.81E+00	1.44E-03	5.26E+01	9.60E+00	1.81E+00
17	1.59	7.50E-01	6.00E+00	1.60E-03	5.70E+01	1.10E+01	2.24E+00
18	1.71	7.00E-01	6.49E-00	1.86E-03	6.12E-01	1.31E+01	2.78E+00
; 9	1.84	6.80E-01	7.25E+00	2.23E-03	6.f2E+01	1.51E+01	2.32E+00
20	;	0.60E-01	3.17E-00	2.70E-03	6.91E+01	1.74E+01	4.(4E+00
21	2.12	6.(EE-01	9.51E-00	3.38E-03	7.31E+01	2.00E+01	:.94E+0(
12	1.18	6.11E-01	1.01E+(1	3.84E-00	7.67E+01	1.19E+01	F. : CE-(0
22	2. :	7.71E-01	1.(8E-01		8.01E+31	1.892-01	1.14E-10
<u>.</u> ;		f. (fE-01	1.11 <b>E-</b> 01	4.875-00	3.01E+01	2.605+01	8.40 <b>E+</b> 00
2.5	2.82	4.472-01	1.1(E+01	5.00E-00	8.87E+01	0.21E-01	9.88E-00
	2.75	3.90E-01	1.14E+01	8.80E-08	10+303.8	3.50E+01	1.1;E+(1
	2.27	3.02E-01	1.12E+01	5.10E-03	9.00E+01	8.54E+63	1.8 E+01
		2.71E-01	1.08E+01	6.10E-03	9.16E+01	1.14E÷01	
		2,28E-01	1.02E-01	6.48E-03	9.30E+01	4.42E+01	1.64E+01
3.0	4.06	1.84E-01	9.55E+00	6.48E-03	9.40E+(1	1.89E+01	1.:1E+01
21	1.27	1.41E-01	8.48E+00	6.16E-03	9.49E+01	4.82E+01	1.98E-01
32	4.69	1.18E-01	8.22E+00	6.44E-03	9.50E+(1	8.18E+01	1.15E+(1
	5.64	3.16E-02	7.33E+00	6.17E-03	9.61E+01	5.08E+61	2.21E+()
34	5.42	7.61E-02	7.04E+00	6.37E-03			2.48E+01
	5.82	7.18E-02	7.65E÷00	7.43E-03	9.70E+01	5.77E+01	2.68E+01
<b>₹</b> ()	6.26	5.76E-02	7.10E+00	7.41E-03		5.8TE+01	2.87E÷01
	€.73	F.48E-02	7.81E+00	8.76E-03		6.18E+01	:.IIE+01
	7.23	4.94E-02	8.13E÷00	9.80E-03		0.41E + 01	8.87E+01
	7.77	4.64E-02	8.82E+00	1.14E-02	9.82E÷01	6.66E+01	3.67E+01
	8.35	3.84E-02	8.42E+00	1.17E-02	9.85E+01	6.89E+01	3.58E+01
41	8.97	3.91E-02	9.90E+00	1.48E-02		7.17E+01	4.38E÷01
	9.64	3.44E-02	1.01E+01	1.62E-02	9.89E+01	7.48E+01	4.81E+01
	10.3	3.34E-02	1.13E+01	1.95E-02	9.91E+01	7.76E+01	5.30E+61
44	11.1	3.17E-02	1.24E+01	2.29E-02	9.93E+01	8.11E+01	5.94E+01
45	11.9	3.31E-02	1.49E÷01	2.97E-02	9.95E-01	8.52E+(:1	6.73E+01
46	12.8	2.98E-02	1.55E-01	3.32E-02	9.97E+01	8.5CE+01	7.63E+01
47	12.8	2.76E-02	1.06E÷01	3.82E-02	9.98E÷01	9.4CE+01	8.02E+01
48	14.5	3.01E-02		5.17E-02	1.00E+02	1.00E+02	1.00E+02
> T > T + 1	15.4	0.00E±00		0.00E+00	1.00E+02	1.00E+00	1.00E+02
10151	L\$:	1.08E+01 3	3.58E+02 3.	102-01			

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## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 15.002 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		CONCE	NTRATIONS		CUMU	LATIVE %	
CHNI.	DTA .	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< ·	. 186	7.20E-03		3.36E-07	1.93E-01		3.89E-04
1	.504	5.04E-03	4.03E-03	3.39E-07	3.29E-01		7.82E-04
2	.542	7.44E-03	6.87E-03	6.21E-07	5.29E-01	1.90E-02	1.50E-03
3	.581	1.30E-02	1.38E-02	1.34E-06	8.77E-01	3.59E-02	3.05E-03
4	.625	2.39E-02	2.93E-02	3.05E-06		7.20E-02	6.58E-03
5	.673	4.15E-02	5.91E-02	6.63E-06	2.63E+00	1.45E-01	1.43E-02
6	.723	7.20E-02	1.18E-01	1.43E-05	4.57E+00	2.91E-01	3.08E-02
7	.777	1.14E-01	2.17E-01	2.81E-05	7.64E+00	5.58E-01	6.34E-02
8	.835	1.50E-01	3.29E-01	4.58E-05	1.17E+01	9.63E-01	1.16E-01
9	.897	1.68E-01	4.26E-01	6.38E-05	1.62E+01	1.49E+00	1.90E-01
10	. 964	1.77E-01	5.17E-01	8.32E-05	2.09E+01	2.13E+00	2.87E-01
11	1.03	1.80E-01	6.07E-01	1.05E-04	2.58E+01	2.87E+00	4.08E-01
12	1.11	1.9;E-01	7.58E-01	1.41E-04	3.10E+01	3.81E+00	5.71E-01
13	1.19	1.94E-01	8.75E-01	1.75E-04	3.62E+01	4.89E+00	7.74E-01
1;	1.28	1.89E-01	9.81E-01	2.10E-04	4.13E+01	6.09E+00	1.02E+00
15	1.38	1.92E-01	1.16E+00	2.66E-04	4.65E+01	7.52E+00	1.33E+00
16	1.48	1.87,5-01	1.29E+00	3.20E-04	5.15E+01	9.11E+00	1.70E+00
17	1.52	1.70E-01	1.35E+00	3.63E-04	5.61E+01	1.08E+01	2.12E+00
16	1.71	1.88E-01	1.43E+00	4.10E-04	6.02E+01	1.26E+01	2.59E-00
19	1.84	1.885-01	1.65E+00	5.07E-04	6.44E-01	1.405+01	3.18E+00
20	1. (8	1.321-01	:.88E+00	6.20E-04	0.8FE-11	1.09E-01	3.90E-00
21	2	1.48E-01	2.31E+00	7.50E-04	7.28E+01	1.951+01	1.77E+00
4: 5	2.25	1.0.2-01	1.20E+00	E.37E-04	7.01E+11	2.22E-01	5.74E-00
, -		* * * * * * * * * * * * * * * * * * * *	2.48E÷00	1.00E-03	7.875-01	1.f1E+:1	6.5 E+()
2:	2.6	1.1.E-C1	2.47E+00	1.09E-03	8.202-01	2 E+	8.16E-10
				1.18E-00	8.81E+(1	0.10E+01	E - ()
-:	2.83	9.025-02	2.44F+00	1.02E-08	8.78E+01	3.4FE+01	1.1(E+(1
25	₹. (₹ 9 - 9 <del>*</del>	6. x(T=(2	2.60E+00		8.96E+01	3.70E+01	
- ·	· • •	7.575-02	2.54E+00 2.40E-00	1.09E-08 1.41E-08		4.00E-01	1.0fE-01 1.40E-01
29 29	7.73	0.10E-01	2.40E-00 2.30E+00	1.45E-03			1.558401
	2.78	F.1 E-02	1.01E+00		5.30E+01		1.75E-01
	1.00	3.88E-02			9.45E+61		1.91E-01
31	4.87	(.18E-02	1.89E+00				2.1(E÷01
22	4.69	1.62E-02	1.02E+00		9.50E+01		2.1CE+01 2.27E+01
33	5.04	1.11E-02	1.78E+00	1.50E-03	9.58E+01	E.29E+01	
34	5.42	1.17E-02	2.10E+00		9.65E÷01	5.55E+01	2.49E+01
: : ::	5.82	1.91E-02	2.04E+00		9.70E+01	5.80E+01	2.71E+01
36	6.26	1.70E-02	2.10E+00	2.19E-03	9.74E+01	6.00E+01	2.97E+01
3 T	6.73	1.32E-02	1.88E+00	2.11E-03	9.78E+01	6.29E+01	2.22E+01
38	7.23	9.5(E-03	1.58E+00	1.90E-03	9.80E+01	6.48E+01	3.44E+01
29	7.77	9.60E-03	1.82E÷00	2.35E-03		6.71E÷01	8.71E+01
40	9.35	7.88E-03	1.66E+00	2.31E-03	9.85E+01	6.91E+01	3.98E+01
41	8.97	E.52E-03	1.40E+00	2.09E-03	9.87E+01	7.08E+01	4.00E+01
42	9.64	7.68E-03	2.25E+00	3.61E-03	9.892+01	7.36E+01	4.64E+01
43	10.3	7.44E-03	2.51E+00	4.34E-03		.7.67E+01	5.14E+01
44	11.1	4.80E-03	1.87E+00	3.47E-03	9.92E+01	7.90E+01	5.54E+01
15	11.9	7.56E-03	3.40E+00	6.79E-03	9.94E-01	8.32E+01	6.33E+01
46	12.8	8.04E-03	4.18E+00	8.96E-03	9.96E+01	8.80E+01	7.37E+01
47	13.8	7.20E-03	4.32E+00	9.9CE-03	9.98E+01	9.36E+01	8.52E+01
3 }	14.8	7.44E-03	5.16E+00	1.28E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	3.72E+00 8	.12E+01 8.	63E-02			

FILE NAME: OUT5 15.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CHNL < 1		NUMBER	ENTRATIONS				
<b>&lt;</b> 1		MCMDLIC	SURFACE	MASS	NUMBER	SURFACE	MASS
1	.486	4.20E-03	2.62E-03	1.96E-07	2.09E-01	5.45E-03	3.60E-04
	.504	3.12E-03	2.50E-03	2.10E-07	3.63E-01	1.06E-02	7.47E-04
•,	.542	5.76E-03	5.32E-03	4.81E-07	6.49E-01	2.17E-02	1.63E-03
2		7.92E-03	8.42E-03	8.16E-07	1.04E+00	3.92E-02	3.13E-03
3	.581	1.14E-02	1.40E-02	1.46E-06	1.61E+00	6.82E-02	5.82E-03
4	.625	2.50E-02	3.55E-02	3.98E-06	2.85E+00	1.42E-01	1.32E-02
5	.673		6.63E-02	8.00E-06	4.85E+00	2.80E-01	2.79E-02
6	.723	4.03E-02	1.25E-01	1.62E-05	8.11E+00	5.39E-01	5.77E-02
7	.777	6.58E-02		2.53E-05	1.22E+01	9.16E-01	1.04E-01
8	.835	8.28E-02	1.82E-01	3.64E-05	1.70E+01	1.42E+00	1.71E-01
8	.897	9.61E-02	2.43E-01		2.17E+01	2.00E+00	2.54E-01
10	.964	9.53E-02	2.79E-01	4.48E-05		2.67E+00	2.56E-01
11	1.03	9.47E-02	3.20E-01	5.53E-05	2.64E+01		4.92E-01
12	1.11	1.03E-01	4.00E-01	7.43E-05	3.15E+01	3.50E+00	
1.3	1.19	1.10E-01		9.85E-05	3.70E+01	4.52E+00	6.74E-01
1.4	1.28	1.03E-01	5.34E-01	1.15E-04	4.21E+01	5.60E+00	8.85E-01
ō	1.38	1.00E-01	6.16E-01	1.42E-04	4.72E+01	6.91E+00	1.15E+00
6	1.48	9.f2E-02	6.60E-01	1.63E-04	5.19E+01	8.28E+00	1.4FE+00
-	1.59	8.12E-02	6.75E-01	1.79E-04	5.61E+01	8.08E+00	1.78E+00
6	1.71	8.78E-02	8.12E-01	2.32E-04	G.04E+01	1.14E+01	2.21E+00
Ų	1.84	8.21E-02	8.70E-01	2.095-04	9.48E+01	1.02E±01	2.70E+(C
	1.88	7.61E-02	9.38E-01	3.10E-04	6.83E+01	1.51E+01	8.27E+00
1	2.12	7.78E-(2	1.10E+00	3.92E-04	7.21E+01	1.74E+()	3.89E+00
2	2.28	7.00E-02	1.18E+00	4.38E-14	7.80E-01	1.98E+(1	:.KOE÷06
20	2.43	7.21E-02	1.27E+06	5.61E-04	7.91E-01	2.27E+(1	8.98E-00
24	2.64	f.fSE-02	1.225+00	5.38E-04	8.2(E+01	2.52E+61	18.32 <b>E</b> +00
<u> </u>	2.82	5.(8E-02	1.28E+00	6.08E-04	8.45E+01	1.74E-11	7.8,5+90
- i.	2 0	4.88E-02	1.33E+00	6.70E-04	8.67E+01	3.00E+01	9.19E+00
• 0				7.08E-04	8.86E-01	8.38E+61	1.6FE+61
27	0.27	2.84E-02	1.30E+00 1.30E+00	7.04E-04	9.00E+01	3.00E+01	1.19E+01
2.8	3.52	8.84E-02		7.63E-04	9.16E+01	3.88E+01	1.23E+01
29	3.78	1.68E-02	1.19E÷00	7.53E-04 7.70E-04		4.09E+01	1.47E+01
30	1.06	2.18E-02				4.30E+01	1.03E+01
3 1	4.37	1.98E-02		8.66E-04			1.78E+01
32	4.68	1.46E-02	1.02E+00	7.95E-04		4.54E+01	1.96E+01
33	5.64	1.51E-02		1.02E-03		4.80E+(1	
3.1	5.42	1.12E-02		9.33E-04		5.01E+01	2.11E+01
3 5	5.82	9.24E-03		9.58E-04		5.22E+01	2.31E+01
36	0.26	9.14E-03		1.19E-03		8.48E+61	2.53E+01
37	f.73	7.80E-03	1.11E+00	1.25E-03		5.6aE+01	1.70E+01
38	7.23	7.92E-03		1.57E-03		5.65E+01	7.05E+01
3 <b>9</b>	7.77	G. 60E-03		1.62E-03			3.35E+01
40	8.35	7.32E-03	1.60E+00	2.23E-03		6.88 <b>E</b> +01	3.70E+01
41	8.97	4.80E-03		1.82E-03		6.80E+01	4.09E+01
42	9.64	5.10E-03	1.51E+00	2.43E-03		7.11E+01	: : i E+01
43	10.3	6.24E-03	2.11E+00	3.64E-03	9.89E+01	7.55E+01	F.21E+01
4 4	11.1	4.08E-03	1.59E+00	2.95E-03	9.81E+01		5.76E+01
45	11.9	4.20E-03	=	3.77E-03	9.93E+01	8.27E+01	f.47E+01
46	12.8	4.80E-03		5.35E-03	9.96E+01	8.79E+01	7.44E+01
47	12.8	4.86E-03		6.31E-03		9.56E+61	8.60E+01
18	14.8	4.44E-03		7.62E-03			1.00E+02
10 >	15.4	0.00E+00		0.00E+00	_		1.00E+02
			4.81E+01 5.		21002 06	:	
TOTAL	LD:	2.012-00	T. GIETUI U.	702-02			
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#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 15.004 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

	CONCENTRATI			LATIVE %	
CHNL DIA	NUMBER SURFAC			SURFACE	MASS
< .18			1.74E-01	4.41E-03	2.85E-04
1 .50			3.13E-01	8.94E-03	6.16E-04
2 .543			6.00E-01	1.97E-02	1.46E-03
3 .58		C-03 6.06E-07	1.03E+00	3.82E-02	3.02E-03
4 .€2	8.88E-03 1.09E	C-02 1.14E-06	1.67E+00	7.04E-02	5.93E-03
5 .673	1.64E-02 2.34E	2.62E-06	2.86E+00	1.39E-01	1.27E-02
6 .72	2.88E-02 (4.74E	-02 5.71E-06	4.95E+00	2.79E-01	2.73E-02
7 .77	4.49E-02 8.52E	-02 1.10E-05	8.20E+00	5.31E-01	5.56E-02
8 .83	5.64E-02 1.24E	-01 1.72E-05	1.23E+01	8.96E-01	9.97E-02
9 .89	6.73E-02 1.71E	-01 2.55E-05	1.72E+01	1.40E+00	1.65E-01
10 .96	6.67E-02 1.95E	C-01 3.14E-05	2.20E+01	1.98E+00	2.46E-01
11 1.03			2.71E+01	2.68E+00	3.51E-01
12 1.1			3.19E+01	3.45E+00	4.75E-01
13 1.19			3.70E+01	4.08E+00	6.36E-01
14 1.28			4.25E+01	5.55E+00	8.55E-01
15 1.38			4.78E+01	6.80E+00	1.10E+00
16 1.43			7.41E+01	8.05E+00	1.37E+00
1 1.5			f.60E-01	9.45E+00	1.70E+00
18 1.7			6.07E+01	1.11E-01	2.10E+00
19 1.5			# FF-01	1.275+01	1.54E-(0
27 3 29			6.88E+61	1.47E+01	9.11E-00
11 2.11			7.15E-01	1.67E+01	
				1.90E+01	4.465-00
22 2.33			7.60E+01		
			7.67E+01	2.16F+01	7. 11÷((
21 2.0			6.17E-01	1.18E+01	0.44E-18
25 2.83			8.42E+01	2.69E+01	7.80E+00
25 0.03			8.64E+01	2.952+01	6.00E-00
27 2.2			8.81E-01	3.19E+01	6.78E+00
28 8.5			8.98E+01	3.16E+C1	1.10E+01
19 3.79			9.12E+01	3.71E+01	1.1FE+(1
30 4.06			9.24E÷01	3.97E+01	1.41E+01
31 4.2			9.35E+01	4.24E+01	1.57E+01
22 4.63			9.43E+01	4.45E+01	1.72E+01
33 5.0-	8.88E-03 7.11E	-01 5.98E-04	9.49E+01	4.66E+01	1.68E+01
34 5.43	6.60E-03 6.10E		9.54E+01	4.84E+01	2.02E+01
35 5.83	7.68E-03 8.20E	-01 7.96E-04	9.59E-01	5.09E+01	2.22E+01
36 6.26	8.64E-03 1.07E	+00 1.11E-03	9.06E+01	5.40E+61	2.51E+01
37 6.73	5.88E-03 8.37E	-01 9.39E-04	9.70E+01	5.65E+01	2.75E+01
38 7.23	5.40E-03 8.88E	-01 1.07E-03	9.74E+01	5.91E+01	3.62E+01
39 7.73		-01 1.24E-03	9.78E+01	6.19E+01	3.34E+01
10 8.33	4.20E-03 9.21E	-01 1.2EE-03	9.81E÷01	6.46E+01	3.67E+01
41 8.97		-01 1.14E-03	9.83E+01	6.69E+01	3.96E+01
12 9.6			9.85E+01	6.94E+01	4.31E+01
43 10.3			9.87E+01	7.27E+01	4.81E+01
44 11.1			9.9CE+01	7.67E+01	5.45E+01
45 11.9			9.93E+01	8.18E+01	6.24E+01
46 12.8			9.95E+01	8.70E+01	7.30E+01
47 13.8			9.98E-01	9.34E+01	8.57E+01
18 14.8			1.00E+02	1.00E+02	1.00E+02
> 15.4			1.00E+02	1.00E+02	1.00E+02
TOTALS:	1.38E+00 3.39E+0		1.002702	1.002702	4 + WW = 1 W 6
IVI PILE	1.002700 0.00270	1 0.302-04			

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## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 15.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

;		CONC	ENTRATIONS			JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	3.24E-03	2.02E-03	1.51E-07	2.39E-01	6.13E-03	4.22E-04
<b>1</b>	.504	2.04E-03	1.63E-03	1.37E-07	3.90E-01	1.11E-02	8.07E-04
2	.512	3.48E-03	3.21E-03	2.90E-07	6.47E-01		1.62E-03
3	.581	5.64E-03	5.99E-03	5.81E-07	1.06E+00	3.90E-02	3.25E-03
4	.625	7.80E-03	9.57E-03	9.97E-07	1.64E+00	6.80E-02	6.04E-03
5	.673	1.80E-02	2.56E-02	2.87E-06	2.97E+00	1.46E-01	1.41E-02
6	.723	2.33E-02	3.83E-02	4.62E-06	4.69E+00	2.62E-01	2.70E-02
7	.777	3.96E-02	7.52E-02	9.75E-06	7.61E+00	4.90E-01	5.43E-02
8	. 235	5.22E-02	1.14E-01	1.59E-05	1.15E+01	8.37E-01	9.89E-02
9	. 200	6.01E-02	1.52E-01	2.28E-05	1.59E+01	1.30E+00	1.63E-01
	.964	6.0SE-02	1.78E-01	2.86E-05	2.04E+01	1.84E+00	2.43E-01
10		6.71E-02	2.27E-01	3.91E-05	2.54E+01	2.51E+00	3.52E-01
11	1.03	7.14E-02	2.79E-01	5.17E-05	3.06E+01	3.37E+00	4.97E-01
12	1.11	7.16E-02	3.23E-01	6.44E-C5	3.59E+01	4.38F+00	6.78E-01
13	1.19		3.31E-01	7.11E-05	4.065+01	5.85E+00	8.77E-01
1:	1.28	6.37E-02	3.99E-01	9.20E-08	;.ffE+01	6.56E-00	
3.5	8	0.65E-02		1.07E-01	5.01E-01	T.67E-00	1.43E+00
10		#.C4E-02	4.38E-01	1.22E-01	5.4-Σ÷01	9.16E+66	:. *SI - (C)
-	:	7.72E-02	4.88E-01		E. E ( E = ( )		2.175-36
1:	1.73	7.16E-02	4.90E-01	:.:CE-0;		1.1/E-01	2.8FE-(0
2 3	1.::	1.628-62	F.89E-01	1.817-04	0.2-T-1	1. 11 <b>2</b> +1.1	3.29E-00
-		7.05E-01	0.00E-11	2.18E-01	(.C.F-1)	2 • 5 ° 2 ° 7 ° 4 ° 4 ° 4 ° 4 ° 4 ° 4 ° 4 ° 4 ° 4	2.0 E-00
-:	- •	5. 5-(2	7.1.7-		7.01F-77		. 5 : E + 0 C
• •		: . M: E="1	3.4XE-71	(.1(E-))	7.712-11	1.325-11	7 2.E <del>-</del> 2.5
_	· ·	2	2.11E-/I		7.70%-11		
:	<u>.</u>	1.111-12	9.6 <b>E</b> -31	0.99 <b>E-0</b> 4	S.(4E-(1		
25	2.50	3.88F-32	8.99E-01	4.261-00	€.2( <b>E</b> -1)	1.755+31	6.24E+0
20		0.18E-02	9.60E-01	4.73E-04	S.F. E-	:.::E-:1	9.56E+06
	3.27	0.08E-02	1.08E-00	5.02E-04	8.7(E-0)	3.1.1-0.	1.11E+(1
28		2.26E-02	3.94E-01	E.25E-04	8.83E+01	3.015+11	1.28E-01
2:	· • • •	1.65E-12	8.91E-01	5.82E-04	9.08E-01	3.888401	1,422+01
20	4	1.80E-02	9.00E-(1	6.34E-04	9.21E-01	4.16E+01	1.00E+01
	4.37	1.49E-02	8.93E-01	6.51E-04	9.81E-01	4.40E÷01	1.78E+01
32	: . : :	1.20E-02	8.32E-01	6.51E-04	9.41E-01	4.08E+01	1.96E+01
20	1.01	3.88E-03	7.11E-61	5.98E-04	9.47E+01		2.13E+01
34	£ . 12	1.01E-02	9.32E-01	8.42E-04	9.55E+01		2.36E+01
3 :	5.82	8.88E-03	9.48E-01	9.21E-04	9.61E+01	5.47E+01	2.62E+01
36	6.26	6.0(E-03	7.40E-01	7.72E-04		5.70E+01	2.84E+01
37	6.73	6.00E-03	8.54E-01	9.58E-04		5.98E÷01	3.51E+01
38	7.23	7.20E-03	1.18E+00	1.43E-03		6.31E+01	3.51E+01
39	7.77	5.04E-03	9.57E-01	1.24E-03		6.60E+01	3.85E+01
	8.35	3.84E-03		1.17E-03		6.86E+01	4.18E+01
40		2.88E-03	-	1.09E-03			4.49E+01
411	5.97			1.69E-03			4.96E+01
42	9.64	3.60E-03 3.12E-03	<del>-</del>	1.82E-03			5.47E+01
13	10.3			1.82E-03			6.01E+01
44	11.1	2.64E-03		3.66E-03			7.03E+01
45	11.9	4.08E-03	-	4.15E-03	-	_	5.15E+01
46	12.8	3.72E-03	_	3.98E-03		·	2.31E+01
47	13.8	2.88E-03		2.47E-03			1.(0E-02
48	14.8	1.44E-03		0.00E+00			1.00E 02
> 	15.4	0.00E+00			1.00E-02	1.002-02	3 · · · · · · · · · ·
TOTA	L5:	1.3tE+00	3.30E+01 3	. ひょとこしょ			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 15.006 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		DIU. KAII	10. 1 .1	Erric.	CORRECT I		
		CONCI	ENTRATIONS		CIIVI	ULATIVE %	
CHAIL	DTA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
CHNL	.486	2.40E-03	1.49E-03	1.11E-07		5.88E-03	3.88E-04
< 1	.504	1.92E-03	1.54E-03	1.11E-07	4.40E-01	1.19E-02	8.38E-04
		2.64E-03	2.44E-03	2.20E-07	7.08E-01	2.15E-02	
2 3	.542	3.96E-03	4.21E-03	4.08E-07	1.11E+00	3.81E-02	1.61E-03
	.581	5.52E-03	6.78E-03	7.06E-07			3.03E-03
.1	.625				1.67E+00	6.48E-02	
5	.673	1.06E-02	1.50E-02 2.98E-02	1.69E-06	2.75E+00	1.24E-01	1.14E-02
6 7	.723	1.81E-02		3.59E-06	4.59E+00	2.41E-01	2.39E-02
	.777	2.89E-02	5.49E-02	7.12E-06	7.53E+00	4.58E-01	4.87E-02
8	.835	3.55E-02	7.79E-02	1.08E-05	1.11E+01	7.64E-01	8.65E-02
9	.897	4.45E-02	1.13E-01	1.69E-05	1.57E+01	1.21E+00	1.45E-01
10	.964	4.18E-02	1.22E-01	1.96E-05	1.99E+01	1.69E+00	2.14E-01
11	1.03	4.54E-02	1.53E-01	2.65E-05	2.45E+01	2.29E+00	3.06E-01
12	1.11	4.96E-02	1.93E-01	3.59E-05	2.9EE+01	3.05E+00	4.31E-01
13	1.19	4.56E-02	2.05E-01	4.10E-05	3.42E+01	3.86E+00	5.74E-01
11	1.28	4.54E-02	2.36E-01	5.06E-05	3.88E+01	4.79E+00	7.50E-01
15	1.38	4.48E-02	2.69E-01	6.19E-05	4.34E+01	5.85E+00	9.66E-01
16	1.:8	4.18E-02	3.07E-01	7.60E-05	1.79E+01	7.06E+00	1.23E+00
17	1.59	4.07E-02	3.26F-01	8.67E-05	5.20E+01	9.34E+00	1.53E+00
13	1.73	3.78E-02	3.1FE-01	9.86E-05	5.88E+01	9.70E+00	1.88E+00
1 0	1.84	3.80E-(2	0.00F-01	1.25E-04	5.87E+01	1.10E+01	2.21E+00
20	1.98	4.10E-01	F.06E-01	1.67E-04	6.09E+01	1.80E-01	2.861-00
21	2.12	4.01E=01	5.71E-01	2.00E-04	9.80E-01	1.55E+01	2.60E+00
	2.28	3.83E-51	(TE=(:	2.47E-(4	7.1(E-(1	1.81E+01	4.462+00
	2.45	2.80F-02	1.275-01	2.88E-04	7.595-01	2.1(E+(1	8.86E-00
2;	2.54	3.40E-02	7.52E-01	3.81E-04	7.93E+01	2.89E+01	F.SSE+CC
	2.83	3.20E-02	F.11E-01	3.84E-04	8.28E+01	1.71E+01	7.68E+00
26	3.05	2.E0E-02	7.30E-01	3.71E-04	8.51E+01	9.00E+(1	5.28E+00
27	2.27	2.23E-02	7.58E-01	4.12E-04	8.74E+01	3.00E+01	1.(7E+01
28	3.52	1.72E-02	6.09E-01	3.93E-04	8.92E-01	3.56E+01	1.21E+01
<b>.</b> 5	3.78	1.69E-02	7.62E-01	4.81E-04	9.09E+01	3.86F+01	1.38E+01
20	4.06	1.18E-02	E.99E-01	4.06E-04	8.21E-01	4.08E+01	1.82E+01
31	1.37	9.48E-03	F.69E-01	4.15E-04	9.30E+01	4.32E+01	1.06E+01
22	4.69	8.76E-63	6.07E-01	4.76E-04	9.39E+01	1.56E+01	1.83E+01
33	5.04	7.32E-08	5.86E-01	4.93E-04	9.47E-01	4.79E+01	2.00E+01
34	5.42	6.72E-03	6.21E-01	5.62E-04	9.53E-01	5.03E+01	2.20E+01
÷ :	5.82	5.70E-03	6.15E-01	5.97E-04	9.59E-01	5.28E+01	2.40E+01
36	6.26	5.28E-03	6.51E-01	6.80E-04	9.05E-01	5.53E+01	2.84E+01
37	6.73	4.32E-03	6.15E-01	6.9GE-04	9.69E-01	5.77E+01	2.88E+01
3 <b>S</b>	7.23	3.12E-03	E.13E-01	6.18E-04	9.72E+01	5.98E+01	3.10E+01
3.9	7.77	4.44E-03	8.43E-01	1.09E-03	9.77E+01	6.21E+01	3.48E+01
40	8.35	3.00E-03	6.58E-01	9.16E-04	9.80E+01	6.57E+01	3.80E+01
41	8.97	3.24E-03	8.20E-01	1.23E-03	9.83E-01	6.39E+01	4.22E+01
42	9.64	2.52E-03	7.37E-01	1.18E-03	9.86E+01	7.18E+01	4.61E+01
43	10.3	1.20E-03	4.05E-01	7.00E-04	9.87E+01	7.34E+01	4.88E+01
44	11.1	2.52E-03	9.82E-01	1.82E-03	9.89E+01	7.73E+01	5.52E+01
15	11.9	2.64E-03	1.19E+00	2.37E-03	9.92E+01	8.20E+01	6.34E+01
4€	12.8	3.48E-03	1.81E+00	3.88E-03	9.96E-01	8.91E+01	7.09E+01
17	13.8	2.40E-03	1.44E+00	3.32E-03	9.98E+01	9.48E+01	8.85E+01
38	14.8	1.92E-03	1.33E+00	3.30E-03	1.00E÷02	1.00E+02	1.00E+02
, 5	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL			.54E+01 2.		1.002-02	4 + WVL * W4	21002706
101.41	-C ·	3.00E-01 2		015-06			

01-01-1980 FILE NAME: OUT5 15.007 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

			ENTRATIONS			ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	1.32E-03	8.08E-04	5.97E-08	2.19E-01	5.45E-03	3.35E-04
1	.504	7.20E-04	5.76E-04	4.85E-08	3.39E-01	9.33E-03	6.06E-04
2	.542	1.32E-03	1.22E-03	1.10E-07	5.59E-01	1.75E-02	1.22E-03
3	.581	2.04E-03	2.17E-03	2.10E-07	8.98E-01	3.22E-02	2.40E-03
4	.625	4.56E-03	5.60E-03	5.83E-07	1.66E+00	6.99E-02	5.67E-03
5	.673	7.44E-03	1.06E-02	1.19E-06	2.89E+00	1.41E-01	1.23E-02
6	.723	1.20E-02	1.97E-02	2.38E-06	4.89E+00	2.74E-01	2.56E-02
7	.777	2.05E-02	3.90E-02	5.05E-06	8.30E+00	5.37E-01	F.09E-02
8	.835	2.76E-02	6.05E-02	8.43E-06	1.29E+01	9.45E-01	1.01E-01
9	.897	2.71E-02	6.87E-02	1.03E-05	1.74E÷01	1.41E+00	1.59E-01
10	.964	2.89E-02	E.46E-02	1.36E-05	2.22E+01	1.98E+00	2.35E-01
11	1.03	3.48E-02	1.18E-01	2.03E-05	2.80E+01	2.77E+00	3.49E-01
12	1.11	3.13E-02	1.22E-01	2.27E-05	3.32E+01	3.59E+00	4.76E-01
13	1.19	2.95E-02	1.33E-01	2.65E-05	3.81E+01	4.49E+00	6.24E-01
1 4	1.28	3.17E-02	1.65E-01	3.53E-05	4.34E+01	5.60E+00	8.22E-01
15	1.38	3.02E-02	1.82E-01	4.18E-05	4.84E+01	6.82E÷00	1.(FE+00
16	1.;8	2.90E-02	2.01E-01	4.98E-05	5.32E+01	8.18E+00	1.24E+60
17	1.59	0.01E-02	2.42E-01	6.44E-05	5.82E+01	9.81E+00	1.705+00
1 8	1.71	2.80E-02	1.18E-01	0.15E-05	6.21E+01	1.18E+61	1.04E+11
19	1.84	2.03E-01	0.80F-01	8.70E-05	8.68E-01	1.02E+01	2.86E+01
2.5	1.55	1.18E-02	1.60E-01	8.79E-08	7.01E+01	1.50E+01	8.01E-06
23	1.11	1(E+ 2	2.94E-01	1.04F-04	7.05E+01	1.65E+01	:
2.2	2.18	1.81E-02	2.98E-01	1.14E-04	7.00E+01	].4(E+1]	2.245-77
	2.48	1.615-01	3.41E-01	1.40E-04	7.9(E-0)	1.10F+01	3.41 <b>E-</b> 1
2;	2.64	1.80E-02	CCE-01	1.54E-(4	8.11E4(1	2.19E+11	F E-//
28	2.83	1.48E-02	3.74E-01	1.77E-04	8.47E+01	2.41E+01	# . > <b>&gt; 7 -</b> ( )
26	3.(5	1.20E-02	0.08E-01	1.87E-04	8.08E+01	2.8(E+01	7.90 <b>F</b> 400
27	3.27	1.19E-02	4.01E-01	2.19E-04	8.8TE+01	3.13E-01	9.10E-07
28	3.52	8.64E-03		1.98E-04	9.02E-01	3.20E+01	1.00F+01
<u>.</u> c	3.78	7.31E-08	3.30E-01	2.08E-04	9.14E+01	3.58E+01	1.14E+61
30	4.68	7.68E-03	3.99E-01	2.71E-04	9.27E+01	3.88E+01	1.29E+01
31	4.37	7.08E-03	4.25E-01	3.10E-04	9.38E+01	4.14E+01	1.47E+(1
32	4.69	4.08E-03	2.83E-01	2.22E-04	9.45E+01	4.33E+01	1.88F-01
3 <b>3</b>	5.04	3.24E-03	2.59E-01	2.18E-04	9.51E+01	4.50E+01	1.71E+01
24	5.42	3.12E-03	2.88E-01	2.61E-04	9.56E+01	4.70E+01	1.86E+01
3.5	5.82	3.60E-03	3.84E-01	3.73E-04	9.62E+01	4.96E+01	1.07E+01
36	6.26	2.52E-03	3.11E-01	3.24E-04	9.60E+01	5.17E+01	2.18E+01
37	6.73	2.28E-03	3.25E-01	3.64E-04	9.70E+01	5.08E+01	2.455+01
38	7.23	2.16E-03	3.55E-01	4.28E-04	9.73E+01	5.02E+01	2.09E+01
38	7.77	1.68E-03	3.19E-01	4.13E-04	9.7(E+01	5.84E+01	2.90E+61
40	8.35	1.32E-03	2.89E-01	4.03E-04	9.78E+01	6.03E+01	3.15F-01
41	8.97	1.56E-03	0.95E-01	5.91E-04	9.81E+01	€.3CE+01	3.48E+01
42	9.61	1.92E-03	5.61E-01	9.02E-04	9.84E+01	6.68E+01	31.69E-01
43	:0.3	1.68E-03	5.67E-01	9.80E-04	9.87E-01	7.06E+01	4.545-01
4.4	11.1	8.40E-04	3.27E-01	6.08E-04	9.88E+01	7.28E-01	1.8:F-6:
45	11.9	1.91E-03	3.64E-01	1.72E-03	9.91E÷01	7.86E±01	5.84E+61
46	12.8	1.32E-03	6.86E-01	1.47E-03	9.94E+01	8.03E+01	6.67E401
47	13.8	1.92E-03	1.15E+00	2.6EE-03	9.97E+01	9.10E+01	8.10E-01
48	14.8	1.925-03	1.33E+00	3.30E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E-02	1.00E+02	1.0(E+()
TOTAL			. 48E-01 1.				
				· <del>_</del>			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 15.008 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		DIL. KAII	0: 1 :1	EFF1C. C	onne en en	-	
		201105	V:TD 4 TT 0 V:C		CUMU	LATIVE %	
			NTRATIONS	<b>WAGG</b>		SURFACE	MASS
CHNL	DIA	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	SURFACE	MASS		7.68E-03	4.81E-04
<	.486	2.64E-03	1.62E-03	1.19E-07	3.31E-01		8.39E-04
	.504	1.32E-03	1.06E-03	8.88E-08	4.96E-01	1.27E-02	
	.542	1.92E-03	1.77E-03	1.60E-07	7.36E-01	2.11E-02	1.48E-03
	.581	3.48E-03	3.70E-03	3.59E-07	1.17E+00	3.87E-02	2.93E-03
	.625	4.44E-03	5.45E-03	5.G8E-07	1.73E+00	6.4GE-02	5.21E-03
		9.24E-03	1.31E-02	1.48E-06	2.88E+00	1.27E-01	1.12E-02
	.673		2.70E-02	3.26E-06	4.94E+00	2.5EE-01	2.43E-02
	.723	1.64E-02	4.53E-02	5.88E-06	7.93E+00	4.71E-01	4.80E-02
	.777	2.39E-02		8.91E-06	1.16E+01	7.76E-01	9.40E-02
8	.835	2.93E-02	6.42E-02		1.67E+01	1.27E+00	1.46E-01
ô	.897	4.09E-02	1.04E-01	1.55E-05		1.79E+00	2.17E-01
10	.964	3.73E-02	1.09E-01	1.76E-05	2.14E-01		3.06E-01
	1.03	3.79E-02	1.28E-01	2.21E-05	2.61E+01	2.39E+00	
	1.11	3.94E-02	1.54E-01	2.85E-05	3.11E+01	3.12E+00	4.21E-01
	1.19	2.61E-02	1.63E-01	3.25E-05	$3.56E \pm 01$	3.90E+00	F.52E-01
-	1.29	3.08E-02	2.07E-01	4.44E-05	4.06E+01	4.98E+00	7.31E-01
	1.78	0.8FE-02	2.31E-01	F.00E-05	4.545+01	5.99E+00	9.48E-01
		0.44E-02	2.09E-01	E.91E-05	1.97E-01	7.11E+00	1.18E+00
	1.18		2.58E-01	6.855-05	8.37E-01	8.34E+00	1.405-00
1 7	1.59	0.22E-02	2.85E-01	8.: FE-0F	F. TCE+01	9.89E+00	1.79E+00
19	1.71	3.08E-02		1.0(E-04	6.14E-01	1.11E-01	1.19E+00
• 0	1.54	3.0FE-02	3.25E-01		0.82E+01	1.3:E+(1	L. CFE-GC
20	1.98	2.99E-02	3.08E-(1	1.22E-01		1.07-01	.18₹ <b>-</b> (0
<u> </u>	2.:2	2.80E-02	4.12F-11	1.8(1-04	6.89F-01		(TF+(
22	2.15	0.10 <b>E-</b> 02	F.;FE-01	1.80E-01	7.185-01	1.7:5+61	. 60E+00
23	2	2.4.F-02	0.99E-01	2.04 <b>E-</b> 04	7.61F- 1	1. ** E*: 1	
2 ;	1.11	2.77E-02	E.9.E-01	2.62E-0:	T. C.E. C.I	2.1 E-01	7.68E+18
· : -	2.4	2.41E-02	0.11F-01	1.89E-04	9.2FE+01	1.00E+ 1	7.11E+0
26	·· · · ·	2.14E-02	6.14E-01	3.17E-04	8.82E+01	2.8[E+6]	9.35 <b>∑-</b> 30
2.7		1.80E-02		8.32E-04	8.74E-01	2.34F+03	$S = \{0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0$
28	1.72	1.42E-02	5.52E-01	2.24E-04		3.10E+01	1.10F-01
		1.16E-02		2.88E-04		2.67 <b>E</b> ÷01	1.20E+01
2.9	2.78	9.48E-03		3.84E-04		3.80E+01	1.88E+01
20	;.00 -		4.86E-01	3.52E-04		4.10E+01	1.51E+01
01	• • • •	8.04E-03		3.71E-04		4.00E+01	1.67E+01
32	;.(2	6.84E-03		3.96E-04		4. F&E-03	1.80E+01
03	7.34	5.38E-03				4.84E+01	1.08E+01
34	5.12	5.88E-03		4.91E-04			2.22E+01
: 5	5.82	4.50E-03		4.73E-04			1.41E+01
26	6.29	3.72E-03		4.79E-04			2.64E+01
37	€.73	3.48 <b>E-0</b> 3		5.FGE-04			2.93E+01
38	7.23	3.60E-03	5.92E-01	7.13E-04			
39	7.77	2.52E-03	4.78E-01	6.20E-04			2.18E+01
40	8.35	2.40E-03		7.23E-04			3.47E+01
41	5.97	1.08E-03		6.36E-04	9.80E-01		3.70E+01
	9.64	2.40E-03		1.13E-03		6.81E+01	4.18E+01
12		1.56E-03		9.10E-04			4.88E+01
43	10.3			9.55E-04			1.93E+01
4.1	11.1	1.32E-03		3.02E-03			6.15E+61
15	11.9	3.36E-03		3.02E-00			7.39E+01
46	12.8	2.70E-03		2.99E-03			8.59E+01
17	3.51	2.16E-03					1.00E+02
48	14.8	2.04E-03					1.00E+02
>	15.4	0.00E+00		0.00E+00	J 1.00E+02	1.002-02	• • • • • • • • • • • • • • • • • • •
TOTA	LS:	7.99E-01	2.11E+01 2	.48E-02			

FILE NAME: OUT5 15.009 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC
DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCI	ENTRATIONS		CUMI	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	1.68E-03	1.06E-03	7.93E-08	2.55E-01	5.97E-03	3.83E-04
1	.504	1.68E-03	1.34E-03	1.13E-07	5.10E-01	1.36E-02	9.30E-04
2	.542	2.64E-03	2.44E-03	2.20E-07	9.11E-01	2.73E-02	1.99E-03
3	.581	3.00E-03	3.19E-03	3.09E-07	1.37E+00	4.53E-02	3.49E-03
4	.625	5.28E-03	6.48E-03	6.75E-07	2.17E+00	8.19E-02	6.75E-03
5	.673	8.16E-03	1.16E-02	1.30E-06	3.41E+00	1.48E-01	1.31E-02
6	.723	1.39E-02	2.29E-02	2.76E-06	5.52E+00	2.77E-01	2.64E-02
7	.777	1.69E-02	3.21E-02	4.16E-06	8.09E+00	4.58E-01	4.65E-02
8	835	2.54E-02	5.5EE-02	7.77E-06	1.20E+01	7.73E-01	8.41E-02
9	.897	2.65E-02	6.72E-02	1.01E-05	1.60E+01	1.15E+00	1.33E-01
10	.961	2.78E-02	E.14E-02	1.31E-05	2.02E+01	1.61E+00	1.96E-01
11	1.03	3.31E-02	1.12E-01	1.93E-05	2.52E+01	2.24E+00	2.89E-01
12	1.11	3.47E-02	1.35E-01	2.51E-05	3.05E+01	3.01E+00	4.11E-01
13	1.19	3.10E-02	1.39E-01	2.78E-05	3.52E+01	3.80E+00	5.45E-01
] ]	1.13	3.20E-02	1.67E-01	3.57E-05	4.01E-01	4.74E+00	7.18E-01
	1.08	2.88E-02	1.73E-01	3.99E-05	4.45E+01	5.71E+00	9.11E-01
10	1.18	2.90E-02	1.07E-01	5.13E-05	4.90E+01	0.88E+00	1.16E+00
17	1.78	2.30E-02	2.08E-01	5.72E-05	5.29E+01	5.06E+00	1.43E+00
		2.87E-12	2.05E-01	7.58E-05	5.73E+01	9. F E E + 00	1.795+00
19	1.71	2.88F-02	2.7FE-01	8.40E-05	6.12E+01	1.11E+01	1.10E+00
				9.67E-05	6.19E+(1	1.1-E+01	1.68E-00
20	3.58	0.00E-00	0.02E-01 3.79E-01	1.05E-04	6.90F+C1	1.7(E-()	2.37 <u>E</u> =30
- 4	2.15	2.86F-02			7.48E-01	1.717-01	1.0 E+ 0
<b>4</b> 0 <b>4</b> 0	0.00	2.2;E-02	?? E=0:	1.17E-04			
•	1. 5	1. 10 E-01	4.80E-01	1.87E-(4	7.62E- 1	1.07E-01	#
<b>-</b> :	2.64	2.86E-62	5.18E-01	2.28E-04	7.95E=()	2.11 <b>E</b> +01	
	2.83	1.85E-02	4.88E-01	2.21E-04	8.20E+01	f(E-61	7.10E+00
- (	3.( <del>.</del>	1.89E-02	1.63E-01	2.3FE-04	8.50E-01	2.79E+01	8.20 <b>2-</b> 60
		1.40E-02	4.74E-03	2.59E-04	8.71E-01	0.16E±01	9.81E=00
<u>. E</u>	2.52	1.08E-02	4.01E-01	2.47E-04	8.88E±01	3.1954(1	1.07E+01
	2.78	1.07E-02	4.81E-01	3.00E-04	9.04E+01	0.87E+01	1.22E+(1
20	4.00	6.71E-03	3.49E-01	2.37E-04	9.14E-(1	3.76E+01	1.00E+01
71	1.3	6.96E-03	4.1SE-01	3.04E-04	9.25E÷01	4.9CE+01	1.(FE+0)
22	:.(9	5.64E-03	3.91E-01	3.06E-04	9.88E-01	1.21E+(1	1.00E+01
22	5.04	6.48E-02	5.19E-01	4.36E-04	9.48E-01		1.84E+01
34	5.42	3.12E-03	2.88E-01	2.61E-04	9.48E+01	4.08E+01	1.90E-01
3.5	E.82	3.84E-03	4.10E-01	3.98E-04	9.54E+01	4.91E÷01	2.1(E+(·1
3€	6.26	3.48E-03	1.29E-01	4.48E-04	9.58E-01	5.15E+01	2.87E+01
37	€. 73	2.40E-08	3.42E-01	3.83E-04	9.62E+01	5.04E+01	2.86E+01
0.9	7.23	4.32E-03	7.10E-01	8.56E-04	9.69E+01	5.74E+01	2.97E+01
(· 5	7.77	3.12E-03	5.82E-01	7.67E-04	9.74E÷01	6.08E+01	3.34E+01
40	8.35	2.04E-03	4.47E-01	6.23E-04	9.77E+01	6.30E+01	3.04E÷01
11	8.97	2.28E-03	5.77E-01	8.64E-04	9.80E+01	6.66E+01	4.05E±01
12	9.54	2.28E-03	6.67E-01	1.07E-03	9.84E-01	7.03E+01	1.58E÷01
13	10.3	1.92E-03	6.48E-01	1.12E-03	9.87E÷01	7.40E+01	0.12E÷01
44	11.1	1.80E-03	7.02E-01	1.30E-03	9.89E+01	7.80E±01	5.75E+01
j 5	11.9	2.04E-03	9.18E-01	1.83E-03			6.84E+01
46	12.8	1.08E-03	8.73E-01	1.87E-03	9.95E-01	8.81E+01	7.84E+01
47	13.8	1.44E-03	8.65E-01	1.99E-03	9.97E-01	5.00E+01	8.51E+01
18	14.8	1.80E-03	1.25E+00	3.09E-03	1.00E+02	1.00E÷02	1.00E+01
>	15.4	0.00E-00	0.00E±00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	6.88E-01 1	.77E÷01 2.	07E-02			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: OUT5 15.010 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		<i>D1 D1 D1 D1 D1 D1 D1 D1</i>					
		CONCE	NTRATIONS		CUMU	LATIVE %	
CHNL	LT.C		SURFACE	MASS	NUMBER	SURFACE	MASS
< <	.486	1.44E-03	8.91E-04	6.62E-08	2.41E-01	5.04E-03	3.1(E-04
	.504	1.08E-03	8.64E-04	7.27E-08	4.23E-01	9.94E-03	6.50E-04
1		1.80E-03	1.66E-03	1.50E-07	7.24E-01	1.93E-02	1.35E-03
2	.542		2.68E-03	2.60E-07	1.15E+00	3.45E-02	2.57E-03
3	.581	2.52E-03	<del>-</del>	4.30E-C7	1.71E+00	5.79E-02	4.88E-03
-3	.625	3.36E-03	4.12E-03	-	2.80E+00	1.10E-01	9.42E-03
ភិ	.073	6.48E-03	9.22E-03	1.03E-06		2.26E-01	2.10E-02
r:	.723	1.25E-02	2.05E-02	2.47E-06	1.89E+00	4.25E-01	4.242-02
7	. 7 7 7	1.8CE-02	3.53E-02	4.58E-08	8.01E+00		
£	. 835	2.38E-02	E.21E-02	7.25E-06	1.20E+01	7.21E-01	7.64E-02
ġ.	.897	2.66E-02	€.75E-02	1.01E-05	1.65E+01	1.10E-00	].14E-(1
10	109.	2.52E-02	7.37E-02	1.19E-05	2.07E+01	1.52E+00	1.785-01
11	1.03	2.11E-02	F.15E-02	1.41E-05	2.47E÷01	1.98E+00	2.4FF-(1
12	1.11	2.88E-02	1.12E-01	2.09E-05	2.96F÷01	2.02E+00	0.43E-01
4 <del>4</del>	1.;5		16E-01	2.31E-05	3.29E+01	3.27E+00	i.f(E-(1
		2.5(5-02	1.52E-01	3.27E-05	0.88E+01	4.10E+00	€.00 <b>E-</b> 01
	1.59		1.81E-01		4.80E+01	5.05F+00	* . * : = : :
	1			0.98E-05	:.T2E-01	5.51E+10	\$.64 <b>:-</b> 11
<u>:</u> #	1		:.C1F-C1		7.78E-01	0.90E=00	·
			1.71E-01			8.20E+00	
: :	1.7:	2.11E-61	2.2FE-(1		7.16E+01	6.2.E=60	
1.5							
-		2. ; ' <b>F-</b> %2	1.60E-01	9.77.	().1(F+())	1.112+11	
•			12E-01	1.18E-(-	(1, 1, 1, ₹ <b>E -</b> 1, 1, 1		· · · · · · · · · · · · · · · · · · ·
• •,		1.10E-11	(,:CE-01	1.({E-'	T. :: E-(:		<b></b>
6 %		2.17E- 1	.:1E-(1	1.68E4	7.07E-01		
24		1.87E-02	1.31E-01	1.9(E-()	7.70E+01	1.552-61	
~ ;		:.T1E-01	4.84E-01	2.00E-05	7.98E+01	1.20E=03	( . ] . E-
- (	2 1 2 1	1.8(E-02	4.67E-01	2.87E-04	E.26E+01	2.88E-61	
			5.47E-01	2.88E-64	8.50E-01	2.81 <b>E-</b> 01	ξ.:: <b>Ξ-</b> (:)
-	·. • = ·	1.012-(2		3.05E-04	8.78E-01		1.(:E+(1
2.8	3.72	1.001-02	F.13E-01	2.86E-04	5.91E-01	3.06E-01	].;4E=(;
2.9	0.78	1.(1E-01	4.84E-(1		9.0EE-01		1.2 E-11
30	4.00	7.80E-03	4.05E-01	2.75E-04			1.1.25-11
. 1	1.37	0.12F-08		2.88E-04	9.16E+01		:.58E-(1
32	1.00	7.86E-03		4.10E-04	9.28E+01		
	(	4.2(E-63	3.38E-01	2.83E-04	9.3EE-01		
3.4	8.42	3.88E-03	3.66E-01	3.31E-04	9.42E+01		1.67E+01
	5.82	3.96E-03	4.23E-01	4.11E-04	9.49E+01		1. (T-(1
36	6.26	3.9EE-03		5.10E-04	9.55E+01	5.01E+01	2.3(E-01
27	C.73	3.24E-03		5.17E-04	9.61E÷01	5.27E+01	2.542+01
	7.13	2.88E-03		5.71E-04	9.66E+01	5.53E+01	1.81E+01
38		2.40E-03	-	5.90E-04	9.70E+01	5.79E+01	0.04E-01
	7.77	1.56E-03		4.76E-04			3.311-01
40	8.35			8.18E-04	9.7CE+01	-	3.68E-(1
.i ]	8.97	2.16E-03		8.46E-04			4.(954(1
12	9.64	1.8(E-03			-		1.8 IE-01
4.3	10.3	2.76E-03		1.61E-03			7.7( <u>E</u> +(1
14	11.1	2.04E-03		1.48E-03			6.54E-31
45	11.9	2.40E-03		2.16E-03			7.5 iE+01
46	12.8	1.92E-03		2.14E-08	9.94E+01		
47	13.8	2.16E-03		2.99E-03			E.P4E-(1)
48	14.8	1.32E-03		2.27E-03			1.0(E+(2
>	1: .4	( . 3( E+00		0.00E+00	1.00E+02	2 1.00E=02	1.00F-01
	ALS:		1.77E+01 2	.14E-02			
101	1 40 1.7 1	CTCCL CA		_			

FILE NAME: IN5 13.000 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 20 QSEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

			ENTRATIONS			JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	1.53E-01		7.20E-06		1.96E-02	1.30E-03
1	.504	1.20E-01	9.60E-02	8.08E-06		3.91E-02	2.75E-03
2	.542	2.37E-01	2.19E-01	1.98E-05	1.10E+00	8.37E-02	6.30E-03
3	.581	4.59E-01	4.88E-01	4.73E-05	2.08E+00	1.83E-01	1.48E-02
4 .	.625	7.92E-01	9.72E-01	1.01E-04	3.79E+00	3.81E-01	3.30E-02
5	.673	1.51E+00		2.40E-04		8.17E-01	7.63E-02
6	.723	2.67E+00	4.39E+00	5.30E-04	1.28E+01	1.71E+00	1.71E-01
7	.777	3.68E+00	7.00E+00	9.07E-04	2.07E+01	3.14E+00	3.35E-01
8	.835	4.49E+00	9.85E+00	1.37E-03	3.03E+01	5.14E+00	5.81E-01
9	.897	4.56E+00	1.15E+01	1.73E-03	4.01E+01	7.49E+00	8.92E-01
10	.964	4.40E+00	1.29E+01	2.07E-03	4.96E+01	1.01E+01	1.26E+00
11	1.03	4.14E+00	1.40E+01	2.42E-03	5.85E+01	1.30E+01	1.70E+00
12	1.11	3.45E+00	1.35E+01	2.50E-03	6.59E+01	1.57E+01	2.15E+00
13	1.19	3.03E+00	1.36E+01	2.72E-03	7.25E+01	1.85E+01	2.64E+00
14	1.28	2.55E+00	1.33E+01	2.84E-03	7.79E+01	2.12E+01	3.15E+00
15	1.38	2.22E+00	1.33E+01	3.07E-03	8.27E+01	2.39E+01	3.70E+00
16	1.48	1.70E+00	1.18E+01	2.91E-03	8.64E+01	2.63E+01	4.23E+00
17	1.59	1.22E+00	9.75E+00	2.60E-03	8.90E+01	2.83E+01	4.69E+C0
18	1.71	8.91E-01	8.24E+00	2.35E-03	9.09E+01	3.00E+01	5.12E+30
19	1.84	6.84E-01	7.30E+00	2.24E-03	9.24E+01	3.14E+01	5.52E+00
20	1.98	5.07E-01	6.25E+00	2.06E-03	9.35E+01	3.27E+01	5.89E+(()
21	2.12	3.24E-01	4.61E+00	1.64E-03	9.42E+01	3.37E+01	6.19E+00
22	2.28	2.82E-01	4.64E+00	1.77E-03	9.48E+01	3.46E+01	6.5(E+C)
23	2.45	2.37E-01	4.8GE+00	1.84E-03	9.53E+(:1	3.55E+01	6.84E+00
24	2.64	1.77E-01	3.88E+00	1.71E-03	9.5(E+01	3.63E+01	7.14E+00
25	2.83	1.83E-01	4.63E÷00	2.19E-03	9.50E+01	3.72E+01	7.54E+U(
26	3.05	1.56E-01	4.56E+00	2.32E-03	9.64E+01	3.82E+01	7.85E+(°0
27	3.27	1.26E-01	4.25E+00	2.32E-03	9.66E+01	3.90E+01	8.37F+00
28	3.52	1.11E-01	4.33E÷00	2.54E-03	9.69E+01	3.99E÷01	8.83E+00
29	3.78	1.26E-01	5.67E+00	3.58E-03	9.72E+01	4.11E+01	9.47E+00
30	4.06	1.02E-01	5.30E+00	3.60E-03	9.74E+01	4.22E+01	1.01E+01
31	4.37	1.29E-01	7.75E+00	5.64E-03	9.77E+01	4.37E+01	1.11E+01
32	4.€9	8.70E-02	6.03E+00	4.72E-03	9.78E+01	4.50E+01	1.20E-01
33	5.04	1.05E-01	8.41E+00	7.07E-03	9.81E+01	4.67E+01	1.33E+01
34	5.42	5.10E-02	4.71E+00	4.26E-03	9.82E+01	4.76E+01	1.40E+01
35	5.82	7.80E-02	8.33E+00	8.09E-03	9.83E+01	4.93E+01	1.55E+01
36	6.26	9.60E-02	1.18E+01	1.24E-02	9.85E+01	5.17E+01	1.77E+01
37	6.73	9.00E-02	1.28E+01	1.44E-02	9.87E+01	5.43E+01	2.03E+01
38	7.23	6.30E-02	1.04E+01	1.25E-02	9.89E+01	5.65E+01	2.25E+01
39	7.77	5.40E-02	1.03E+01	1.33E-02	9.90E+01	5.85E+01	2.49E+01
40	8.35	2.10E-02	4.60E+00	6.41E-03	9.90E+01	5.95E+01	2.61E+01
41	8.97	5.70E-02	1.44E+01	2.16E-02	9.92E+01	6.24E+01	3.00E+01
42	9.64	7.20E-02	2.10E+01	3.38E-02	9.93E+01	6.67E+01	3.60E+01
43	10.3	2.70E-02	9.11E+00	1.57E-02	9.94E+01	6.8GE+01	3.89E+01
44	11.1	6.30E-02	2.46E+01	4.56E-02	9.95E+01	7.36E+01	4.71E+01
45	11.9	6.60E-02	2.97E+01	5.93E-02	9.97E+01	7.96E+01	5.77E+01
46	12.8	3.00E-02	1.56E+01	3.34E-02	9.97E+01	8.2EE+01	6.37E+01
47	13.8	7.50E-02	4.50E+01	1.04E-01	9.99E+01	9.20E+01	8.24E+01
48	14.8	5.70E-02	3.95E+01	9.78E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	4.65E+01 4	1.91E+02 5.	56E-01			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: IN5 13.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIL. RAII	0: 1:1	Erric.	ORRECT: 1	) į	
		COVER	NTRATIONS		CUM	ULATIVE %	
CHAI	Ald		SURFACE	MASS		SURFACE	MASS
< CH.VL	. 136	1.56E+00				1.45E-02	8.42E-04
	.501	1.15E+00		7.73E-05			1.73E-03
1		2.17E+00	2.00E+00				3.81E-03
2	.542	3.85E+00					3.81E-03 8.37E-03
3	.581	7.20E+00					
<del>1</del> 5	.625						1.90E-02
	.673						4.41E-02
6 7	.723	2.29E+01	3.77E+01 6.43E+01				9.64E-02
	.777	3.33E+01					1.92E-01
8	.935	4.08E+01					3.36E-01
9	.397	4.29E+01	1.09E+02	1.63E-02			5.23E-01
10	.961	4.07E+01	1.19E+02	1.91E-02			7.43E-01
11	1.03	3.78E+01	1.28E+02				
12	1.11	3.41E+01	1.33E+02				1.23E+00
12	1.19	2.99E+01	1.35E÷02				1.59E+00
1	1.23	2.61E+01	1.362+02				1.93E+00
15	1.38	2.14E+01	1.29E+02				2.27E+00
16	1.48	1.725+01	1.19E+02				2.61E+00
17	1.59	1.34E+01	1.07E+02				2.93E+C0
13	1.71	1.00E+01	9.26E+01				3.24E+00
19	1.81	7.34E+00	7.83E+01				3.52E+00
2.)	1.98	5.31E+00	6.58E+01				3.77E+00
21	2.12	3.93E+00	5.60E+01				J.99E+00
0.1	2.23	3.012+00	1.95E+01				1.21E+00
23	2.45		4.82E+01				1.44E+00
21	2.64	2.08E+00	4.56E+01		9.39E+01		4.67E+00
2.5	2.83	1.79E+00	4.53E+01	2.14E-02			4.92E+00
25	3.05	1.65E+00	4.81E+01	2.45E-02	9.16E+01		
27	3.27	1.55E+00	5.22E+01	2.85E-02	9.50E+01		5.53E+00
28	3.52	1.47E+00	5.73E+01	3.36E-02	9.53E+01	2.962+01	5.91E+00
53	3.78	1.39E+00	6.24E+01	3.94E-02			6.37E+00
30	1.06	1.31E+00	6.80E+01	4.61E-02			6.90E+00
31	4.37	1.27E+00	7.63E+01	5.56E-02	9.62E+01		7.54E+00
32	1.69	1.18E+00	8.15E+01	6.38E-02	9.64E+01		8.27E+00
33	5.04	1.19E+00	9.54E+01	8.02E-02			9.19E+00
3.4	5.42	1.17E+00	1.09E+02	9.82E-02			1.03E+01
35	5.82	1.13E+00	1.20E+02	1.17E-01			1.17E+01
36	6.26	1.10E+00	1.36E+02	1.42E-01	9.74E+01	4.07E+01	1.33E+01
37	6.73	1.07E+00	1.53E+02	1.72E-01			1.53E+01
38	7.23	1.03E+00	1.70E+02				1.76E+01
39	7.77	1.03E+00	1.96E+02	2.54E-01		4.85E+01	2.05E+01
40	8.35	1.01E+00	2.21E+02	3.07E-01	9.84E+01	5.18E+01	2.41E+01
41	8.97	1.04E+00	2.63E+02	3.93E-01		5.57E+01	2.86E+01
42	9.64	9.88E-01	2.89E+02	4.64E-01	9.88E+01		3.40E+01
43	10.3	9.46E-01	3.19E+02	5.52E-01	9.90E+01	6.48E+01	4.03E+01
44	11.1	9.02E-01	3.52E+02	6.53E-01	9.92E+01	7.00E+01	4.78E+01
45	11.9	8.68E-01	3.91E+02	7.80E-01	9.94E+01	7.59E+01	5.68E+01
46	12.8	9.02E-01	4.69E+02	1.01E+00	9.96E+01	8.29E+01	6.84E+01
47	13.8	8.89E-01	5.34E+02	1.23E+00	9.98E+01	9.08E+01	8.25E+01
48	14.8	8.85E-01	6.14E+02	1.52E+00	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL		4.53E+02 6	.70E+03 8	.69E+00			

FILE NAME: IN5 13.002 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200-SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC	ENTRATION	S	CUM	ULATIVE %	
CHN	L DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	VACC
<	.486	1.68E+00	1.05E+0		3.50E-01	1.52E-02	MASS
1	.504	1.25E+00	9.99E-0		6.09E-01		
2	.542		2.18E+0		1.10E+00		1.83E-03
3	.581		4.43E+00		1.97E+00	6.10E-02	4.05E-03
4	.625		9.63E+0			1.25E-01	8.88E-03
5	.673		2.08E+01		3.60E+00	2.64E-01	2.02E-02
6	.723		4.09E+01		6.64E+00	5.64E-01	4.65E-02
7	.777		7.00E+01		1.18E+01	1.15E+00	1.02E-01
8	.835	_	9.63E+01		1.95E+01	2.16E+00	2.04E-01
9	.897	4.57E+01	1.16E+02		2.86E+01	3.55E+00	3.55E-01
10	.964	4.30E+01			3.81E+01	5.22E+00	5.50E-01
11	1.03	3.98E+01	1.26E+02		4.70E+01	7.03E+00	7.78E-01
12	1.11		1.34E+02		5.53E+01	8.97E+00	1.04E+00
13		3.55E+01	1.38E+02		6.27E+01	1.10E+01	1.33E+00
	1.19	3.10E+01	1.40E+02		6.91E+01	1.30E+01	1.64E+00
14	1.28	2.70E+01	1.40E+02		7.47E+01	1.50E+01	1.98E+00
15	1.38	2.24E+01	1.35E+02		7.94E+01	1.69E+01	2.33E+00
16	1.18	1.81E÷01	1.26E+02		8.32E+01	1.88E+01	2.68E+00
17	1.59	1.43E+01	1.14E+02		8.61E÷01	2.04E+01	3.02E+00
18	1.71	1.09E+01	1.01E+02		8.84E+01	2.18E+01	3.35E+00
19	1.84	6.00E+00	$8.54E \pm 01$	2.62E-02	9.01E+01	2.31E+01	3.64F+00
20	1.98	5.88E+00	7.38E+01	2.44E-02	9.13E+01	2.41E+01	2.92E+00
21	2.12	4.39E÷00	6.25E+01	2.22E-02	9.22E+01	2.50E+01	4.17E+00
22	2.28	3.37E+00	5.53E+01		9.29E+01	2.f8E+01	4.40E+00
23	2.45	2.85E+00	5.41E+01	2.22E-02	9.35E÷01	2.66E+01	4.65E+00
24	2.64	2.28E+00	4.99E+01	2.20E-02	9.40E+01	2.73E+01	
25	2.83	1.89E+00	4.77E+01	2.26E-02	9.44E+01		4.90E+00
26	3.05	1.77E+00	5.16E+01	2.62E-02	9.48E+01	2.80E+01	5.18E=00
27	3.27	1.66E+00	5.62E+01	3.07E-02	9.51E+01	2.88E+01	5.45E+00
28	3.52	1.61E+00	6.27E+01	3.68E-02	9.54E+01	2.96E+01	5.8(E+(0
29	3.78	1.43E+00	6.46E+01	4.07E-02		3.05E+01	6.21E+00
30	4.06	1.34E+00	6.98E+01	4.73E-02	9.57E+01	3.14E+01	6.67E+00
31	4.37	1.29E+00	7.72E+01	5.62E-02	9.60E+01	3.24E+01	7.20E+00
32	4.69	1.29E+00	8.92E+01	6.98E-02	9.63E+01	3.35E+01	7.84E+00
33	5.04	1.21E+00	9.73E÷01		9.65E+01	3.48E+01	8.62E+00
34	5.42	1.24E+00	1.15E+02	8.18E-02	9.68E+01	3.62E+01	9.54E+00
35	5.82	1.20E+00	1.13E+02 1.28E+02	1.04E-01	9.71E+01	3.79E+01	1.07E+01
36	6.26	1.17E+00	1.44E+02	1.24E-01	9.73E+01	3.97E+01	1.21E+01
37	6.73	1.11E+00	-	1.51E-01	9.75E+01	4.1SE+01	1.3SE+01
38	7.23	1.08E+00	1.59E+02	1.78E-01	9.78E+01	4.41E÷01	1.58E+01
39	7.77	1.06E+00	1.77E+02	2.14E-01	9.80E+01	4.66E+01	1.82E+01
40	8.35		2.00E+02	2.60E-01	9.82E+01	4.95E+01	2.11E+01
41	8.97	1.04E+00	2.28E+02	3.17E-01	9.84E+01	5.28E+01	2.47E+01
42		1.05E+00	2.65E+02	3.96E-01	9.87E+01	5.66E+01	2.92E+01
42 43	9.64	9.94E-01	2.91E+02	4.67E-01	9.89E+01	6.08E+01	3.44E+01
4.1	10.3	9.64E-01	3.25E+02	5.62E-01	9.91E+01	6.55E+01	4.08E+01
	11.1	8.95E-01	3.49E+02	6.48E-01	9.92E+01	7.05E+01	4.80E+01
	11.9		4.05E+02	8.08E-01	9.94E+01	7.64E+01	5.71E+01
	12.8	<b>.</b>	4.68E+02	1.00E+00	9.96E+01	8.31E+01	6.84E+01
	13.8		5.50E+02	1.27E+00	9.98E+01	9.11E+01	8.27E+01
	14.8		6.20E+02	1.54E+00	1.00E+02	1.00E+02	1.00E+02
	15.4		0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	5:	4.81E+02 6.	94E+03 8.	88E+00	- <del>-</del>		

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: IN5 13.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		טונה. אאוו	0. 1 .1	EFFIC. (	ORRECTOR		
		COV.CE	NTRATIONS		CI WI	ULATIVE %	
A11.11	D. T. L			RASS	NUMBER	SURFACE	WVCC
	DIA		SURFACE	1.95E-05		1.68E-02	MASS 1.07E-03
<	. 186	4.16E-01	2.61E-01				
1	.501	3.01E-01	2.41E-01	2.03E-05	5.85E-01	3.24E-02	2.195-03
2 3	.512	5.70E-01	5.27E-01	4.76E-05	1.05E+00	6.65E-02	4.81E-03
3	.581	1.01E+00	1.07E+00	1.04E-04	1.87E+00		1.05E-02
1	.625	1.83E+00	2.31E+00	2.41E-04	3.10E+00		2.38E-02
5	.673	3.57E+00	5.08E+00	5.70E-01	6.31E+00	6.13E-01	5.52E-02
6	.723	5.95E+00	9.78E+00	1.18E-03	1.12E+01	1.25E+00	1.20E-01
7	.777	8.89E+00	1.69E+01	2.19E-03	1.84E+01	2.34E+00	2.41E-01
8	.335	1.07E+31	2.35E+01	3.28E-03	2.72E+01	3.86E+00	4.21E-01
9	.897	1.125+01	2.85E+01	4.26E-03	3.63E+01	5.70E+00	6.56E-01
10	.961	1.08E+01	3.15E+01	5.07E-03	4.51E+01	7.74E+00	9.35E-01
11	1.03	1.00E+01	3.38E÷01	5.85E-03	5.33E+01	9.93E+00	1.25E+00
12	1.11	9.21E+00	3.61E+01	6.70E-03	6.08E÷01	1.23E+01	1.632+00
13	1.19	8.222+00	3.70E+01	7.39E-03	6.75E+01	1.47E+01	2.03E+00
11	1.23	7.26E+00	3.77E+01	8.09E-03	7.34E+01	1.71E+01	2.48E+00
1.5		6.17E-00	3.71E+01	8.545-03	7.85E+01	1.95E+01	2.95E+00
	1.38	5.04E-00	3.50E+01	8.66E-03	8.26E+01		3.43E+00
16	1.48		3.25E+01	8.662-03	8.59E+01	2.39E+01	3.90E+00
17	1.53	4.05E÷00		8.29E-03	8.85E+01	2.57E+01	1.35E+0)
13	1.71	3.14E-00	2.90E÷01		9.042+01	2.74E+01	1.79E+00
19	1.91	2.37E+00	2.53E+01	7.77E-03			
20	: .93	1.77E+00	2.18E+C1	7.19E-03	9.19E+01		
21	2.12	1.30E-00	1.85E+01	6.55=-03	9.29E÷01	3.00E+01	
2.2	2.23	9.45E-01	1.55E+01	5.92E-03	9.37E+01	3.10E+01	5.87E+00
23	2.45	7.625-01	1.45E+01	5.93E-03	9.432-01		6.295+00
21	2.64	6.16E-01	1.35E+01	5.91E-03		3.23E+01	6.53E+00
23	2.33	4.83E-01	1.222+01	5.78E-03	9.525-01	3.36E+01	6.85E+00
26	3.05	4.29E-01	1.26E+01	6.38E-03	9.55E+01	3.44E+01	7.20E+00
27	3.27	3.92E-01	1.32E+01	7.24E-03	9.53E+01		7.60E+00
28	3.52	3.54E-01	1.38E+01	8.10E-03	9.61E+01	_	
29	3.78	3.33E-01	1.50E+0i	9.47E-03	9.64E+01	3.71E+01	8.56E+00
30	4.06	3.15E-01	1.64E+01	1.11E-02	9.67E+01	3.82E+01	9.17E+00
31	1.37	3.02E-01	1.81E+01	1.32E-02	9.69E+01	3.93E+01	9.90E+00
32	1.69	2.91E-0i	2.02E+01	1.58E-02	9.71E+01	4.06E+01	1.08E+01
33	5.04	2.67E-01	2.14E+01	1.80E-02	9.74E+01	4.20E+01	1.18E+01
34	5.42	2.76E-01	2.55E+01	2.30E-02	9.76E+01	4.37E+01	1.30E+01
35	5.82	2.69E-01	2.87E+01	2.79E-02	9.78E+01	4.55E+01	1.46E+01
36	6.26	2.61E-01	3.21E+01	3.36E-02	9.80E+01	4.76E+01	1.64E+01
37	6.73	2.50E-01	3.55E+01	3.99E-02	9.82E+01	4.99E+01	1.86E+01
38	7.23	2.33E-01	3.83E+01	4.61E-02	9.84E+01	5.24E+01	2.12E+01
39	7.77	2.38E-01	4.52E+01	5.85E-02	9.86E+01		2.44E+01
40	8.35	2.14E-01	4.70E+01	6.55E-02	9.88E+01	5.83E+01	2.80E+01
41	8.97	2.32E-01	5.86E+01	8.77E-02	9.90E+01	6.21E+01	3.28E+01
42	9.64	2.13E-01	6.22E+01	1.00E-01			3.83E+01
43	10.3	1.87E-01	6.32E+01	1.09E-01	9.93E+01	7.02E+01	4.43E+01
4.4	11.1	1.79E-01	6.99E+01	1.30E-01	9.94E+01		5.15E+01
	11.1	1.81E-01	8.14E+01	1.62E-01	9.96E+01	8.00E+01	6.05E+01
45 46		1.76E-01	9.14E+01	1.96E-01	9.97E+01		7.12E+01
46	12.8	1.66E-01	9.98E+01	2.30E-01	9.99E+01		8.39E+01
47	13.8		1.18E+02	2.92E-01	1.00E+02		1.00E+02
48	14.8	1.70E-01	0.00E+00	0.00E+00	1.00E+02		1.00E+02
>	15.4	0.00E+00	1.55E+03 1.		1.006.05		
TOTA	r9:	1.432+04	L.SJETUJ I.	015700			

FILE NAME: IN5 13.004 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

					CUMU	\ T T \ 'E \	
			NTRATIONS	W . C C		CLATIVE %	MASS
CHNL		•	SURFACE	MASS	NUMBER	SURFACE	
<	.486	2.00E+00	1.26E+00	9.39E-05		1.54E-02	8.78E-04
1	.504	1.48E+00	1.19E+00	9.97E-05	6.48E-01	2.995-02	1.81E-03
2	.512	2.77E+00	2.55E+00	2.31E-04	1.16E+00	6.13E-02	3.97E-03
3	.581	4.90E+00	5.21E+00	5.05E-04	2.07E+00	1.25E-01	8.69E-03
<b>‡</b>	.625	9.02E+00	1.11E+01	1.15E-03	3.75E+00	2.61E-01	1.95E-02
5	.673	1.70E+01	2.42E+01	2.71E-03	6.91E+00	5.57E-01	4.485-02
6	.723	2.82E+01	4.63E+01	5.59E-03	1.22E+01	1.13E+00	9.71E-02
6	.777	4.17E+01	7.92E+01	1.03E-02	1.99E+01	2.105+00	1.93E-01
8	.835	4.95E+01	1.09E+02	1.51E-02	2.91E+01	3.43E+00	3.34E-01
9	.897	5.10E+01	1.29E+02	1.93E-02	3.86E+01	5.02E+00	5.15E-01
10	.961	4.82E+01	1.41E+02	2.26E-02	4.76E+01	6.74E+00	7.27E-01
11	1.03	4.38E+01	1.485+02	2.56E-02	5.57E+01	8.56E+00	9.665-01
12	1.11	3.89E+01	1.52E+02	2.82E-02	6.30E+01	1.01E+01	1.23E+00
13	1.19	3.41E+01	1.53E+02	3.06E-02	6.93E+01	1.23E+01	1.52E+00
11	1.28	2.93E+01	1.53E+02	3.27E-02	7.48E+01	1.42E+01	1.32E+00
15	1.38	2.43E+01	1.46E+02	3.36E-02	7.93E+01	1.60E+01	2.145+00
16	1.18	1.95E+01	1.35E+02	3.35E-02	8.29E÷01	1.76E+01	2.45E+00
	1.59	1.55E+01	1.24E+02	3.31E-02	8.585-01	1.92E+01	2.765+00
17		1.17E+01	1.08E+02	3.09E-02	8.80E+01	2.05E+01	3.05E+00
13	1.71	8.91E+00	9.51E+01	2.925-02	8.96E+01	2.162+01	3.32E+00
19		6.65E+00	8.20E+01	2.71E-02	9.09E+01	2.26E+01	3.57E+00
20	1.93	5.04E+00	7.13E+01	2.552-02	9.18E+01	2.35E+01	3.81E+00
21	2.12	3.92E+00	6.45E+01	2.162-02	9.26E-01	2.432+01	1.01E+00
22	2.29		6.13E+01	2.55E-02	9.325+01	2.51E+01	4.28E+00
	2.15	3.285+00		2.58E-02	9.37E+31	2.58E+01	1.52E+00
21	2.61	2.68E+00	5.87E+01		9.41E+01	2.65E+01	4.77E+00
2.5	2.83	2.24E+00	5.66E+01	2.685-02	9.41E+01	2.72E+01	5.05E+00
26	3.05	2.02E+00	5.91E+01	3.00E-02		2.80E+01	5.392+00
27	3.27	1.95E+00	6.58E+01	3.59E-02	9.48E+01	2.89E+01	5.78E+00
23	3.52	1.83E+00	7.12E+01	4.18E-02	9.52E+01		6.2 ± E ÷ 00
29	3.78	1.72E+00	7.77E+01	4.90E-02	9.55E+01	2.99E+01	6.77E+00
30	1.06	1.62E+00	8.42E+01	5.71E-02		3.09E+01	7.39E+00
31	1.37	1.52E+00	9.11E+01	6.64E-02	9.61E+01	3.20E+01	8.14E+00
32	4.69	1.46E+00	1.02E+02	7.95E-02	9.63E+01	3.33E+01	9.03E+00
33	5.04	1.42E+00	1.13E+02	9.55E-02	9.66E+01	3.47E+01	
34	5.42	1.39E+00	1.28E+02	1.16E-01	9.69E+01		1.01E+01
35	5.82	1.39E+00	1.48E+02	1.44E-01	9.71E+01	3.80E+01	1.15E+01
36	6.26	1.34E+00	1.66E+02	1.73E-01	9.74E+01	4.01E+01	1.31E+01
37	6.73	1.28E+00	1.82E+02	2.04E-01	9.76E+01	4.23E+01	1.50E+01
38	7.23	1.27E+00	2.09E+02	2.52E-01		1.49E+01	1.74E+01
39	7.77	1.26E+00	2.39E+02	3.09E-01	9.81E+01	4.78E+01	2.02E+01
40	8.35	1.23E+00	2.69E+02	3.75E-01	9.83E+01	5.11E+01	2.37E+01
41	8.97	1.24E+00	3.13E+02	4.68E-01	9.85E+01	5.50E+01	2.81E+01
42	9.64	1.20E+00	3.50E+02	5.63E-01		5.92E+01	3.34E+01
43	10.3	1.14E+00	3.86E+02	6.67E-01		6.40E+01	3.96E+01
44	11.1	1:11E+00	4.34E+02	8.05E-01	9.92E+01	6.93E+01	4.72E+01
45	11.9	1.12E+00	5.03E+02	1.00E+00		7.55E+01	5.65E+01
46	12.8	1.10E+00	5.70E+02	1.22E+00		8.25E+01	6.80E+01
47	13.8	1.09E+00	6.57E+02	1.51E+00			8.21E+01
48	14.8	1.11E+00	7.72E+02	1.91E+00	1.00E+02	1.00E+02	1.00E+02
<b>&gt;</b>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA		5.37E+02 8					

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: INS 13.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

						•	
		CONC	ENTRATIONS		CUMI	LATIVE %	•
CHY	IL DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 186		2.85E+00			1.15E-02	5.95E-04
1	.504	3.33E+00					1.22E-03
2	.512	6.18E+00			1.11E+00	4.51E-02	2.66E-03
2	.581	1.09E+01	1.15E+01	1.12E-03	1.96E+00	9.15E-02	5.78E-03
Ĭ	.625	1.99E+01				1.90E-01	
5	.673	3.74E+01	5.32E+01			1.90E-01	1.29E-02
6	.723	6.36E+01	1.05E+02	1.26E-02	1.15E+01	· · · <del>-</del>	2.96E-02
7	.723	9.50E+01	1.81E+02	2.34E-02		8.21E-01	6.48E-02
8	.835	1.14E+02	2.51E+02			1.55E+00	1.30E-01
9	.897	1.20E+02	3.03E+02			2.56E+00	2.28E-01
10	.951	1.13E+02				3.78E+00	3.54E-01
			3.31E+02	- · · - · -	4.63E+01	5.11E+00	5.03E-01
11	1.03	1.05E+02	3.55E+02	6.14E-02	5.46E+01	6.545+00	6.74E-01
12	1.11	9.33E+01	3.64E+02			8.00E+00	8.63E-01
13	1.19	8.13E+01		7.30E-02		9.47E+00	1.07E+00
11	1.28	6.93E+01	3.63E+02	7.78E-02	7.39E+01	1.09E+01	1.28E+00
1.5	1.38	5.67E+01	3.405+02	7.84E-02	7.83E+01	1.23E+01	1.505+00
16	1.48	4.49E+01	3.11E+02			1.36E+01	1.725+00
17	1.59	3.43E+01	2.75E+02			1.47E+01	1.92E+00
19	1.71	2.55E+01	2.36E+02			1.56E+01	2.11E+00
19	1.84	1.89E+01	2.02E+02	6.215-02		1.64E+01	2.23E+00
20	1.98	1.39E+01	1.715+02			1.71E+01	2.41E+00
21	2.12	1.075+01	1.535-02	5.43E-02	9.005+01	1.77E+01	2.595+00
20	2.28	8.63E+00	1.12E-02	5.41E-02	9.07E+01	1.33E+01	2.74E+00
2.3	2.45	7.62E+00	1.45E+02	5.92E-02	9.13E+01	1.89E+01	2.91E+00
24	2.54	6.55E+00	1.445+02	6.322-02	9.18E+01	1.94E+01	3.09E+00
2.5	2.83	5.75E+00	1.46E+02	6.88E-02	9.232-01	2.00E+01	3.28E+00
26	3.05	5.57E+00	1.63E+02	8.27E-02	9.27E+01	2.07E+01	3.51E+00
27	3.27	5.45E+00	1.84E+02	1.01E-01	9.31E+01	2.142+01	
28	3.52	5.27E+00		1.21E-01			4.13E+00
23	3.73	5.03E+00	2.26E+02	1.43E-01		2.32E+01	4.52E+00
30	4.06	4.63E+00	2.41E+02	1.63E-01		•	1.98E+00
31	4.37	4.42E+00			9.47E+01		5.52E+00
32	4.69	4.19E+00	2.91E+02	2.28E-01			6.16E+00
33	5.01	4.15E+00	3.33E+02	2.80E-01	9.53E+01		6.94E+CO
3 4	5.42	4.14E+00	3.83E+02	3.46E-01			7.90E+00
35	5.82	4.12E+00			9.60E+01		9.10E+00
36	6.26	4.04E+00	4.98E+02	5.20E-01			1.05E+01
37	6.73	4.00E+00	5.70E+02	6.39E-01	9.66E+01		1.23E+01
38	7.23	4.00E+00					1.45E+01
39	7.77	3.91E+00	7.43E+02		9.72E+01		1.72E+01
40	8.35	3.91E+00			9.75E+01		2.06E+01
41	8.97	4.07E+00	1.03E+03	1.54E+00	9.79E+01	4.85E+01	2.49E+01
42	9.64	3.88E+00	1.13E+03	1.82E+00		-	3.00E+01
43		3.87E+00					3.62E+01
	10.3	3.78E+00	1.47E+03	2.25E+00 2.73E+00			4.39E+01
44 45	11.1	3.79E+00	1.47E+03	3.41E+00		7.11E+01	5.34E+01
	11.9				9.91E+01		6.57E+01
46	12.8	3.96E+00	2.06E+03	4.41E+00			
47	13.8	3.92E+00	2.35E+03	5.42E+00			8.08E+01
48	14.8	4.00E+00	2.78E+03	6.87E+00	1.00E+02		1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOT	ALS:	1.27E+03 2	2.49E+04 3.	28E+01			

FILE NAME: IN5 13.006 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: DI

	gov:gr			<b>~</b>	•••	
CUVI DI		ENTRATIONS	V . C C		ULATIVE %	
CHNL DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	M.ASS
< .136		2.65E+00	1.98E-01	3.17E-01	1.06E-02	5.71E-04
1 .501		2.45E+00	2.06E-04	5.46E-01		1.165-03
2 .512		5.23E+00	4.73E-04	9.70E-01	4.13E-02	2.52E-03
3 .581		1.06E+01	1.03E-03	1.72E+00	8.38E-02	5.49E-03
1 .625		2.25E+01	2.35E-03	3.09E+00	1.74E-01	1.22E-02
5 .673		4.90E+01	5.50E-03	5.67E+00	3.70E-01	2.81E-02
6 .723		9.71E+01	1.17E-02	1.01E+01	7.58E-01	6.17E-02
		1.71E+02	2.21E-02	1.68E+01	1.44E+00	1.25E-01
8 .835		2.42E+02	3.37E-02	2.51E+01	2.41E+00	2.22E-01
9 .897		2.98E+02	4.46E-02	3.39E+01	3.60E+00	3.51E-01
10 .964		3.32E+02	5.34E-02	4.24E+01	4.93E+00	5.04E-01
11 1.03		3.63E+02	6.27E-02	5.04E+01	6.38E+00	6.83E-01
12 1.11		3.86E+02	7.16E-02	5.78E+01	7.92E+00	8.91E-01
13 1.19		4.00E+02	7.98E-02	6.442+01	9.52E+00	1.12E+00
11 1.29		4.14E+02	8.89E-02	7.01E+01	1.12E+01	1.38E+00
15 1.33		4.05E+02	9.33E-02	7.54E+01	1.28E+01	1.54E+00
16 1.49		3.88E+02	9.59E-02	7.96E+01	1.14E+01	1.92E+00
17 1.59		3.59E+02	9.552-02	8.30E÷01	1.58E+01	2.19E+00
18 1.71		3.19E+02	9.12E-02	8.56E+01	1.71E+01	2.46E+00
19 1.84	2.62E+01	2.80E+02	8.59E-02	8.75E+01	1.825+01	2.70E+00
20 1.93		2.39E+02	7.83E-02	3.90E÷01	1.91E+01	2.93E+00
21 2.12	1.47E+01	2.10E+02	7.45E-02	9.01E+01	2.00E+01	3.15E+00
22 2.23		1.85E+02	7.07E-02	9.09E+01	2.075+01	3.35E+00
23 2.45	9.152+00	1.79E+02	7.35E-02	9.16E+01	2.14E+01	3.56E÷00
21 2.51	7.63E+00	1.67E+02	7.36E-02	9.22E+01	2.21E+01	3.77E+90
25 - 2.83	6.498+00	1.62E+02	7.56E-02	9.27E+01	2.285-01	3.99E+00
25 3.05	6.03E÷00	1.76E+02	8.97E-02	9.31E+01	2.35E+01	4.25E+00
27 3.27	5.70E+00	1.92E+02	1.05E-01	9.35E+01	2.42E+01	4.55E+00
28 3.52		2.10E+02	1.23E-01	9.40E+01	2.51E+01	4.91E+00
29 3.78		2.31E+02	1.46E-01	9.43E÷01	2.60E+01	5.33E+00
30 4.06	1.77E÷00	2.48E+02	1.68E-01	9.17E+01	2.70E+01	5.81E+00
31 4.37	4.52E+00	2.71E+02	1.985-01		2.81E+01	6.38E+00
32 4.69		2.99E+02	2.34E-01	9.54E+01	2.93E+01	7.05E+00
33 5.04	4.21E+00	3.37E+02	2.83E-01	9.57E+01	3.06E+01	7.87E+00
31 5.42	4.16E+00	3.84E+02	3.48E-01	9.60E+01	3.21E+01	8.87E+00
35 5.82	4.12E+00	4.40E+02	4.28E-01	9.63E+01	3.39E+01	1.01E+01
36 6.26		4.99E+02	5.21E-01	9.66E+01	3.59E+01	1.16E+01
37 6.73	3.96E+00	5.63E+02	6.32E-01	9.69E+01	3.82E+01	1.34E+01
38 7.23	3.88E+00	6.38E+02	7.69E-01	9.72E+01	4.07E+01	1.56E+01
39 7.77	3.85E+00	7.30E+02	9.46E-01	9.75E+01	4.36E+01	1.83E+01
40 8.35	3.84E+00	8.41E+02	1.17E+00	9.78E+01	4.70E+01	2.17E+01
41 8.97		9.99E+02	1.49E+00	9.80E+01	5.10E+01	2.60E+01
42 9.64	3.82E+00	1.12E+03	1.80E+00	9.83E+01	5.55E+01	3.12E+01
43 10.3	3.72E+00	1.26E+03	2.17E+00	9.86E+01	6.05E+01	3.74E+01
44 11.1		1.44E+03	2.67E+00	9.89E+01	6.62E+01	4.51E+01
45 11.9		1.63E+03	3.26E+00	9.92E+01	7.28E+01	5.45E+01
46 12.8		1.95E+03	4.18E+00	9.94E+01	8.06E+01	6.65E+01
47 13.8	3.77E+00	2.26E+03	5.21E+00	9.97E+01	8.96E+01	8.15E+01
48 14.8	3.75E+00	2.60E+03	6.44E+00	1.00E+02	1.00E+02	1.00E+02
> 15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTALS:	1.34E+03 2	.5UE+04 3.	48E+01			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: IN5 13.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIG. KATI	.0. 1 .1		Chrest.		
		CONCE	ENTRATIONS		CI:MI	ULATIVE %	
CHAL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 136		9.14E-01	6.84E-05			7.24E-04
1	.501	1.06E+00	8.52E-01	7.17E-05			1.48E-03
	.512	2.00E+00	1.85E+00	1.67E-04			3.25E-03
2 3	.531	3.58E+00	3.81E+00	3.69E-04			7.16E-03
Ĭ.	.625	6.61E+00	8.14E+00	8.48E-04			1.61E-02
4 5	.673	1.26E+01	1.79E+01	2.01E-03			3.74E-02
6	.723	2.15E+01	3.53E+01	4.26E-03	9.83E+00	9.19E-01	8.25E-02
6 7	.777	3.29E+01	6.23E+01	8.07E-03	1.64E+01	1.75E+00	1.63E-01
8	.835	1.01E+01	8.86E+01	1.23E-02		2.93E+00	2.98E-01
8 9	.597	4.31E+01	1.09E+02	1.632-02	3.33E+01	4.39E+00	4.72E-01
10	.961	4.19E+01	1.23E+02	1.97E-02	4.17E+01	6.03E+00	6.80E-01
ίί	1.03	4.00E+01	1.35E+02	2.342-02	4.98E+01	7.84E+00	9.28E-01
12	1.11	3.71E+01	1.46E+02	2.71E-02	5.73E+01		1.21E+00
13	1.19	3.37E+01	1.52E+02	3.03E-02	6.41E+01	1.18E+01	1.53E+00
1 1	1.29	3.05E+01	1.58E+02	3.49E-02	7.02E+01	1.395+01	1.89E+00
15	1.38	2.52E+01	1.57E+02	3.62E-02	7.55E+01	1.60E+01	2.23E+00
15	1.18	2.22E+01	1.54E+02		8.00E+01	1.81E+01	2.682+00
17	1.59	1.81E+91	1.45E+02	3.37E-02	8.35E+01	2.005+01	3.092+00
19	1.7i	1.41E+01	1.30E+02	3.72E-02	8.64E+01	2.18E+01	3.18E+00
19	1.31	1.08E+01	1.15E+02	3.54E-02	8.862+01	2.33E+01	3.36E+00
20	1.93	8.16E+00	1.01E+02	3.32E-02	9.03E+C1		4.21E+00
21	0.10	6.03E+00	8.52E÷01	3.05E-02		2.53E+01	1.53E+00
2.7	2.23	1.59E+00	7.55E+01	2.83E-02	9.24E+01	2.63E+01	1.31E+00
2.3	2.15	3.35E+00	6.33E+01	2.845-02		2.775+01	3.14E+00
2;	2.61	2.35E+00	6.28E+01	2.76E-02			5.13E+00
23	2.83	2.26E+00	5.72E+01	2.71E-02	9.422+01	2.905+01	5.72E+00
26	3.05	2.01E+00	5.86E+01	2.98E-02	9.462+01	3.01E+01	6.03E+00
27	3.27	1.96E+00	6.29E+01	3.44E-02		3.10E+01	
28	3.52	1.68E÷00	6.55E+01	3.85E-02	9.53E+01		6.80E+00
29	3.73	1.58E+00	7.09E+01	4.47E-02	9.562+01	3.28E+01	7.28E+00
30	4.06	1.16E+00	7.61E+01	5.16E-02		3.38E+01	7.82E+00
31	1.37	1.41E+00	8.47E+01	6.17E-02		3.49E+01	8.18E+00
32	4.69	1.36E+00	9.42E+01	7.37E-02	9.65E+01		9.26E+00
33	5.04	1.30E+00	1.05E+02	8.81E-02	9.67E+01	3.76E+01	1.02E+01
34	5.12	1.29E+00	1.19E+02	1.08E-01	9.70E+01		1.13E+01
35	5.82	1.24E+00	1.13E+02 1.32E+02	1.08E-01	9.72E+01		1.27E+01
36	6.26	1.21E+00	1.50E+02	1.56E-01	9.75E+01		1.43E+01
37	6.73	1.16E+00	1.66E+02	1.86E-01	9.77E+01	4.51E+01	1.63E+01
38	7.23	1.16E+00	1.91E+02	2.30E-01	9.79E+01		1.87E+01
39	7.77	1.12E+00	2.13E+02	2.76E-01	9.82E+01		2.17E+01
40	8.35	1.12E+00	2.46E+02	3.43E-01	9.84E+01		2.53E+01
41	8.97	1.10E+00	2.78E+02	4.17E-01	9.86E+01	5.76E+01	2.97E+01
42	9.64	1.04E+00	3.05E+02	4.91E-01	9.88E+01	6.16E+01	3.49E+01
43	10.3	1.03E+00	3.47E+02	5.99E-01	9.90E+01		4.12E+01
44	11.1	9.70E-01	3.78E+02	7.02E-01	9.92E+01		4.87E+01
45	11.9	9.57E-01	4.31E+02	8.60E-01	9.94E+01	7.71E+01	5.78E+01
46	12.8	9.51E-01	4.94E+02	1.06E+00	9.96E+01		6.90E+01
47	13.8	9.42E-01	5.66E+02	1.30E+00	9.98E+01		8.28E+01
48	14.8	9.47E-01	6.56E+02	1.63E+00	1.00E+02		1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
	LS:		7.49E+03 9.				
.017						•	

FILE NAME: IN5 13.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: DI

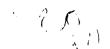
		COV.CE	NTRATIONS		CI.AI	LATIVE %	
CHVI	DIA		SURFACE	REAR	NUMBER	SURFACE	MASS
( n.v.	. 186	6.19E-01		2.90E-05		1.19E-02	7.53E-04
ì	.501	4.44E-01	3.55E-01	2.99E-05	4.59E-01	2.28E-02	1.54E-03
2	.512	8.23E-01	7.60E-01	6.87E-05	8.15E-01	4.61E-02	3.34E-03
3	.581	1.48E+00	1.57E+00	1.52E-04	1.45E+00		7.32E-03
ļ	.625	2.81E+00	3.45E+00	3.59E-04	2.67E+00		1.67E-02
5	.673	5.29E+00	7.53E+00	8.45E-04	1.95E+00	4.31E-01	3.885-02
6	.723	8.91E+00	1.47E+01	1.77E-03	8.82E÷00	8.83E-01	8.52E-02
6 7	.777	1.38E+01	2.63E+01	3.40E-03	1.48E+01	1.692+00	1.74E-01
, 8	.835	1.72E+01	3.77E+01	5.25E-03	2.22E+01	2.85E+00	3.11E-01
9	.397	1.86E+01	4.71E+01	7.05E-03	3.02E+01	4.29E+00	1.96E-01
10	.964	1.83E+01	5.35E+01	8.61E-03	3.81E+01	5.93E+00	7.21E-01
11	1.03	1.81E+01	6.10E+01	1.05E-02	4.60E+01	7.81E+00	9.97E-01
12	1.11	1.69E+01	6.59E+01	1.225-02	5.33E+01	9.83E+00	1.32E+00
13	1.13	1.595+01	7.17E+01	1.43E-02	6.01E÷01	1.20E+01	1.69E+00
11	1.23	1.49E+01	7.735+01	1.66E-02	6.65E+01	1.115+01	2.12E+00
1.5	1.33	1.32E+01	7.95E÷01	1.83E-02	7.23E+01	1.63E+01	2.60E+00
15	1.13	1.15E+01	7.91E+01	1.97E-02	7.72E+01	1.932+01	3.12E+00
17	1.59	9.84E+00	7.88E÷01	2.10E-02	8.152+01	2.17E+01	3.67E+00
19	1.71	7.99E+00	7.39E+01	2.11E-02	8.19E+01	2.402+01	4.22E+00
19	1.34	6.28E+00	6.70E+01	2.06E-02	8.76E+01	2.60E+01	1.76E+00
20	1.93	1.83E+00	5.96E+01	1.97E-02	8.97E+31	2.79E+01	5.27E+00
21	2.12	3.67E+00	5.23E+01	1.95E-02	9.13E+01	2.935-01	5.76E+00
22	2.28	2.71E+00	1.50E+01	1.725-02	9.25E+01	3.03E+01	6.21E+00
2.1	2.15	2.135+00	4.03E+01	1.65E-02	9.345-01	3.212+01	6.61E+00
21	2.61	1.52E÷00	3.33E+01	1.47E-02	9.415+01	3.31E+01	7.02E+00
25	2.83	1.17E÷00	2.95E+01	1.40E-02	9.462+01	3.40E+01	7.39E+00
25	3.05	1.02E+00	2.992+01	1.52E-02	9.50E+01	3.19E+01	7.79E+00
27	3.27	9.01E-01		1.66E-02	9.542+01	3.595+01	8.22E+00
28	3.52	7.87E-01	3.07E+01	1.80E-02	9.57E+01	3.68E+01	8.69E+00
29	3.78	7.22E-01	3.25E+01	2.05E-02	9.60E+01		9.23E+00
30	4.06	6.71E-01	3.49E+01	2.37E-02	9.63E+01	3.895+01	9.85E+00
31	4.37	6.39E-01	3.83E+01	2.79E-02	9.662+01	4.01E+01	1.06E+01
32	1.69	5.92E-01	4.11E+01	3.22E-02	9.69E+01	4.13E+01	1.14E+01
33	5.01	5.87E-01	4.70E+01	3.95E-02	9.71E+01	4.28E+01	1.25E+01
34	5.42	5.63E-01	5.21E+01	4.71E-02	9.74E+01	4.44E+01	1.37E+01
35	5.82	5.44E-01	5.81E+01	5.64E-02	9.76E+01	4.61E+01	1.52E+01
36	6.26	5.20E-01	6.41E+01	6.70E-02	9.78E+01	4.81E+01	1.69E+01
37	6.73	4.99E-01	7.11E+01	7.98E-02	9.80E+01	5.03E+01	1.90E+01
38	7.23	4.88E-01	8.02E+01	9.67E-02	9.83E+01	5.28E+01	2.15E+01
39	7.77	4.62E-01	8.78E+01	1.14E-01	9.85E+01	5.54E+01	2.45E+01
40	8.35	4.48E-01	9.82E+01	1.37E-01	9.86E+01	5.85E+01	2.81E+01
41	8.97	4.59E-01	1.16E+02	1.74E-01	9.88E+01	6.20E+01	3.26E+01
42	9.64	4.12E-01	1.20E+02	1.94E-01	9.90E+01	6.57E+01	3.77E+01
43	10.3	4.19E-01	1.41E+02	2.44E-01	9.92E+01	7.01E+01	4.41E+01
44	11.1	4.08E-01	1.59E+02	2.96E-01	9.94E+01	7.50E+01	5.18E+01
45	11.9	3.68E-01	1.66E+02	3.30E-01	9.95E+01	8.00E+01	6.04E+01
46	12.8	3.55E-01	1.85E+02	3.96E-01	9.97E+01	8.57E+01	7.08E+01
47	13.8	3.52E-01	2.11E+02	4.87E-01	9.98E+01	9.22E+01	8.35E+01
48	14.8	3.67E-01	2.54E+02	6.30E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	2.31E+02 3	.26E+03 3.	82E+00			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: IN5 13.009 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIL. KAI	10. 1 .1	Erric. (	JORREU. I I		
		covic	ENTRATIONS		CINI	ULATIVE %	
CHVII	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.186		2.34E-01		2.56E-01		7.66E-04
ì	.504	2.705-01		1.82E-05	4.41E-01		1.56E-03
2	.512	5.10E-01	4.71E-01	4.26E-05	7.90E-01	· -	3.43E-03
3	.531	8.95E-01	9.52E-01	9.23E-05	1.40E+00		7.47E-03
4	.625	1.61E+00	1.98E+00	2.06E-04			1.65E-02
5	.673	3.10E+00	4.41E+00	4.94E-04	4.625+00	<del>-</del>	3.825-02
	.723	5.37E+00	8.84E+00	1.07E-03	8.30E+00		8.48E-02
6 7	.777	8.21E+00	1.56E+01	2.02E-03	1.39E+01	1.63E+00	1.73E-01
8	.835	1.02E+01	2.23E+01	3.11E-03	2.09E+01	2.74E+00	3.09E-01
9	.897	1.12E+01	2.84E+01	4.25E-03	2.85E+01	4.15E+00	4.95E-01
10	.951	1.13E+01	3.31E+01	5.32E-03	3.63E+01	5.80E+00	7.29E-01
11	1.03	1.11E+01	3.74E+01	6.45E-03	4.39E+01	7.66E+00	1.01E+00
12	1.11	1.06E+01	4.14E-01	7.68E-03	5.11E+01	9.72E+00	1.35E+00
13	1.19	1.01E+01	4.53E+01	9.04E-03	5.80E+01	1.20E+01	1.74E+00
11	1.28	9.67E+00	5.03E+01	1.08E-02	6.46E+01	1.45E+01	2.22E+00
1.5	1.38	8.79E+00	5.28E+01	1.225-02	7.06E+01	1.71E+01	2.75E+00
18	1.18	7.73E+00	5.36E+01	1.33E-02	7.59E+01	1.93E+01	3.33E+00
. 7	1.39	6.61E+00	5.30E+01	1.41E-02	8.045-01	2.24E+01	3.95E+00
18	1.71	5.11E+00	5.03E+01	1.44E-02	8. 11E+91	2.49E+01	4.58E+00
1.3	1.31	4.425+00	4.71E+01	1.45E-02	8.72E+01	2.73E+01	5.21E+00
29	1.93	3.37E+00	4.16E÷01	1.37E-02	8.95E+01	2.935+01	5.31E+00
0:	2.12	2.54E+00	3.62E+01	1.295-02	9.12E-01	3.115+01	6.33E+00
22	2.23	1.90E+00	3.12E+01	1.19E-02	9.25E-01	3.27E+01	6.90E+00
23	2.15	1.14E+00		1.125-02	9.35E+01		7.39E+00
24	2.61	1.03E+00	2.27E+01	9.97E-03	9.42E+01	3.52E+01	7.932+00
	2.83	7.30E-01	1.97E+01	9.34E-03			8.24E+00
26	3.05	6.53E-01	1.92E+01	9.78E-03	9.52E+01	3.71E+01	8.66E+00
27	3.27	3.63E-01		1.045-02	9.56E+01		
23	3.52	4.98E-01	1.94E+01	1.14E-02	9.59E+01		9.62E+00
29	3.78	4.39E-01	1.98E+01	1.25E-02	9.625+01		1.02E+01
30	4.06	1.01E-01	2.09E+01	1.41E-02	9.65E+01		1.08E+01
31	1.37	3.87E-01	2.32E+01	1.69E-02	9.68E+01		1.15E+01
32	4.69	3.73E-01	2.58E+01	2.02E-02	9.70E+01		1.24E+01
33	5.04	3.59E-01	2.88E+01	2.42E-02	9.73E+01		1.35E+01
3 1	5.12	3.58E-01	3.31E+01	2.99E-02	9.75E+01		1.48E+01
35	5.82	3.36E-01		3.48E-02	9.77E+01		1.63E+01
36	6.26	3.23E-01	3.98E+01	4.15E-02	9.79E+01		1.81E+01 2.03E+01
37	6.73	3.17E-01	4.51E+01	5.06E-02	9.82E+01		2.03E+01 2.28E+01
38	7.23	2.88E-01	4.73E+01	5.71E-02	9.84E+01		2.57E+01
39	7.77	2.66E-01	5.05E+01	6.54E-02	9.85E+01		2.95E+01
40	8.35	2.80E-01	6.15E+01	8.56E-02	9.87E+01		3.41E+01
41	8.97	2.80E-01	7.08E+01	1.06E-01	9.89E+01 9.91E+01		3.41E+01 3.93E+01
42	9.64	2.55E-01		1.20E-01 1.45E-01	9.91E+01 9.93E+01		4.57E+01
43	10.3	2.48E-01 2.18E-01	8.38E+01 8.50E+01	1.45E-01 1.58E-01	9.93E+01 9.94E+01		5.26E+01
44 45	11.1	2.18E-01 2.07E-01	9.33E+01	1.86E-01	9.96E+01	8.08E+01	6.08E+01
45 46	12.8	2.18E-01		2.43E-01	9.97E+01		7.14E+01
47	13.8	2.19E-01	1.13E+02	3.03E-01	9.99E+01		8.47E+01
48	14.8	2.19E-01 2.04E-01	1.41E+02	3.50E-01	1.00E+02		1.00E+02
<b>+0</b>	15.4	0.00E+00		0.00E+00	1.00E+02	1.00E+02	1.00E+02
	LS:		2.01E+03 2.			<del>-</del>	
• •							



FILE NAME: IN5 13.010 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CHNL DIA         NUMBER         SURFACE         MASS         NUMBER         SURFACE         MASS           1         .504         4.25E-01         3.66E-01         2.74E-05         3.29E-01         1.53E-02         9.62E-04           1         .504         4.25E-01         3.66E-01         2.86E-05         5.67E-01         2.94E-02         1.97E-03           3         .581         1.38E-00         1.725E-01         6.55E-05         1.01E+00         5.96E-02         4.27E-03           4         .625         2.58E+00         3.16E+00         3.29E-04         3.23E+00         2.52E-01         2.08E-02           6         .723         8.806E+00         1.32E+01         1.60E-03         1.73E+01         2.97E-03         1.73E+01         3.98E+00         3.98E+00         3.66E-01           8         .835         1.47E+01         3.22E+01         4.49E-03         2.55E+01         3.99E+00         3.66E-01           10         .964         1.48E+01         4.76E+01         8.22E-03         3.31E+01         5.06E+01         3.39E+00         3.66E-01           11         1.03         1.41E+01         4.76E+01         8.22E-03         5.03E+01         1.39E+02         7.5EE+01         1.19E-02			CONCE	NTRATIONS		CUMI	JLATIVE %	
1	CHNI	DTA			MASS			NASS
1         .504         4.25E-01         3.40E-01         2.86E-05         5.67E-01         2.58E-02         7.85E-01         7.55E-01         6.55E-05         1.01E+00         5.86E-02         2.52E-01         9.27E-03           3         .581         1.38E+00         1.47E+00         1.43E-04         1.78E+00         1.21E-01         9.27E-03           4         .625         2.58E+00         3.16E+00         3.28E-04         3.28E+00         5.60E-01         1.08E-01           6         .723         8.06E+00         1.32E+01         1.60E-03         1.05E+01         1.99E+00         2.08E-01           8         .835         1.47E+01         2.29E+01         2.97E-03         2.55E+00         3.99E+00         3.66E-01           10         .964         1.48E+01         4.33E+01         6.96E-03         4.24E+01         6.80E+00         8.13E-01           11         1.03         1.41E+01         5.03E+01         9.36E+03         5.25E+01         1.98E+01         1.31E+01         1.43E+01           12         1.11         1.29E+01         5.03E+01         1.36E-02         6.41E+01         1.31E+01         1.43E+00           13         1.19         1.18E+01         5.03E+01         1.36E-02								
2         .542         7.88E-01         7.25E-01         6.55E-05         1.01E+00         5.96E-02         4.27E-03           3         .581         1.38E+00         3.16E+00         1.43E-04         1.78E+00         2.52E-01         2.08E-02           4         .625         2.58E+00         3.16E+00         7.74E-04         5.95E+00         5.40E-01         4.80E-02           5         .673         4.85E+00         6.90E+00         7.74E-04         5.95E+00         5.40E-01         4.80E-02           7         .777         1.21E+01         2.29E+01         2.97E-03         1.53E+01         2.08E-01           8         .935         1.47E+01         3.22E+01         4.49E-03         2.55E+01         5.06E+00           9         .897         1.52E+01         3.87E+01         6.79E-03         3.41E+01         5.00E+00         5.69E-01           10         .964         1.48E+01         4.33E+01         6.96E-03         4.24E+01         5.00E+00         5.69E-01           11         1.03         1.41E+01         5.03E+01         9.35E-03         5.75E+01         1.09E+01         1.43E+01           12         1.11         1.22E+01         5.55E+01         1.19E-02         7.01E+01<								
3         .581         1.38E+00         1.47E+00         1.43E-04         1.78E+00         2.52E-01         2.08E-02         2.58E+00         2.52E-01         2.08E-02         2.52E-01         2.08E-02         2.52E-01         2.08E-02         2.52E-01         2.08E-02         2.52E-01         2.08E-02         2.08E-02         1.08E-02         2.08E-02         2.08E-03         2.08E-03         2.08E-03         2.08E-03         2.08E-03         2.08E-03         3.39E-00         2.08E-01         2.08E-03         3.39E-00         3.66E-01         3.08E-03         3.66E-01         3.08E-03         3.41E-03         3.09E-00         3.66E-01         3.08E-03         3.41E-03         5.00E-03         3.41E-03         5.00E-00         3.66E-01         3.08E-03         3.66E-01         3.08E-03         3.66E-01         3.08E-03         3.66E-01         3.08E-03         3.66E-03         3.41E-03         5.00E-03         3.66E-03         3.41E-03         3.08E-03         5.00E-03         3.41E-03         3.08E-03         5.00E-03         3.41E-03         3.08E-03         5.00E-03         3.41E-03         3.00E-								
4         .625         2.58E+00         3.16E+00         3.29E-04         3.23E+00         2.52E-01         2.08E-02           5         .673         4.88E+00         6.09E+00         7.74E-04         5.95E+00         1.09E+00         1.04E-01           7         .777         1.21E+01         2.29E+01         2.97E-03         1.73E+01         2.05E+00         2.08E-01           8         .835         1.47E+01         3.22E+01         4.49E-03         2.55E+01         3.09E+00         3.66E-01           10         .964         1.48E+01         4.33E+01         6.96E-03         3.41E+01         5.00E+00         5.69E-01           11         1.03         1.41E+01         4.76E+01         8.22E-03         5.03E+01         1.09E+01         1.43E+00           12         1.11         1.29E+01         5.03E+01         1.06E-02         6.41E+01         1.31E+01         1.80E+00           13         1.19         1.18E+01         5.56E+01         1.09E-02         7.01E+01         1.54E+01         2.22E+00           14         1.28         1.07E+01         5.56E+01         1.37E-02         7.99E+01         2.02E+01         1.37E-02         7.99E+01         2.02E+01         1.36E+00								
5         .673         4.88E+00         6.90E+00         7.74E-04         5.95E+00         1.09E+01         1.04E-01           6         .723         8.06E+00         1.32E+01         1.60E-03         1.05E+01         1.09E+00         2.08E-01           7         .777         1.21E+01         2.29E+01         2.97E-03         1.73E+01         2.05E+00         2.08E-01           8         .835         1.47E+01         3.22E+01         4.49E-03         2.55E+01         3.39E+00         3.66E-01           10         .964         1.48E+01         4.33E+01         6.96E-03         4.24E+01         6.90E+00         8.13E-01           11         1.03         1.41E+01         4.76E+01         8.22E-03         5.03E+01         1.09E+01         1.43E+00           12         1.11         1.29E+01         5.03E+01         1.06E-02         6.41E+01         1.31E+01         1.43E+00           13         1.19         1.18E+01         5.30E+01         1.30E-02         7.54E+01         1.57E+01         2.67E+00           15         1.28         9.36E+00         5.62E+01         1.30E-02         7.54E+01         1.77E+01         2.67E+00           15         1.58         6.5E+00         5.27E+0								
6         .723         8.06E+00         1.32E+01         1.60E-03         1.05E+01         1.09E+00         2.08E-01           7         .777         1.21E+01         2.29E+01         2.97E-03         1.73E+01         3.39E+00         3.66E-01           8         .835         1.47E+01         3.22E+01         4.49E-03         2.55E+01         3.39E+00         3.66E-01           10         .964         1.48E+01         4.33E+01         6.96E-03         3.41E+01         6.80E+03         8.13E-01           11         1.03         1.41E+01         4.76E+01         8.22E-03         5.03E+01         8.78E+00         1.10E+00           12         1.11         1.29E+01         5.03E+01         9.35E-03         5.75E+01         1.09E+01         1.43E+00           14         1.28         1.07E+01         5.5E+01         1.19E-02         7.01E+01         1.54E+01         2.27E+00           15         1.48         9.06E+00         5.5E+01         1.37E-02         7.5E+01         1.76E+00         2.6EE+01           16         1.48         9.06E+00         5.5E+01         1.37E-02         7.99E+01         2.00E+01         2.6EE+00           15         1.59         6.5EE+01         1.37E-02<								
77         1.21E+01         2.99E+01         2.97E-03         1.73E+01         3.09E+00         3.66E-01           9         .897         1.533+01         3.22E+01         4.49E-03         2.55E+01         3.39E+00         3.66E-01           10         .964         1.48E+01         4.33E+01         5.79E-03         3.41E+01         5.00E+00         8.69E-01           11         1.03         1.41E+01         4.33E+01         6.96E-03         4.24E+01         6.80E+00         1.10F+00           12         1.11         1.29E+01         5.03E+01         9.35E-03         5.75E+01         1.09E+01         1.43E+00           13         1.19         1.18E+01         5.30E+01         1.06E-02         6.41E+01         1.31E+01         1.86E+00           14         1.28         1.07E+01         5.5E+01         1.30E-02         7.54E+01         1.57E+01         2.67E+00           15         1.38         9.36E+00         5.2FE+01         1.37E-02         7.54E+01         1.77E+01         2.67E+00           16         1.48         9.36E+00         5.2FE+01         1.37E-02         7.54E+01         1.77E+01         2.67E+00           17         1.58         6.2E+00         5.2FE+01         1	6							
8								
9								
10								
1.03								
1.11								
1.19								
14       1.28       1.07E+01       5.55E+01       1.38E+02       7.01E+01       1.54E+01       2.22E+00         15       1.38       9.36E+00       5.55E+01       1.37E+02       7.54E+01       1.77E+01       2.67E+00         16       1.48       9.06E+00       5.55E+01       1.37E+02       7.59E+01       2.00E+01       2.16E+00         17       1.59       6.5EE+00       5.27E+01       1.40E+02       8.36E+01       2.22E+01       3.65E+00         18       1.71       5.27E+00       4.48E+01       1.37E+02       8.36E+01       2.23E+01       4.44E+00         19       1.84       4.17E+00       4.48E+01       1.27E+02       8.36E+01       2.71E+01       5.07E+00         20       1.98       3.16E+00       3.89E+01       1.29E+02       9.06E+01       2.71E+01       5.07E+00         21       2.12       2.40E+00       3.49E+01       1.29E+02       9.20E+01       2.71E+01       5.07E+00         22       2.15       1.78E+00       2.92E+01       1.04E+02       9.20E+01       3.76E+01       5.0EE+01         21       2.64       1.05E+00       2.93E+01       3.16E+01       3.16E+01       5.2EE+01         21       2.65								
1.58         9.36E+00         5.62E+01         1.30E-02         7.54E+01         1.77E+01         2.67E+00           16         1.18         9.00E+00         5.55E+01         1.37E-02         7.99E+01         2.00E+01         2.16E+00           17         1.59         6.58E+00         5.27E+01         1.40E-02         8.36E+01         2.43E+01         4.14E+00           18         1.71         5.27E+00         4.87E+01         1.39E-02         8.65E+01         2.43E+01         4.14E+00           19         1.64         4.17E+00         4.45E+01         1.25E-02         8.96E+01         2.43E+01         4.14E+00           20         1.98         3.16E+00         3.41E+01         1.21E-02         9.20E+01         2.7EE+01         5.49E+00           21         2.12         2.40E+00         3.41E+01         1.21E-02         9.30E+01         2.0EE+01         5.49E+00           22         2.14         1.7EE+00         2.93E+01         1.0EE+02         9.30E+01         2.24E+01         5.49E+00           23         2.61         1.7EE+00         2.93E+01         1.0EE+02         9.48E+01         3.24E+01         6.26E+02           25         2.82         5.4E+01         2.14E+01         <								
16         1.18         8.00E+00         5.55E+01         1.37E-02         7.99E+01         2.00E+01         2.16E+00           17         1.59         6.58E+00         5.27E+01         1.40E-02         8.36E+01         2.22E+01         2.67E+00           18         1.71         5.27E+00         4.87E+01         1.38E-02         8.65E+01         2.43E+01         4.14E+00           19         1.84         4.17E+00         4.45E+01         1.27E-02         8.89E-01         2.51E+01         4.60E+00           20         1.98         3.16E+00         3.89E+01         1.29E-02         9.06E+01         2.77E+01         5.7FE+00           21         2.12         2.40E+00         3.41E+01         1.21E-02         9.36E+01         2.7EE+01         5.3FE+00           21         2.45         1.78E+00         2.6EE+01         1.0E-02         9.38E+01         3.7EE+01         6.26E+00           21         2.45         1.79E+00         2.6EE+01         1.0E-02         9.38E+01         3.2EE+01         6.26E+00           21         2.40         1.0E-02         9.48E+01         3.2EE+01         3.42E+01         7.36E+00           21         2.5E         5.5E=01         2.14E+01         1.0E-0								
17         1.59         5.5EE+00         5.27E+01         1.40E-02         8.36E+01         2.22E+01         2.6EE+00           18         1.71         5.27E+00         4.45E+01         1.39E-02         8.65E+01         2.43E+01         4.14E+00           19         1.84         4.17E+00         4.45E+01         1.37E-02         8.9E-01         2.51E+01         4.6EE+00           20         1.98         3.16E+00         3.41E+01         1.2E-02         9.06E+01         2.77E+01         5.07E+00           21         2.12         2.40E+00         3.41E+01         1.2E-02         9.06E+01         2.77E+01         5.49E+00           21         2.45         1.09F+00         2.62E+01         1.0E-02         9.30E+01         3.1EE-01         6.20E+00           21         2.64         1.67E+00         2.30E+01         1.0E-02         9.48E+01         3.2EE-01         6.20E+00           21         2.64         1.67E+00         2.30E+01         1.0E-02         9.48E+01         3.2EE-01         6.20E+00           22         2.77         6.31E-01         2.16E+01         1.16E-02         9.52E+01         3.42E+01         7.77E+00           25         2.25         5.88E-01         2.18E+01								
18       1.71       5.27E+00       4.87E+01       1.39E-C2       8.65E+01       2.43E+01       4.14E+00         19       1.84       4.17E+00       4.45E+01       1.27E-C2       8.89E-01       2.61E+01       4.62E+00         20       1.98       3.16E+00       3.89E+01       1.29E-C2       9.06E+01       2.77E+01       5.07E+00         21       2.12       2.40E+00       3.41E+01       1.21E-C2       9.06E+01       2.92E+01       5.49E+00         22       2.12       1.78E+00       2.92E+01       1.16E-02       9.30E+01       3.16E+01       5.49E+00         21       2.64       1.79E+00       2.63E+01       1.04E-02       9.30E+01       3.22E+01       6.26E+00         21       2.64       1.67E+00       2.63E+01       1.04E-02       9.48E+01       3.32E+01       6.26E+01         26       2.85       6.44E-01       2.14E+01       1.16E-02       9.52E+01       3.42E+01       7.77E+00         27       2.77       6.31E-01       2.18E+01       1.12E-02       9.52E+01       3.42E+01       7.77E+00         28       2.52       5.58E-01       2.18E+01       1.2ED-02       9.52E+01       3.36FE+01       8.72E+00         29 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
1.84								
1.98								
21       2.12       2.40E+00       3.41E+01       1.21E-02       9.20E+01       2.92E+01       5.39E+00         22       1.18       1.78E+00       2.93E-01       1.12E-02       9.30E+01       2.04E+01       5.89E+00         21       2.64       1.03E+00       2.60E+01       1.01E-02       9.38E+01       3.15E+01       6.20E+00         21       2.64       1.05E+00       2.90E+01       1.01E-02       9.48E+01       3.30E+01       0.98E+00         25       2.83       8.44E-01       2.14E+01       1.01E-02       9.48E+01       3.30E+01       0.98E+00         26       3.05       7.39E+01       2.16E+01       1.16E-02       9.56E+01       3.41E+01       7.77E+60         27       2.27       6.31E-01       2.13E+01       1.26E-02       9.56E+01       3.50E+01       8.22E+00         29       2.78       5.12E-01       2.30E+01       1.45E-02       9.62E+01       3.70E+01       8.72E+00         30       4.06       4.54E-01       2.52E+01       1.71E-02       9.67E+01       3.80E+01       8.72E+00         31       4.37       4.57E-01       2.52E+01       2.75E+01       3.92E+01       3.92E+01       3.0E+01         32 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
1.18								
28       1.45       1.29F+00       2.68E+01       1.08E-02       9.38E+01       8.16E+01       6.20E+00         21       2.64       1.05E+00       2.30E+01       1.01E-02       9.48E+01       8.24E+01       6.20E+00         26       2.80       8.44E-01       2.14E+01       1.01E-02       9.48E+01       3.3E+01       6.88E+00         26       3.05       7.39E-01       2.13E+01       1.16E-02       9.56E+01       3.51E+01       7.77E+00         28       3.52       5.58E-01       2.18E+01       1.28E-02       9.59E+01       3.60E+01       8.22E+00         29       6.78       5.12E-01       2.30E+01       1.45E-02       9.65E+01       3.70E+01       8.72E+00         30       4.06       4.84E-01       2.52E+01       1.71E-02       9.67E+01       3.80E+01       9.33E+00         31       4.37       4.57E-01       2.75E+01       2.00E-02       9.67E+01       3.80E+01       1.09E+01         32       4.69       4.41E-01       3.06E+01       2.39E-02       9.70E+01       4.04E+01       1.09E+01         34       4.09       4.48E+01       3.37E+01       3.37E+01       4.35E+02       9.74E+01       4.34E+01       1.19E+01								
21         2.64         1.05E+00         2.30E+01         1.01E-02         9.48E+01         3.24E+01         6.82E+00           25         2.85         8.44E+01         2.14E+01         1.01E-02         9.48E+01         3.30E+61         6.98E+00           26         3.65         7.39E+01         2.16E+01         1.10E-02         9.52E+01         3.42E+01         7.36E+00           27         6.31E-01         2.13E+01         1.16E-02         9.56E+01         3.60E+01         8.22E+00           28         2.52         5.58E-01         2.18E+01         1.28E-02         9.62E+01         3.70E+01         8.72E+00           30         4.06         4.64E-01         2.52E+01         1.71E-02         9.63E+01         3.60E+01         9.33E+00           31         4.37         4.57E-01         2.75E+01         2.00E-02         9.67E+01         3.92E+01         1.00E+01           32         4.09         4.41E-01         3.06E+01         2.38E-02         9.72E+01         4.18E+01         1.19E+01           33         5.42         4.03E-01         3.73E+01         3.37E-02         9.74E+01         4.34E+01         1.31E+01           35         5.82         4.20E-01         4.48E+01 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
25         2.82         8.44E-01         2.14E+01         1.01E-02         9.48E+01         3.30E+01         6.98E+00           26         3.05         7.39E-01         2.16E+01         1.10E-02         9.56E+01         3.42E+01         7.36E+00           27         2.27         6.31E-01         2.13E+01         1.16E-02         9.56E+01         3.51E+01         7.77E+00           28         2.52         5.58E-01         2.18E+01         1.28E-02         9.59E+01         3.60E+01         8.22E+00           29         4.06         4.84E-01         2.52E+01         1.71E-02         9.65E+01         3.80E+01         9.33E+00           31         4.27         4.57E-01         2.75E+01         2.00E-02         9.67E+01         3.92E+01         1.00E+01           4.09         4.41E-01         3.06E+01         2.39E-02         9.70E+01         4.04E+01         1.09E+01           34         5.24         4.03E-01         3.41E+01         2.87E-02         9.72E+01         4.18E+01         1.19E+01           34         5.42         4.03E-01         3.37E+01         3.37E-02         9.74E+01         4.53E+01         1.46E+01           35         5.82         4.20E-01         4.48E+01								
26       3.05       7.39E-01       2.16E+01       1.10E-02       9.52E+01       3.42E+01       7.36E+00         27       3.27       6.31E-01       2.12E+01       1.16E-02       9.56E+01       3.51E+01       7.77F+00         28       3.52       5.58E-01       2.18E+01       1.28E-02       9.59E+01       3.60E+01       8.22E+00         29       3.78       5.12E-01       2.30E+01       1.45E-02       9.65E+01       3.70E+01       8.76E+00         30       4.06       4.64E-01       2.52E+01       1.71E-02       9.65E+01       3.80E+01       9.33E+00         31       4.37       4.57E-01       2.75E+01       2.00E-02       9.67E+01       3.92E+01       1.00E+01         32       4.69       4.41E-01       3.06E+01       2.39E-02       9.70E+01       4.04E+01       1.09E+01         34       5.42       4.03E-01       3.73E+01       3.37E-02       9.74E+01       4.38E+01       1.19E+01         35       5.82       4.20E-01       4.48E+01       4.35E-02       9.77E+01       4.53E+01       1.46E+01         36       6.26       3.90E-01       4.80E+01       5.02E-02       9.79E+01       4.73E+01       1.46E+01         37 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
27								
28								
29       3.78       5.12E-01       2.30E+01       1.45E-02       9.62E+01       3.70E+01       8.73E+00         30       4.06       4.84E-01       2.52E+01       1.71E-02       9.65E+01       3.80E+01       9.33E+00         31       4.37       4.57E-01       2.75E+01       2.00E-02       9.67E+01       3.92E+01       1.00E+01         32       4.69       4.41E-01       3.06E+01       2.39E-02       9.70E+01       4.04E+01       1.09E+01         34       5.42       4.03E-01       3.41E+01       2.87E-02       9.72E+01       4.18E+01       1.19E+01         34       5.42       4.03E-01       3.73E+01       3.37E-02       9.74E+01       4.34E+01       1.31E+01         35       5.82       4.20E-01       4.48E+01       4.35E-02       9.77E+01       4.53E+01       1.46E+01         36       6.26       3.90E-01       4.80E+01       5.02E-02       9.79E+01       4.73E+01       1.64E+01         37       3.87E-01       5.51E+01       6.18E-02       9.81E+01       4.96E+01       1.85E+01         38       7.23       3.83E-01       6.30E+01       7.60E-02       9.87E+01       5.79E+01       2.76E+01         40       8.35 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td>						_		
30       4.06       4.64E-01       2.52E+01       1.71E-02       9.65E+01       3.80E+01       9.33E+00         31       4.37       4.57E-01       2.75E+01       2.00E-02       9.67E+01       3.92E+01       1.00E+01         32       4.69       4.41E-01       3.06E+01       2.39E-02       9.70E+01       4.04E+01       1.09E+01         33       5.04       4.25E-01       3.41E+01       2.87E-02       9.72E+01       4.18E+01       1.19E+01         34       5.42       4.03E-01       3.73E+01       3.37E-02       9.74E+01       4.34E+01       1.31E+01         35       5.82       4.20E-01       4.48E+01       4.35E-02       9.77E+01       4.53E+01       1.46E+01         36       6.26       3.90E-01       4.80E+01       5.02E-02       9.79E+01       4.73E+01       1.64E+01         37       6.73       3.87E-01       5.51E+01       6.18E-02       9.83E+01       4.96E+01       1.85E+01         38       7.23       3.83E-01       6.52E+01       8.45E-02       9.85E+01       5.49E+01       2.42E+01         40       8.35       3.25E-01       7.12E+01       9.92E-02       9.87E+01       5.79E+01       2.76E+01         41 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
31       4.37       4.57E-01       2.75E+01       2.00E-02       9.67E+01       3.92E+01       1.00E+01         32       4.69       4.41E-01       3.06E+01       2.39E-02       9.70E+01       4.04E+01       1.09E+01         33       5.04       4.25E-01       3.41E+01       2.87E-02       9.72E+01       4.18E+01       1.19E+01         34       5.42       4.03E-01       3.73E+01       3.37E-02       9.74E+01       4.34E+01       1.31E+01         35       5.82       4.20E-01       4.48E+01       4.35E-02       9.77E+01       4.53E+01       1.46E+01         36       6.26       3.90E-01       4.80E+01       5.02E-02       9.79E+01       4.73E+01       1.64E+01         37       6.73       3.87E-01       5.51E+01       6.18E-02       9.81E+01       4.96E+01       1.85E+01         38       7.23       3.83E-01       6.30E+01       7.60E-02       9.83E+01       5.49E+01       2.42E+01         40       8.35       3.25E-01       7.12E+01       9.92E-02       9.87E+01       5.79E+01       2.76E+01         41       8.97       3.31E-01       8.38E+01       1.25E-01       9.89E+01       6.14E+01       3.20E+01         42 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
32       4.69       4.41E-01       3.06E+01       2.39E-02       9.70E+01       4.04E+01       1.09E+01         33       5.04       4.25E-01       3.41E+01       2.87E-02       9.72E+01       4.18E+01       1.19E+01         34       5.42       4.03E-01       3.73E+01       3.37E-02       9.74E+01       4.34E+01       1.31E+01         35       5.82       4.20E-01       4.48E+01       4.35E-02       9.77E+01       4.53E+01       1.46E+01         36       6.26       3.90E-01       4.80E+01       5.02E-02       9.79E+01       4.73E+01       1.64E+01         37       6.73       3.87E-01       5.51E+01       6.18E-02       9.81E+01       4.96E+01       1.85E+01         38       7.23       3.83E-01       6.30E+01       7.60E-02       9.83E+01       5.22E+01       2.12E+01         39       7.77       3.43E-01       6.52E+01       8.45E-02       9.85E+01       5.49E+01       2.42E+01         40       8.35       3.25E-01       7.12E+01       9.92E-02       9.87E+01       5.79E+01       2.76E+01         41       8.97       3.31E-01       8.38E+01       1.25E-01       9.89E+01       6.14E+01       3.20E+01         42 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
33								
34 5.42 4.03E-01 3.73E+01 3.37E-02 9.74E+01 4.34E+01 1.31E+01 35 5.82 4.20E-01 4.48E+01 4.35E-02 9.77E+01 4.53E+01 1.46E+01 36 6.26 3.90E-01 4.80E+01 5.02E-02 9.79E+01 4.73E+01 1.64E+01 27 6.73 3.87E-01 5.51E+01 6.18E-02 9.81E+01 4.96E+01 1.85E+01 38 7.23 3.83E-01 6.30E+01 7.60E-02 9.83E+01 5.22E+01 2.12E+01 39 7.77 3.43E-01 6.52E+01 8.45E-02 9.85E+01 5.49E+01 2.42E+01 40 8.35 3.25E-01 7.12E+01 9.92E-02 9.87E+01 5.79E+01 2.76E+01 41 8.97 3.31E-01 8.38E+01 1.25E-01 9.89E+01 6.14E+01 3.20E+01 42 9.64 3.18E-01 9.29E+01 1.49E-01 9.91E+01 6.52E+01 3.73E+01 43 10.3 3.01E-01 1.02E+02 1.75E-01 9.92E+01 6.94E+01 4.34E+01 4.34E+01 4.31E+01 5.08E+01 1.19 2.86E-01 1.13E+02 2.10E-01 9.95E+01 7.95E+01 5.98E+01 45 11.9 2.86E-01 1.40E+02 2.99E-01 9.97E+01 8.53E+01 7.03E+01 4.34E+01 13.8 2.73E-01 1.64E+02 3.77E-01 9.98E+01 9.21E+01 8.36E+01 4.88E+01 1.89E+02 4.68E-01 1.00E+02 1.00								
35       5.82       4.20E-01       4.48E+01       4.35E-02       9.77E+01       4.53E+01       1.46E+01         36       6.26       3.90E-01       4.80E+01       5.02E-02       9.79E+01       4.73E+01       1.64E+01         37       6.73       3.87E-01       5.51E+01       6.18E-02       9.81E+01       4.96E+01       1.85E+01         38       7.23       3.83E-01       6.30E+01       7.60E-02       9.83E+01       5.22E+01       2.12E+01         39       7.77       3.43E-01       6.52E+01       8.45E-02       9.85E+01       5.49E+01       2.42E+01         40       8.35       3.25E-01       7.12E+01       9.92E-02       9.87E+01       5.79E+01       2.76E+01         41       8.97       3.31E-01       8.38E+01       1.25E-01       9.89E+01       6.14E+01       3.20E+01         42       9.64       3.18E-01       9.29E+01       1.49E-01       9.91E+01       6.52E+01       3.73E+01         43       10.3       3.01E-01       1.02E+02       1.75E-01       9.92E+01       6.94E+01       4.34E+01         44       11.1       2.89E-01       1.13E+02       2.10E-01       9.95E+01       7.41E+01       5.08E+01         45 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
36       6.26       3.90E-01       4.80E+01       5.02E-02       9.79E+01       4.73E+01       1.64E+01         37       6.73       3.87E-01       5.51E+01       6.18E-02       9.81E+01       4.96E+01       1.85E+01         38       7.23       3.83E-01       6.30E+01       7.60E-02       9.83E+01       5.22E+01       2.12E+01         39       7.77       3.43E-01       6.52E+01       8.45E-02       9.85E+01       5.49E+01       2.42E+01         40       8.35       3.25E-01       7.12E+01       9.92E-02       9.87E+01       5.79E+01       2.76E+01         41       8.97       3.31E-01       8.38E+01       1.25E-01       9.89E+01       6.14E+01       3.20E+01         42       9.64       3.18E-01       9.29E+01       1.49E-01       9.91E+01       6.52E+01       3.73E+01         43       10.3       3.01E-01       1.02E+02       1.75E-01       9.92E+01       6.94E+01       4.34E+01         44       11.1       2.89E-01       1.13E+02       2.10E-01       9.95E+01       7.41E+01       5.08E+01         45       11.9       2.86E-01       1.40E+02       2.99E-01       9.97E+01       8.53E+01       7.03E+01         46 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
37       6.73       3.87E-01       5.51E+01       6.18E-02       9.81E+01       4.96E+01       1.85E+01         38       7.23       3.83E-01       6.30E+01       7.60E-02       9.83E+01       5.22E+01       2.12E+01         39       7.77       3.43E-01       6.52E+01       8.45E-02       9.85E+01       5.49E+01       2.42E+01         40       8.35       3.25E-01       7.12E+01       9.92E-02       9.87E+01       5.79E+01       2.76E+01         41       8.97       3.31E-01       8.38E+01       1.25E-01       9.89E+01       6.14E+01       3.20E+01         42       9.64       3.18E-01       9.29E+01       1.49E-01       9.91E+01       6.52E+01       3.73E+01         43       10.3       3.01E-01       1.02E+02       1.75E-01       9.92E+01       6.94E+01       4.34E+01         44       11.1       2.89E-01       1.13E+02       2.10E-01       9.94E+01       7.41E+01       5.08E+01         45       11.9       2.86E-01       1.29E+02       2.57E-01       9.95E+01       7.95E+01       5.98E+01         46       12.8       2.68E-01       1.40E+02       2.99E-01       9.97E+01       8.53E+01       7.03E+01         47 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
38       7.23       3.83E-01       6.30E+01       7.60E-02       9.83E+01       5.22E+01       2.12E+01         39       7.77       3.43E-01       6.52E+01       8.45E-02       9.85E+01       5.49E+01       2.42E+01         40       8.35       3.25E-01       7.12E+01       9.92E-02       9.87E+01       5.79E+01       2.76E+01         41       8.97       3.31E-01       8.38E+01       1.25E-01       9.89E+01       6.14E+01       3.20E+01         42       9.64       3.18E-01       9.29E+01       1.49E-01       9.91E+01       6.52E+01       3.73E+01         43       10.3       3.01E-01       1.02E+02       1.75E-01       9.92E+01       6.94E+01       4.34E+01         44       11.1       2.89E-01       1.13E+02       2.10E-01       9.94E+01       7.41E+01       5.08E+01         45       11.9       2.86E-01       1.29E+02       2.57E-01       9.95E+01       7.95E+01       5.98E+01         46       12.8       2.68E-01       1.40E+02       2.99E-01       9.97E+01       8.53E+01       7.03E+01         47       13.8       2.73E-01       1.64E+02       3.77E-01       9.98E+01       9.21E+01       8.36E+01         48 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
39 7.77 3.43E-01 6.52E+01 8.45E-02 9.85E+01 5.49E+01 2.42E+01 40 8.35 3.25E-01 7.12E+01 9.92E-02 9.87E+01 5.79E+01 2.76E+01 41 8.97 3.31E-01 8.38E+01 1.25E-01 9.89E+01 6.14E+01 3.20E+01 42 9.64 3.18E-01 9.29E+01 1.49E-01 9.91E+01 6.52E+01 3.73E+01 43 10.3 3.01E-01 1.02E+02 1.75E-01 9.92E+01 6.94E+01 4.34E+01 4.34E+01 1.1 2.89E-01 1.13E+02 2.10E-01 9.94E+01 7.41E+01 5.08E+01 45 11.9 2.86E-01 1.29E+02 2.57E-01 9.95E+01 7.95E+01 5.98E+01 46 12.8 2.68E-01 1.40E+02 2.99E-01 9.97E+01 8.53E+01 7.03E+01 47 13.8 2.73E-01 1.64E+02 3.77E-01 9.98E+01 9.21E+01 E.36E+01 14.8 2.73E-01 1.89E+02 4.68E-01 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
40       8.35       3.25E-01       7.12E+01       9.92E-02       9.87E+01       5.79E+01       2.76E+01         41       8.97       3.31E-01       8.38E+01       1.25E-01       9.89E+01       6.14E+01       3.20E+01         42       9.64       3.18E-01       9.29E+01       1.49E-01       9.91E+01       6.52E+01       3.73E+01         43       10.3       3.01E-01       1.02E+02       1.75E-01       9.92E+01       6.94E+01       4.34E+01         44       11.1       2.89E-01       1.13E+02       2.10E-01       9.94E+01       7.41E+01       5.08E+01         45       11.9       2.86E-01       1.29E+02       2.57E-01       9.95E+01       7.95E+01       5.98E+01         46       12.8       2.68E-01       1.40E+02       2.99E-01       9.97E+01       8.53E+01       7.03E+01         47       13.8       2.73E-01       1.64E+02       3.77E-01       9.98E+01       9.21E+01       8.36E+01         48       14.8       2.73E-01       1.89E+02       4.68E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
41       8.97       3.31E-01       8.38E+01       1.25E-01       9.89E+01       6.14E+01       3.20E+01         42       9.64       3.18E-01       9.29E+01       1.49E-01       9.91E+01       6.52E+01       3.73E+01         43       10.3       3.01E-01       1.02E+02       1.75E-01       9.92E+01       6.94E+01       4.34E+01         44       11.1       2.89E-01       1.13E+02       2.10E-01       9.94E+01       7.41E+01       5.08E+01         45       11.9       2.86E-01       1.29E+02       2.57E-01       9.95E+01       7.95E+01       5.98E+01         46       12.8       2.66E-01       1.40E+02       2.99E-01       9.97E+01       8.53E+01       7.03E+01         47       13.8       2.73E-01       1.64E+02       3.77E-01       9.98E+01       9.21E+01       8.36E+01         48       14.8       2.73E-01       1.89E+02       4.68E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
42       9.64       3.18E-01       9.29E+01       1.49E-01       9.91E+01       6.52E+01       3.73E+01         43       10.3       3.01E-01       1.02E+02       1.75E-01       9.92E+01       6.94E+01       4.34E+01         44       11.1       2.89E-01       1.13E+02       2.10E-01       9.94E+01       7.41E+01       5.08E+01         45       11.9       2.86E-01       1.29E+02       2.57E-01       9.95E+01       7.95E+01       5.38E+01         46       12.8       2.68E-01       1.40E+02       2.99E-01       9.97E+01       8.53E+01       7.03E+01         47       13.8       2.73E-01       1.64E+02       3.77E-01       9.98E+01       9.21E+01       8.36E+01         48       14.8       2.73E-01       1.89E+02       4.68E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
43       10.3       3.01E-01       1.02E+02       1.75E-01       9.92E+01       6.94E+01       4.34E+01         44       11.1       2.89E-01       1.13E+02       2.10E-01       9.94E+01       7.41E+01       5.08E+01         45       11.9       2.86E-01       1.29E+02       2.57E-01       9.95E+01       7.95E+01       5.98E+01         46       12.8       2.68E-01       1.40E+02       2.99E-01       9.97E+01       8.53E+01       7.03E+01         47       13.8       2.73E-01       1.64E+02       3.77E-01       9.98E+01       9.21E+01       8.36E+01         48       14.8       2.73E-01       1.89E+02       4.68E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
44       11.1       2.89E-01       1.13E+02       2.10E-01       9.94E+01       7.41E+01       5.08E+01         45       11.9       2.86E-01       1.29E+02       2.57E-01       9.95E+01       7.95E+01       5.98E+01         46       12.8       2.68E-01       1.40E+02       2.99E-01       9.97E+01       8.53E+01       7.03E+01         47       13.8       2.73E-01       1.64E+02       3.77E-01       9.98E+01       9.21E+01       8.36E+01         48       14.8       2.73E-01       1.89E+02       4.68E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
45 11.9 2.86E-01 1.29E+02 2.57E-01 9.95E+01 7.95E+01 5.98E+01 46 12.8 2.68E-01 1.40E+02 2.99E-01 9.97E+01 8.53E+01 7.03E+01 47 13.8 2.73E-01 1.64E+02 3.77E-01 9.98E+01 9.21E+01 8.36E+01 48 14.8 2.73E-01 1.89E+02 4.68E-01 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
46 12.8 2.68E-01 1.40E+02 2.99E-01 9.97E+01 8.53E+01 7.03E+01 47 13.8 2.73E-01 1.64E+02 3.77E-01 9.98E+01 9.21E+01 8.36E+01 48 14.8 2.73E-01 1.89E+02 4.68E-01 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
47 13.8 2.73E-01 1.64E+02 3.77E-01 9.98E+01 9.21E+01 8.36E+01 48 14.8 2.73E-01 1.89E+02 4.68E-01 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02			2.68E-01					
48 14.8 2.73E-01 1.89E+02 4.68E-01 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02			2.73E-01					
TOTALS: 1.78E+02 2.4CE+03 2.85E+00	>	15.4	0.00E+00	0.00E+00	0.00E+00			
	TOTAL	S:	1.78E+02 2	.4CE+03 2.	85E+00			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: IN5 13.011 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		COXC	ENTRATIONS		Ct.Ai	ULATIVE %	
CRZI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
( (	. 186	4.12E-01		1.94E-05	3.08E-01	1.46E-02	9.40E-04
ì	.504	3.21E-01	2.57E-01	2.16E-05	5.48E-01	2.91E-02	1.99E-03
	.512	5.83E-01	5.38E-01	4.86E-05	9.84E-01	5.95E-02	4.34E-03
2 3	.581	1.02E+00	1.08E+00	1.05E-04	1.74E+00	1.21E-01	9.42E-03
3 •		1.88E÷00		2.41E-04	3.15E÷00		
5	.625	3.55E+00		5.66E-04	5.80E+00		2.11E-02
	.673		9.86E+00	1.19E-03		5.36E-01	4.85E-02
5 7	.723	6.00E+00			1.03E+01	1.095+00	1.06E-01
	.777	8.95E+00	1.70E+01	2.20E-03	1.70E+01	2.05E+00	2.13E-01
g	.335	1.09E+0i	2.38E÷01	3.325-03	2.51E+01	3.402+00	3.745-01
9	.897	1.11E+01	2.90E+01	1.34E-03	3.37E+01	5.04E+00	5.84E-01
10	.964	1.11E+01	3.25E+01	5.22E-03	4.20E+01	6.87E+00	8.37E-01
11	1.03	1.06E+01	3.58E+01	6.18E-03	4.99E+01	8.895+00	1.1 LE+00
12	1.11	9.67E+00		7.01E-03	5.71E+01	1.10E+01	1.43E+00
13	1.19	8.74E+00		7.85E-03	6.37E+31	1.32E+01	1.85E+00
1 !	1.23	8.07E+00	4.205+01	9.00E-03	6.97E+01	1.56E+01	2.29E+00
1.5	1.38	7.08E+00	4.25E÷01	9.795-03	7.505+01	1.805+01	2.77E+00
15	1.13	6.11E+00		1.05E-02	7.95E÷01	2.01E+01	3.28E+00
1.7	1.59	5.06E+00		1.032-02		2.27E+01	3.80E+00
13	1.71	1.01E+00		1.07E-02	8.63E+01	2.485+01	4.32E+00
13	1.81	3.21E+00	3.42E+01	1.05E-02	8.87E-01	2.67E+01	1.83E+00
20	1.93	2.48E+00	3.03E+01	1.0CE-02		2.81E+01	5.31E+00
21	2.12	1.85E+00		9.36E-03			5.782+00
5.5	2.28	1.42E+00	2.33E+Ci	8.88E-03	9.30E+01	3.12E+01	5.19E+00
23	2.45	1.045+30	1.97E+01	8.09E-03	9.33E+)1	3.21E+01	6.59E+00
24	2.51	8.17E-01	1.79E+01	7.83E-03	9.44E+01	$3.34\Xi + 01$	6.97E+00
2.5	2.83	6.29E-01	1.59E+01	7.53E-03	9.49E÷01	3.43E+01	7.33E÷00
26	3.05	5.71E-01	1.67E+01	8.48E-03	9.53E+01	3.52E+01	7.75E+00
27	3.27	4.66E-01	1.57E+01	8.59E-03	9.57E+01	3.61E+01	8.16E+00
28	3.52	4.36E-01	1.70E+01	9.97E-03	9.60E+01	3.71E+01	8.64E+00
2.3	3.78	3.77E-01	1.70E+01	1.07E-02	9.63E+01	3.80E+01	9.16E+00
30	4.06	3.58E-01	1.86E+01	1.26E-02	9.65E+01	3.91E+01	9.78E+00
3 i	4.37	3.46E-01	2.08E+01	1.52E-02	9.68E+01	4.02E+01	1.05E+01
32	4.69	3.30E-01	2.29E+01	1.79E-02	9.70E+01	4.15E+01	1.14E+01
33	5.04	3.04E-01	2.44E+01	2.05E-02	9.73E+01	4.29E+01	1.24E+01
31	5.42	3.20E-01	2.96E+01	2.67E-02	9.75E+01	4.46E+01	1.37E+01
35	5.82	3.18E-01	3.40E+01	3.30E-02	9.77E+01	4.65E+01	1.53E+01
36	6.26	2.84E-01	3.51E+01	3.66E-02	9.80E+01	4.85E+01	1.70E+01
37	6.73	2.73E-01	3.89E+01	4.37E-02	9.82E+01	5.07E+01	1.92E+01
38	7.23	2.59E-01	4.26E+01	5.13E-02	9.84E+01	5.31E+01	2.16E+01
39	7.77	2.61E-01	4.95E+01	6.42E-02	9.86E+01	5.59E+01	2.48E+01
40	8.35	2.42E-01	5.30E+01	7.38E-02	9.87E+01	5.89E+01	2.83E+01
41	8.97	2.55E-01	6.45E+01	9.65E-02	9.89E+01	6.25E+01	3.30E+01
42	9.64	·2.17E-01	6.34E+01	1.02E-01	9.91E+01	6.61E+01	3.80E+01
43	10.3	2.27E-01	7.66E+01	1.32E-01	9.93E+01	7.04E+01	4.44E+01
44	11.1	2.17E-01	8.48E+01	1.57E-01	9.94E+01	7.52E+01	5.20E+01
45	11.9	1.96E-01	8.83E+01	1.76E-01	9.96E+01	8.02E+01	6.05E+01
46	12.8	2.00E-01	1.04E+02	2.23E-01	9.97E+01	8.61E+01	7.14E+01
47	13.8	1.95E-01	1.17E+02	2.70E-01	9.99E+01	9.27E+01	8.45E+01
48	14.8	1.87E-01	1.30E+02	3.21E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA		•	1.77E+03 2.			- <del>-</del>	
			_ ; 🗕 :				

FILE NAME: IN5 13.012 01-01-1980 FILE NAME: IN5 13.013 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1 DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CONCENTRATIONS CUMULATIVE % CHNL DIA NUMBER SURFACE MASS NUMBER SURFACE 486 6.95E-01 4.35E-01 3.26E-05 2.79E-01 1.28E-02 8.09E-04 .504 5.10E-01 4.08E-01 3.43E-05 4.84E-01 2.47E-02 1.66E-03 .542 9.85E-01 9.10E-01 8.22E-05 8.80E-01 5.14E-02 3.71E-03 .581 1.74E+00 1.85E+00 1.79E-04 1.58E+00 1.05E-01 8.16E-03 .625 3.21E+00 3.94E+00 4.10E-04 2.87E+00 2.21E-01 1.83E-02 .673 6.11E+00 8.70E+00 9.76E-04 5.32E+00 4.75E-01 4.26E-02 .723 1.04E+01 1.71E+01 2.06E-03 9.49E+00 9.76E-01 9.38E-02 .777 1.58E+01 3.01E+01 3.90E-03 1.59E+01 1.86E+00 1.91E-01 7 .835 1.96E+01 4.30E+01 5.99E-03 2.37E+01 3.12E+00 3.40E-01 8 .897 2.09E+01 5.28E+01 7.91E-03 3.21E+01 4.66E+00 5.36E-01 9 10 .964 2.05E+01 6.01E+01 9.66E-03 4.04E+01 6.42E+00 7.76E-01 1.03 1.96E+01 6.61E+01 1.14E-02 4.82E+01 8.36E+00 1.06E+00 1 1 1.11 1.82E+01 7.10E+01 1.32E-02 5.55E+01 1.04E+01 1.39E+00 12 13 1.19 1.69E+01 7.63E+01 1.52E-02 6.23E+01 1.27E+01 1.77E+00 14 1.23 1.56E+01 8.11E+01 1.74E-02 6.86E+01 1.50E+01 2.20E+00 15 1.33 1.36E+01 8.15E+01 1.83E-02 7.41E+01 1.74E+01 2.67E+00 16 1.48 1.17E+01 8.12E+01 2.01E-02 7.88E+01 1.98E+01 3.16E+00 17 1.59 9.78E+00 7.83E+01 2.08E-02 8.27E+01 2.21E+01 3.68E+00 7.81E+00 7.22E+01 2.06E-02 8.58E+01 2.42E+01 4.20E+00 6.17E+00 6.59E+01 2.02E-02 3.83E+01 2.61E+01 4.70E+00 19 1.84 20 1.98 4.72E+00 5.82E+01 1.92E-02 9.02E+01 2.78E+01 5.18E+00 3.59E+00 5.11E+01 1.81E-02 9.16E+01 2.93E+01 5.63E+00 2.71E+00 1.50E+01 1.71E-02 9.27E+01 3.07E+01 6.05E+00 23 2.45 2.10E+00 3.98E+01 1.63E-02 9.36E+01 3.18E+)1 6.46E+00 24 2.64 1.60E+00 3.52E+01 1.55E-02 9.42E+01 3.29E+01 6.54E+00 23 2.33 1.245+00 3.14E+01 1.48E-02 9.47E+01 3.38E+01 7.21E+00 26 3.05 1.01E+00 2.96E+01 1.51E-02 9.51E+01 3.46E+01 7.59E+00 27 3.27 9.30E-01 3.14E+01 1.71E-02 9.55E+01 3.56E+01 8.01E+00 7.97E-01 3.11E+01 1.82E-02 9.58E+01 3.65E+01 8.17E+00 29 3.78 7.38E-01 3.32E+01 2.10E-02 9.61E+01 3.74E+01 8.99E+00 7.18E-01 3.74E+01 2.53E-02 9.64E+01 3.85E+01 9.62E+00 30 1.06 31 4.37 6.60E-01 3.96E+01 2.89E-02 9.67E+01 3.97E+01 1.03E+01 6.51E-01 4.52E+01 3.54E-02 9.69E+01 4.10E+01 1.12E+01 32 1.69 33 5.04 6.01E-01 4.82E+01 4.05E-02 9.72E+01 4.24E+01 1.22E+01 34 5.42 5.83E-01 5.39E+01 4.87E-02 9.74E+01 4.40E+01 1.34E+01 35 5.82 5.79E-01 6.18E+01 6.01E-02 9.76E+01 4.58E+01 1.49E+01 36 6.26 5.52E-01 6.80E+01 7.10E-02 9.79E+01 4.78E+01 1.67E+01 37 6.73 5.25E-01 7.47E+01 8.39E-02 9.81E+01 5.00E+01 1.88E+01 38 7.23 5.17E-01 8.49E+01 1.02E-01 9.83E+01 5.25E+01 2.13E+01 39 7.77 4.83E-01 9.17E+01 1.19E-01 9.85E+01 5.52E+01 2.43E+01 4.99E-01 1.10E+02 1.52E-01 9.87E+01 5.84E+01 2.81E+01 40 8.35 4.80E-01 1.21E+02 1.82E-01 9.89E+01 6.19E+01 3.26E+01 41 8.97 4.35E-01 1.27E+02 2.04E-01 9.90E+01 6.57E+01 3.77E+01 4.11E-01 1.39E+02 2.40E-01 9.92E+01 6.97E+01 4.36E+01 44 11.1 4.12E-01 1.61E+02 2.99E-01 9.94E+01 7.44E+01 5.10E+01 3.91E-01 1.76E+02 3.51E-01 9.95E+01 7.96E+01 5.98E+01 45 11.9 46 12.8 3.90E-01 2.03E+02 4.35E-01 9.97E+01 8.55E+01 7.06E+01 3.89E-01 2.34E+02 5.38E-01 9.98E+01 9.24E+01 8.40E+01 48 14.8 3.76E-01 2.60E+02 6.45E-01 1.00E+02 1.00E+02 1.00E+02 > 15.4 3.00E-04 2.40E-01 6.39E-04 1.00E+02 1.00E+02 1.00E+02 TOTALS: 2.49E+02 3.42E+03 4.02E+00

#### TSI AERODYNAMIC PARTICLE SIZER

DENSITY: 1 DIL. RATIO: 1 :1 EFFIC. CORRECT.: D1

			ENTRATIONS		CUM	L'LATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 186	7.68E-02	4.83E-02	3.61E-06	2.31E-01	1.13E-02	7.79E-04
1	.504	6.03E-02	4.82E-02	4.06E-06	4.13E-01	2.26E-02	1.65E-03
2	.542	1.04E-01	9.61E-02	8.69E-06	7.26E-01	4.51E-02	3.53E-03
- 3	.581	1.82E-01	1.93E-01	1.87E-05	1.27E+00	9.03E-02	7.57E-03
4	.625	3.42E-01	4.20E-01	4.38E-05	2.30E+00	1.89E-01	1.70E-02
5	.673	6.46E-01	9.20E-01	1.03E-04	4.25E+00	4.04E-01	3.93E-02
6	.723	1.15E+00	1.89E+00	2.27E-04	7.70E+00	8.45E-01	8.83E-02
7	. 777	1.79E+00	3.40E+00	4.41E-04	1.31E+01	1.64E+00	1.83E-01
8	.835	2.32E+00	5.08E+00	7.07E-04	2.01E+01	2.83E+00	3.36E-01
9	.897	2.57E+00	6.52E+00	9.75E-04	2.73E+01	4.36E+00	5.46E-01
10	.961	2.59E+00	7.59E+00	1,22E-03	3.56E+01	6.13E+00	8.09E-01
11	1.03	2.59E+00	8.76E+00	1.51E-03	4.34E+01	8.13E+00	1.14E+00
12	1.11	2.51E+00	9.80E+00	1.82E-03	5.10E+01	1.05E+01	1.53E+00
13	1.19	2.41E+00	1.09E+01	2.175-03	5.82E+01	1.30E+01	1.995+00
14	1.28	2.27E+00	1.18E+01	2.54E-03	6.51E+01	1.58E+01	2.54E+00
1.5	1.38	2.05E+00	1.23E+01	2.83E-03	7.12E+01	1.87E+01	
16	1.18	1.78E+00	1.21E+01	3.06E-03	7.66E+01	2.16E+01	3.15E+00
17	1.59						3.81E+00
	1.71	1.545+00	1.23E+01	3.28E-03	8.12E-01	2.44E+01	1.52E+00
18		1.22E+00	1.13E+01	3.23E-03	8.495+01	2.71E+01	5.22E+00
19	1.84	9.605-01	1.025+01	3.15E-03	8.785+01	2.95E+01	5.90E+00
20	1.98	7.17E-01	9.21E+00	3.01E-03	9.01E+01	3.16E+01	6.55E+00
21	2.12	5.412-01	7.71E+00	2.74E-03	9.17E+01	3.31E+01	7.142+0)
22	2.28	1.01E-01	6.65E+00	2.53E-03	9.29E+01	3.50E+01	7.69E+00
23	2.45	3.105-01	3.83E+00	2.41E-03	9.38E+01	3.64E+01	8.21E+00
2 1	2.64	2.24E-01	4.91E+00	2.16E-03	9.45E+01	3.75E+01	8.67E+00
2.5	2.83	1.75E-01	4.44E+00	2.10E-03	9.50E+01	3.86E+01	9.13E+00
26	3.03	1.11E-01	4.22E+00	2.14E-03	9.55E+01	3.95E+01	9.59E+00
2.7	3.27	1.15E-01	3.89E+00	2.12E-03	9.5SE+01	4.05E+01	1.00E+01
28	3.52	1.03E-01	4.02E+00	2.36E-03	9.61E+01	4.11E+01	1.06E+01
29	3.78	9.87E-02	4.44E+00	2.80E-03	9.54E+01	4.24E+01	1.12E+01
30	1.06	9.39E-02	4.88E+00	3.31E-03		1.36E+01	1.19E+01
31	1.37	8.49E-02	5.10E+00	3.71E-03	9.70E+01	4.48E+01	1.27E+01
32	1.69	8.58E-02	5.95E+00	4.66E-03	9.72E+01	4.62E+01	1.37E+01
33	5.04	8.43E-02	6.75E+00	5.68E-03	9.75E+01	4.77E+01	1.49E+01
34	5.42	7.98E-02	7.38E+00	6.67E-03	9.77E+01	4.95E+01	1.63E+01
35	5.82	7.56E-02	8.07E+00	7.84E-03	9.80E+01	5.14E+01	1.80E+01
36	6.26	6.78E-02	8.36E+00	8.73E-03	9.82E+01	5.33E+01	1.99E+01
37	6.73	6.87E-02	9.78E+00	1.10E-02	9.84E+01	5.56E+01	2.23E+01
38	7.23	6.93E-02	1.14E+01	1.37E-02	9.86E+01	5.83E+01	2.52E+01
39	7.77	6.15E-02	1.17E+01	1.51E-02	9.88E+01	6.10E+01	2.85E+01
40	8.35	6.00E-02	1.32E+01	1.83E-02	9.89E+01	6.41E+01	3.25E+01
41	8.97	5.22E-02	1.32E+01	1.98E-02	9.91E+01	6.72E+01	3.67E+01
42	9.64	4.74E-02	1.39E+01	2.23E-02	9.92E+01	7.04E+01	4.15E+01
43	10.3	4.26E-02	1.44E+01	2.48E-02	9.94E+01	7.38E+01	4.69E+01
4.4	11.1	4.26E-02	1.66E+01	3.08E-02	9.95E+01	7.77E+01	5.35E+01
45	11.9	4.26E-02	1.92E+01	3.83E-02	9.96E+01	8.22E+01	6.18E+01
46	12.8	4.26E-02	2.21E+01	4.75E-02	9.97E+01	8.73E+01	7.20E+01
47	13.8	4.02E-02	2.41E+01	5.56E-02	9.99E+01	9.30E+01	8.40E+01
48	14.8	4.32E-02	2.99E+01	7.41E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	S:	3.32E+01 4	.27E+02 4.	64E-01			

FILE NAME: INS 13.014 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: DI

		covica				_	
CILX	: D.F.\		ENTRATIONS	W . G G		ULATIVE %	
	L DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<b>&lt;</b>	. 186	1.97E-01	1.24E-01	9.25E-06	2.47E-01	1.15E-02	7.86E-04
1	.504	1.48E-01	1.19E-01	9.99E-06	4.32E-01	2.25E-02	1.63E-03
2	.512	2.59E-01	2.40E-01	2.17E-05	7.57E-01	4.49E-02	3.47E-03
3	.581	4.67E-01	4.97E-01	4.82E-05	1.34E+00	9.13E-02	7.56E-03
4	.625	8.65E-01	1.06E+00	1.11E-04	2.42E+00	1.90E-01	1.70E-02
5	.673	1.66E+00	2.36E+00	2.64E-04	4.50E+00	4.10E-01	3.94E-02
6	.723	2.80E+00	4.61E+00	5.56E-01	8.00E+00	8.40E-01	8.66E-02
7	.777	4.37E+00	8.29E+00	1.07E-03	1.35E+01	1.61E+00	1.78E-01
8	.835	5.51E+00	1.21E+01	1.68E-03	2.04E+01	2.71E+00	3.21E-01
9	.897	6.07E+00	1.54E+01	2.30E-03	2.80E+01	4.17E÷00	5.16E-01
10	.961	5.98E+00	1.75E+01	2.81E-03	3.512+01	5.80E+00	7.55E-01
11	1.03	5.86E+00	1.98E+01	3.425-03	4.28E+01	7.65E+00	1.05E+00
12	1.11	5.75E+00	2.21E+01	4.16E-03	5.00E+01	9.71E+00	1.40E+00
13	1.19	5.51E+00	2.435+01	4.95E-03	5.59E+01	1.21E+01	1.82E+00
1 1	1.28	5.20E+00	2.70E+01	5.79E-03	6.31E+01	1.16E+01	2.31E÷00
15	1.38	1.305+00	2.83E+01	6.64E-03	5.945+01	1.73E+01	2.885+00
16	1.13	1.31E+00	2.99E+01	7.39E-03	7.18E-01	2.00E+01	3.50E+00
17	1.59	3.72E+00	2.98E+01	7.93E-03	7.942+01	2.285+01	4.182+00
13	1.71	3.15E÷00	2.92E+01	8.34E-03	8.31E-01	2.55E+01	4.89E+00
19	1.84	2.53E-00	2.70E+01	8.30E-03	8.65E+01	2.915+01	5.59E+00
26	1.95	2.02E+00	2.50E+01	8.21E-03	3.91E+01	3.01E+01	6.29E+00
2:	2.12	1.51E+00	2.15E+01	7.65E-03	9.10E+01	3.245+01	
22	2.23	1.17E+00	1.925+01	7.33E-03	9.21E+01		5.9 (E+0)
23	2.45	8.45E-01	1.602+01	6.57E-03		3.42E+01	7.56E+00
24	2.61	6.40E-01	1.40E+01	6.18E-03	9.35E+01	3.57E+01	8.12E+00
2.5	2.83	4.59E-01	1.15E+01		9.435+01	3.70E+01	8.63E+00
26	3.05	3.67E-01	1.07E+C1	5.49E-03	9.495+01	3.31E+01	9.11E+00
27	3.27	3.09E-01		5.45E-03	9.53E+01	3.91E+01	9.58E+00
28	3.52	2.71E-01	1.04E+01	5.70E-03	9.57E÷01	4.01E+01	1.012+01
29	3.78	2.71E-01 2.32E-01	1.06E+01	6.21E-03	9.60E+01	4.10E+01	1.05E+01
30	1.06	2.29E-01	1.05E+01	6.60E-03	9.63E+01	4.205+01	1.11E+01
31	4.37	2.11E-01	1.19E+01	8.08E-03	9.66E+01		1.18E+01
32	1.69	2.02E-01	1.26E+01	9.21E-03	9.69E+01	4.435+01	1.26E+01
33	5.04	1.87E-01	1.40E+01	1.09E-02	9.71E+01	4.56E+01	1.35E+01
34	5.42		1.50E+01	1.26E-02	9.74E+01	4.70E+01	1.46E+01
35		1.93E-01	1.79E+01	1.61E-02	9.76E+01	4.87E+01	1.60E+01
3 <i>5</i>	5.82	1.88E-01	2.00E+01	1.95E-02	9.78E+01	5.05E+01	1.76E+01
37	6.26 6.73	1.81E-01	2.23E+01	2.32E-02	9.81E+01	5.26E+01	1.96E+01
		1.64E-01	2.34E+01	2.63E-02	9.83E+01	5.48E+01	2.18E+01
38 20	7.23	1.57E-01	2.58E+01	3.12E-02	9.85E+01	5.72E+01	2.45E+01
39	7.77	1.46E-01	2.78E+01	3.60E-02	9.87E+01	5.98E+01	2.75E+01
40	8.35	1.41E-01	3.08E+01	4.29E-02	9.88E+01	6.27E+01	3.12E+01
41	8.97	1.34E-01	3.40E+01	5.09E-02	9.90E+01	6.58E+01	3.55E+01
42	9.64	1.37E-01	4.01E+01	6.44E-02	9.92E+01	6.96E+01	4.10E+01
43	10.3	1.25E-01	4.23E+01	7.31E-02	9.93E+01	7.35E+01	4.72E+01
44	11.1	1.20E-01	4.69E+01	8.71E-02	9.95E+01	7.79E+01	5.46E+01
45	11.9	1.11E-01	4.98E+01	9.94E-02	9.96E+01	8.25E+01	6.30E+01
46	12.8	1.07E-01	5.57E+01	1.19E-01	9.97E+01	8.77E+01	7.32E+01
47	13.8	9.66E-02	5.80E+01	1.34E-01	9.99E+01	9.31E+01	8.45E+01
48	14.8	1.06E-01	7.36E+01	1.82E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	T2:	7.99E+01 1	.07E+03 1.	18E+00			

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#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: IN5 13.015 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIL. RATIO	0: 1:1	EFFIC. C	ORRECT .: D	01	
		201/251			ar.w.	''	
			NTRATIONS	W. C.C.		LATIVE %	W. CC
CHNL			SURFACE	MASS 2.03E-06	NUMBER 2.93E-01	SURFACE 1.31E-02	MASS 8.63E-01
<b>‹</b>	. 486	4.32E-02 3.33E-02	2.71E-02 2.66E-02	2.03E-06 2.24E-06			1.82E-03
i	.501	5.82E-02	5.37E-02	4.86E-06		5.21E-02	3.88E-03
2 3	.542	9.90E-02	1.05E-01	1.02E-05	1.58E+00		8.22E-03
	.581 .625	1.30E-01	2.21E-01	2.31E-05	2.80E+00	2.10E-01	1.80E-02
	.673	3.37E-01	4.80E-01	5.38E-05	5.09E+00	4.43E-01	1.09E-02
6	.723	5.55E-01	9.12E-01	1.10E-04	8.81E+00		8.77E-02
5 6 7	.777	8.50E-01	1.61E+00	2.09E-04	1.46E+01	1.67E+00	1.77E-01
8	.835	1.94E+00	2.27E+00	3.16E-04	2.16E+01	2.77E+00	3.11E-01
9	.897	1.145+00	2.83E+00	4.31E-04	2.93E+01	4.16E+00	4.94E-01
10	.961	1.10E+00	3.21E+00	5.16E-04	3.67E+01	5.72E+00	7.14E-01
11	1.03	1.07E+00	3.61E+00	6.242-04	4.40E+01	7.47E+00	9.79E-01
12	1.11	1.01E+00	3.96E+00	7.35E-04	5.09E+01	9.38E+00	1.29E+00
13	1.19	9.72E-01	4.38E+00	8.73E-04	5.74E+01	1.15E+01	1.65E+00
1 1	1.28	9.35E-01	1.86E+00	1.042-03	6.38E+01		2.11E+00
1.5	1.33	8.31E-01	1.99E+00	1.15E-03	6.94E+01	1.63E+01	2.592+00
16	1.13	7.54E-01	5.22E+00	1.29E-03	7.45E+01	1.98E+01	3.1 LE+00
17	1.59	6.375-01	5.52E+00	1.47E-03	7.92E+01	2.15E+01	3.77E+00
13	1.71	5.63E-01	5.21E+00	1.49E-03	8.30E+01		4.10E+00
19	1.84	1.50E-01	4.91E+00	1.51E-03	8.61E+01	2.64E+01	5.0 (E+00
20	1.98	3.57E-01	1.11E-00	1.45E-03	8.85E+01	2.85E+01	5.66E+00
21	2.12	2.91E-01	1.14E+00	1.47E-03	9.05E+01		6.23E+00
22	2.29	2.01E-01	3.31E+00	1.26E-03			6.82E+00
23	2.15	1.545-01	3.12E+00	1.28E-03	9.30E+0i		7.37E+00
2!	2.61	1.225-01	2.68E+00	1.18E-03	9.38E+01	3.495+01	7.97E+00
25	2.83	9.242-02	2.34E+00	1.11E-03	9.442+01	3.61E+01	8.345+00
25	3.05	8.15E-02	2.39E-00	1.21E-03	9.50E+01	3.72E+01	8.852+00
27	3.27	6.36E-02	2.15E+00	1.17E-03	9.54E+01		9.35E+00 9.91E+00
28	3.52	5.73E-02	2.23E+00	1.31E-03	9.58E+01 9.62E+01		1.05E+01
29	3.73	5.195-02	2.47E+00	1.56E-03 1.59E-03	9.65E+01	i.17E+01	1.12E+01
30	1.06	1.50E-02	2.34E+00 2.45E+00	1.78E-03	9.67E+01	4.29E+01	1.20E+01
3 i	1.37	1.08E-02 3.78E-02	2.45E+00 2.62E+00	2.05E-03			1.29E+01
32	4.69	3.78E-02 3.81E-02	3.05E+00	2.57E-03			1.40E+01
33	5.04 5.42	3.99E-02	3.69E+00	3.33E-03		4.74E+01	1.54E+01
3 l 35	5.82	3.60E-02	3.84E+00	3.73E-03	9.78E+01		1.70E+01
36	6.26	3.75E-02	4.62E+00	4.83E-03			1.90E+01
37	6.73	3.21E-02	4.57E+00	5.13E-03		5.37E+01	2.12E+01
38	7.23	3.21E-02	5.28E+00	6.36E-03	9.84E+01	5.63E+01	2.39E+01
39	7.77	2.34E-02	4.44E+00	5.76E-03	9.86E+01	5.84E+01	2.64E+01
40	8.35	2.28E-02	5.00E+00	6.96E-03	9.88E+01	6.08E+01	2.93E+01
41	8.97	2.52E-02	6.38E+00	9.55E-03	9.89E+01	6.39E+01	3.34E+01
42	9.64	2.13E-02	6.23E+00	1.00E-02	9.91E+01	6.69E+01	3.76E+01
43	10.3	2.40E-02	8.10E+00	1.40E-02	9.92E+01	7.09E+01	4.36E+01
44	11.1	2.16E-02	8.42E+00	1.56E-02		7.49E+01	5.02E+01
45	11.9	2.19E-02	9.86E+00	1.97E-02		7.97E+01	5.86E+01
46	12.8	2.13E-02	1.11E+01	2.37E-02	9.97E+01	8.51E+01	6.87E+01
47	13.8	2.46E-02	1.48E+01	3.40E-02	9.98E+01	9.22E+01	8.31E+01
48	14.8	2.31E-02	1.60E+01	3.96E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOT	ALS:	1.48E+01 2	.06E+02 2.	35E-01			

FILE NAME: IN5 13.016 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

	20112			CUM	u ATTUE W	
		ENTRATIONS	MACC	NUMBER	JLATIVE % SURFACE	MASS
CHNL DIA	NUMBER	SURFACE	MASS 6.42E-06	2.56E-01	1.20E-02	8.14E-04
< .486	1.37E-01		6.95E-06	4.49E-01		1.69E-03
1 .504	1.03E-01 1.86E-01	1.72E-01	1.55E-05		4.77E-02	3.67E-03
2 .542 3 .581	3.24E-01	3.44E-01	3.34E-05		9.59E-02	7.90E-03
3 .581 4 .625	6.16E-01	7.56E-01	7.88E-05	2.55E+00	2.02E-01	1.79E-02
5 .673	1.16E+00		1.84E-04	4.71E+00	4.32E-01	4.13E-02
6 .723	1.93E+00		3.83E-04	8.32E+00		8.98E-02
7 .777	2.99E+00		7.36E-04	1.39E+01	1.67E+00	1.83E-01
8 .835	3.71E+00	8.14E+00	1.13E-03	2.08E+01	2.81E+00	3.27E-01
9 .897	4.01E+00		1.52E-03	2.83E+01	4.23E+00	5.19E-01
10 .964	3.99E+00		1.88E-03	3.58E+01	5.87E+00	7.57E-01
11 1.03	3.97E+00		2.31E-03	4.32E+01	7.74E+00	1.05E+00
12 1.11	3.77E+00	1.47E+01	2.73E-03	5.03E+01	9.80E+00	1.40E+00
13 1.19	3.58E+00	1.61E+01	3.22E-03	5.70E+01	1.21E+01	1.81E+00
14 1.28	3.44E+00		3.83E-03	6.34E+01	1.46E+01	2.29E+00
15 1.38	3.18E+00		4.40E-03	6.93E+01	1.72E+01	2.85E+00
16 1.18	2.86E+00	1.98E+01	4.91E-03	7.47E÷01	2.00E+01	3.47E+00
17 1.59	2.50E+00	2.00E+01	5.33E-03	7.93E÷01	2.28E+01	1.15E+00
18 1.71	2.09E+00		5.52E-03	8.32E+01	2.55E+01	4.85E+00
19 1.84	1.72E+00	1.84E+01	5.65E-03	8.65E-01	2.81E+01	5.56E+00
20 1.98	1.35E+00	1.66E-01	5.48E-03	8.90E+01	3.04E+01	9.16E+00
21 2.12	1.04E+00	1.48E+01	5.27E-03	9.09E÷01	3.25E+01	6.93E+00
22 2.28	7.97E-01	1.31E+01	5.00E-03	9.24E+01	3.48E÷01	7.f6E+00
23 2.45	5.88E-01	1.12E+01	4.57E-03	9.05E+01	3.59E+01	8.14E+60
21 2.61	4.37E-01	9.59E+00	4.22E-03	9.43E+01	3.72E+01	8.67E+00
25 2.83	3.28E-01	8.30E+00	3.93E-03	9.49E+01	0.84E+01	5.17E+00
26 3.05	2.52E-01	7.37E+00	3.75E-03	9.54E+01	3.94E+01	9.65E+00
27 3.27	2.09E-01	7.05E+00	3.85E-03	9.58E+01	4.04E+01	1.(1E+(1
28 3.52	1.75E-01	6.84E+00	4.02E-03	9.61E+01	4.14E+01	1.06E+01
29 3.78	1.62E-01	7.31E+00	4.61E-03	9.6-E+01	4.24E+01	1.12E+01
30 4.06	1.44E-01	7.47E+00	5.06E-03	9.67E+01	4.85E+01	1.19E+01
31 4.37	1.36E-01	8.20E+00	5.97E-03	9.70E+01	4.46E+01	1.26E+01
32 4.69	1.34E-01	9.32E+00	7.30E-03	9.72E+01	4.59E+01	1.30E+01
33 5.04	1.22E-01	9.80E+00	8.24E-03	9.74E+01	4.73E+01	1.46E+01
34 5.42	1.23E-01	1.13E+01	1.03E-02	9.77E+01	4.89E+01	1.59E+01
35 5.82	1.20E-01	1.28E+01	1.25E-02	9.79E+01	5.07E+01	1.75E+01
36 €.26	1.14E-01	1.41E+01	1.47E-02	9.81E+01	5.26E+01	1.93E+01
37 6.73	1.05E-01	1.49E+01	1.68E-02	9.83E+01	5.47E+01	2.15E+01
38 7.23	1.07E-01	1.76E+01	2.12E-02	9.85E+01	5.72E+01	2.42E+01
39 7.77	9.15E-02	1.74E+01	2.25E-02	9.87E+01	5.96E+01	2.70E+01
40 8.35	9.54E-02	2.09E+01	2.91E-02	9.89E+01	G.25E+01	3.07E+01
41 8.97	8.40E-02	2.13E+01	3.18E-02	9.90E+01	6.55E+01	3.47E+01
42 9.64	8.73E-02	2.55E+01	4.10E-02	9.92E+01	6.91E+01	3.99E+01
43 10.3	8.70E-02	2.94E+01	5.07E-02	9.93E+01	7.32E+01	4.64E+01
44 11.1	6.30E-C2	2.46E+01	4.56E-02	9.95E+01	7.67E+01	5.22E+01
45 11.9	7.17E-02	3.23E+01	6.44E-02	9.96E+01	8.12E+01	6.03E+01
46 12.8	7.29E-02	3.79E+01	8.13E-02	9.97E+01	8.65E+01	7.0GE+01
47 13.8	7.11E-02	4.27E+01	9.83E-02	9.99E+01	9.25E+01	8.31E+01
48 14.8	7.77E-02		1.33E-01	1.00E+02	1.00E+02	1.00E+02
> 15.4	0.30E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTALS:	5.35E+01	7.14E+02 7.	89E-01			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: IN5 13.017 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIC. MAIL	0. 1 .1	Errio.	ORRECT I		
		COVCE	NTRATIONS		CI:MI	ULATIVE %	
CHNI	. DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< · · ·	. 136		1.58E-02	1.18E-06			7.51E-01
ì	.504	1.83E-02	1.45E-02	1.23E-06	4.36E-01		1.53E-03
2	.512	3.06E-02	2.83E-02	2.55E-06	7.43E-01	4.125-02	3.16E-03
2 3	.581	4.93E-02	5.29E-02	5.13E-06	1.24E+00		6.42E-03
.1	.625	9.51E-02	1.17E-01	1.22E-05	2.20E+00		1.42E-02
4 5	.673	1.72E-01	2.45E-01	2.74E-05	3.92E+00		3.16E-02
ĸ	.723	3.07E-01	5.06E-01	6.10E-05	7.00E+00		7.0 LE-02
6 7	.777	4.74E-01	9.00E-01	1.17E-04	1.18E+01	1.32E+00	1.45E-01
g	.835	6.03E-01	1.32E+90	1.84E-04	1.78E+01	2.25E+00	2.62E-01
8 9	.837	6.64E-01	1.68E+00	2.52E-04	2.45E+01	3.43E+00	4.22E-01
10	.951	6.69E-01	1.96E+00	3.15E-04	3.12E+01	1.80E+00	6.22E-01
11	1.03	6.795-01	2.29E+00	3.97E-04	3.805+01	6.41E÷00	
12	1.11	6.65E-01	2.60E+00	4.82E-04	4.47E+01	8.23E+00	
13	1.19	6.542-01	2.95E+00	5.88E-01	5.12E+01	1.03E+01	1.55E+00
1 !	1.28	6.61E-01	3.46E+00	7.41E-04	5.79E+01	1.03E+01	2.03E+00
15	1.38	6.33E-01	3.80E+00	8.76E-04	6.42E+01	1.54E+01	2.58E+00
16	1.48	5.80E-01	4.02E÷00	9.95E-01	7.00E+01	1.82E+01	
17	1.59	5.38E-01	4.01E+00	1.15E-03	7.54E+01	2.12E+01	
13		1.11E-01	4.10E+00	1.17E-03	7.99E+01	2.41E+01	1.59E+00
	1.71		4.16E+00	1.17E-03	9.38E+01	2.70E+01	5.51E+00
13	1.31	3.392-01		1.25E-03	8.69E+01	2.97E+01	6.30E+00
20	1.98	3.07E-01	3.78E+00				7.07E+00
21	2.12	2.39E-01	3.40E+00	1.21E-03	3.93E+01	3.212+01	7.84E+00
5.3	2.28	1.93E-01	3.17E+00	1.21E-03	9.12E÷01	3.435+01	
23	2.45	1.44E-01	2.74E÷00	1.12E-03	9.275+01	3.52E+01	8.55E+00
21	2.64	1.08E-01	2.36E+00	1.04E-03	9.37E+01	3.795+01	9.21E+00
2.5	2.83	7.44E-02	1.88E+00	8.91E-04	9.45E+01	3.92E÷01	9.78E+00
25	3.05	5.16E-02	1.60E+00	8.12E-04	9.50E+01	1.03E÷01	1.03E+01
27	3.27		1.54E+00				1.08E+01
23	3.52	4.17E-02	1.63E+00	9.54E-04	9.59E+01	4.262+01	1.14E+01
29	3.78	3.15E-02	1.42E+00	8.95E-04	9.62E+01	4.35E÷01	1.20E+01
30	1.06	2.91E-02	1.51E+00	1.03E-03	9.65E+01	4.462+01	1.27E+01
31	4.37	2.85E-02	1.71E+00	1.25E-03	9.68E+01	4.58E+01	1.35E+01
32	1.69	2.97E-02	2.06E+00	1.61E-03	9.71E+01	4.73E+01	1.45E+01
33	5.04	2.79E-02	2.23E+00	1.88E-03	9.74E+01	4.88E+01	1.57E+01
34	5.42	2.37E-02	2.19E+00	1.98E-03	9.76E+01	5.04E+01	1.69E+01
35	5.82	2.58E-02	2.75E+00	2.68E-03	9.79E+01	5.23E+01	1.86E+01
36	6.26	2.40E-02	2.96E+00	3.09E-03	9.81E+01	5.44E+01	2.06E+01
37	6.73	1.98E-02	2.82E+00	3.16E-03	9.83E+01	5.64E+01	2.26E+01
38	7.23	1.92E-02	3.16E+00	3.81E-03	9.85E+01	5.86E+01	2.50E+01
39	7.77	1.89E-02	3.59E+00	4.65E-03	9.87E+01	6.11E+01	
40	8.35	1.38E-02	3.03E+00	4.21E-03	9.88E+01	6.32E+01	
41	8.97	1.41E-02	3.57E+00	5.34E-03	9.90E+01	6.57E+01	3.41E+01
42	9.64	1.53E-02	4.47E+00	7.19E-03	9.91E+01	6.89E+01	3.86E+01
43	10.3	1.23E-02	4.15E+00	7.17E-03	9.93E+01	7.18E+01	4.32E+01
44	11.1	1.26E-02	4.91E+00	9.12E-03	9.94E+01	7.52E+01	4.90E+01
45	11.9	1.44E-02	6.48E+00	1.29E-02	9.95E+01	7.98E+01	5.72E+01
46	12.8	1.68E-02	8.73E+00	1.87E-02	9.97E+01	8.59E+01	6.91E+01
47	13.8	1.20E-02	7.20E+00	1.66E-02	9.98E+01	9.10E+01	
48	14.8	1.86E-02	1.29E+01	3.19E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	ALS:	9.97E+00 1	.42E+02 1.	57E-01	. •		



FILE NAME: IN5 13.018 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCI	ENTRATIONS		CIIMI	ULATIVE %		
CHNI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS	
<b>CHAL</b>	.486	4.80E-02	3.00E-02	2.24E-06	2.71E-01	1.30E-02	9.25E-04	
ì	. 504	3.30E-02	2.64E-02	2.22E-06	4.57E-01	2.45E-02	1.84E-03	,~
2	.542	5.97E-02	5.51E-02	4.98E-06	7.93E-01	4.85E-02	3.90E-03	
3	.581	1.06E-01	1.12E-01	1.09E-05	1.39E+00	9.73E-02	8.40E-03	
4	.625	1.87E-01	2.30E-01	2.39E-05	2.44E+00	1.97E-01	1.83E-02	
5	.673	3.59E-01	5.11E-01	5.74E-05	4.47E+00	4.20E-01	4.20E-02	
6	.723	6.23E-01	1.02E+00	1.24E-04	7.98E+00	8.65E-01	9.31E-02	
7	.777	9.47E-01	1.80E+00	2.33E-04	1.33E+01	1.65E+00	1.89E-01	
8	.835	1.19E+00	2.61E+00	3.63E-04	2.00E+01	2.78E+00	3.39E-01	
9	.897	1.28E+00	3.25E+00	4.86E-04	2.72E+01	4.19E+00	5.40E-01	
10	.964	1.28E+00	3.76E+00	6.04E-04	3.45E+01	5.83E+00	7.90E-01	
11	1.03	1.26E+00	4.26E+00	7.37E-04	4.16E+01	7.68E+00	1.09E+00	
12	1.11	1.21E+00	4.72E+00	8.76E-04	4.84E+01	9.73E+00	1.4GE+00	
13	1.19	1.20E+00	5.39E+00	1.07E-03	5.52E+01	1.21E+01	1.90E+00	
1.4	1.28	1.13E+00	5.85E+00	1.26E-03	6.15E+01	1.46E+01	2.42E+00	
15	1.28	1.09E+00	6.55E+00	1.51E-03	6.77E+01	1.75E+01	3.04E+00	
16	1.48	9.37E-01	6.50E+00	1.61E-03	7.29E+01	2.03E+01	3.71E+00	
17	1.59	8.50E-01	6.80E+00	1.81E-03	7.77E+01	2.33E+01	4.46E+00	
18	1.71	7.58E-01	7.01E-00	2.00E-03	8.20E+01	2.63E+01	5.29E+00	
19	1.84	6.09E-01	6.50E+00	2.00E-03	8.54E+01	2.9;E+01	6.11E+00	
20	1.98	1.97E-01	6.13E+00	2.02E-03	8.82E+01	3.18E+01	0.55E+00	
21	2.12	3.89F-01	5.54E+00	1.97E-03	9.04E+01	3.42E+01	7.76E+06	
#: #)	2.28	(.07E-01	5.04E+00	1.92E-03	9.02E+01	3.64E+01	8.88E+00	
22	2.43	2.27E-01	4.32E+00	1.77E-03	9.34E+01	3.83E+01	9.28E+00	
2 ;	2.64	1.57E-01	3.43E+00	1.51E-03	9.43E+01	3.98E+01	5.51F+00	
25	2.83	1.23E-01	3.11E+00	1.47E-03	9.50E+01	4.11E+01	1.05F+01	
26	3.05	9.06E-02	2.65E+00	1.35E-03	9.55E+01	4.2(E+01	1.11E+01	
27	3.27	7.56E-02	2.55E+00	1.39E-03	9.60E+01	4.34E+01	1.17E-01	
28	3.52	€.27E-02	2.44E+00	1.44E-03	9.03E+01	4.45E+01	1.22E+01	
29	3.78	5.01E-02	2.26E+00	1.42E-03	9.66E+01	4.54E+01	1.28E+01	
30	4.06	4.92E-02	2.56E÷00	1.73E-03	9.69E+01	4.65E+01	1.35E+01	
31	4.37	1.68E-02	2.81E+00	2.05E-03	9.71E+01	4.78E+01	1.44E+01	
32	4.69	3.78E-02	2.62E+00	2.05E-03	9.74E+01	4.85E+01	1.52E+01	
33	5.04	4.68E-02	3.75E+00	3.15E-03	9.76E+01	5.05E+01	1.65E+01	
34	5.42	3.96E-02	3.66E+00	3.31E-03	9.78E+01	5.21E+0.1	1.79E+01	
35	5.82	3.72E-02	3.97E+00	3.86E-03	9.81E+01	5.39E+01	1.75E+01 1.95E+01	
36	6.26	3.54E-02	4.36E+00	4.56E-03	9.82E+01	5.58E+01	2.14E+01	
37	6.73	3.45E-02	4.91E+00	5.51E-03	9.84E+01	5.79E+01	2.37E+01	
38	7.23	3.43E-02	6.26E+00	7.55E-03	9.87E+01	6.06E+01	2.68E+01	
39	7.77	2.91E-02	5.52E+00	7.16E-03	9.88E+01	6.30E+01	2.97E+01	
40	8.35	2.82E-02	6.18E+00	8.61E-03	9.90E+01	6.57E+01	3.33E+01	
41	8.97	2.94E-02	7.44E+00	1.11E-02	9.91E+01	6.89E+01	3.79E+01	
42		2.10E-02						
43	$9.64 \\ 10.3$	2.10E-02 2.22E-02	6.14E+00 7.49E+00	9.87E-03		7.16E+01	4.20E+01	
		2.22E-02 2.07E-02	8.07E+00	1.29E-02	9.94E+01	7.49E+01	4.73E+01	
44	11.1			1.50E-02	9.95E+01	7.84E+01	5.35E+01	
45 46	11.9	1.74E-02	7.83E+00	1.56E-02	9.96E+01	8.18E+01	6.00E+01	
46	12.8	2.64E-02	1.37E+01	2.94E-02	9.98E+01	8.78E+01	7.22E+01	
47	13.8	2.19E-02	1.31E+01	3.03E-02	9.99E+01	9.35E+01	8.47E+01	
48	14.8	2.16E-02	1.50E+01	3.71E-02	1.00E+02	1.00E+02	1.00E+02	
> TOT 4	15.4	0.30E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02	
TOTA	ro:	1.112+01 2	.30E+02 2.	42E-01				

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: IN5 13.019 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		CONC	ENTRATIONS		CUMI	JLATIVE %	
CHNI.	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	3.90E-02			2.16E-01		7.04E-04
ì	.504	2.58E-02		1.74E-06			1.38E-03
2	.542	5.37E-02	4.96E-02	4.48E-06		3.86E-02	3.12E-03
3	.581	9.45E-02	1.00E-01	9.74E-06	1.18E+00	7.95E-02	6.90E-03
4	.625	1.69E-01	2.08E-01	2.16E-05		1.64E-01	1.53E-02
5	.673	3.36E-01	4.78E-01	5.36E-05		3.59E-01	3.61E-02
6	.723	5.80E-01	9.55E-01	1.15E-04		7.49E-01	8.09E-02
7	.777	8.98E-01	1.71E+00	2.21E-04	1.22E+01	1.44E+00	1.67E-01
		1.10E+00	2.42E+00	3.37E-04	1.83E+01	2.43E+00	2.98E-01
8	.835			4.82E-04	2.53E+01	3.75E+00	4.85E-01
9	.897	1.27E+00	3.22E+00			5.30E+00	7.23E-01
10	.964	1.30E+00	3.81E+00	6.12E-04	3.25E+01		
11	1.03	1.24E+00	4.17E+00	7.21E-04	3.93E+01	7.00E+00	1.00E+00
12	1.11	1.25E+00		9.08E-04	4.63E+01		1.36E+00
13	1.19	1.18E+00		1.06E-03			1.77E+00
14	1.28	1.19E+00	6.19E+00	1.33E-03		1.37E+01	2.28E+00
15	1.38	1.09E+00	6.53E+00	1.51E-03	6.54E+01	1.64E+01	2.87E+00
16	1.48	1.01E+00	7.02E+00	1.74E-03	7.10E+01	1.92E+01	3.54E+00
17	1.59	9.40E-01	7.52E+00			2.23E+01	4.32E+00
18	1.71	7.96E-01	7.36E+00	2.11E-03		2.53E+01	5.14E+00
19	1.84	6.69E-01	7.14E+00	2.19E-03		2.82E+01	5.99E+00
20	1.98	5.46F-01	6.73E+00		8.73E+01		6.8GE+00
21	2.12	1.48E-01	6.09E+00				7.74E+00
22	2.28	3.10E-01	5.09E+00				8.46E+00
23	2.45	2.44E-01	4.63E+00	1.9(E-03	9.29E+01	3.75E+01	9.23E+00
2;	2.64	1.87E-01	1.10E-00	1.80E-03		8.82E+01	9.98E+00
25	2.83	1.41E-01	3.58E+00	1.69E-03	9.47E+01	4.07E+01	1.06E+0:
26	3.05	1.09E-01	3.18E+00	1.62E-03	9.53E+01	4.20E+01	1.12E+01
27	3.27	8.58E-02	2.90E+00	1.58E-03	9.58E+01	4.31E+01	1.18E+01
28	3.52	6.36E-02	2.48E+00	1.46E-03	9.01E+01	4.41E+01	1.24E+01
20	3.78	5.76E-02	2.59E+00	1.64E-03	9.64E+01	4.52E+01	1.30E+01
30	4.06	4.98E-02	2.59E+00	1.76E-03	9.67E+01	4.63E+01	1.37E+01
31	4.37	5.10E-02	3.06E+00	2.23E-03	9.70E+01	4.75E+01	1.46E+01
2 <b>2</b>	4.69	4.71E-02	3.27E+00	2.56E-03	9.72E-01	4.88E+01	1.56E+01
33	5.04	4.29E-02	3.43E+00	2.89E-03	9.75E+01	5.02E+01	1.67E+01
34	5.42	3.93E-02	3.63E+00	3.28E-03	9.77E+01	5.17E+01	1.80E+01
35	5.82	4.05E-02	4.32E+00	4.20E-03	9.79E+01	5.35E+01	1.96E+01
€ 3	6.26	3.90E-02	4.81E+00	5.02E-03	9.81E+01	5.55E+01	2.16E+01
37	6.73	3.69E-02	5.25E+00	5.89E-03	9.83E+01	5.76E+01	2.38E+01
38	7.23	3.21E-02	5.28E+00	6.36E-03	9.85E+01	5.97E+01	2.63E+01
39	7.77	3.06E-02	5.81E+00	7.53E-03	9.87E+01	6.21E+01	2.92E+01
40	8.35	3.36E-02	7.37E+00	1.03E-02	9.89E+01	6.51E+01	3.32E+01
41	8.97	2.97E-02	7.52E+00	1.13E-02	9.90E+01	6.82E+01	3.76E+01
42	9.64	3.72E-02	1.09E+01	1.75E-02	9.92E+01	7.26E+01	4.44E+01
43	10.3	2.40E-02	8.10E+00	1.40E-02	9.94E+01		4.98E+01
44	11.1	2.01E-02	7.84E+00	1.45E-02	9.95E+01		5.55E+01
45	11.9	2.55E-02	1.15E÷01	2.29E-02	9.96E+01	8.38E+01	6.44E+01
46	12.8	2.28E-02	1.19E+01	2.54E-02	9.98E+01	8.87E+01	7.43E+01
47	13.8	2.52E-02	1.51E+01	3.49E-02	9.99E+01	9.48E+01	8.78E+01
48	14.8	1.83E-02	1.27E+01	3.14E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA			2.45E+02 2.				
1013		1.012/01 4		- · - · · ·			

FILE NAME: IN5 14.000 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

•							
		CONCI	ENTRATIONS		CUMI	ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	5.62E-01	3.51E-01	2.62E-05	6.60E-01	2.78E-02	1.90E-03
, 1	.504	3.76E-01	3.01E-01	2.53E-05	1.10E+00		3.74E-03
2	.542	6.56E-01	6.06E-01	5.48E-05		9.97E-02	7.71E-03
3	.581	1.08E+00	1.15E+00	1.12E-04	3.14E+00	1.91E-01	1.58E-02
4	.625	1.76E+00	2.15E+00	2.24E-04	5.20E+00	3.62E-01	3.21E-02
5	.673	2.79E+00	3.97E+00		8.48E+00	6.77E-01	6.44E-02
6	.723	4.05E+00	6.66E+00	8.03E-04	1.32E+01	1.20E+00	1.23E-01
6 7	.777	5.35E+00	1.02E+01	1.32E-03	1.95E+01	2.01E+00	2.18E-01
		6.10E+00	1.34E+01	1.86E-03	2.67E+01	3.07E+00	
8 9	.835						3.53E-01
	.897	6.16E+00	1.56E+01	2.33E-03	3.39E+01	4.31E+00	5.23E-01
10	.964	5.75E+00	1.68E+01	2.71E-03	4.06E+01	5.64E+00	7.19E-01
11	1.03	5.51E+00	1.86E+01	3.22E-03	4.71E+01	7.12E+00	9.53E-01
12	1.11	5.12E+00	2.00E+01	3.71E-03	5.31E+01	8.70E+00	1.22E+00
13	1.19	4.69E+00	2.11E+01	4.21E-03	5.86E+01	1.04E+01	1.53E+00
14	1.28	4.47E+00	2.33E+01	4.99E-03	6.39E+01	1.22E-01	1.89E+00
15	1.38	3.93E+00	2.36E÷01	5.44E-03	6.85E+01	1.41E+01	2.28E+00
16	1.48	3.43E+00	2.38E+01	5.89E-03	7.25E+01	1.60E+01	2.71E+00
17	1.59	2.58E÷00	2.38E-01	6.34E-03	7.60E+01	1.79E+01	3.17E+00
13	1.71	2.58E+00	2.89E+01	6.83E-03	7.90E+01	1.98E+01	3.67E+00
. 6	1.84	2.2EE+00	2.41E+01	7.42E-03	8.17E+01	2.17E+01	4.21E+00
10	1.88	2.03E+00	2.50E+01	8.25E-03	8.41E+C1	2.37E-01	4.80E+00
2.1	2::2	1.82E+00	2.59E+01	9.20E-03	8.62E+01	2.87E+01	5.47E+00
2.2	2.18	1.63E+C0	2.69E-01	1.00E-02	8.81E-01	2.78E+01	6.22E+00
23	2.45	1.42E+00	2.69E+01	1.10E-02	S.98E+01	3.00E+01	7.01E+00
14	2.64	1.21E+00	2.65E+01	1.17E-02	9.12E+01	3.21E-01	7.86E-00
2.5	2.83	1.03E-00	2.60E+01	1.23E-02	9.24E+01	8.41E+01	8.75E+00
2.9	3.35	E.47E-01	2.48E+01	1.26E-02	9.34E+01	3.61E+01	9.67E+00
27	3.27	7.08E-01	2.39E+01	1.31E-02	9.42E+01	3.80E+01	1.08E+01
28	3.52	6.06E-01	2.36E+01	1.39E-02	9.49E+01	3.99E-01	1.18E+01
<u> </u>	3.78	5.00E-01	2.25E+01	1.42E-02	9.55E-01	4.18E-01	1.27E+01
30	4.06	4.13E-01	2.15E-01	1.4EE-02	9.60E-01	4.03E-01	1.37E+01
31	4.37	3.60E-01	2.16E+01	1.58E-02	9.64E+01	4.51E÷01	1.49E+01
32	4.69	3.01E-01	2.09E+01	1.63E-02	9.68E+01	4.67E+01	1.00E+01
33	5.04	2.69E-01	2.15E+01	1.81E-02	9.71E+01	4.84E+01	1.74E+01
34	5.42	2.36E-01	2.18E+01	1.97E-02	9.74E+01	5.02E+01	1.88E+01
35	5.82	2.26E-01	2.42E+01	2.35E-02	9.76E+01	5.21E+01	2.05E±01
36	6.26	2.34E-01	2.89E÷01	3.02E-02	9.79E+01	5.44E+01	2.27E+01
37	6.73	1.88E-01	2.68E+01	3.01E-02	9.81E+01	5.65E+01	2.49E+01
38	7.23	1.86E-01	3.06E+01	3.69E-02	9.84E+01	5.89E+01	2.75E+01
3 9	7.77	1.66E-01	3.16E+01	4.10E-02	9.86E+01	6.14E+01	3.05E+01
40	8.35	1.81E-01	3.97E+01	5.52E-02	9.88E+01	6.46E+01	3.45E+01
41	8.97	1.51E-01	4.08E+01	6.10E-02	9.90E+01	6.78E+01	3.89E+01
42	9.64	1.52E-01	4.45E+01	7.15E-02	9.91E+01	7.13E+01	
43	10.3	1.49E-01	5.03E+01	8.70E-02	9.93E+01	7.53E+01	5.04E-01
4.4	11.1	1.30E-01	5.06E+01	9.40E-02	9.95E+01	7.93E+01	5.73E+01
45	11.9	1.21E-01	5.47E+01	1.09E-01	9.96E+01	8.37E+01	6.52E+01
46	12.8	1.07E-01	5.57E+01	1.19E-01	9.97E+01	8.81E+01	7.38E+01
47	13.8	1.19E-01	7.13E÷01	1.64E-01	9.99E+01	9.37E+01	8.58E+01
48	14.8	1.13E-01	7.84E÷01	1.94E-01	1.00E+02	9.99E+01	9.99E÷01
>	15.4	9.00E-04	7.20E-01	1.92E-03	1.00E+02	1.00E+02	1.00E+02
TOTAL			.26E+03 1.	· <del>-</del>	2.002.02		
		J. J. L. J.					

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: IN5 14.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIL. KAII	10: 1:1	EFFIC.	CORRECTOR	J1	
		CONCI	ENTRATIONS		CUM	ULATIVE %	
CHAI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< CHNL	DIA .486	9.04E-01			7.14E-01		2.17E-03
ì	.504	6.36E-01		4.28E-05	1.22E+00		4.36E-03
2	.542	1.10E+00		9.21E-05	2.09E+00		9.08E-03
3	.542	1.83E+00		1.88E-04	3.53E+00		1.87E-02
		2.96E+00		3.78E-04	5.87E+00	4.43E-01	3.81E-02
4 5	.625	4.74E+00		7.57E-04	9.61E+00	8.32E-01	7.69E-02
5 6	.673	6.87E+00		1.36E-03	1.50E+01	1.48E+00	1.47E-01
6 7	.723	9.12E+00		2.24E-03	2.22E+01	2.48E+00	2.62E-01
,	.777	9.12E+00 9.98E+00	2.19E+01	3.05E-03	3.01E+01	3.75E+00	4.18E-01
8 9	.835	9.91E+00	2.51E+01	3.76E-03	3.80E+01	5.20E+00	6.11E-01
	.897	9.12E+00		4.29E-03	4.52E+01	6.74E+00	8.31E-01
10	.964	8.57E+00		5.00E-03	5.19E+01	8.41E+00	1.09E+00
11	1.03	7.74E+00		5.61E-03	5.80E+01	1.02E+01	1.03E+00 1.37E+00
12	$1.11 \\ 1.19$	7.74E+00	3.16E+01	6.31E-03	6.36E+01	1.02E+01 1.20E+01	1.70E+00
13		6.37E+00		7.10E-03	6.86E+01	1.39E+01	2.06E+00
14 15	1.28	5.61E+00		7.77E-03			2.46E+00
	1.38	4.84E+00	3.35E+01	8.30E-03		1.78E+01	2.89E+00
16 17	1.48	4.16E+00	3.33E+01	8.86E-03	8.02E+01	1.97E+01	3.34E+00
	1.59			8.95E-03		2.15E+01	3.80E+00
18	1.71	3.29E+00		9.38E-03			4.28E+00
19	1.84	2.86E+00		1.00E-02		2.33E+01 2.50E+01	4.79E+00
20	1.98	2.46E+00		1.00E-02		2.88E+01	5.84E+00
21	2.12	2.12E+00	3.02E+01			2.86E-01	E.80E+00
55	2.28	1.91E+00	3.14E+01	1.20E-02	9.02E-01 9.15E-01		6.61E+00
23	2.48	1.64E+00		1.28E-02		3.04E+01 3.22E+01	7.00E+00
24	2.64	1.40E-00	0.07E+01	1.35E-02			
15	2.83	1.17E+00	2.95E+01	1.40E-02	9.05E-01	3.39E÷01 3.55E÷01	8.02E÷00 8.77E÷00
26	3.05	9.85E-01	1.88E÷01	1.46E-02	9.43E+01		
17	3.27	8.33E-01	2.81E+01	1.54E-02	9.50E+01		9.56E+00
18	3.52	7.02E-01	2.74E+01	1.61E-02	9.55E+01		1.04E+01
26	3.78	5.91E-01	2.86E+01	1.68E-02	9.60E+01		1.12E+01
30	4.06	4.86E-01	2.53E+01	1.71E-02			1.21E+01
31	4.37	4.09E-01	2.46E+01	1.79E-02		4.31E+01	1.30E+01
32	4.69	3.71E-01	2.58E+01	2.02E-02	9.7CE+01		1.41E+01
33	5.04	3.46E-01	2.77E+01	2.33E-02	9.73E+01		1.53E+01
34	5.42	3.19E-01	2.95E+01	2.67E-02			1.66E+01
35	5.82	3.12E-01	3.33E÷01	3.24E-02	9.78E+01		1.83E+01
36	6.26	2.83E-01	3.49E+01	3.65E-02	9.80E+01	5.19E+01	2.02E+01
37	6.73	2.70E-01	3.84E+01	4.31E-02			2.24E+01
38	7.23	2.60E-01	4.27E+01	5.15E-02			2.50E+01
39	7.77	2.41E-01	4.58E+01	5.94E-02			2.81E+01
40	8.35	2.45E-01	5.37E+01	7.48E-02	9.88E+01		3.19E+01
41	8.97	2.25E-01	5.70E+01	8.52E-02			3.63E+01
12	9.64	1.98E-01	5.80E+01	9.32E-02			4.10E+01
43	10.3	2.02E-01	6.83E+01	1.18E-01	9.93E+01		4.71E+01
44	11.1	1.79E-01	6.99E+01	1.30E-01	9.94E+01	7.69E+01	5.37E+01
45	11.9	1.77E-01	7.97E+01	1.59E-01	9.96E+01		6.19E+01
46	12.8	1.75E-01	9.11E+01	1.95E-01	9.97E+01		7.19E+01
47	13.8	1.77E-01	1.06E+02	2.45E-01	9.99E+01		8.45E+01
48	14.8	1.77E-01	1.22E+02	3.03E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	1.27E+02	1.73E+03 1.	95E+00			

FILE NAME: IN5 14.002 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCE	NTE ATTONE		CLM	'1 \TT\'F &	
CB7.1	DIA	NUMBER	INTRATIONS SURFACE	MASS	NUMBER	CLATIVE % SURFACE	MASS
( ( )	.485		2.76E-01	2.06E-05		2.32E-02	1.58E-03
ì	.504	3.06E-01	2.45E-01	2.06E-05	9.27E-01		3.16E-03
2		5.42E-01	5.01E-01				
3	.542	8.99E-01		4.52E-05	1.60E+00		6.62E-03
	.581		9.56E-01	9.26E-05	2.71E+00		1.37E-02
<del>1</del> 5	.625	1.48E+00	1.81E+0C	1.89E-04	4.54E+00		2.82E-02
5	.673	2.46E+00	3.50E+00	3.92E-04	7.59E+00		5.82E-02
6 7	. 723	3.53E+00	5.81E+00	7.00E-04	1.20E+01	1.10E+00	1.12E-01
	.777	4.82E+00	9.15E+00	1.19E-03	1.79E+01	1.86E+00	2.03E-01
8	.835	5.54E+00	1.21E+01	1.69E-03	2.48E+01	2.88E+00	3.32E-01
ô	.997	5.67E+00	1.44E+01	2.15E-03	3.18E+01	1.08E+00	4.97E-01
10	.9€4	5.30E+00	1.55E+01	2.49E-C3	3.84E+01	5.38E+00	6.88E-01
11	1.03	5.19E+00	1.75E÷01	3.03E-03	4.48E+01	5.85E+00	9.20E-01
12	1.11	4.9CE+00	1.91E+01	3.55E-03	5.09E+01	8.45E+00	1.19E+00
13	1.19	4.62E+00	2.08E+01	4.15E-03	5.66E+01	1.02E+01	1.51E+00
14	1.28	4.40E+00	2.29E+01	4.91E-03	6.21E-01	1.21E+01	1.89E+00
15	1.33	3.95E+0C	2.37E+01	5.46E-03	6.69E+01	1.41E+01	2.30E+00
16	1.48	3.52E+00	2.44E-01	6.C5E-03	7.13E-01	1.61E+01	2.77E+00
17	1.59	3.08E+00	2.47E+01	6.57E-03	7.51E+01	1.82E+01	3.27E+00
; c	1.71	2.68E-00	2.48E-01	7.09E-03	7.85E+01	2.03E+01	3.81E+00
19	: · ē i	2.35E+00	2.51E-01	7.71E-03	8.14E-01	2.245-01	4.40E+00
29	1.88	2.06E-00		8.37E-03	8.39E-01	1.45E+01	
21	2.12	1.74E-00	2.475-01	8.77E-03	3.61E+01	2.66E+01	5.72E+00
	2.28	1.63E+00	2.68E-01	1.01E-01	8.81E+01	2.88E+01	6.50E+00
• ··		1.415+00	1.681-01	1.10E-02	8.98E÷01	3.11E+01	7.34E+00
24	2.6:	1.22E+00		1.17E-02	9.13E+01	3.33E+01	
2:	2.33	1.00E+00	2.54E+01	1.20E-02	9.26E+01	3.54E+01	
26	3.08	8.08E-01	2.36E+01	1.20E-02	9.36E+01	3.74E+01	1.01E-01
<b>-</b> 1	3.27	6.79E-01		1.25E-02	9.44E+01		
28	3.52	5.92E-01	2.31E+01	1.35E-02	9.52E+01	4.13E+01	1.21E+01
29	3.78	4.83E-01 3.76E-01	2.18E+01	1.37E-02	9.58E+01	4.31E+01	1.31E+01
30 31	4.06	3.76E-01	1.95E÷01	1.32E-02	9.62E+01	4.47E+01	1.41E+01
32	4.37	2.74E-01	1.95E+01 1.90E+01	1.42E-02 1.49E-02	9.65E+01 9.70E+01	4.64E+01 4.80E+01	1.52E+01 1.64E+01
33	5.04	2.40E-01	1.90E+01	1.62E-02	9.73E+01	4.96E+01	1.76E+01
34	5.42	2.14E-01	1.98E+01	1.79E-02	9.75E+01	5.12E+01	1.90E+01
35	5.82	2.08E-01	2.22E+01	2.16E-02	9.78E+01	5.31E+01	2.06E+01
36	6.26	1.80E-01	2.22E+01	2.32E-02	9.80E+01	5.49E+01	2.24E+01
37	6.73	1.75E-01	2.49E+01	2.80E-02	9.82E+01	5.70E+01	2.46E+01
38	7.23	1.55E-01	2.55E+01	3.08E-02	9.84E+01	5.92E+01	2.69E+01
39	7.77	1.46E-01	2.77E+01	3.59E-02	9.86E+01	6.15E+01	2.97E+01
40	8.35	1.53E-01	3.35E+01	4.66E-02	9.88E+01	6.43E+01	3.32E+01
41	8.97	1.36E-01	3.46E+01	5.17E-02	9.90E+01	6.72E+01	3.72E+01
42	9.64	1.33E-01	3.89E+01	6.26E-02	9.91E+01	7.05E+01	4.20E+01
43	10.3	1.19E-01	4.02E+01	6.95E-02	9.93E+01	7.38E+01	4.73E+01
44	11.1	1.09E-01	4.27E+01	7.93E-02	9.94E+01	7.74E+01	5.34E+01
45	11.9	1.26E-01	5.67E+01	1.13E-01	9.96E+01	8.21E+01	6.21E+01
46	12.8	1.13E-01	5.86E+01	1.26E-01	9.97E+01	8.71E+01	7.17E+01
47	13.8	1.24E-01	7.42E+01	1.71E-01	9.99E+01	9.33E+01	8.48E+01
48	14.8	1.16E-01	8.03E+01	1.99E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	8.07E+01 1	.19E+03 1.	31E+00			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: IN5 14.003 C1-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

	DIET RATIO: 1 .1	Ellie. Coursell.	D1	
	CONCENTRATIONS	CI.,	SULATIVE %	
CHNL DIA	NUMBER SURFACE	MASS NUMBER	SURFACE	MASS
< .486	6.61E-01 4.13E-01	3.09E-05 5.16E-0		1.44E-03
1 .504	4.59E-01 3.68E-01	3.09E-05 8.74E-0		2.89E-03
2 .542 3 .581	8.20E-01 7.57E-01	6.84E-05 1.51E+00		6.09E-03
	1.33E+00 1.42E+00	1.37E-04 2.56E+00		1.25E-02
4 .625	2.21E+00 2.72E+00	2.83E-04 4.28E+00		2.58E-02
5 .673	3.63E+00 5.16E+00	5.79E-04 7.11E+00		5.28E-02
6 .723 7 .777	5.28E+00 8.68E+00	1.05E-03 1.12E+0		1.02E-01
7 .777	7.24E+00 1.38E+01	1.78E-03 1.69E+0		1.85E-01
8 .835	8.38E+0.0 1.84E+01	2.56E-03 2.34E+0		3.05E-01
9 .897	8.62E+00 2.18E+01	3.27E-03 3.02E+0		4.58E-01
10 .964	8.22E+00 2.41E+01	3.87E-03 3.66E+01	1.94E+00	6.39E-01
11 1.03	7.97E+00 2.69E+01	4.65E-03 4.28E+01	6.31E+00	8.56E-01
12 1.11	7.58E+00 2.96E+01	5.49E-03 4.87E+0	7.80E+00	1.11E+00
13 1.19	7.22E+00 3.25E+01	6.48E-03 5.43E+0	9.45E+00	1.42E+00
14 1.28	7.00E+00 3.64E+01	7.81E-03 5.98E+0	1.13E+01	1.78E+00
15 1.38	6.42E+00 3.86E+01	8.89E-03 6.48E+0	1.33E+01	2.20E+00
16 1.48	5.76E+00 3.99E+C1	9.89E-03 6.93E+01		2.66E+00
17 1.59	5.11E+00 4.09E+01	1.09E-02 7.33E+0		3.17E+00
13 1.71	4.45E+00 4.12E+01	1.18E-02 7.68E-0		3.72E-00
19 1.84	3.95E+00 4.22E+01	1.30E-02 7.99E+0		4.23E+CC
20 1.98	3.49E+00 4.30E+C1	1.42E-02 8.26E+0		1.99E+C3
21 2.12	3.10E+00 4.42E+01	1.57E-02 8.50E+0		5.72E+00
22 2.28	2.77E+00 4.56E-01	1.74E-02 8.72E+C		6.54E+00
20 2.45	2.42E+00 4.59E+01	1.83E-02 8.91E+0		7.42E+05
24 2.64	2.03E+0C 4.45E+01	1.96E-02 9.07E+C		8.33E-C)
25 2.83	1.70E+00 4.31E-01	2.04E-02 9.20E+0		9.19E+00
26 3.05				1.03E+01
27 3.27	1.42E+00 4.15E+01			1.13E+01
	1.21E+00 4.10E+01 9.93E-01 3.87E+01	2.24E-02 9.40E+0 2.27E-02 9.48E+0		1.13E+01 1.24E+01
28 3.52				1.35E+01
29 3.78	8.14E-01 3.67E+01		· •	
30 4.05	6.85E-01 3.56E+01	2.41E-02 9.60E+0		1.46E+01
31 4.37	5.44E-01 3.27E+01	2.38E-02 9.64E+0		1.57E+01
32 4.69	4.95E-C1 3.43E+O1	2.69E-02 9.68E+0		1.70E+01
33 5.04	4.11E-01 3.29E+01	2.77E-02 9.71E+0:		1.83E+01
34 5.42	3.70E-01 3.42E-01	3.09E-02 9.74E+0		1.97E+01
35 5.82	3.60E-01 3.85E+01	3.74E-02 9.77E+0		2.15E+01
36 6.26	3.10E-01 3.82E+01	3.99E-02 9.79E+0		2.33E+01
37 6.73	2.83E-01 4.03E+01	4.52E-02 9.82E+0		2.54E+01
38 7.23	2.57E-01 4.22E+01	5.09E-02 9.84E+0		2.78E+01
39 7.77	2.49E-01 4.73E+01	6.13E-02 $9.85E+0$		3.07E+01
40 8.35	2.58E-01 5.66E+01	7.88E-02 9.87E+0		3.44E+01
41 8.97	2.43E-01 6.15E+01	9.20E-02 9.89E+0		3.87E+01
42 9.64	2.17E-01 6.33E+01	1.02E-01 9.91E+0		4.35E+01
43 10.3	2.01E-01 6.78E+01	1.17E-01 9.93E+0		4.89E+01
44 11.1	1.89E-01 7.36E+01	1.37E-01 9.94E+0		5.53E+01
45 11.9	1.94E-01 8.74E+01	1.74E-01 9.96E+0		6.35E+01
46 12.8	2.01E-01 1.05E+02	2.24E-01 9.97E+0		7.40E+01
47 13.8	1.87E-01 1.12E+02	2.59E-01 9.99E+0		8.61E+01
48 14.8	1.73E-01 1.20E+02	2.98E-01 1.00E+0		1.00E+02
> 15.4	0.00E+00 0.00E+00	0.00E+00 1.00E+0	2 1.00E+02	1.00E+02
TOTALS:	1.28E+02 1.97E+03 2.	14E+00		

FILE NAME: INS 14.004 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		DID: KAI		EIFIC.	CORRECT I	01	
		COVC	ENTRATIONS		CUM	ULATIVE %	
CHNI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	2.50E-01				2.40E-02	
ì	.504	1.72E-01					1.65E-03
2							3.29E-03
	.542	3.04E-01	2.81E-01			8.85E-02	6.89E-03
3	.581	5.14E-01	5.46E-01				1.44E-02
4	.625	8.32E-01			4.81E+00		2.94E-02
5	.673	1.36E+00	1.93E+00		7.97E+00	6.28E-01	6.02E-02
6 7	.723	1.95E+00	3.21E+00		1.25E+01	1.12E+00	1.15E-01
	.777	2.55E+00	4.84E+00	6.27E-04	1.84E+01	1.87E+00	2.04E-01
8	.835	2.89E+00	6.34E+00	8.83E-04	2.52E+01	2.84E+00	3.29E-01
9	.897	2.96E+00	7.50E+00	1.12E-03	3.20E+01	4.00E+00	4.88E-01
10	.964	2.78E+00	8.13E+00	1.31E-03	3.85E+01	5.25E+00	6.73E-01
11	1.03	2.69E+00	9.08E+00	1.57E-03	4.47E+01	6.65E+00	8.95E-01
12	1.11	2.47E+00	9.63E+00	1.79E-03	5.05E+01	8.13E+00	1.15E+00
13	1.19	2.36E+00	1.06E+01		5.60E+01	9.77E+00	1.45E+00
14	1.28	2.29E+00	1.19E+01	2.55E-03	6.13E+01	1.16E+01	1.81E+00
15	1.38	2.10E+00	1.26E+01	2.90E-03	6.61E+01	1.35E+01	2.22E+00
16	1.48	1.89E+00	1.31E+01		7.05E÷01		2.68E+00
17	1.59	1.59E+00	1.35E+01		7.44E+01	1.76E+01	3.19F+00
18	1.71	1.46E+00	1.35E+01	3.86E-03	7.78E+01		
19	1.84	1.27E÷00	1.35E+01			1.97E+01	3.73E÷00
20				4.16E-03	8.08E+01	2.18E+01	4.80E-00
	1.98	1.10E+00	1.36E÷01	4.49E-03	8.33E÷01	2.89E+01	4.90E-00
21	2.12	9.71E-01	1.38E÷01	4.91E-03	8.56E-01	2.60E-01	8.68E÷06
22	2.23	8.45E-01	:.29E+(1	5.28E-03	S.70E-01	1.82E+01	6.4(E+00
23	2.45	7.52E-01	1.43E+01	5.85E-(3	8.93E+01	3.04E+01	7.23E+00
24	2.64	6.60E-01	:.45E-(;	6.37E-63	9.08E+01	3.10E+01	8.18E-00
15	2.83	5.88E-01	1.36E+01	8.44E-(3	9.21E+01	3.47E+01	E. C. E. C.
26	3.(5	4.80E-01	1.35E+(1	6.86E-03	9.32E+01	3.68E+01	1.00E+(1
27	2.27	3.99E-01	1.35E÷01	7.35E-03	9.41E+01	3.68E+01	1.11E+01
28	8.52	3.34E-01	1.30E+01	7.65E-03	9.48E-01	4.0SE+01	1.21E+01
5.5	3.78	2.87E-01	1.29E+01	8.15E-03	9.55E+01	4.28E+01	1.331-01
30	4.06	2.18E-01	1.12E+01	7.57E-03	9.6(E+01	4.46E+01	1.44E+01
31	4.37	1.90E-01	1.14E+01	8.33E-03	9.65E+01	4.63E+01	1.58E+01
32	4.69	1.54E-01	1.07E+01	8.37E-03	9.68E+01	4.80E+01	1.67E+01
33	5.04	1.40E-01	1.12E+01	9.42E-03	9.72E÷01	4.97E÷01	1.81E+01
34	5.42	1.33E-01	1.23E+01	1.11E-02	9.75E÷01	5.16E+01	1.96E+01
35	5.82	1.03E-01	1.10E+01	1.07E-02	9.77E+01	5.33E÷01	2.11E+01
36	6.26	1.06E-01	1.30E+01	1.36E-02	9.80E+01	5.53E+01	2.31E-(1
37	6.73	9.93E-02	1.4jE+01	1.59E-02	9.82E+01	5.74E-01	2.53E+01
38	7.23	8.91E-02	1.46E+01	1.77E-02	9.84E+01	5.97E÷01	2.78E+01
39	7.77	7.59E-02	1.44E+01	1.87E-02			
40	8.35	8.40E-02			9.86E+01	6.19E÷01	3.05E÷01
41	8.97		1.84E+01	2.56E-02	9.88E+01	6.48E+01	3.41E+01
		8.46E-02	2.14E+01	3.20E-02	9.90E+01	6.81E+01	3.86E+01
42	9.64	7.59E-02	2.22E+01	3.57E-02	9.91E+01	7.15E÷01	4.37E+01
43	10.3	6.48E-02	2.19E+01	3.78E-02	9.93E+01	7.48E+01'	4.90E-01
44	11.1	5.58E-02	2.18E+01	4.04E-02	9.94E+01	7.82E+01	5.47E÷01
45	11.9	6.78E-02	3.05E+01	6.09E-02	9.96E+01	8.29E+01	6.34E+01
46	12.8	5.46E-02	2.84E+01	6.09E-02	9.97E+01	8.73E+01	7.20E+01
47	13.8	5.60E-02	3.96E+01	9.13E-02	9.99E+01	9.34E+01	8.49E+01
48	14.8	6.21E-02	4.31E+01	1.07E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	4.30E+01 6	.49E+02 7.	06E-01			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: INS 14.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		CONC	ENTRATIONS		CUMI	CLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	6.62E-01	4.14E-01	3.09E-05	7.25E-01		2.06E-03
1	.504	4.70E-01	3.76E-01	3.17E-05	1.24E+00		4.17E-03
2	.542	8.20E-C1	7.57E-01	6.84E-05	2.14E+00		8.72E-03
3	.531	1.31E+00	1.39E+00	1.35E-04	3.57E+00		1.77E-02
1	.625	2.11E+00		2.69E-04	5.88E+00		3.56E-02
5	.673	3.43E+00	4.88E+00	5.47E-04	9.63E+00		7.20E-02
6	.723	5.05E+00	8.31E+00	1.00E-03	1.52E+01	1.44E+00	1.39E-01
7	.777	6.69E+00	1.27E+01	1.65E-03	2.25E+01	2.41E+00	2.48E-01
8	.835	7.30E+00	1.60E+01	2.23E-03	3.05E+01		3.97E-01
9	.833	7.18E+00	1.82E+01	2.72E-03	3.83E+01		·
10	.964	6.58E+00	1.82E+01	3.10E-03		5.04E-00 6.52E+00	5.78E-01
		6.14E+00			4.55E÷01	· - <del>-</del> · · ·	7.84E-01
11	1.03		2.07E+01	3.58E-03	5.23E+01	8.11E+00	1.02E+00
12	1.11	5.63E÷00	2.20E+01	4.08E-03	5.84E+01		1.29E+00
13	1.19	5.09E+00	2.29E+01	4.58E-03	6.40E+01	1.162+01	1.60E+00
14	1.29	4.66E+00	2.43E+01	5.20E-03	6.91E÷01	1.34E÷01	1.95E+00
15	1.39	4.06E+00	2.44E+01	5.62E-03	7.36E+01	1.53E+01	2.32E+00
16	1.48	3.41E+00	2.37E÷01	5.86E-03	7.73E+01		2.71E+00
17	1.59	2.94E+00	2.35E+01	6.26E-03	8.05E+01		3.13E+00
18	1.71	2.41E+00	2.23E+01	6.38E-03	8.32E+01	2.03E+01	3.55E+00
19	1.84	1.98E+00	2.12E+01	6.50E-03	8.53E+01	2.23E+01	3.98E+00
20	1.93	1.71E-00	2.11E+01	6.97E-03		2.39E+01	4.45E+00
21	2.12	1.40E+00	1.99F+01	7.07E-03	8.87E+01	2.545+01	4.92E+00
22	2.23	1.25E+00	2.05E+01	7.81E-03	9.01E+01	2.70E-01	5.44E+00
23	2.45	1.07E+00	2.03E+01	8.32E-03	9.13E+01	2.35E+01	5.99E+00
24	2.64	9.29E-01	2.04E+01	8.96E-03	9.23E+01	3.01E+01	6.59E+00
25	2.83	7.90E-01	2.00E-01	9.46E-03	9.31E÷01	3.17E+01	7.22E+00
26	3.05	6.92E-01	2.02E+01	1.03E-02	9.395+01	3.00E+01	7.90E+00
27	3.27	6.11E-01	2.06E+01	1.13E-02	9.46E+01	3.48E+01	9.65E+00
28	3.52	5.20E-01	2.03E+01	1.19E-02	9.51E÷01	3.632+01	9.45E+00
29	3.78	4.47E-01	2.01E+01	1.27E-02	9.56E+01	3.73E+01	1.03E+01
30	4.06	3.97E-01	2.06E+01	1.40E-02	9.61E+01	3.95E+01	1.12E+01
31	4.37	3.40E-01	2.04E+01	1.49E-02	9.64E+01	4.10E+01	1.22E+01
32	4.69	2.91E-01	2.02E+01	1.58E-02	9.68E+01	4.26E+01	1.33E+01
33	5.04	2.63E-01	2.11E+01	1.77E-02	9.70E+01	4.42E+01	1.44E+01
34	5.42	2.62E-01	2.42E+01	2.19E-02	9.73E+01	4.61E+01	1.59E+01
35	5.82	2.41E-01	2.57E+01	2.50E-02	9.76E+01	4.80E+01	1.76E+01
36	6.26	2.16E-01	2.66E+01	2.78E-02	9.78E+01	5.01E+01	1.94E+01
37	6.73	2.17E-01	3.09E+01	3.46E-02	9.81E+01	5.25E+01	2.17E+01
38	7.23	2.08E-01	3.43E+01	4.13E-02	9.83E+01	5.51E+01	2.45E+01
39	7.77	1.85E-01	3.51E+01	4.55E-02	9.85E+01	5.78E+01	2.75E+01
40	8.35	1.81E-01	3.98E+01	5.54E-02	9.87E+01	6.09E+01	3.12E+01
	8.97	1.83E-01	4.64E+01	6.94E-02	9.89E+01	6.44E+01	3.58E+01
41					9.91E+01	6.77E+01	4.04E+01
42	9.64	1.48E-01	4.32E+01	6.94E-02	9.91E+01 9.92E+01	7.21E+01	4.70E+01
43	10.3	1.69E-01	5.69E+01	9.83E-02		7.62E+01	5.36E+01
44	11.1	1.38E-01	5.38E+01	9.99E-02	9.94E+01	8.11E+01	6.21E+01
45	11.9	1.42E-01	6.39E+01	1.27E-01	9.96E+01		7.26E+01
46	12.8	1.41E-01	7.35E+01	1.57E-01	9.97E+01	8.68E+01	
47	13.8	1.39E-01	8.34E+01	1.92E-01	9.99E+01	9.32E+01	8.54E+01
48	14.8	1.27E-01	8.84E+01	2.19E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	3.00E-04	2.40E-01	6.39E-04	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	9.13E+01	1.30E+03 1.	50E+00			

FILE NAME: INS 14.006 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCE	ENTRATIONS		CUMI	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< CH.V.L.	.486	9.39E-01		4.38E-05	5.27E-01		1.49E-03
		6.42E-01	5.14E-01	4.32E-05	8.87E-01		2.96E-03
1	.504		1.04E+00	9.43E-05	1.52E+00		6.17E-03
2 3	.542	1.13E+00				1.56E-01	1.29E-02
	.581	1.92E+00	2.04E+00	1.98E-04	2.60E+00		
4	.625	3.12E+00	3.83E+00	3.99E-04	4.35E+00		2.65E-02
ō	.673	5.13E+00	7.29E+00	8.18E-04	7.22E+00		5.43E-02
6 7	.723	7.64E+00	1.26E+01	1.51E-03	1.15E+01		1.06E-01
7	.777	1.04E+01	1.97E+01	2.56E-03	1.73E+01	1.78E+00	1.93E-01
8	. 835	1.18E+01	2.60E+01	3.61E-03	2.40E+01	2.74E+00	3.16E-01
. 9	.897	1.21E+01	3.08E+01	4.60E-03	3.08E+C1	3.895+00	4.72E-01
: 10	.964	1.17E+01	3.43E+01	5.51E-03	3.74E+01	5.17E+00	6.59E-01
11	1.03	1.14E+01	3.84E+01	6.63E-03	4.37E+01	6.60E+00	8.85E-01
12	1.11	1.08E+01	4.23E+01	7.86E-03	4.98E+01	8.18E+00	1.15E+00
13	1.19	1.03E+01	4.64E+01	9.26E-03	5.56E+01	9.91E+00	1.47E+00
. 14	1.28	9.91E+00	5.16E+01	1.11E-02	6.12E+01		1.84E+00
1 5	1.38	9.145+00	5.49E+01	1.26E-02	6.63E+01	1.39E+01	2.27E+00
16	1.48	8.20E+00		1.41E-02	7.09E+01		2.75E+00
17	1.59	7.19E+00	5.76E+01	1.53E-02	7.49E+01		3.27E+00
		6.19E+00	5.73E+01	1.64E-02	7.84E+01	2.03E+01	3.83E+00
18	1.71			1.76E-02	8.14E+01	2.24E+01	4.43E+00
: 9	1.84	5.3TE+00	5.73E+01			2.46E+01	5.C7E+00
20	1.98	1.6TE-00	5.76E+01	1.90E-02	8.40E+01	2.675+01	5.07E+00
21	2.12	4.075+00	5.795+01	2.05E-00	8.63E+01		
	2.28	3.47E-00	E.68E-01	2.16E-01	8.82E-01	2.58E+01	8.51E+60
2.3	2.45	1.94E+00	5.67E+01	2.30E-00	8.99E+01	2.10E+01	7.31E+10
2 :	2.61	2.55E+00	5.89E+01	2.48E-01	9.13E+01		00-381.3
2.5	2.83	2.11E+00		2.522-01	9.25E+01		8.992+00
28	3.05	1.795+00	5.23E+01	2.66E-02	9.35E-01	3.70E+01	9.90E+60
2.7	3.27	1.52E+00	5.12E+01	2.80E-02	9.44E+01	3.89E+01	1.08E+01
23	3.52	1.21E-00	4.72E+01	2.77E-02	9.51E+01	4'.07E+01	1.18E+01
29	3.78	9.96E-01	4.48E+0:	2.83E-02	9.56E + 01	41.23E+01	1.23E+01
30	4.0c	8.52E-C1	4.43E+01	3.00E-02	9.61E+01	410E+01	1.38E+01
31	4.37	6.93E-01	4.16E+01	3.03E-02	9.65E+01	4.55E+01	1.48E+01
32	4.59	6.29E-01	4.36E+01	3.42E-02	9.68E+01	4.72E+01	1.60E+01
33	5.04	5.57E-01	4.46E+01	3.75E-02	9.72E+01	4.88E+01	1.72E+01
34	5.42	4.90E-01	4.53E+01	4.09E-02	9.74E+01	5.05E+01	1.86E+01
35	5.82	4.54E-01	4.85E+01	4.71E-02	9.77E+01	5.23E+01	2.02E+01
36	6.26	4.38E-01	5.40E+01	5.63E-02	9.79E+01	5.43E+01	2.21E+01
37	6.73	3.93E-01	5.67E+01	6.36E-02	9.81E+01	5.64E+01	2.43E+01
38	7.23	3.71E-01	6.10E+01	7.35E-02	9.84E+01	5.87E+01	2.68E+01
39	7.77	3.58E-01	6.79E+01	8.80E-02	9.86E+01	6.12E+01	2.98E+01
40	8.35	3.20E-01	7.01E+01	9.76E-02	9.87E+01	6.39E+01	3.31E+01
41	8.97	3.25E-01	8.22E+01	1.23E-01	9.89E+01	6.69E+01	3.73E+01
42	9.64	3.10E-01	9.08E+01	1.46E-01	9.91E+01	7.03E+01	4.23E+01
43	10.3	2.79E-01	9.43E+01	1.63E-01	9.93E+01	7.38E+01	4.78E+01
44	11.1	2.74E-01	1.07E+02	1.98E-01	9.94E+01	7.78E+01	5.45E+01
45	11.9	2.86E-01	1.29E+02	2.57E-01	9.96E+01	8.26E+01	6.33E+01
,46	12.8	2.84E-01	1.48E+02	3.17E-01	9.97E+01	8.81E+01	7.40E+01
47	13.8	2.45E-01	1.47E+02	3.39E-01	9.99E+01	9.36E+01	8.56E+01
48	14.8	2.47E-01	1.71E+02	4.24E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA		-	2.68E+03 2.				
IUIA	LJ:	1.102402	LIUUETUJ ZI	372100			

### TSI AERODYNAMIC PARTICLE SIZER

		CONCE	ENTRATIONS		CUMI	LATIVE %	
CHNI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 186	5.69E-01	3.56E-01	2.66E-05	4.24E-01	1.63E-02	
1	.501.	4.00E-01	3.20E-01	2.70E-05	7.23E-01	3.10E-02	
2	.512	6.99E-01	6.45E-01	5.83E-05	1.24E+00		2.32E-03
3	.581	1.12E+00	1.19E+00			6.06E-02	4.85E-03
				1.16E-04	2.08E+00	1.15E-01	9.87E-03
1	.625	1.86E+00	2.29E+00	2.38E-01	3.47E+00	2.20E-01	
5	.673	3.05E+00	1.34E+00	4.87E-04	5.74E+00	4.19E-01	4.13E-02
6	.723	4.58E+00	7.53E+00	9.08E-04	9.16E+00	7.64E-01	8.06E-02
7	.777	6.43E+00	1.22E+01	1.58E-03	1.39E+01	1.32E+00	1.495-01
8	.835	7.685+00	1.68E+01	2.35E-03	1.97E+01	2.10E+00	2.51E-01
9	. 897	8.19E+CC	2.07E + 01	3.10E-03	2.58E+01	3.05E+00	3.85E-01
10	.961	7.90E+00	2.31E+01	3.72E-03	3.17E+01	4.11E+00	5.46E-01
11	1.03	7.93E+00	2.70E+01	4.66E-03	3.76E+01	5.34E+00	7.48E-01
12	1.11	7.76E+00	3.03E+01	5.62E-03	4.34E+01	6.73E+00	9.92E-01
13	1.19	7.59E+00	3.42E+01	6.82E-03	4.91E+01	8.30E+00	1.29E+00
1.4	1.28	7.50E+00	3.90E+01	8.36E-03	5.46E+01	1.01E+01	1.65E+00
15	1.38	7.10E+00	4.26E+01	9.83E-03	5.99E+01	1.20E+01	2.0SE+00
16	1.43	6.55E+00	4.54E+01	1.12E-02	6.48E+01	1.41E+C1	2.56E+00
17	1.59	5.89E+00	4.71E+01	1.25E-02	6.92E+01	1.63E+01	3.11E+00
18	1.71	5.40E+0C	4.93E+01	1.43E-02	7.32E+01		
19	1.84	4.90E+00	5.23E+01	1.61E-02		1.86E+01	3.72E+00
20	1.98	4.40E+00			7.69E+01	2.10E+01	4.42E+00
			5.43E+01	1.79E-02	8.02E+01	2.35E+01	5.20E+00
$\frac{21}{20}$	2.12	3.69E+00	5.53E+01	1.96E-02	\$.30E+01	2.60E+01	6.05E-00
	2.28	3.39E+06	5.58E-01	2.13E-02	8.56E+01	2.85E+01	6.97E+00
23	2.45	3.00E+00	5.69E+01	2.33E-02	8.78E+01	3.12E+01	7.98E+00
24	2.61	2.53E+0(	5.54E+01	2.44E-02	8.97E+01	3.37E+01	9.04E-00
25	2.83	2.09E+00	5.28E+01	2.50E-02	$9.12E \pm 01$	$3.61E \pm 01$	1.01E+01
26	3.65	1.735+00	5.06E+01	2.57E-02	9.25E+01	3.84E+01	1.12E+01
27	3.27	1.45E+00	4.90E+01	2.68E-02	9.36E+01	4.07E-01	1.245+01
28	3.52	1.21E+00	4.71E+01	2.76E-02	9.45E+01	4.28E+01	1.36E+01
29	3.78	9.28E-01	4.18E+01	2.63E-02	9.52E+01	4.48E+01	1.47E+01
30	4.06	7.87E-01	4.09E+01	2.77E-02	9.58E+01	4.66E+01	1.59E+01
31	4.37	6.67E-01	4.00E+01	2.92E-02	9.63E+01	4.85E+01	1.72E+01
32	4.69	5.53E-01	3.84E+01	3.01E-02	9.67E+01	5.02E+01	1.85E+01
33	5.04	4.57E-01	3.66E+01	3.08E-02	9.70E+01	5.19E+01	1.98E+01
34	5.42	4.19E-01	3.87E+01	3.50E-02	9.74E+01	5.37E+01	2.14E+01
35	5.82	3.85E-01	4.11E+01	3.99E-02	9.76E+01	5.56E+01	2.31E+01
36	6.26	3.53E-01	4.35E+01	4.54E-02	9.79E+01	5.76E+01	2.50E+01
37	6.73	2.97E-01	4.23E+01	4.75E-02	9.81E+01	5.95E+01	2.71E+01
38	7.23	2.89E-01	4.75E+01	5.73E-02	9.83E+01	6.17E+01	2.96E+01
39	7.77	2.78E-01	5.27E+01	6.83E-02	9.86E+01	6.41E+01	3.25E+01
40	8.35	2.47E-01	5.41E+01				
41	8.97	2.53E-01		7.53E-02	9.87E+01	6.66E+01	3.58E+01
			6.41E+01	9.59E-02	9.89E+01	6.95E+01	4.00E+01
42	9.64	2.32E-01	6.80E+01	1.09E-01	9.91E+01	7.26E+01	4.47E+01
43	10.3	2.14E-01	7.21E+01	1.25E-01	9.93E+01	7.59E+01	5.01E+01
44	11.1	2.03E-01	7.92E+01	1.47E-01	9.94E+01	7.96E+01	5.65E+01
45	11.9	2.04E-01	9.17E+01	1.83E-01	9.96E+01	8.38E+01	6.44E+01
46	12.8	2.07E-01	1.08E+02	2.31E-01	9.97E+01	8.87E+01	7.44E+01
47	13.8	1.93E-01	1.16E+02	2.66E-01	9.99E+01	9.40E+01	8.59E+01
48	14.8	1.89E-01	1.31E+02	3.24E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	3.00E-04	2.40E-01	6.39E-04	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	1.34E+02 2	.18E+03 2.	31E+00		-	

# APPENDIX E

Raw Data from the APS for the Grade Efficiency Test and the Effect of Changing Gas Physical Properties

Coded Experimental Data:

EPX2 1 is Inlet for Air

EPX2 2 is Outlet for Air

EPX2 3 is Inlet for Nitrogen

EPX2 4 is Outlet for Nitrogen

EPX2 5 is Inlet for Helium

EPX2 6 is Outlet for Helium

EPX2 7 is Inlet for Argon

EPX2 8 is Outlet for Argon

EPX2 9 is Inlet for Oxygen

EPX2 10 is Outlet for Oxygen

FILE NAME: EXP2 1.000 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 20 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

<b>0</b>	D.T.A		ENTRATIONS	MACC		JLATIVE %	MACC
• • • • • •	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	8.19E-01	5.14E-01	3.84E-05 4.16E-05	1.88E-01 3.30E-01	8.70E-03 1.71E-02	5.23E-04 1.09E-03
1	.504	6.18E-01 1.21E+00	4.94E-01 1.12E+00	1.01E-04	6.09E-01	3.61E-02	2.47E-03
2 3	.542	2.26E+00	2.40E+00	2.33E-04	1.13E+00	7.67E-02	5.64E-03
4	.581 .625	4.57E+00	5.62E+00	5.85E-04	2.18E+00	1.72E-01	1.36E-02
	.673	9.58E+00	1.36E+01	1.53E-03	4.38E+00	4.03E-01	3.44E-02
5 6 7	.723	1.90E+01	3.12E+01	3.77E-03	8.74E+00	9.32E-01	8.57E-02
7	.777	3.09E+01	5.86E+01	7.60E-03	1.58E+01	1.92E+00	1.89E-01
8	.835	4.03E+01	8.84E+01	1.23E-02	2.51E+01	3.42E+00	3.57E-01
9	.897	4.38E+01	1.11E+02	1.66E-02	3.51E+01	5.30E+00	5.83E-01
10	.964	4.27E+01	1.25E+02	2.01E-02	4.50E+01	7.41E+00	8.56E-01
11	1.03	3.93E+01	1.33E+02	2.30E-02	5.40E+01	9.66E+00	1.17E+00
12	1.11	3.56E+01	1.39E+02	2.58E-02	6.22E+01	1.20E+01	1.52E+00
13	1.19	3.08E+01	1.39E+02	2.76E-02	6.92E+01	1.44E+01	1.90E+00
14	1.28	2.64E+01	1.37E+02	2.94E-02	7.53E+01	1.67E+01	2.30E+00
15	1.38	2.17E+01	1.30E+02	3.01E-02	8.03E+01	1.89E+01	2.71E+00
16	1.48	1.73E+01	1.20E+02	2.97E-02	8.43E+01	2.09E+01	3.11E+00
17	1.59	1.31E+01	1.05E+02	2.78E-02	8.73E+01	2.27E+01	3.49E+00
18	1.71	9.64E+00	3.91E+01	2.55E-02	9.95E-01	2.42E+01	3.84E+00
19	1.84	6.99E+00	7.46E+01	2.29E-02	9.11E+01	2.55E+01	4.15E+00
20	1.98	4.87E+00	6.00E+01	1.98E-02	9.22E-01	2.65E+01	4.42E+00
21	2.12	3.56E+00	5.07E+01	1.80E-02	3.30E-01	2.73E+01	4.66E÷00
22	2.28	2.45E-06	4.03E+01	1.54E-02	9.36E+01	2.80E+01	4.87E+00
23	2.45	2.25E+00	4.27E+01	1.75E-02	9.41E+01	2.87E+01	5.11E+00
5 1	2.64	1.72E+00	3.77E-01	1.66E-02	9.45E+01	2.94E+01	5.34E+00
25	2.83	1.48E+00	3.74E+01	1.77E-02	9.43E-01	3.00E+01	5.58E+00
26	3.05	1.43E+00	4.19E+01	2.13E-02	9.51E+01	3.07E+01	5.87E+00
27	3.27	1.42E+00	4.81E+01	2.63E-02	9.55E+01	3.15E+01	6.23E+00
28	3.52	1.32E+00	5.16E+01	3.03E-02	9.58E+01	3.24E+01	6.64E+00
29	3.78	1.19E+00	5.36E+01	3.38E-02	9.61E+01	3.33E+01	7.10E+30
30	4.06	1.09E+00	5.66E+01	3.84E-02	9.63E+01	3.43E+01	7.62E+00
31	1.37	1.14E+00	6.83E+01	4.97E-02	9.66E+01 9.68E+01	3.54E÷01	8.30E+00 9.11E+00
32 33	4.69 5.04	1.09E+00 1.07E+00	7.59E+01 8.55E+01	5.94E-02 7.19E-02	9.71E+01	3.67E-01 3.82E+01	1.01E-01
34	5.42	1.07E+00	9.60E+01	8.67E-02	9.73E+01	3.98E+01	1.13E+01
<b>3</b> 5	5.82	9.39E-01	1.00E+02	9.74E-02	9.75E+01	4.15E+01	1.25E+01
36	6.26	9.36E-01	1.15E+02	1.20E-01	9.77E+01	4.34E+01	1.42E+01
37	6.73	9.66E-01	1.38E+02	1.54E-01	9.80E+01	4.58E+01	1.63E+01
38	7.23	9.21E-01	1.51E+02	1.83E-01	9.82E+01	4.83E+01	1.83E+01
39	7.77	8.94E-01	1.70E+02	2.20E-01	9.84E+01	5.12E+01	2.18E+01
40	8.35	9.03E-01	1.98E+02	2.76E-01	9.86E+01	5.46E+01	2.56E+01
41	8.97	9.48E-01	2.40E+02	3.59E-01	9.88E+01	5.86E+01	3.05E+01
42	9.64	8.19E-01	2.39E+02	3.85E-01	9.90E+01	6.27E+01	3.57E+01
43	10.3	7.77E-01	2.62E+02	4.53E-01	9.92E+01	6.71E+01	4.19E+01
44	11.1	7.47E-01	2.91E+02	5.41E-01	9.93E+01	7.21E+01	4.92E+01
45	11.9	6.90E-01	3.11E+02	6.20E-01	9.95E+01	7.73E+01	5.77E+01
46	12.8	7.65E-01	3.98E+02	8.53E-01	9.97E+01	8.41E+01	6.93E+01
47	13.8	7.41E-01	4.45E+02	1.02E+00	9.93E+01	9.16E+01	8.32E+01
48	14.8	7.17E-01	4.97E+02	1.23E+00	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	4.35E+02 5	3.91E+03 7.	34E+00			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EXP2 1.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIL. RATIO:	1:1	EFFIC. C	ORRECT.: D	1	
		CONCENT			CINI		
~*****		CONCENTE		W. CC		LATIVE %	MACC
	DIA		RFACE	MASS	NUMBER 1.88E-01	SURFACE	MASS
<	.486		15E-01			8.44E-03 1.64E-02	5.04E-04 1.03E-03
1	.504	· · · · ·	76E-01	4.84E-05 1.18E-04	3.26E-01 5.96E-01	3.42E-02	2.32E-03
2 3	.542		30E+00				
3	.581	<del>-</del>	83E+00	2.75E-04	1.11E+00	7.32E-02	5.33E-03
4 5 6 7	.625		56E+00	6.83E-04		1.63E-01	1.28E-02
2	.673	• . •	64E+01	1.83E-03	4.34E+00	3.88E-01	3.29E-02
6	.723		63E+01	4.37E-03	8.57E+00	8.86E-01	8.08E-02
	.777		93E+01	8.97E-03	1.56E+01	1.84E+00	1.79E-01
8	.835		04E+02	1.45E-02	2.47E+01	3.27E+00	3.38E-01
9	.897		31E+02	1.96E-02	3.46E+01	5.07E+00	5.53E-01
10	.964	•	46E+02	2.34E-02	4.41E+01	7.07E+00	8.09E-01
11	1.03		57E+02	2.71E-02		9.22E÷00	1.11E+00
12	1.11		64E+02	3.04E-02		1.15E+01	1.44E+00
13	1.19		67E+02	3.34E-02	6.82E+01	1.39E+01	1.81E+00
14	1.28		.68E÷02	3.61E-02	7.44E+01	1.61E+01	2.20E+00
15	1.38		60E+02	3.69E-02		1.83E+01	$2.61\Xi + 00$
16	1.48	2.14E+01 1	.48E+02	3.68E-02	8.37E+01	2.03E+01	3.01E+00
17	1.59	1.66E+01 1.	.33E+02	3.53E-02	8.68E+01	2.21E+01	3.39E+00
18	1.71	1.21E+01 1.	.12E+02	3.19E-02	8.91E+01	2.37E+01	3.74E+00
19	1.84	8.73E÷00 9	31E+01	2.86E-02	9.08E+01	2.50E+01	4.06E+00
20	1.98	6.14E+00 7	.57E+01	2.50E-02	9.20E+01	2.60E-01	4.33E+00
21	2.12	4.46E+00 6	35E+01	2.25E-02	9.28E+01	2.69E+01	4.58E+00
22	2.28	3.21E+00 5	.29E+01	2.01E-02	9.35E+01	2.76E+01	4.80E+00
23	2.45		.94E+01		9.40E+01	2.93E+01	5.02E+00
24	2.64		.63E+01		9.445+01	2.89E-01	5.24E+00
25	2.83		.45E-01	2.10E-02	9.47E+01	2.95E+01	5.47E+00
26	3.05		.90E+01	2.49E-02	9.50E-01	3.02E+01	5.75E+00
27	3.27		32E+01	2.91E-02	9.53E+01	3.09E+01	6.07E-00
28	3.52		.05E-01	3.55E-02	9.56E+01	3.18E+01	6.46E+00
29	3.78		.57E+01	4.15E-02	9.59E+01	3.27E+01	6.91E+00
30	4.06		23E+01	4.94E-02	9.62E+01	3.37E+31	7.45E-00
31	4.37		.23E÷01	5.99E-02	9.64E+01	3.48E+01	8.11E+00
32	4.69		.08E+01	7.11E-02	9.67E+01	3.60E+01	8.89E+00
33	5.04		.00E+02	8.43E-02		3.74E+01	9.81E+00
34	5.42		.15E+02	1.04E-01		3.90E+01	1.09E+01
35	5.82		.32E+02	1.28E-01	9.74E+01	4.08E+01	1.24E+01
36	6.26		.50E+02	1.57E-01	9.76E+01	4.29E+01	1.41E+01
37	6.73		69E+02	1.90E-01		4.52E+01	1.61E+01
38	7.23		95E+02	2.35E-01	9.81E+01	4.795+01	1.87E+01
39	7.77		18E+02	2.82E-01	9.83E+01	5.08E+01	2.18E+01
40	8.35		.33E+02	3.24E-01	9.85E+01	5.40E+01	2.54E+01
41	8.97		.79E+02	4.18E-01	9.87E+01	5.79E+01	2.99E+01
	9.64		.73E+02	4.96E-01	9.89E+01	6.21E+01	3.54E+01
42			.00E+02	5.71E-01	9.91E+01	6.66E+01	4.16E+01
43	10.3		. 70E+02	6.87E-01	9.93E+01	7.17E+01	4.91E+01
44 45	11.1		.70E+02	8.39E-01	9.95E+01	7.75E+01	5.83E+01
	12.8		.21E+02	1.05E+00	9.97E+01	8.42E+01	6.98E+01
46 47			.33E+02	1.03E+00	9.98E+01	9.15E+01	8.33E+01
47	13.8			1.53E+00	1.00E+02	1.00E+02	1.00E+02
48	14.8 15.4		.16E+02	0.00E+00	1.00E+02 1.00E+02	1.00E+02 1.00E+02	1.00E+02
> TOT 1		5.21E+02 7.28	.00E+00		1.002+02	1.905405	1.006+02
TOTA	LJ:	J. 61ETUZ 7.28	DETUS 3.	135400			

FILE NAME: EXP2 1.002 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCI	CNTDATIONS		CI:MI	JLATIVE %	
CHAIT	DIA		ENTRATIONS	MASS	NUMBER	SURFACE	MASS
CHNL		NUMBER	SURFACE 5.23E-01		1.91E-01	-	5.29E-04
<	.486	8.34E-01 6.23E-01	4.99E-01	4.20E-05	3.33E-01	1.72E-02	1.10E-03
1	.504		1.14E+00	1.03E-04	6.16E-01	3.64E-02	2.49E-03
2	.542	1.23E+00 2.37E+00		2.45E-04	1.16E+00	7.90E-02	5.79E-03
3	.581	4.83E+00	5.93E+00	6.17E-04	2.26E+00	1.79E-01	1.41E-02
4 5	.625	1.03E+01	1.47E+01	1.65E-03	4.63E+00	4.27E-01	3.64E-02
	.673	1.96E+01	3.23E+01	3.89E-03	9.11E+00	9.71E-01	8.90E-02
6 7	.723	3.24E+01	6.14E+01	7.96E-03	1.65E+01	2.01E+00	1.97E-01
	.777	4.17E+01	9.15E+01	1.27E-02	2.61E+01	3.55E+00	3.69E-01
8 9	.835 .897	4.50E+01	1.14E+02	1.71E-02	3.64E+01	5.47E+00	5.99E-01
	.964	4.28E+01	1.14E+02 1.25E+02	2.01E-02	4.62E+01	7.59E+00	8.72E-01
10	1.03	3.93E+01	1.33E+02	2.29E-02	5.51E+01	9.82E+00	1.18E÷00
11 12	1.11	3.48E+01	1.35E+02	2.52E-02	6.31E+01	1.21E+01	1.52E+00
13	1.11	3.04E+01	1.37E+02	2.73E-02	7.01E+01	1.44E+01	1.89E+00
14	1.19	2.60E+01	1.35E+02	2.90E-02	7.60E+01	1.67E+01	2.28E+00
15	1.38	2.115+01	1.33E+02	2.92E-02	8.08E+01	1.88E+01	2.68E+00
16	1.48	1.67E+01	1.16E+02	2.87E-02	8.47E+01	2.08E+01	3.06E+00
17	1.59	1.26E+01	1.01E+02	2.59E-02	8.75E+01	2.25E+01	3.43E+00
13	1.71	9.29E+00	8.53E+01	2.45E-02	8.97E÷01	2.39E+01	3.76E+00
19	1.84	5.59E+00	7.14E+01	2.19E-02	9.12E+01	2.51E+01	4.06E+00
20	1.98	4.71E+00	5.81E+01	1.92E-02	9.23E+01	2.61E+01	4.32E+00
21	2.12	3.38E+00	4.81E+01	1.71E-02	9.31E+01	2.69E-01	1.55E+00
22	2.28	2.45E+00	4.02E+01	1.53E-02	9.36E+01	2.76E+01	4.75E+00
23	2.45	2.09E+00	3.95E+01	1.62E-02	9.41E+01	2.83E+01	4.97E+00
24	2.64	1.72E+00	3.78E+01	1.66E-02	9.45E+01	2.89E÷01	5.20E+00
25	2.83	1.475+00	3.72E+01	1.76E-02	9.48E+01	2.95E+01	5.44E+00
26	3.05	1.35E+00	3.96E+01	2.01E-02	9.51E+01	3.02E+01	5.71E+00
27	3.27	1.31E+00	4.43E+01	2.42E-02		3.10E+01	6.03E÷00
28	3.52	1.31E+00	4.85E+01	2.85E-02	9.57E-01	3.18E+01	6.42E÷00
29	3.78	1.2GE+00	5.40E+01	3.40E-02	9.60E+01	3.27E+01	6.88E+00
30	4.06	1.15E+00	5.96E+01	4.04E-02	9.62E+01	3.37E+01	7.43E+00
31	4.37	1.13E+00	6.77E+01	4.93E-02	9.65E+01	3.48E÷01	3.09E+00
32	4.69	1.10E÷00	7.64E+01	5.98E-02	9.68E+01	3.61E+01	8.90E+00
33	5.04	1.06E+00	8.49E+01	7.14E-02	9.70E+01	3.76E+01	
34	5.42	1.06E+00	9.83E+01	8.88E-02	9.72E+01	3.92E+01	
35	5.82	1.02E+00	1.09E+02	1.06E-01	9.75E+01	4.10E+01	1.25E+01
36	6.26	1.02E+00	1.26E+02	1.31E-01	9.77E+01	4.32E+01	1.43E+01
37	6.73	9.69E-01	1.38E+02	1.55E-01	9.79E+01	4.55E+01	1.64E+01
38	7.23	9.48E-01	1.56E+02	1.88E-01	9.81E+01	4.81E+01	1.89E+01
39	7.77	9.46E-01	1.80E+02	2.33E-01	9.84E+01	5.12E+01	2.20E+01
40	8.35	8.83E-01	1.93E+02	2.69E-01	9.86E+01	5.44E+01	2.57E+01
41	8.97	9.21E-01	2.33E+02	3.49E-01	9.88E+01	5.83E+01	3.04E+01
42	9.64	8.49E-01	2.48E+02	3.99E-01	9.90E+01	6.25E+01	3.58E+01
43	10.3	8.05E-01	2.72E+02	4.70E-01	9.92E+01	6.71E+01	4.21E+01
44	11.1	7.63E-01	2.98E+02	5.52E-01	9.93E+01	7.21E+01	4.96E+01
45	11.9	7.43E-01	3.34E+02	6.67E-01	9.95E+01	7.78E+01	5.86E+01
46	12.8	7.29E-01	3.79E+02	8.12E-01	9.97E+01	8.42E+01	6.96E+01
47	13.8	7.34E-01	4.41E+02		9.98E+01	9.16E+01	8.33E+01
48	14.8	7.19E-01	4.98E+02	1.23E+00	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	.s:	4.37E+02 5	.93E+03 7.	40E+00			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EXP2 1.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

CHNL DIA NUMBER SURFACE ( . 486 7.65E-01 4.81E-01 3.60E-05 1.91E-01 8.93E-03 5.36E-04 1.504 5.89E-01 4.72E-01 3.97E-05 3.38E-01 1.77E-02 1.13E-03 3.58I 2.17E+00 2.31E+00 2.24E-04 1.17E+00 8.05E-02 5.90E-03 3.58I 2.17E+00 2.31E+00 2.24E-04 1.17E+00 8.05E-02 5.90E-03 4.62E 4.42E+00 5.42E+00 5.65E-04 2.27E+00 4.33E-01 1.77E-02 1.13E-02 5.6673 9.52E+00 1.36E+01 1.52E-03 4.65E+00 4.33E-01 3.70E-02 5.6673 9.52E+00 1.36E+01 1.52E-03 4.65E+00 4.33E-01 3.70E-02 7.777 3.00E+01 5.70E+01 7.38E-03 4.65E+00 4.33E-01 3.70E-02 7.777 3.00E+01 5.70E+01 7.38E-03 1.67E+01 2.05E+00 2.01E-01 8.835 3.88E+01 8.52E+01 1.19E-02 2.66E+01 3.63E+00 4.37E-01 3.70E-02 7.777 3.00E+01 5.70E+01 7.38E-03 1.67E+01 2.05E+00 2.01E-01 11 1.03 3.63E+01 1.15E+02 1.86E-02 4.65E+01 7.72E+00 8.87E-01 11 1.03 3.63E+01 1.25E+02 1.86E-02 4.65E+01 7.72E+00 8.87E-01 11 1.03 3.63E+01 1.25E+02 2.33E-02 6.36E+01 7.72E+00 8.87E-01 11 1.03 3.63E+01 1.25E+02 2.33E-02 6.36E+01 7.72E+00 8.87E-01 12 1.11 3.21E+01 1.25E+02 2.33E-02 6.36E+01 1.23E+01 1.59E+00 13 1.19 2.75E+01 1.24E+02 2.47E-02 7.64E+01 1.69E+01 1.59E+00 13 1.19 2.75E+01 1.24E+02 2.47E-02 7.64E+01 1.69E+01 2.31E+00 15 1.88 1.93E+01 1.15E+02 2.58E-02 8.49E+01 2.19E+01 2.31E+00 15 1.88 1.93E+01 1.04E+02 2.58E-02 8.49E+01 2.10E+01 3.09E+00 15 1.88 1.93E+01 1.04E+02 2.58E-02 8.49E+01 2.10E+01 3.09E+00 15 1.88 1.93E+00 6.32E+01 1.04E+02 2.58E-02 8.49E+01 2.10E+01 3.09E+00 15 1.88 1.93E+00 6.32E+01 1.04E+02 2.58E-02 8.49E+01 2.10E+01 3.09E+00 15 1.88 1.93E+00 6.32E+01 1.04E+02 2.58E-02 8.49E+01 2.10E+01 3.09E+00 15 1.88 1.93E+00 6.32E+01 1.58E-02 9.25E+01 2.42E+01 3.79E+00 15 1.89E+00 6.32E+01 1.58E-02 9.25E+01 2.42E+01 3.79E+00 15 1.89E+00 6.32E+01 1.58E-02 9.25E+01 2.42E+01 3.79E+00 15 1.89E+00 6.32E+01 1.58E-02 9.25E+01 2.33E+01 1.99E+01 1.04E+02 9.45E+01 1.58E-02 9.45E+01 1.58E+02 9.45E+01 1.49E+01 1.04E+02 9.45E+01 1.49E+02 9.45E+01 1.49E+02 9.45E+01 1.49E+02 9.45E+01 1.49E+02 9.45E+01 1.49E+01 1.49		DIL. RATIO: 1:1	EFFIC.	CORRECT	D1	
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18         1.71         8.40E+00         7.76E+01         2.22E-02         8.99E+01         2.42E+01         3.79E+00           19         1.84         5.98E+00         6.38E+01         1.96E-02         9.14E+01         2.53E+01         4.09E+00           20         1.98         4.24E+00         5.23E+01         1.73E-02         9.24E+01         2.63E+01         4.34E+00           21         2.12         3.01E+00         4.29E+01         1.52E-02         9.32E+01         2.71E+01         4.56E-00           22         2.28         2.00E+00         3.62E+01         1.38E-02         9.37E+01         2.78E+01         4.77E+00           24         2.64         1.51E+00         3.31E+01         1.4E-02         9.46E+01         2.91E+01         5.20E+00           25         2.93         1.27E+00         3.22E+01         1.52E-02         9.49E+01         2.97E+01         5.43E+00           26         3.05         1.25E+00         3.64E+01         1.85E-02         9.52E+01         3.01E+01         5.70E+00           27         3.27         1.21E+00         4.08E+01         2.23E-02         9.58E+01         3.11E+01         6.03E+00           28         3.52         1.77E+00         4.5						
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25 2.33 1.27E+00 3.22E+01 1.52E-02 9.49E+01 2.97E+01 5.43E+00 26 3.05 1.25E+00 3.64E+01 1.85E-02 9.52E+01 3.03E+01 5.70E+00 27 3.27 1.21E+00 4.08E+01 2.23E-02 9.55E+01 3.11E+01 6.03E+00 28 3.52 1.17E+00 4.58E+01 2.69E-02 9.55E+01 3.19E+01 6.03E+00 29 3.78 1.09E+00 4.90E+01 3.09E-02 9.60E+01 3.29E+01 6.44E+00 30 4.06 1.03E+00 5.37E+01 3.64E-02 9.63E+01 3.38E+01 7.44E+00 31 4.37 9.97E-01 5.99E+01 4.36E-02 9.66E+01 3.50E+01 8.09E+00 32 4.69 1.00E+00 6.96E+01 5.45E-02 9.68E+01 3.63E+01 8.09E+00 33 5.04 9.61E-01 7.70E+01 6.48E-02 9.70E+01 3.77E+01 9.87E+00 34 5.42 9.36E-01 8.65E+01 7.82E-02 9.73E+01 3.93E+01 1.10E+01 35 5.82 9.49E-01 1.01E+02 9.84E-02 9.75E+01 4.32E+01 1.25E+01 36 6.26 9.03E-01 1.11E+02 1.16E-01 9.77E+01 4.32E+01 1.25E+01 38 7.23 8.71E-01 1.43E+02 1.73E-01 9.80E+01 4.57E+01 1.64E+01 39 7.77 8.12E-01 1.35E+02 2.00E-01 9.84E+01 5.12E+01 1.64E+01 39 7.77 8.12E-01 1.54E+02 2.00E-01 9.84E+01 5.12E+01 1.64E+01 39 7.77 8.12E-01 1.78E+02 2.47E-01 9.86E+01 5.45E+01 2.56E+01 41 8.97 8.31E-01 2.38E+02 4.10E-01 9.89E+01 5.45E+01 2.56E+01 41 8.97 8.31E-01 2.38E+02 4.10E-01 9.99E+01 6.69E+01 4.17E+01 4.90E+01 4.11 6.76E-01 2.38E+02 4.10E-01 9.99E+01 6.59E+01 4.90E+01 4.57E+01 4.90E+01 4.57E+01 1.54E+02 2.00E-01 9.89E+01 5.45E+01 3.03E+01 4.90E+01 4.57E+01 1.64E+01 3.03E+01 4.57E+01 1.54E+02 2.00E+01 9.89E+01 5.45E+01 2.56E+01 4.1 8.97 8.31E-01 2.38E+02 4.10E-01 9.98E+01 5.45E+01 2.56E+01 4.1 8.97 8.31E-01 2.38E+02 4.10E-01 9.99E+01 6.69E+01 4.17E+01 4.20E+01 4.20E+02 3.54E-01 9.99E+01 6.69E+01 4.17E+01 4.20E+01 4.20E+01 4.20E+02 3.56E+01 4.20E+02 4.20E+02 4.20E+02 4.20E+01 4.20E+0						
26  3.05  1.25E+00  3.64E+01  1.85E-02  9.52E+01  3.03E+01  5.70E+00  27  3.27  1.21E+00  4.08E+01  2.23E-02  9.55E+01  3.11E+01  6.03E+30  28  3.52  1.17E+00  4.58E+01  2.69E-02  9.58E+01  3.19E+01  6.44E+00  29  3.78  1.09E+00  4.90E+01  3.09E-02  9.60E+01  3.29E+01  6.90E-00  30  4.06  1.03E+00  5.37E+01  3.64E-02  9.63E+01  3.38E+01  7.44E+00  31  4.37  9.97E-01  5.99E+01  4.36E-02  9.66E+01  3.50E+01  8.09E+00  32  4.69  1.00E+00  6.96E+01  5.45E-02  9.68E+01  3.63E+01  8.90E+00  33  5.04  9.61E-01  7.70E+01  6.48E-02  9.70E+01  3.77E+01  9.87E+00  34  5.42  9.36E-01  8.65E+01  7.82E-02  9.73E+01  3.93E+01  1.10E+01  35  5.82  9.49E-01  1.01E+02  9.84E-02  9.75E+01  4.32E+01  1.25E+01  36  6.26  9.03E-01  1.01E+02  9.84E-02  9.75E+01  4.32E+01  1.25E+01  37  6.73  9.10E-01  1.30E+02  1.45E-01  9.80E+01  4.57E+01  1.64E+01  38  7.23  8.71E-01  1.43E+02  1.73E-01  9.82E+01  4.83E+01  1.90E+01  40  8.35  8.11E-01  1.78E+02  2.00E-01  9.84E+01  5.45E+01  2.56E+01  40  8.35  8.11E-01  1.78E+02  2.00E-01  9.84E+01  5.45E+01  2.56E+01  40  8.35  8.31E-01  2.10E+02  3.15E-01  9.88E+01  5.45E+01  2.56E+01  4.30E+01  4.57E+01  4.50E+01  4.50E+						
27         3.27         1.21E+00         4.08E+01         2.23E-02         9.55E+01         3.11E+01         6.03E+30           28         3.52         1.17E+00         4.58E+01         2.69E-02         9.58E+01         3.19E+01         6.44E+00           29         3.78         1.09E+00         4.90E+01         3.09E-02         9.60E+01         3.28E+01         5.90E+00           30         4.06         1.03E+00         5.37E+01         3.64E-02         9.63E+01         3.38E+01         7.44E+00           31         4.37         9.97E-01         5.99E+01         4.36E-02         9.68E+01         3.50E+01         8.09E+00           32         4.69         1.00E+00         6.96E+01         5.45E-02         9.68E+01         3.63E+01         8.90E+00           33         5.04         9.61E-01         7.70E+01         6.48E-02         9.70E+01         3.77E+01         9.87E+00           34         5.42         9.36E-01         8.65E+01         7.82E-02         9.73E+01         3.93E+01         1.10E+01           35         5.82         9.49E-01         1.01E+02         9.84E-02         9.75E+01         4.32E+01         1.25E+01           36         6.26         9.03E-01         1.						
28 3.52 1.17E+00 4.58E+01 2.69E-02 9.58E+01 3.19E+01 6.44E+C0 29 3.78 1.09E+00 4.90E+01 3.09E-02 9.60E+01 3.28E+01 6.90E+00 30 4.06 1.03E+00 5.37E+01 3.64E-02 9.63E+01 3.38E+01 7.44E+00 31 4.37 9.97E-01 5.99E+01 4.36E-02 9.66E+01 3.50E+01 8.09E+00 32 4.69 1.00E+00 6.96E+01 5.45E-02 9.68E+01 3.63E+01 8.90E+00 33 5.04 9.61E-01 7.70E+01 6.48E-02 9.70E+01 3.77E+01 9.87E+00 34 5.42 9.36E-01 8.65E+01 7.82E-02 9.73E+01 3.93E+01 1.10E+01 35 5.82 9.49E-01 1.01E+02 9.84E-02 9.75E+01 4.12E+01 1.25E+01 36 6.26 9.03E-01 1.11E+02 1.16E-01 9.77E+01 4.32E+01 1.42E+01 37 6.73 9.10E-01 1.30E+02 1.45E-01 9.80E+01 4.57E+01 1.64E+01 38 7.23 8.71E-01 1.43E+02 1.73E-01 9.82E+01 4.83E+01 1.90E+01 40 8.35 8.11E-01 1.78E+02 2.00E-01 9.84E+01 5.12E+01 2.19E+01 40 8.35 8.11E-01 1.78E+02 2.47E-01 9.86E+01 5.45E+01 2.19E+01 41 8.97 8.31E-01 2.10E+02 3.15E-01 9.88E+01 5.94E+01 3.03E+01 42 9.64 7.52E-01 2.20E+02 3.54E-01 9.90E+01 6.25E+01 3.56E+01 43 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 44 11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.76E+01 5.82E+01 45 11.9 6.38E-01 3.10E+02 6.18E-01 9.93E+01 7.76E+01 5.82E+01 46 12.8 6.65E-01 3.46E+02 7.41E-01 9.95E+01 7.76E+01 5.82E+01 47 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02						
3.78						
30       4.06       1.03E+00       5.37E+01       3.64E-02       9.63E+01       3.38E+01       7.44E+00         31       4.37       9.97E-01       5.99E+01       4.36E-02       9.66E+01       3.50E+01       8.09E+00         32       4.69       1.00E+00       6.96E+01       5.45E-02       9.68E+01       3.63E+01       8.90E+00         33       5.04       9.61E-01       7.70E+01       6.48E-02       9.70E+01       3.77E+01       9.87E+00         34       5.42       9.36E-01       8.65E+01       7.82E-02       9.73E+01       3.93E+01       1.10E+01         35       5.82       9.49E-01       1.01E+02       9.84E-02       9.75E+01       4.12E+01       1.25E+01         36       6.26       9.03E-01       1.11E+02       1.16E-01       9.77E+01       4.32E+01       1.42E+01         37       6.73       9.10E-01       1.30E+02       1.45E-01       9.80E+01       4.57E+01       1.64E+01         38       7.23       8.71E-01       1.43E+02       2.00E-01       9.80E+01       4.53E+01       1.90E+01         40       8.35       8.11E-01       1.78E+02       2.47E-01       9.86E+01       5.45E+01       2.56E+01         41 <td></td> <td></td> <td>=</td> <td></td> <td></td> <td></td>			=			
31       4.37       9.97E-01       5.99E+01       4.36E-02       9.66E+01       3.50E+01       8.09E+00         32       4.69       1.00E+00       6.96E+01       5.45E-02       9.68E+01       3.63E+01       8.90E+00         33       5.04       9.61E-01       7.70E+01       6.48E-02       9.70E+01       3.77E+01       9.87E+00         34       5.42       9.36E-01       8.65E+01       7.82E-02       9.73E+01       3.93E+01       1.10E+01         35       5.82       9.49E-01       1.01E+02       9.84E-02       9.75E+01       4.12E+01       1.25E+01         36       6.26       9.03E-01       1.11E+02       1.16E-01       9.77E+01       4.32E+01       1.42E+01         37       6.73       9.10E-01       1.30E+02       1.45E-01       9.80E+01       4.57E+01       1.64E+01         38       7.23       8.71E-01       1.43E+02       1.73E-01       9.82E+01       4.83E+01       1.90E+01         40       8.35       8.11E-01       1.54E+02       2.00E-01       9.84E+01       5.45E+01       2.56E+01         41       8.97       8.31E-01       2.10E+02       3.54E-01       9.88E+01       5.84E+01       3.03E+01         42 <td>29 3.78</td> <td></td> <td></td> <td></td> <td></td> <td>-</td>	29 3.78					-
32       4.69       1.00E+00       6.96E+01       5.45E-02       9.68E+01       3.63E+01       8.90E+00         33       5.04       9.61E-01       7.70E+01       6.48E-02       9.70E+01       3.77E+01       9.87E+00         34       5.42       9.36E-01       8.65E+01       7.82E-02       9.73E+01       3.93E+01       1.10E+01         35       5.82       9.49E-01       1.01E+02       9.84E-02       9.75E+01       4.12E+01       1.25E+01         36       6.26       9.03E-01       1.11E+02       1.16E-01       9.77E+01       4.32E+01       1.42E+01         37       6.73       9.10E-01       1.30E+02       1.45E-01       9.80E+01       4.57E+01       1.64E+01         38       7.23       8.71E-01       1.43E+02       1.73E-01       9.82E+01       4.83E+01       1.90E+01         40       8.35       8.12E-01       1.54E+02       2.00E-01       9.86E+01       5.45E+01       2.56E+01         41       8.97       8.31E-01       2.10E+02       3.15E-01       9.88E+01       5.34E+01       3.03E+01         42       9.64       7.52E-01       2.20E+02       3.54E-01       9.92E+01       6.69E+01       3.56E+01         43 <td>30 4.06</td> <td></td> <td></td> <td></td> <td></td> <td></td>	30 4.06					
33 5.04 9.61E-01 7.70E+01 6.48E-02 9.70E+01 3.77E+01 9.87E+00 34 5.42 9.36E-01 8.65E+01 7.82E-02 9.73E+01 3.93E+01 1.10E+01 35 5.82 9.49E-01 1.01E+02 9.84E-02 9.75E+01 4.12E+01 1.25E+01 36 6.26 9.03E-01 1.11E+02 1.16E-01 9.77E+01 4.32E+01 1.42E+01 37 6.73 9.10E-01 1.30E+02 1.45E-01 9.80E+01 4.57E+01 1.64E+01 38 7.23 8.71E-01 1.43E+02 1.73E-01 9.82E+01 4.83E+01 1.90E+01 39 7.77 8.12E-01 1.54E+02 2.00E-01 9.84E+01 5.12E+01 2.19E+01 40 8.35 8.11E-01 1.78E+02 2.47E-01 9.86E+01 5.45E+01 2.56E+01 41 8.97 8.31E-01 2.10E+02 3.15E-01 9.88E+01 5.84E+01 3.03E+01 42 9.64 7.52E-01 2.20E+02 3.54E-01 9.90E+01 6.25E+01 3.56E+01 43 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 44 11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.18E+01 4.90E+01 45 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 46 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 47 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02				=		
34       5.42       9.36E-01       8.65E+01       7.82E-02       9.73E+01       3.93E+01       1.10E+01         35       5.82       9.49E-01       1.01E+02       9.84E-02       9.75E+01       4.12E+01       1.25E+01         36       6.26       9.03E-01       1.11E+02       1.16E-01       9.77E+01       4.32E+01       1.42E+01         37       6.73       9.10E-01       1.30E+02       1.45E-01       9.80E+01       4.57E+01       1.64E+01         38       7.23       8.71E-01       1.43E+02       1.73E-01       9.82E+01       4.83E+01       1.90E+01         39       7.77       8.12E-01       1.54E+02       2.00E-01       9.84E+01       5.12E+01       2.19E+01         40       8.35       8.11E-01       1.78E+02       2.47E-01       9.86E+01       5.45E+01       2.56E+01         41       8.97       8.31E-01       2.10E+02       3.15E-01       9.88E+01       5.84E+01       3.03E+01         42       9.64       7.52E-01       2.20E+02       3.54E-01       9.90E+01       6.25E+01       3.56E+01         43       10.3       7.04E-01       2.38E+02       4.10E-01       9.92E+01       6.69E+01       4.17E+01         45 <td></td> <td>1.00E+00 6.96E+01</td> <td>5.45E-02</td> <td></td> <td></td> <td></td>		1.00E+00 6.96E+01	5.45E-02			
35 5.82 9.49E-01 1.01E+02 9.84E-02 9.75E+01 4.12E+01 1.25E+01 36 6.26 9.03E-01 1.11E+02 1.16E-01 9.77E+01 4.32E+01 1.42E+01 37 6.73 9.10E-01 1.30E+02 1.45E-01 9.80E+01 4.57E+01 1.64E+01 38 7.23 8.71E-01 1.43E+02 1.73E-01 9.82E+01 4.83E+01 1.90E+01 39 7.77 8.12E-01 1.54E+02 2.00E-01 9.84E+01 5.12E+01 2.19E+01 40 8.35 8.11E-01 1.78E+02 2.47E-01 9.86E+01 5.45E+01 2.56E+01 41 8.97 8.31E-01 2.10E+02 3.15E-01 9.88E+01 5.84E+01 3.03E+01 42 9.64 7.52E-01 2.20E+02 3.54E-01 9.90E+01 6.25E+01 3.56E+01 43 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 44 11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.18E+01 4.90E+01 45 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 46 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 47 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 5 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02	33 5.04	9.61E-01 7.70E+01	6.48E-02			
36 6.26 9.03E-01 1.11E+02 1.16E-01 9.77E+01 4.32E+01 1.42E+01 37 6.73 9.10E-01 1.30E+02 1.45E-01 9.80E+01 4.57E+01 1.64E+01 38 7.23 8.71E-01 1.43E+02 1.73E-01 9.82E+01 4.83E+01 1.90E+01 39 7.77 8.12E-01 1.54E+02 2.00E-01 9.84E+01 5.12E+01 2.19E+01 40 8.35 8.11E-01 1.78E+02 2.47E-01 9.86E+01 5.45E+01 2.56E+01 41 8.97 8.31E-01 2.10E+02 3.15E-01 9.88E+01 5.84E+01 3.03E+01 42 9.64 7.52E-01 2.20E+02 3.54E-01 9.90E+01 6.25E+01 3.56E+01 43 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 44 11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.18E+01 4.90E+01 4.5 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 4.5 11.9 6.38E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 4.13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 4.14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02	34 5.42	9.36E-01 8.65E+01				
37 6.73 9.10E-01 1.30E+02 1.45E-01 9.80E+01 4.57E+01 1.64E+01 38 7.23 8.71E-01 1.43E+02 1.73E-01 9.82E+01 4.83E+01 1.90E+01 39 7.77 8.12E-01 1.54E+02 2.00E-01 9.84E+01 5.12E+01 2.19E+01 40 8.35 8.11E-01 1.78E+02 2.47E-01 9.86E+01 5.45E+01 2.56E+01 41 8.97 8.31E-01 2.10E+02 3.15E-01 9.88E+01 5.84E+01 3.03E+01 42 9.64 7.52E-01 2.20E+02 3.54E-01 9.90E+01 6.25E+01 3.56E+01 43 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 44 11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.18E+01 4.90E+01 45 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 46 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 47 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02	35 5.82	9.49E-01 1.01E+02	9.84E-02			
38 7.23 8.71E-01 1.43E+02 1.73E-01 9.82E+01 4.83E+01 1.90E+01 39 7.77 8.12E-01 1.54E+02 2.00E-01 9.84E+01 5.12E+01 2.19E+01 40 8.35 8.11E-01 1.78E+02 2.47E-01 9.86E+01 5.45E+01 2.56E+01 41 8.97 8.31E-01 2.10E+02 3.15E-01 9.88E+01 5.84E+01 3.03E+01 42 9.64 7.52E-01 2.20E+02 3.54E-01 9.90E+01 6.25E+01 3.56E+01 43 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 44 11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.18E+01 4.90E+01 45 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 46 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 47 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 5 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02	36 6.26	9.03E-01 1.11E+02	1.16E-01	9.77E+01	4.32E+01	
39 7.77 8.12E-01 1.54E+02 2.00E-01 9.84E+01 5.12E+01 2.19E+01 40 8.35 8.11E-01 1.78E+02 2.47E-01 9.86E+01 5.45E+01 2.56E+01 41 8.97 8.31E-01 2.10E+02 3.15E-01 9.88E+01 5.84E+01 3.03E+01 42 9.64 7.52E-01 2.20E+02 3.54E-01 9.90E+01 6.25E+01 3.56E+01 43 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 44 11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.18E+01 4.90E+01 4.5 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 4.5 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 4.7 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 4.8 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02	37 6.73	9.10E-01 1.30E+02	1.45E-01	9.80E+01	4.57E+01	
40 8.35 8.11E-01 1.78E+02 2.47E-01 9.86E+01 5.45E+01 2.56E+01 41 8.97 8.31E-01 2.10E+02 3.15E-01 9.88E+01 5.84E+01 3.03E+01 42 9.64 7.52E-01 2.20E+02 3.54E-01 9.90E+01 6.25E+01 3.56E+01 43 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 44 11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.18E+01 4.90E+01 45 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 46 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 47 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02	38 7.23	8.71E-01 1.43E+02	1.73E-01	9.82E+01	4.83E+01	
41 8.97 8.31E-01 2.10E+02 3.15E-01 9.88E+01 5.84E+01 3.03E+01 42 9.64 7.52E-01 2.20E+02 3.54E-01 9.90E+01 6.25E+01 3.56E+01 43 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 4.11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.18E+01 4.90E+01 4.5 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 4.5 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 4.7 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 4.8 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02 5.50E+02 1.5.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02	39 7.77	8.12E-01 1.54E+02	2.00E-01	9.84E+01		
42       9.64       7.52E-01       2.20E+02       3.54E-01       9.90E+01       6.25E+01       3.56E+01         43       10.3       7.04E-01       2.38E+02       4.10E-01       9.92E+01       6.69E+01       4.17E+01         44       11.1       6.76E-01       2.64E+02       4.89E-01       9.93E+01       7.18E+01       4.90E+01         45       11.9       6.38E-01       3.10E+02       6.18E-01       9.95E+01       7.76E+01       5.82E+01         46       12.8       6.65E-01       3.46E+02       7.41E-01       9.97E+01       8.40E+01       6.92E+01         47       13.8       6.69E-01       4.02E+02       9.25E-01       9.98E+01       9.14E+01       8.30E+01         48       14.8       6.64E-01       4.60E+02       1.14E+00       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02	40 8.35	8.11E-01 1.78E+02	2.47E-01	9.86E+01	5.45E+01	
13 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 44 11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.18E+01 4.90E+01 45 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 46 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 47 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02	41 8.97	8.31E-01 2.10E+02	3.15E-01	9.88E+01	5.84E+01	
13 10.3 7.04E-01 2.38E+02 4.10E-01 9.92E+01 6.69E+01 4.17E+01 44 11.1 6.76E-01 2.64E+02 4.89E-01 9.93E+01 7.18E+01 4.90E+01 45 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 46 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 47 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02		7.52E-01 2.20E+02	3.54E-01	9.90E+01	6.25E+01	
45 11.9 6.38E-01 3.10E+02 6.18E-01 9.95E+01 7.76E+01 5.82E+01 46 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 47 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02		7.04E-01 2.38E+02	4.10E-01	9.92E+01		
45       11.9       6.38E-01       3.10E+02       6.18E-01       9.95E+01       7.76E+01       5.82E+01         46       12.8       6.65E-01       3.46E+02       7.41E-01       9.97E+01       8.40E+01       6.92E+01         47       13.8       6.69E-01       4.02E+02       9.25E-01       9.98E+01       9.14E+01       8.30E+01         48       14.8       6.64E-01       4.60E+02       1.14E+00       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02	44 11.1	6.76E-01 2.64E+02	4.89E-01	9.93E+01	7.18E+01	
46 12.8 6.65E-01 3.46E+02 7.41E-01 9.97E+01 8.40E+01 6.92E+01 4.7 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02		6.38E-01 3.10E+02	6.18E-01	9.95E+01	7.76E+01	
47 13.8 6.69E-01 4.02E+02 9.25E-01 9.98E+01 9.14E+01 8.30E+01 48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02		6.65E-01 3.46E+02	7.41E-01	9.97E+01	8.40E+01	
48 14.8 6.64E-01 4.60E+02 1.14E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02		6.69E-01 4.02E+02	9.25E-01	9.98E+01	9.14E+01	8.30E+01
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02		6.64E-01 4.60E+02	1.14E+00	1.00E+02	1.00E+02	1.00E+02
		0.00E+00 0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
		4.01E+02 5.38E+03 6.	71E+00			

FILE NAME: EXP2 1.004 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

					Olivi.	:: A T T T T	
			INTRATIONS	WA 6.6		JLATIVE % SURFACE	MASS
CHNL		NUMBER	SURFACE	MASS	NUMBER	9.32E-03	5.68E-04
<	.486	6.28E-01	3.94E-01	2.95E-05	1.94E-01	<del>-</del>	
1	.504	4.70E-01	3.76E-01	3.17E-05	3.39E-01	1.82E-02	1.18E-03
2	.542	9.13E-01	8.43E-01	7.62E-05	6.21E-01	3.82E-02	2.64E-03
3	.581	1.76E+00	1.87E+00	1.81E-04	1.16E+00	8.24E-02	6.14E-03
4	.625	3.62E+00	4.44E+00	4.63E-04	2.28E+00	1.88E-01	1.51E-02
5	.673	7.72E+00	1.10E+01	1.23E-03	4.66E+00	4.47E-01	3.88E-02
5 6 7	.723	1.48E+01	2.43E+01	2.93E-03	9.22E+00	1.02E+00	9.52E-02
	.777	2.45E+01	4.66E+01	6.04E-03	1.68E+01	2.12E+00	2.11E-01
8	.835	3.14E+01	6.88E+01	9.58E-03	2.65E+01	3.75E+00	3.96E-01
9	.897	3.35E+01	8.50E+01	1.27E-02	3.68E+01	5.76E+00	6.41E-01
10	.964	3.18E+01	9.29E+01	1.49E-02	4.66E+01	7.96E+00	9.28E-01
11	1.03	2.92E+01	9.84E+01	1.70E-02	5.56E+01	1.03E+01	1.26E+00
12	1.11	2.58E+01	1.01E+02	1.87E-02	6.36E+01	1.27E+01	1.62E+00
13	1.19	2.25E+01	1.01E+02	2.02E-02	7.05E+01	1.51E+01	2.00E+00
14	1.28	1.91E+01	9.96E+01	2.14E-02	7.64E+01	1.74E+01	2.42E+00
15	1.38	1.55E+01	9.34E+01	2.15E-02	8.12E+01	1.96E+01	2.83E+00
16	1.48	1.23E+01	8.54E+01	2.11E-02	8.50E+01	2.16E+01	3.24E+00
17	1.59	9.48E+00	7.59E+01	2.02E-02	8.79E+01	2.34E+01	3.63E+00
18	1.71	6.84E+00	6.32E+01	1.81E-02	9.00E+01	2.49E+01	3.97E+00
19	1.84	4.85E+00	5.17E+01	1.59E-02	9.15E+01	2.62E+01	4.28E+00
20	1.98	3.49E+00	4.30E+01	1.42E-02	9.26E+01	2.72E+01	4.55E+00
21	2.12	2.47E+00	3.51E-01	1.25E-02	9.34E+01	2.80E+01	4.79E+00
22	2.28	1.81E+00	2.98E+01	1.14E-02	9.39E+01	2.87E+01	5.01E+00
23	2.45	1.50E+00		1.17E-02	9.44E+01	2.94E+01	5.24E+00
24	2.64	1.23E+00	2.70E+01	1.19E-02	9.48E+01	3.00E+01	5.47E+00
25	2.83	9.94E-01	2.52E+01	1.19E-02	9.51E+01	3.06E+01	5.70E+00
26	3.05	9.72E-01	2.84E+C1	1.45E-02	9.54E+01	3.13E+01	5.97E+00
27	3.27	9.22E-01	3.11E+01	1.70E-02	9.56E+01	3.20E+01	6.30E+00
28	3.52	8.85E-01	3.45E+01	2.03E-02	9.59E+01	3.28E+01	6.69E÷00
29	3.78	8.55E-01	3.35E+01	2.43E-02	9.62E+01	3.38E+01	7.16E-00
30	₹.06	8.04E-01	4.18E+G1	2.83E-02		3.47E+01	7.71E+00
31	4.37	8.07E-01	4.85E+01	3.53E-02		3.59E+01	3.39E+00
32	1.69	7.49E-01	5.19E÷01	4.07E-02	9.69E+01	3.71E+01	9.17E+00
33	5.04	7.51E-01	6.01E+01	5.06E-02		3.85E+01	1.01E+01
34	5.42	7.48E-01	6.92E+01	6.25E-02		4.02E+01	1.13E+01
35	5.82	7.38E-01	7.88E+01	7.66E-02		4.20E+01	1.28E+01
36	6.26	6.94E-01	8.55E+01	8.93E-02	9.78E+01	4.41E+01	1.45E+01
37	6.73	6.99E-01	9.95E+01	1.12E-01	9.80E+01	4.64E+01	1.67E+01
38	7.23	6.82E-01	1.12E+02	1.35E-01	9.82E+01	4.91E+01	1.93E+01
<b>3</b> 9	7.23	6.62E-01	1.26E+02	1.63E-01	9.84E+01	5.20E+01	2.24E+01
	8.35	6.61E-01	1.45E+02	2.02E-01	9.87E+01	5.55E+01	2.63E+01
40		6.59E-01	1.67E+02	2.50E-01	9.89E+01	5.94E+01	3.11E+01
<del>1</del> 1	8.97		1.68E+02	2.70E-01		6.34E+01	3.63E+01
42	9.64	5.75E-01	1.89E+02	3.27E-01	9.92E+01	6.79E+01	4.26E+01
43	10.3	5.60E-01	2.10E+02	3.27E-01 3.90E-01	9.94E+01	7.28E+01	5.01E+01
44	11.1	5.38E-01		4.64E-01	9.95E+01	7.28E+01	5.91E+01
45	11.9	5.16E-01	2.32E+02 2.74E+02	5.88E-01	9.97E+01	8.48E+01	7.04E+01
<b>46</b>	12.8	5.28E-01			9.98E+01	9.18E+01	8.35E+01
47	13.8	4.94E-01	2.97E+02	6.84E-01	1.00E+02	1.00E+02	1.00E+02
48	14.8	4.98E-01	3.45E+02	8.54E-01		1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.002702	1.006702
TOTA	LS:	3.24E+02	1.23E+03 5.	135+00			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EXP2 1.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

CHNL DIA (			aava	CNEDAMIONO		<b>~</b>		
Color	CHAI	DIA			MACC			W + 2.2
1 .504							· · · · · · · · · · · · · · · · · · ·	
2 .542 8.80E-01 8.12E-01 7.34E-05 5.47E-01 3.27E-02 2.32E-03 4 .581 1.62E+00 1.72E+00 1.67E-04 1.00E+00 6.88E-02 5.24E-03 4 .625 3.29E+00 4.04E+00 4.21E-04 1.93E+00 1.54E-01 1.25E-02 5.673 7.02E+00 9.99E+00 1.12E-03 3.90E+00 3.63E-01 3.22E-02 7 .777 2 1.36E+01 2.24E+01 2.70E-03 7.73E+00 8.33E-01 7.94E-02 7 .777 2.28E+01 4.33E+01 5.62E-03 1.41E+01 1.74E+00 1.78E-01 8 .835 2.98E+01 6.53E+01 9.09E-03 2.25E+01 3.11E+00 3.3TE-01 9.885 2.38E+01 6.53E+01 1.25E-02 3.18E+01 4.87E+00 5.56E-01 10 .964 3.24E+01 9.47E+01 1.52E-02 3.18E+01 4.87E+00 5.56E-01 11 .03 3.09E+01 1.04E+02 1.80E-02 4.09E+01 6.85E+00 8.22E-01 11 1.03 3.09E+01 1.04E+02 1.80E-02 4.09E+01 6.85E+00 8.22E-01 11 1.03 3.09E+01 1.04E+02 1.80E-02 4.96E+01 1.39E+01 1.91E+00 12 1.11 2.85E+01 1.11E+02 2.06E-02 5.76E+01 1.14E+01 1.50E+00 11 1.91E+00 1								
3								
4 .625 3.29E+00 4.04E+00 4.21E+04 1.93E+00 3.63E+01 1.26E+02 6 .673 7.02E+00 9.99E+00 1.12E+03 3.90E+00 3.63E+01 1.26E+02 7.777 2.28E+01 4.33E+01 5.62E+03 1.41E+01 1.74E+00 1.79E+02 7.777 2.28E+01 4.33E+01 5.62E+03 1.41E+01 1.74E+00 1.79E+02 9.897 3.30E+01 8.36E+01 1.25E+02 3.18E+01 4.87E+00 5.66E+01 10.96E+03 3.32E+01 8.36E+01 1.52E+02 4.09E+01 4.87E+00 6.82E+01 11 1.03 3.09E+01 1.04E+02 1.80E+02 4.09E+01 6.85E+00 8.22E+01 11 1.03 3.09E+01 1.04E+02 1.80E+02 4.99E+01 9.05E+00 1.14E+01 1.50E+00 12 1.11 2.85E+01 1.11E+02 2.06E+02 5.76E+01 1.39E+01 1.39E+00 1.41E+00 12 1.11 2.85E+01 1.12E+02 2.06E+02 5.76E+01 1.39E+01 1.91E+00 14 1.28 2.33E+01 1.22E+02 2.62E+02 7.75E+01 1.89E+01 2.33E+00 14 1.28 2.33E+01 1.22E+02 2.62E+02 7.75E+01 1.89E+01 2.33E+00 15 1.39E+01 1.91E+00 17 1.53 8.00E+01 1.05E+02 2.85E+02 8.18E+01 2.14E+01 2.33E+00 17 1.59 1.32E+01 1.05E+02 2.85E+02 8.18E+01 2.14E+01 3.35E+00 17 1.59 1.32E+01 1.05E+02 2.85E+02 8.55E+01 2.36E+01 3.3EE+00 17 1.59 1.32E+01 1.05E+02 2.85E+02 9.04E+01 2.71E+01 4.73E+00 17 1.59 1.32E+00 7.87E+01 2.42E+02 9.04E+01 2.71E+01 4.73E+00 17 1.59 1.32E+00 7.87E+01 2.42E+02 9.04E+01 2.56E+01 3.84E+00 17 1.59 1.32E+01 7.3EE+01 2.42E+02 9.04E+01 2.56E+01 3.5EE+01 3.60E+00 17 1.59 1.32E+01 3.05E+00 3.05E+01 1.87E+02 9.39E+01 2.56E+01 3.64E+00 3.65E+01 1.87E+02 9.50E+01 3.3EE+01 5.10E+00 3.65E+01 1.85E+02 9.50E+01 3.2EE+01 5.10E+00 3.65E+01 1.87E+02 9.50E+01 3.2EE+01 5.10E+00 3.65E+01 1.87E+02 9.50E+01 3.2EE+01 5.10E+00 3.65E+01 3.65E+01 3.66E+02 9.50E+01 3.2EE+01 3.66E+02 3.65E+01 3.66E+02 9.50E+01 3.2EE+01 3.66E+02 3.66E+01 3.66E+02 9.50E+01 3.2EE+01 3.6EE+01 3.								
5 .673 7.02F+00 9.99E+00 1.12E-03 3.90E+00 3.63E-01 3.22E-02 7.773 1.36E+01 2.24E+01 2.70E-03 7.73E+00 8.33E+01 1.79E+01 1.78E+01								·
1.36E+01								
7         .777         2.28E+01         4.33E+01         5.62E+03         1.41E+01         1.74E+00         1.76E+01           9         .835         2.98E+01         6.53E+01         9.09E+03         2.25E+01         3.11E+00         5.66E+01           10         .964         3.24E+01         9.47E+01         1.52E+02         4.09E+01         9.68E+00         5.66E+01           11         1.03         3.09E+01         1.04E+02         1.80E+02         4.96E+01         9.65E+00         1.11E+00           12         1.11         2.62E+01         1.11E+02         2.06E+02         5.76E+01         1.4E+01         1.50E+00           13         1.19         2.62E+01         1.11E+02         2.35E+02         6.49E+01         1.39E+01         1.39E+01           14         1.28         2.33E+01         1.22E+02         2.62E+02         7.72E+01         1.64E+01         2.37E+00           15         1.38         2.00E+01         1.05E+02         2.85E+02         7.72E+01         1.68E+01         2.38E+00           16         1.48         1.66E+01         1.05E+02         2.85E+02         8.18E+01         2.16E+01         3.35E+01           17         1.59         1.32E+01         2.62E								
8 .835								
9								· -
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11 1.03 3.09E+01 1.04E+02 1.80E-02 4.96E+01 9.05E+00 1.14E+00 1.12E+00 1.14E+00 1.15E+00 1.14E+00 1.15E+00 1.14E+01 1.50E+00 1.14E+01 1.50E+00 1.14E+01 1.39E+01 1.19E+00 1.14E+01 1.39E+01 1.19E+00 1.14E+01 1.39E+01 1.19E+00 1.14E+01 1.39E+01 1.29E+00 1.14E+01 1.39E+01 1.29E+00 1.14E+01 1.39E+01 1.29E+00 1.15E+02 2.85E+02 8.18E+01 2.14E+01 2.37E+00 1.15E+02 2.85E+02 8.18E+01 2.14E+01 3.35E+00 1.15E+02 2.86E+02 8.55E+01 1.89E+01 2.85E+00 1.15E+02 2.86E+02 8.55E+01 2.36E+01 3.84E+00 1.15E+02 2.86E+01 2.16E+02 9.04E+01 2.71E+01 4.73E+00 1.19E+01 2.12 3.66E+00 4.35E+01 1.87E+02 9.9E+01 2.86E+01 5.13E+00 1.22 2.28 2.66E+00 4.35E+01 1.66E+02 9.19E+01 2.86E+01 5.13E+00 1.22 2.28 2.66E+00 3.92E+01 1.66E+02 9.37E+01 3.05E+01 5.72E+00 1.22 2.28 2.66E+00 3.92E+01 1.66E+02 9.37E+01 3.05E+01 5.72E+00 1.22 2.28 3.52 3.36E+00 3.92E+01 1.50E+02 9.47E+01 3.05E+01 5.72E+00 1.22 2.28 3.52 9.80E+01 3.05E+01 1.51E+02 9.50E+01 3.27E+01 6.52E+03 1.07E+00 3.61E+01 1.97E+02 9.50E+01 3.27E+01 6.52E+03 1.07E+00 3.61E+01 1.97E+02 9.59E+01 3.34E+01 6.80E+02 9.37E+01 3.34E+01 6.80E+02 9.37E+01 3.34E+01 6.80E+02 9.37E+01 3.34E+01 6.80E+02 9.59E+01 3.49E+01 7.54E+03 1.02E+01 1.97E+02 9.59E+01 3.49E+01 7.54E+03 1.02E+03 1.00E+03 1.00E+03 1.00E+03 1.00E+03 1.00E+03 1.00E+03 1.00E+03 1.00E+03 1.0								_
1.11								
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17         1.59         1.32E+01         1.05E+02         2.86E-02         8.55E+01         2.36E+01         3.84E+00           18         1.71         9.96E+00         9.20E+01         2.63E-02         8.83E+01         2.55E+01         4.30E+00           19         1.84         7.37E+00         7.87E+01         2.42E-02         9.04E+01         2.71E+01         4.73E+00           20         1.98         5.30E+00         5.54E+01         2.16E-02         9.19E+01         2.85E+01         5.10E+00           21         2.12         3.63E+00         4.35E+01         1.66E-02         9.29E+01         2.96E-01         5.43E+00           22         2.28         2.66E+00         4.35E+01         1.66E-02         9.3TE+01         3.05E+01         5.72E+00           24         2.64         1.56E+00         3.43E+01         1.51E-02         9.47E+01         3.21E+01         6.07E+00           25         2.83         1.21E+00         3.05E+01         1.44E-02         9.50E+01         3.27E+01         6.27E+00           26         3.05         1.07E+00         3.61E+01         1.97E-02         9.53E+01         3.41E+01         6.80E+00           27         3.27         1.07E+00         3.								
18         1.71         9.96E+00         9.20E+01         2.63E-02         8.83E+01         2.55E+C1         4.30E+00           19         1.84         7.37E+00         7.87E+01         2.42E-02         9.04E+01         2.71E+01         4.73E+00           20         1.98         5.30E+00         6.54E+01         2.16E-02         9.19E+01         2.85E+01         5.10E+00           21         2.12         3.69E+00         5.26E+01         1.87E-02         9.29E+01         2.96E+01         5.43E+00           22         2.28         2.65E+00         4.35E+01         1.66E-02         9.37E+01         3.05E+01         5.72E+00           23         2.45         2.06E+00         3.92E+01         1.50E-02         9.47E+01         3.21E+01         6.07E+00           24         2.64         1.56E+00         3.43E+01         1.51E-02         9.47E+01         3.27E+01         6.52E+03           25         2.83         1.21E+00         3.05E+01         1.44E-02         9.50E+01         3.27E+01         6.52E+03           26         3.05         1.07E+00         3.14E+01         1.69E-02         9.56E+01         3.41E+01         7.14E+03           28         3.52         9.80E-01         3.								
19								
20         1.98         5.30E+00         6.54E+01         2.16E-02         9.19E+01         2.85E+01         5.10E+00           21         2.12         3.63E+00         5.26E+01         1.87E-02         9.29E+01         2.96E+01         5.43E+00           22         2.28         2.65E+00         4.35E+01         1.66E-02         9.37E+01         3.05E+01         5.72E+00           23         2.45         2.06E+00         3.92E+01         1.50E-02         9.43E+01         3.14E+01         6.00E+00           24         2.64         1.56E+00         3.43E+01         1.51E-02         9.47E+01         3.21E+01         6.52E+00           26         3.05         1.07E+00         3.61E+01         1.97E-02         9.50E+01         3.34E+01         6.80E+00           27         3.27         1.07E+00         3.61E+01         1.97E-02         9.59E+01         3.41E+01         7.14E+30           28         3.52         9.80E-01         3.92E+01         2.24E-02         9.59E+01         3.49E+01         7.54E+00           30         4.06         8.93E-01         4.64E+01         3.15E+02         9.62E+01         3.58E+01         8.01E+00           31         4.37         9.10E-01         5.								
21								
22         2.C8         2.65E+00         4.35E+01         1.66E-02         9.37E+01         3.05E+01         5.72E+0C           23         2.45         2.06E+00         3.92E+01         1.60E-02         3.43E+01         3.14E+01         6.00E+00           24         2.64         1.56E+00         3.43E+01         1.51E-02         9.47E+01         3.21E+01         6.27E+00           25         2.83         1.21E+00         3.05E+01         1.44E-02         9.50E+01         3.27E+01         6.52E+03           26         3.05         1.07E+00         3.14E+01         1.60E-02         9.53E+01         3.41E+01         7.14E+30           28         3.52         9.80E-01         3.82E+01         2.24E-02         9.59E+01         3.41E+01         7.54E+00           29         3.78         9.58E-01         4.31E+01         2.72E-02         9.62E+01         3.58E+01         8.01E+00           30         4.06         8.93E-01         4.64E+01         3.15E-02         9.64E+01         3.68E+01         8.56E+00           31         4.37         9.10E-01         5.46E+01         3.98E-02         9.67E+01         3.90E+01         9.26E+00           32         4.69         8.67E-01         6.								
23								
24       2.64       1.56E+00       3.43E+01       1.51E-02       9.47E+01       3.21E+01       6.27E+00         25       2.83       1.21E+00       3.05E+01       1.44E-02       9.50E+01       3.27E+01       6.52E+03         26       3.05       1.07E+00       3.14E+01       1.60E-02       9.53E+01       3.34E+01       7.14E+00         27       3.27       1.07E+00       3.61E+01       1.97E-02       9.56E+01       3.41E+01       7.54E+00         28       3.52       9.80E-01       3.92E+01       2.24E-02       9.59E+01       3.49E+01       7.54E+00         30       4.06       8.93E-01       4.31E+01       2.72E-02       9.62E+01       3.58E+01       8.01E+03         30       4.06       8.93E-01       4.64E+01       3.15E-02       9.67E+01       3.68E+01       8.56E+00         31       4.37       9.10E-01       5.46E+01       3.98E-02       9.67E+01       3.30E+01       9.26E-03         32       4.69       8.67E-01       6.01E+01       4.71E-02       9.67E+01       4.06E+01       1.01E+01         33       5.04       8.33E-01       6.67E+01       5.61E-02       9.72E+01       4.06E+01       1.11E+01         34 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
25 2.83 1.21E+00 3.05E+01 1.44E-02 9.50E+01 3.27E+01 6.52E+00 26 3.05 1.07E+00 3.14E+01 1.63E-02 9.53E+01 3.34E+01 6.80E+00 27 3.27 1.07E+00 3.61E+01 1.97E-02 9.53E+01 3.41E+01 7.14E+30 28 3.52 9.80E-01 3.82E+01 2.24E-02 9.59E+01 3.49E+01 7.54E+00 29 3.78 9.58E+01 4.31E+01 2.72E-02 9.62E+01 3.58E+01 8.01E+00 30 4.06 8.93E-01 4.64E+01 3.15E-02 9.64E+01 3.68E+01 8.56E+00 31 4.37 9.10E-01 5.46E+01 3.98E-02 9.67E+01 3.30E+01 9.26E-03 3.50 4.69 8.67E-01 6.01E+01 4.71E-02 9.69E+01 3.92E+01 1.01E+01 33 5.04 8.33E-01 6.67E+01 5.61E-02 9.72E+01 4.06E+01 1.11E+01 34 5.42 8.22E-01 7.60E+01 6.87E-02 9.74E+01 4.22E+01 1.23E+01 3.5 5.82 8.06E-01 8.61E+01 8.36E-02 9.74E+01 4.22E+01 1.37E+01 3.5 5.82 8.06E-01 8.61E+01 9.83E-02 9.78E+01 4.60E+01 1.37E+01 3.5 5.82 8.06E-01 8.61E+01 9.83E-02 9.78E+01 4.60E+01 1.54E+01 3.7 6.73 7.81E-01 1.11E+02 1.25E-01 9.81E+01 4.83E+01 1.76E+01 3.7 6.73 7.21E-01 1.19E+02 1.25E-01 9.81E+01 5.08E+01 2.01E+01 4.08E+01 1.76E+01 3.9 7.77 7.19E-01 1.36E+02 1.77E-01 9.85E+01 5.37E+01 2.32E+01 4.08E+01 2.01E+01 4.08E+01 1.35E+01 4.08E+01 2.01E+01 4.08E+01 1.35E+01 4.08E+01 2.01E+01 4.08E+01 1.35E+01 4.08E+01 2.01E+01 4.08E+01 2.01E+01 4.08E+01 2.01E+01 4.08E+01 2.01E+01 4.08E+01 3.08E+01 2.01E+01 4.08E+01 3.08E+01 2.01E+01 3.08E+01 3.								
26								
27       3.27       1.07E+00       3.61E+01       1.97E-02       9.56E+01       3.41E+01       7.14E+30         28       3.52       9.80E-01       3.92E+01       2.24E-02       9.59E+01       3.49E+01       7.54E+00         29       3.78       9.58E-01       4.31E+01       2.72E-02       9.62E+01       3.58E+01       8.01E+00         30       4.06       8.93E-01       4.64E+01       3.15E-02       9.64E+01       3.68E+01       8.56E+00         31       4.37       9.10E-01       5.46E+01       3.98E-02       9.67E+01       3.80E+01       9.26E+00         32       4.69       8.67E-01       6.01E+01       4.71E-02       9.69E+01       3.92E+01       1.01E+01         33       5.04       8.33E-01       6.67E+01       5.61E-02       9.72E+01       4.06E+01       1.11E+01         34       5.42       8.22E-01       7.60E+01       6.87E-02       9.74E+01       4.22E+01       1.23E+01         35       5.82       8.06E-01       8.61E+01       9.83E-02       9.76E+01       4.60E+01       1.37E+01         36       6.26       7.63E-01       9.41E+01       9.83E-02       9.78E+01       4.60E+01       1.37E+01         37 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
28       3.52       9.80E-01       3.92E+01       2.24E-02       9.59E+01       3.49E+01       7.54E+00         29       3.78       9.58E-01       4.31E+01       2.72E-02       9.62E+01       3.58E+01       8.01E+00         30       4.06       8.93E-01       4.64E+01       3.15E-02       9.64E+01       3.68E+01       8.56E+00         31       4.37       9.10E-01       5.46E+01       3.98E-02       9.67E+01       3.90E+01       9.26E-00         32       4.69       8.67E-01       6.01E+01       4.71E-02       9.69E+01       3.92E+01       1.01E+01         33       5.04       8.33E-01       6.67E+01       5.61E-02       9.72E+01       4.06E+01       1.11E+01         34       5.42       8.22E-01       7.60E+01       6.87E-02       9.74E+01       4.22E+01       1.23E+01         35       5.82       8.06E-01       8.61E+01       8.36E-02       9.78E+01       4.60E+01       1.37E+01         36       6.26       7.63E-01       9.41E+01       9.83E-02       9.78E+01       4.60E+01       1.54E+01         37       7.21E-01       1.19E+02       1.43E-01       9.81E+01       4.83E+01       1.76E+01         38       7.23 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
29       3.78       9.58E-01       4.31E+01       2.72E-02       9.62E+01       3.58E+01       8.01E+00         30       4.06       8.93E-01       4.64E+01       3.15E-02       9.64E+01       3.68E+01       8.56E+00         31       4.37       9.10E-01       5.46E+01       3.98E-02       9.67E+01       3.30E+01       9.26E+00         32       4.69       8.67E-01       6.01E+01       4.71E-02       9.69E+01       3.92E+01       1.01E+01         34       5.42       8.32E-01       6.67E+01       5.61E-02       9.72E+01       4.06E+01       1.11E+01         34       5.42       8.22E-01       7.60E+01       6.87E-02       9.74E+01       4.22E+01       1.23E+01         35       5.82       8.06E-01       8.61E+01       8.36E-02       9.76E+01       4.40E+01       1.37E+01         36       6.26       7.63E-01       9.41E+01       9.83E-02       9.78E+01       4.60E+01       1.54E+01         37       6.73       7.81E-01       1.11E+02       1.25E-01       9.81E+01       4.83E+01       1.76E+01         38       7.23       7.21E-01       1.36E+02       1.77E-01       9.85E+01       5.08E+01       2.32E+01         40 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
30       4.06       8.93E-01       4.64E+01       3.15E-02       9.64E+01       3.68E+01       8.56E+0C         31       4.37       9.10E-01       5.46E+01       3.98E-02       9.67E+01       3.30E+01       9.26E-00         32       4.69       8.67E-01       6.01E+01       4.71E-02       9.69E+01       3.92E+01       1.01E+01         33       5.04       8.33E-01       6.67E+01       5.61E-02       9.72E+01       4.06E+01       1.11E+01         34       5.42       8.22E-01       7.60E+01       6.87E-02       9.74E+01       4.22E+01       1.23E+01         35       5.82       8.06E-01       8.61E+01       8.36E-02       9.76E+01       4.40E+01       1.37E+01         36       6.26       7.63E-01       9.41E+01       9.83E-02       9.78E+01       4.60E+01       1.54E+01         37       6.73       7.81E-01       1.11E+02       1.25E-01       9.81E+01       4.83E+01       1.76E+01         38       7.23       7.21E-01       1.19E+02       1.43E-01       9.85E+01       5.08E+01       2.01E+01         40       8.35       6.90E-01       1.51E+02       2.11E-01       9.87E+01       5.69E+01       2.69E+01         41 <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>			-					
31								
32       4.69       8.67E-01       6.01E+01       4.71E-02       9.69E+01       3.92E+01       1.01E+01         33       5.04       8.33E-01       6.67E+01       5.61E-02       9.72E+01       4.06E+01       1.11E+01         34       5.42       8.22E-01       7.60E+01       6.87E-02       9.74E+01       4.22E+01       1.23E+01         35       5.82       8.06E-01       8.61E+01       8.36E-02       9.76E+01       4.40E+01       1.37E+01         36       6.26       7.63E-01       9.41E+01       9.83E-02       9.78E+01       4.60E+01       1.54E+01         37       6.73       7.81E-01       1.11E+02       1.25E-01       9.81E+01       4.83E+01       1.76E+01         38       7.23       7.21E-01       1.19E+02       1.43E-01       9.83E+01       5.08E+01       2.01E+01         39       7.77       7.19E-01       1.36E+02       1.77E-01       9.87E+01       5.69E+01       2.69E+01         40       8.35       6.90E-01       1.51E+02       2.11E-01       9.87E+01       5.69E+01       2.69E+01         41       8.97       6.92E-01       1.75E+02       2.62E-01       9.89E+01       6.05E+01       3.15E+01         42 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
33 5.04 8.33E-01 6.67E+01 5.61E-02 9.72E+01 4.06E+01 1.11E+01 34 5.42 8.22E-01 7.60E+01 6.87E-02 9.74E+01 4.22E+01 1.23E+01 35 5.82 8.06E-01 8.61E+01 8.36E-02 9.76E+01 4.40E+01 1.37E+01 36 6.26 7.63E-01 9.41E+01 9.83E-02 9.78E+01 4.60E+01 1.54E+01 37 6.73 7.81E-01 1.11E+02 1.25E-01 9.81E+01 4.83E+01 1.76E+01 38 7.23 7.21E-01 1.19E+02 1.43E-01 9.83E+01 5.08E+01 2.01E+01 39 7.77 7.19E-01 1.36E+02 1.77E-01 9.85E+01 5.37E+01 2.32E+01 40 8.35 6.90E-01 1.51E+02 2.11E-01 9.87E+01 5.69E+01 2.69E+01 41 8.97 6.92E-01 1.75E+02 2.62E-01 9.89E+01 6.05E+01 3.15E+01 42 9.64 6.46E-01 1.89E+02 3.04E-01 9.90E+01 6.45E+01 3.68E+01 43 10.3 6.26E-01 2.11E+02 3.65E-01 9.92E+01 6.89E+01 4.32E+01 41 11.1 5.62E-01 2.19E+02 4.07E-01 9.94E+01 7.35E+01 5.03E+01 4.32E+01 4.31E+01 5.79E-01 2.61E+02 5.20E-01 9.95E+01 7.90E+01 5.94E+01 4.32E+01 4.32E+01 4.32E+01 4.32E+01 4.32E+01 5.68E-01 2.95E+02 6.33E-01 9.97E+01 8.52E+01 7.05E+01 4.32E+01 4.32E+01 4.32E+01 4.32E+01 4.32E+01 4.32E+01 5.68E-01 2.95E+02 6.33E-01 9.97E+01 8.52E+01 7.05E+01 4.32E+01 4.32E+01 4.32E+01 4.32E+01 4.32E+01 4.32E+01 5.03E+01 5.94E+01 4.32E+01 5.03E+01 5.03E+								
34 5.42 8.22E-01 7.60E+01 6.87E-02 9.74E+01 4.22E+01 1.23E+01 35 5.82 8.06E-01 8.61E+01 8.36E-02 9.76E+01 4.40E+01 1.37E+01 36 6.26 7.63E-01 9.41E+01 9.83E-02 9.78E+01 4.60E+01 1.54E+01 37 6.73 7.81E-01 1.11E+02 1.25E-01 9.81E+01 4.83E+01 1.76E+01 38 7.23 7.21E-01 1.19E+02 1.43E-01 9.83E+01 5.08E+01 2.01E+01 39 7.77 7.19E-01 1.36E+02 1.77E-01 9.85E+01 5.37E+01 2.32E+01 40 8.35 6.90E-01 1.51E+02 2.11E-01 9.87E+01 5.69E+01 2.69E+01 41 8.97 6.92E-01 1.75E+02 2.62E-01 9.89E+01 6.05E+01 3.15E+01 42 9.64 6.46E-01 1.89E+02 3.04E-01 9.90E+01 6.45E+01 3.68E+01 43 10.3 6.26E-01 2.11E+02 3.65E-01 9.92E+01 6.89E+01 4.32E+01 41 1.1 5.62E-01 2.19E+02 4.07E-01 9.94E+01 7.35E+01 5.03E+01 4.5 11.9 5.79E-01 2.61E+02 5.20E-01 9.95E+01 7.90E+01 5.94E+01 4.6 12.8 5.68E-01 2.95E+02 6.33E-01 9.97E+01 8.52E+01 7.05E+01 41 13.8 5.70E-01 3.42E+02 7.88E-01 9.99E+01 9.24E+01 8.43E+01 4.8 14.8 5.23E-01 3.62E+02 8.97E-01 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02								
35       5.82       8.06E-01       8.61E+01       8.36E-02       9.76E+01       4.40E+01       1.37E+01         36       6.26       7.63E-01       9.41E+01       9.83E-02       9.78E+01       4.60E+01       1.54E+01         37       6.73       7.81E-01       1.11E+02       1.25E-01       9.81E+01       4.83E+01       1.76E+01         38       7.23       7.21E-01       1.19E+02       1.43E-01       9.83E+01       5.08E+01       2.01E+01         39       7.77       7.19E-01       1.36E+02       1.77E-01       9.85E+01       5.37E+01       2.32E+01         40       8.35       6.90E-01       1.51E+02       2.11E-01       9.87E+01       5.69E+01       2.69E+01         41       8.97       6.92E-01       1.75E+02       2.62E-01       9.89E+01       6.05E+01       3.15E+01         42       9.64       6.46E-01       1.89E+02       3.04E-01       9.90E+01       6.45E+01       3.68E+01         43       10.3       6.26E-01       2.11E+02       3.65E-01       9.92E+01       6.89E+01       4.32E+01         44       11.1       5.62E-01       2.19E+02       4.07E-01       9.94E+01       7.35E+01       5.94E+01         45 <td></td> <td></td> <td></td> <td></td> <td>- · · · <del>-</del></td> <td></td> <td></td> <td></td>					- · · · <del>-</del>			
36       6.26       7.63E-01       9.41E+01       9.83E-02       9.78E+01       4.60E+01       1.54E+01         37       6.73       7.81E-01       1.11E+02       1.25E-01       9.81E+01       4.83E+01       1.76E+01         38       7.23       7.21E-01       1.19E+02       1.43E-01       9.83E+01       5.08E+01       2.01E+01         39       7.77       7.19E-01       1.36E+02       1.77E-01       9.85E+01       5.37E+01       2.32E+01         40       8.35       6.90E-01       1.51E+02       2.11E-01       9.87E+01       5.69E+01       2.69E+01         41       8.97       6.92E-01       1.75E+02       2.62E-01       9.89E+01       6.05E+01       3.15E+01         42       9.64       6.46E-01       1.89E+02       3.04E-01       9.90E+01       6.45E+01       3.68E+01         43       10.3       6.26E-01       2.11E+02       3.65E-01       9.92E+01       6.89E+01       4.32E+01         44       11.1       5.62E-01       2.19E+02       4.07E-01       9.94E+01       7.35E+01       5.03E+01         45       11.9       5.79E-01       2.61E+02       5.20E-01       9.97E+01       8.52E+01       7.05E+01         46 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
37       6.73       7.81E-01       1.11E+02       1.25E-01       9.81E+01       4.83E+01       1.76E+01         38       7.23       7.21E-01       1.19E+02       1.43E-01       9.83E+01       5.08E+01       2.01E+01         39       7.77       7.19E-01       1.36E+02       1.77E-01       9.85E+01       5.37E+01       2.32E+01         40       8.35       6.90E-01       1.51E+02       2.11E-01       9.87E+01       5.69E+01       2.69E+01         41       8.97       6.92E-01       1.75E+02       2.62E-01       9.89E+01       6.05E+01       3.15E+01         42       9.64       6.46E-01       1.89E+02       3.04E-01       9.90E+01       6.45E+01       3.68E+01         43       10.3       6.26E-01       2.11E+02       3.65E-01       9.92E+01       6.89E+01       4.32E+01         44       11.1       5.62E-01       2.19E+02       4.07E-01       9.94E+01       7.35E+01       5.03E+01         45       11.9       5.79E-01       2.61E+02       5.20E-01       9.95E+01       7.90E+01       5.94E+01         46       12.8       5.68E-01       2.95E+02       6.33E-01       9.97E+01       8.52E+01       7.05E+01         48 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
38       7.23       7.21E-01       1.19E+02       1.43E-01       9.83E+01       5.08E+01       2.01E+01         39       7.77       7.19E-01       1.36E+02       1.77E-01       9.85E+01       5.37E+01       2.32E+01         40       8.35       6.90E-01       1.51E+02       2.11E-01       9.87E+01       5.69E+01       2.69E+01         41       8.97       6.92E-01       1.75E+02       2.62E-01       9.89E+01       6.05E+01       3.15E+01         42       9.64       6.46E-01       1.89E+02       3.04E-01       9.90E+01       6.45E+01       3.68E+01         43       10.3       6.26E-01       2.11E+02       3.65E-01       9.92E+01       6.89E+01       4.32E+01         44       11.1       5.62E-01       2.19E+02       4.07E-01       9.94E+01       7.35E+01       5.03E+01         45       11.9       5.79E-01       2.61E+02       5.20E-01       9.95E+01       7.90E+01       5.94E+01         46       12.8       5.68E-01       2.95E+02       6.33E-01       9.97E+01       8.52E+01       7.05E+01         47       13.8       5.70E-01       3.42E+02       7.88E-01       9.99E+01       9.24E+01       8.43E+01         48 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
39       7.77       7.19E-01       1.36E+02       1.77E-01       9.85E+01       5.37E+01       2.32E+01         40       8.35       6.90E-01       1.51E+02       2.11E-01       9.87E+01       5.69E+01       2.69E+01         41       8.97       6.92E-01       1.75E+02       2.62E-01       9.89E+01       6.05E+01       3.15E+01         42       9.64       6.46E-01       1.89E+02       3.04E-01       9.90E+01       6.45E+01       3.68E+01         43       10.3       6.26E-01       2.11E+02       3.65E-01       9.92E+01       6.89E+01       4.32E+01         44       11.1       5.62E-01       2.19E+02       4.07E-01       9.94E+01       7.35E+01       5.03E+01         45       11.9       5.79E-01       2.61E+02       5.20E-01       9.95E+01       7.90E+01       5.94E+01         46       12.8       5.68E-01       2.95E+02       6.33E-01       9.97E+01       8.52E+01       7.05E+01         47       13.8       5.70E-01       3.42E+02       7.88E-01       9.99E+01       9.24E+01       8.43E+01         48       14.8       5.23E-01       3.62E+02       8.97E-01       1.00E+02       1.00E+02       1.00E+02         > <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
40 8.35 6.90E-01 1.51E+02 2.11E-01 9.87E+01 5.69E+01 2.69E+01 41 8.97 6.92E-01 1.75E+02 2.62E-01 9.89E+01 6.05E+01 3.15E+01 42 9.64 6.46E-01 1.89E+02 3.04E-01 9.90E+01 6.45E+01 3.68E+01 43 10.3 6.26E-01 2.11E+02 3.65E-01 9.92E+01 6.89E+01 4.32E+01 44 11.1 5.62E-01 2.19E+02 4.07E-01 9.94E+01 7.35E+01 5.03E+01 45 11.9 5.79E-01 2.61E+02 5.20E-01 9.95E+01 7.90E+01 5.94E+01 46 12.8 5.68E-01 2.95E+02 6.33E-01 9.97E+01 8.52E+01 7.05E+01 47 13.8 5.70E-01 3.42E+02 7.88E-01 9.99E+01 9.24E+01 8.43E+01 48 14.8 5.23E-01 3.62E+02 8.97E-01 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
41 8.97 6.92E-01 1.75E+02 2.62E-01 9.89E+01 6.05E+01 3.15E+01 42 9.64 6.46E-01 1.89E+02 3.04E-01 9.90E+01 6.45E+01 3.68E+01 43 10.3 6.26E-01 2.11E+02 3.65E-01 9.92E+01 6.89E+01 4.32E+01 44 11.1 5.62E-01 2.19E+02 4.07E-01 9.94E+01 7.35E+01 5.03E+01 45 11.9 5.79E-01 2.61E+02 5.20E-01 9.95E+01 7.90E+01 5.94E+01 46 12.8 5.68E-01 2.95E+02 6.33E-01 9.97E+01 8.52E+01 7.05E+01 47 13.8 5.70E-01 3.42E+02 7.88E-01 9.99E+01 9.24E+01 8.43E+01 48 14.8 5.23E-01 3.62E+02 8.97E-01 1.00E+02 1.00E+02 1.00E+02 1.00E+02								
42       9.64       6.46E-01       1.89E+02       3.04E-01       9.90E+01       6.45E+01       3.68E+01         43       10.3       6.26E-01       2.11E+02       3.65E-01       9.92E+01       6.89E+01       4.32E+01         44       11.1       5.62E-01       2.19E+02       4.07E-01       9.94E+01       7.35E+01       5.03E+01         45       11.9       5.79E-01       2.61E+02       5.20E-01       9.95E+01       7.90E+01       5.94E+01         46       12.8       5.68E-01       2.95E+02       6.33E-01       9.97E+01       8.52E+01       7.05E+01         47       13.8       5.70E-01       3.42E+02       7.88E-01       9.99E+01       9.24E+01       8.43E+01         48       14.8       5.23E-01       3.62E+02       8.97E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
13 10.3 6.26E-01 2.11E+02 3.65E-01 9.92E+01 6.89E+01 4.32E+01 44 11.1 5.62E-01 2.19E+02 4.07E-01 9.94E+01 7.35E+01 5.03E+01 45 11.9 5.79E-01 2.61E+02 5.20E-01 9.95E+01 7.90E+01 5.94E+01 46 12.8 5.68E-01 2.95E+02 6.33E-01 9.97E+01 8.52E+01 7.05E+01 47 13.8 5.70E-01 3.42E+02 7.88E-01 9.99E+01 9.24E+01 8.43E+01 48 14.8 5.23E-01 3.62E+02 8.97E-01 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
44       11.1       5.62E-01       2.19E+02       4.07E-01       9.94E+01       7.35E+01       5.03E+01         45       11.9       5.79E-01       2.61E+02       5.20E-01       9.95E+01       7.90E+01       5.94E+01         46       12.8       5.68E-01       2.95E+02       6.33E-01       9.97E+01       8.52E+01       7.05E+01         47       13.8       5.70E-01       3.42E+02       7.88E-01       9.99E+01       9.24E+01       8.43E+01         48       14.8       5.23E-01       3.62E+02       8.97E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02						· -		
45       11.9       5.79E-01       2.61E+02       5.20E-01       9.95E+01       7.90E+01       5.94E+01         46       12.8       5.68E-01       2.95E+02       6.33E-01       9.97E+01       8.52E+01       7.05E+01         47       13.8       5.70E-01       3.42E+02       7.88E-01       9.99E+01       9.24E+01       8.43E+01         48       14.8       5.23E-01       3.62E+02       8.97E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
46       12.8       5.68E-01       2.95E+02       6.33E-01       9.97E+01       8.52E+01       7.05E+01         47       13.8       5.70E-01       3.42E+02       7.88E-01       9.99E+01       9.24E+01       8.43E+01         48       14.8       5.23E-01       3.62E+02       8.97E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02						_		
47 13.8 5.70E-01 3.42E+02 7.88E-01 9.99E+01 9.24E+01 8.43E+01 48 14.8 5.23E-01 3.62E+02 8.97E-01 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								-
48 14.8 5.23E-01 3.62E+02 8.97E-01 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
	ATOT.	LS:	3.56E+02 4	.76E+03 5.	72E+00	_	•	

FILE NAME: EXP2 1.006 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC	ENTRATIONS		CUM	ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	3.42E-01	2.15E-01	1.61E-05	1.79E-01		5.77E-04
1	.504	2.65E-01	2.12E-01	1.78E-05	3.18E-01	1.80E-02	1.22E-03
2	.542	5.25E-01	4.85E-01	4.38E-05	5.93E-01	3.84E-02	2.79E-03
3	.581	9.97E-01	1.06E+00	1.03E-04	1.12E+00	8.30E-02	6.48E-03
4	.625	2.02E+00	2.48E+00	2.59E-04	2.18E+00	1.88E-01	1.58E-02
5	.673	4.39E+00	6.24E+00	7.00E-04	4.48E+00	4.50E-01	4.09E-02
6	.723	8.24E+00	1.36E+01	1.63E-03	8.80E+00	1.02E+00	9.96E-02
7	.777	1.37E+01	2.60E+01	3.37E-03	1.60E+01	2.12E+00	2.21E-01
8	.835	1.77E+01	3.87E+01	5.39E-03	2.52E+01	3.75E+00	4.14E-01
9	.897	1.90E+01	4.81E+01	7.19E-03	3.52E+01	5.77E+00	6.73E-01
10	.964	1.82E+01	5.32E+01	8.55E-03	4.47E+01	8.01E+00	9.80E-01
11	1.03	1.69E+01	5.70E+01	9.84E-03	5.36E+01	1.04E+01	1.33E+00
12	1.11	1.50E+01	5.86E+01	1.09E-02	6.14E+01	1.29E+01	1.72E+00
13	1.19	1.34E+01	6.01E+01	1.20E-02	6.84E+01	1.54E+01	2.16E+00
14	1.28	1.17E+01	6.08E+01	1.30E-02	7.46E+01	1.80E+01	2.62E+00
15	1.38	9.69E+00	5.82E+01	1.34E-02	7.96E+01	2.04E+01	3.11E÷00
16	1.48	7.86E+00	5.45E+01	1.35E-02	8.38E+01	2.27E+01	3.59E+00
17	1.59	6.14E+00	4.91E+01	1.31E-02	8.70E+01	2.48E+01	1.06E+00
18	1.71	4.71E+00	4.36E÷01	1.25E-02	8.95E+01	2.66E+01	4.51E+00
19	1.84	3.38E+00	3.61E+01	1.11E-02	9.12E+01	2.81E+01	4.91E-00
20	1.93	2.40E+00	2.96E+01	9.78E-03	9.25E+01	2.94E+01	5.26E+0C
21	2.12	1.79E+00	2.55E+01	9.03E-03	9.34E+01	3.05E+01	5.58E÷00
22	2.28	1.23E+00	2.02E+01	7.71E-03	9.41E+01	3.13E+01	5.86E÷30
23	2.45	9.64E-01	1.83E+01	7.49E-03	9.46E+01	3.21E+01	6.13E÷00
24	2.64	7.57E-01	1.66E+01	7.30E-03	9.50E+01	3.28E+01	6.39E+00
25	2.83	6.27E-01	1.59E+01	7.51E-03	9.53E+01	3.34E+01	6.66E+00
26	3.05	5.88E-01	1.72E+01	8.74E-03	9.56E+01	3.42E+01	6.97E+00
27	3.27	5.36E-01	1.81E+01	9.89E-03	9.59E+01	3.49E+01	7.33E+00
28	3.52	5.15E-01	2.01E+01	1.18E-02	9.62E+01	3.58E+01	7.75E+00
29	3.78	4.99E-01	2.25E+01	1.42E-02	9.64E+01	3.67E+01	8.26E+00
30	4.06	4.51E-01	2.35E+01	1.59E-02	9.67E+01	3.77E+01	8.83E÷00
31	4.37	4.51E-01	2.71E+01	1.98E-02	9.69E+01	3.89E+01	9.54E+00
32	4.69	4.23E-01	2.93E+01	2.30E-02	9.71E+01	4.01E+01	1.04E+01
33	5.04	4.45E-01	3.57E+01	3.00E-02	9.74E+01	4.16E+01	1.14E+31
34	5.42	4.38E-01	4.05E+01	3.66E-02	9.76E+01	4.33E+01	1.28E+01
35	5.82	4.03E-01	4.31E+01	4.18E-02	9.78E+01	4.51E+01	1.43E+01 1.61E+01
36	6.26	4.06E-01	5.01E+01	5.23E-02	9.80E+01	4.72E+01 4.94E+01	1.83E+01
37	6.73	3.69E-01 3.85E-01	5.25E+01 6.33E+01	5.89E-02 7.63E-02	9.82E+01 9.84E+01	5.21E+01	2.10E+01
38 39	7.23 7.77	3.69E-01	7.00E+01	9.08E-02	9.85E+01	5.50E+01	2.43E+31
40	8.35	3.58E-01	7.84E+01	1.09E-01	9.88E+01	5.83E+01	2.82E+01
41	8.97	3.55E-01	8.99E+01	1.34E-01	9.90E+01	6.21E+01	3.30E+01
42	9.64	3.21E-01	9.38E+01	1.51E-01	9.91E+01	6.61E+01	3.84E+01
43	10.3	2.96E-01	1.00E+02	1.73E-01	9.93E+01	7.03E+01	4.46E÷01
44	11.1	2.93E-01	1.14E+02	2.12E-01	9.94E+01	7.51E+01	5.23E+01
45	11.9	2.88E-01	1.30E+02	2.59E-01	9.96E+01	8.06E+01	6.15E+01
46	12.8	2.61E-01	1.36E+02	2.91E-01	9.97E+01		7.20E+01
47	13.8	2.64E-01	1.58E+02	3.65E-01	9.99E+01	9.29E+01	8.51E+01
48	14.8	2.41E-01	1.67E+02	4.15E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL		1.91E+02	2.37E+03 2.	78E+00	•	•	

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EXP2 1.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

X.

	DIB. RATIO. I	. I EFFIC.	CORRECT		
	CONCENTRATIO	างร	CUM	ULATIVE %	
CHNL DIA	NUMBER SURFACI		NUMBER	SURFACE	MASS
< .486	3.70E-01 2.33E			9.79E-03	6.16E-04
1 .504	2.84E-01 2.28E			1.94E-02	1.29E-03
2 .542	5.66E-01 \\ 5.23E		· · · · · · · · · · · · · · · · · · ·		2.97E-03
3 .581	1.06E+00 1.13E				6.83E-03
4 .625	2.19E+00 2.69E				1.68E-02
5 .673	4.69E+00 6.67E				4.33E-02
5 .013					
6 .723 7 .777	8.98E+00 1.48E-			1.105+00	1.06E-01
	1.48E+01 2.80E-		_		2.35E-01
8 .835	1.88E+01 4.13E-				4.38E-01
9 .897	2.00E+01 5.07E				7.07E-01
10 .964	1.88E+01 5.51E			8.48E+00	1.02E+00
11 1.03	1.72E+01 / 5.80E				1.38E+00
12 1.11	1.51E+01 5.91E				1.76E+00
13 1.19	1.30E+01 5.87E				2.18E+00
14 1.28	1.12E+01 5.80E			1.83E+01	2.62E+CO
15 1.38	9.11E+00 5.47E			2.06E+01	3.07E+00
15 1.48	7.29E+00 5.05E				3.51E+00
17 1.59	5.59E+00 4.47E				3.93E+00
18 1.71	4.08E+00 3.77E				4.31E+00
19 1.84	2.99E÷00 3.19E				4.66E÷00
20 1.98	2.13E+00 2.63E	+01 8.67E-03	9.23E+01		4.97E+00
21 2.12	1.49E+00 2.13E-	+01 7.55E-03	9.36E+01	2.36E+01	5.23E+00
22 2.28	1.11E-00 1.83E-	+01 6.98E-03	9.41E+01	3.03E+01	5.48E-00
23 2.45	8.97E-01 1.70E-	+01 6.97E-03	9.46E+01	3.11E+01	5.73E+00
24 2.64	7.30E-01 1.60E-	-01 7.04E-03	9.50E+01	3.17E+01	5.98E+00
25 2.93	5.89E-01 1.49E-	+01 7.05E-03	9.53E+01	3.24E+01	6.23E+00
26 3.05	5.65E-01 1.65E-	+01 8.40E-03	9.56E+01	3.31E+01	6.52E÷00
27 3.27	5.20E-01 1.76E-	+01 9.59E-03			6.86E+00
28 3.52	5.21E-01 2.03E				7.29E+00
29 3.78	4.63E-01 2.08E-			3.55E+01	7.73E+00
30 4.06	4.52E-01 2.35E-				8.31E+00
31 4.37	4.44E-01 2.67E				9.00E+00
32 4.69	4.58E-01 3.17E			3.90E+01	9.88E+00
33 5.04	4.72E-01 3.78E-		•		1.10E+01
34 5.42	4.35E-01 4.02E				1.23E+01
35 5.82	4.23E-01 4.52E		*		1.39E+01
36 6.26	4.19E-01 5.17E				1.58E+01
37 6.73	4.22E-01 6.01E				1.81E+01
38 7.23	3.70E-01 6.09E				2.07E+01
39 7.77	3.51E-01 6.66E				2.38E+01
	3.78E-01 8.29E				2.79E+01
40 8.35					3.29E÷01
41 8.97	3.72E-01 9.42E-				3.80E+01
42 9.64	3.07E-01 8.97E				4.41E+01
13 10.3	2.98E-01 1.01E				5.13E+01
44 11.1	2.80E-01 1.09E-				6.04E+01
45 11.9	2.86E-01 1.29E-			7.97E+01	
46 12.8	2.72E-01 1.41E-				7.11E+01
47 13.8	2.61E-01 1.57E-				8.39E÷01
48 14.8	2.64E-01 1.83E			1.00E+02	1.00E+02
> 15.4	0.00E+00 0.00E		1.00E+02	1.00E+02	1.00E+02
TOTALS:	1.92E+02 2.37E+03	3 2.82E+00			

FILE NAME: EXP2 1.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		cove			CHM	ULATIVE &	
CHY.1	DIA		ENTRATIONS SURFACE	MASS	NUMBER	ULATIVE % SURFACE	MASS
CHNL		NUMBER	2.96E-01	2.22E-05	1.86E-01	9.35E-03	5.82E-04
<	.486 .504	4.72E-01 3.63E-01	2.90E-01	2.44E-05	3.28E-01	1.85E-02	1.22E-03
1 2	.542	7.37E-01	6.81E-01	6.15E-05	6.18E-01	4.00E-02	2.83E-03
3	.542	1.41E+00	1.49E+00	1.45E-04	1.17E+00	8.71E-02	6.63E-03
4	.625	2.89E+00	3.54E+00	3.69E-04	2.31E+00	1.99E-01	1.63E-02
5	.673	6.19E+00	8.81E+00		4.74E+00	4.77E-01	4.22E-02
6	.723	1.18E+01	1.94E+01	2.34E-03	9.39E+00	1.09E+00	1.04E-01
7	.777	1.94E+01	3.69E+01	4.78E-03	1.70E+01	2.25E+00	2.29E-01
8	.835	2.47E+01	5.42E+01	7.55E-03	2.68E+01	3.96E+00	4.27E-01
9	.897	2.65E+01	6.72E+01	1.00E-02	3.72E+01	6.08E+00	6.91E-01
10	.964	2.50E+01	7.33E+01	1.18E-02	4.70E+01	8.39E+00	1.00E+00
11	1.03	2.29E+01	7.73E+01	1.34E-02	5.60E+01	1.08E+01	1.35E+00
12	1.11	2.03E+01	7.94E+01	1.47E-02	6.40E+01	1.33E+01	1.74E+00
13	1.19	1.73E+01	7.80E+01	1.56E-02	7.08E+01	1.58E+01	2.14E+00
14	1.28	1.50E+01	7.79E+01	1.67E-02	7.67E+01	1.83E+01	2.58E+00
15	1.38	1.21E+01	7.28E+01	1.68E-02	8.15E+01	2.06E+01	3.02E+00
16	1.48	9.53E+00	6.60E+01	1.64E-02	8.52E+01	2.26E+01	3.45E+00
17	1.59	7.36E+00	5.89E+01	1.57E-02	8.81E-01	2.45E+01	3.86E+00
18	1.71	5.37E+00	4.97E+01	1.42E-02	9.03E+01	2.61E+01	4.23E+00
19	1.84	3.89E+00	4.15E+01	1.27F-02	9.18E+01	2.74E+01	4.57E+00
20	1.98	2.72E+00	3.36E+01	1.11E-02	9.29E+01	2.84E+01	4.86E+00
21	2.12	1.99E+00	2.83E+01	1.01E-02	9.36E+31	2.93E+01	5.12E+00
22	2.28	1.44E+00	2.37E-01	9.03E-03	9.42E+01	3.01E+01	5.36E+00
23	2.45	1.12E+00	2.12E+01	8.69E-03	9.46E+01	3.07E+01	5.59E+00
24	2.64	9.54E-01	2.09E+01	9.20E-03	9.50E+01	3.14E+01	5.83E+00
25	2.83	7.86E-01	1.99E+01	9.41E-03	9.53E+01	3.20E+01	6.08E+00
26	3.05	7.47E-01	2.18E+01	1.11E-02	9.56E+01	3.27E+01	6.37E+00
27	3.27	6.93E-01	2.34E+01	1.28E-02	9.59E+01	3.35E+01	6.70E+00
28	3.52	6.87E-01	2.68E+01	1.57E-02	9.62E+01	3.43E+01	7.11E+00
29	3.78	6.48E-01	2.92E+01	1.84E-02	9.64E+01	3.52E+01	7.80E+00
30	4.06	6.11E-01	3.1SE+01	2.15E-02	9.6,7E+01	3:62E+01	8.16E+00
31	4.37	5.67E-01	3.40E+01	2.48E-02	9.69E+01	3.73E+01	3.81E-00
32	4.69	5.82E-01	4.04E+01	3.16E-02	9.71E+01	3.86E+01	9.64E+00
33	5.04	5.62E-01	4.50E+01	3.78E-02	9.73E+01	4.00E+01	1.06E+01
34	5.42	5.32E-01	4.92E+01	4.45E-02	9.75E+01	4.15E÷01	1.18E+01
35	5.82	5.67E-01	6.06E+01	5.88E-02	9.78E+01	4.35E+01	1.33E+01
36	6.26	5.20E-01	6.41E+01	6.70E-02	9.80E+01	4.55E+01	1.51E+01
37	6.73	5.11E-01	7.27E+01		9.82E+01	4.78E+01	1.72E+01
38	7.23	4.88E-01	8.03E+01	9.68E-02	9.84E+01	5.03E+01	1.98E+01 2.28E+01
39	7.77	4.68E-01 4.62E-01	8.88E+01 1.01E+02	1.15E-01 1.41E-01	9.85E+01 9.87E+01	5.31E+01 5.63E+01	2.65E+01
40 41	8.35 8.97	4.80E-01	1.01E+02 1.22E+02	1.82E-01	9.89E+01	6.01E+01	3.13E+01
12	9.64	4.54E-01	1.33E+02	2.13E-01	9.91E+01	6.43E+01	3.69E+01
43	10.3	4.30E-01	1.45E+02	2.51E-01	9.93E+01	6.89E+01	4.34E+01
44	11.1	3.98E-01	1.55E+02	2.88E-01	9.94E+01	7.38E+01	5.10E+01
15	11.9	3.96E-01	1.78E+02	3.56E-01	9.96E+01	7.94E+01	6.03E+01
16	12.8	3.68E-01	1.92E+02	4.11E-01	9.97E+01	8.55E÷01	7.11E+01
47	13.8	3.65E-01	2.19E+02	5.05E-01	9.99E+01	9.24E+01	8.43E+01
48	14.8	3.48E-01	2.41E+02	5.97E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL			1.17E+03 3	•	<b>.</b>		

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EXP2 1.009 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIL. RATIO	): 1 ;1	Erric. C	ouncer 2	•	
		CONCEN	TDATIONS		CUMU	LATIVE %	
			TRATIONS SURFACE	MASS	NUMBER	SURFACE	MASS
CHNL		• • • • • • • • • • • • • • • • • • • •	2.81E-01		1.78E-01	8.78E-03	5.44E-04
ζ,	.486		2.70E-01	2.27E-05	_	1.72E-02	1.13E-03
1	.504	• • • • • • • • • • • • • • • • • • • •		5.64E-05			2.60E-03
2	.542	6.76E-01	6.24E-01	1.32E-04			6.02E-03
3 4	.581	<b>2 1 4 5 5</b> 7 7 7	1.36E+00	3.35E-04			1.47E-02
4	.625	2.62E+00	3.21E+00	9.20E-04		-	3.86E-02
5 6 7	.673	5.76E+00	8.20E+00		8.79E+00	1.00E+00	9.49E-02
6	.723	1.09E+01	1.80E+01	2.17E-03			2.12E-01
	.777	1.84E+01	3.49E+01	4.52E-03			4.01E-01
8	.835	2.38E+01	5.22E+01	7.27E-03			6.53E-01
9	.897	2.57E+01	6.51E+01	9.74E-03			9.53E-01
10	.964	2.46E+01	7.19E+01	1.16E-02	4.56E+01		1.30E+00
11	1.03		7.64E+01	1.32E-02		-	1.68E+00
12	1.11	2.03E+01	7.93E+01	1.47E-02			2.09E+00
13	1.19	1.78E+01	8.01E+01	1.60E-02	6.98E+01		2.53E+00
1 4	1.28	1.53E+01	7.94E+01	1.70E-02	7.58E+01		2.98E-00
15	1.38	1.25E+01	7.48E+01	1.72E-02			3.42E+00
16	1.48	9.97E+00	6.91E+01	1.71E-02			3.84E+00
17	1.59	7.51E+00	6.02E + 01	1.60E-02	3.78E+01		4.22E+00
18	1.71	5.53E+00	5.11E+01	1.46E-02	9.00E+01		
19	1.84	4.02E+00	4.29E+01	1.32E-02			4.56E+00
20	1.93	2.82E+00	3.48E+01	1.15E-02		_	4.86E+00
21	2.12	2.00E+00	2.85E+01	1.01E-02	9.35E+01		5.12E+00
22	2.28	1.44E+00	2.37E+01	9.04E-03	9.40E+01	_	5.36E+00
23	2.45	1.18E+30	2.24E+01	9.18E-03			5.59E+00
24	2.64	9.61E-01	2.11E+01	9.27E-03			5.83E+00
25	2.83	7.89E-01	2.00E+01	9.45E-03			6.08E+00
26	3.05	7.31E-01	2.14E+01	1.09E-02			6.36E+00
27	3.27	7.19E-01	2.43E+01	1.33E-02	9.58E÷01		6.71E+00
28	3.52	6.68E-C1	2.61E+01	1.53E-02	9.61E+01		7.10E+00
$\frac{29}{29}$	3.78	6.26E-01	2.82E+01	1.78E-02	9.63E+01		7.56E+00
30	4.06	6.16E-01	3.20E+01	2.17E-02	9.66E+01		8.13E+00
31	4.37	6.19E-01	3.71E+01	2.71E-02	9.63E+01		3.83E+00
32	4.69	5.94E-01	4.12E+01	3.22E-02	9.70E+01		9.67E+0¢
33	5.04	5.70E-01	1.56E+01	3.84E-02			1.07E+01
34	5.42	5.66E-01	5.24E+01	4.73E-02		4.15E+01	1.19E+01
35	5.82	5.51E-01	5.89E+01	5.72E-02			1.34E+01
36 36	6.26	5.41E-01	6.67E+01	6.97E-02			1.52E+01
37	6.73	5.11E-01	7.27E+01	8.16E-02			1.73E+01
38	7.23	4.90E-01	8.05E+01	9.71E-02			1.98E+01
39	7.77	4.89E-01	9.28E+01	1.20E-01	9.85E+01		2.29E+01
40	8.35	4.83E-01	1.06E+02	1.47E-01	9.87E+01		2.68E+01
41	8.97	5.11E-01	1.29E+02	1.93E-01	9.89E+01		3.18E+01
42	9.64	4.51E-01	1.32E+02	2.12E-01	9.91E+01	6.47E+01	3.73E+01
43	10.3	4.02E-01	1.36E+02	2.34E-01	9.93E+01		4.34E+01
44	11.1	3.92E-01	1.53E+02	2.84E-01	9.34E+01		5.07E+01
45	11.9	3.79E-01	1.70E+02	3.40E-01			5.95E+01
46	12.8	3.62E-01	1.88E+02	4.03E-01			7.00E+01
47	13.8	3.71E-01	2.23E+02	5.14E-01			
18	14.8	3.75E-01	2.60E+02	6.43E-01	1.00E+0		
<b>10</b>	15.4	0.00E+00	0.00E+00	0.00E+00		2 1.00E+02	1.00E+02
	ALS:	2.51E+02 3					•
101	ALJ.						

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#### TSI AERODYNAMIC PARTICLE SIZER

3.11E-04

FILE NAME: EPX2 2.000 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

> DENSITY: 1 DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CONCENTRATIONS CUMULATIVE % CHNL DIA NUMBER SURFACE MASS NUMBER SURFACE 1.20E-03 7.57E-04 .486 5.68E-08 1.85E-01 5.20E-03 .504 9.60E-04 7.68E-04 6.46E-08 3.33E-01 1.05E-02

6.65E-04 2.16E-03 1.99E-03 .542 1.80E-07 6.65E-01 2.42E-02 1.65E-03 .581 2.28E-03 2.42E-03 2.35E-07 1.02E+00 4.09E-02 2.94E-03 3.60E-03 .625 4.42E-03 4.60E-07 1.57E+00 7.13E-02 5.46E-03 .673 1.25E-06 2.77E+00 1.48E-01 1.23E-02 7.80E-03 1.11E-02 .723 1.27E-02 2.52E-06 4.73E+00 2.09E-02 2.91E-01 2.61E-02 .777 .835 6.79E-02 9.45E-06 1.24E+01 1.00E+00 3.10E-02

3.58E-02 4.64E-06 7.63E+00 5.38E-01 5.15E-02 .897 9.39E-02 1.41E-05 1.81E+01 1.65E+00 3.71E-02 1.80E-01 .964 10 3.90E-02 1.14E-01 1.83E-05 2.41E+01 2.43E+00 2.81E-01 1.03 3.97E-02 11 1.34E-01 2.32E-05 3.02E+01 3.36E+00 1.75E-01 3.25E-05 3.71E+01 12 1.11 4.49E-02 4.56E+00 5.86E-01

13 4.32E-02 1.191.95E-01 3.88E-05 4.38E+01 5.90E+00 7.99E-01 14 1.28 4.52E-02 2.35E-01 5.05E-05 5.07E+01 7.52E+00 1.08E+00 15 1.38 5.61E-05 5.70E+01 9.19E+00 4.06E-02 2.44E-01 2.56E-01 6.34E-05 6.27E+01 3.70E-02 16 1.48 1.10E+01 1.73E+00

17 1.59 3.55E-02 2.85E-01 7.59E-05 6.82E+01 1.29E+01 13 1.71 2.88E-01 8.25E-05 3.12E-02 7.30E+01 1.49E+01 2.60E+00 19 2.62E-02 2.79E-01 8.58E-05 7.70E÷01 1.68E+01 3.07E+00 1.98 2.04E-02 2.52E-01 8.31E-05 8.01E+01 1.86E+01 3.53E+00 2.12 1.70E-02 2.43E-01 3.61E-05 8.28E+01 2.02E+01 4.00E+00 2.28 1.40E-02 2.31E-01 8.80E-05 8.49E+01 2.18E+01 4.48E+00

2.45 1.15E-02 2.19E-01 8.96E-05 8.67E+01 2.33E+01 2.61 9.96E-03 2.18E-01 9.61E-05 8.82E+01 2.48E+01 5.50E+00 2.83 7.08E-03 1.79E-01 8.48E-05 8.33E÷01 2.60E+01 3.05 6.36E-03 1.86E-01 9.45E-05 9.03E + 012.73E+01 3.27 5.78E-03 1.94E-01 1.06E-04 9.12E + 012.87E+01 3.524.80E-03 1.87E-01 1.10E-04 9.19E+01 3.00E+01 7.67E+00 29 3.78 3.84E-03 1.73E-01 1.09E-04 9.25E+013.11E+01

9.31E+01 4.06 3.84E-03 2.00E-01 1.35E-04 3.25E+01 9.01E+002.16E-01 4.37 3.60E-03 1.57E-04 9.37E+01 3.40E+01 4.69 3.36E-03 2.33E-01 1.82E-04 9.42E+01 3.56E+01 5.04 3.60E-03 2.88E-01 2.42E-04 9.47E+013.76E+015.42 3.12E-03 2.88E-01 2.61E-04 9.52E+013.96E+01 5.82 3.96E-03 4.23E-01 4.11E-04 9.58E+01 4.25E+01

36 2.76E-03 3.40E-01 6.26 3.55E-04 9.62E+01 4.48E+01 37 6.73 2.28E-03 3.25E-01 3.64E-049.66E + 014.70E+01 38 7.23 5.52E-01 3.36E-03 6.66E-049.71E+015.08E+01 7.77 2.88E-03 5.47E-01 7.08E-04 9.76E+01 5.46E+01 2.74E+01 40 8.35 1.20E-03 2.63E-01 3.66E-04 9.77E+01 5.64E+01 2.94E+01 2.16E-03 5.47E-01 8.18E-04 9.81E+01 6.02E+01 3.39E+01 8.97 2.28E-03 6.67E-01 1.07E-03 9.84E+01 6.48E+01 3.97E+01

1.32E-03 4.46E-01 7.70E-04 9.86E+01 6.78E+01 4.39E+01 10.3 11.1 1.32E-03 5.15E-01 9.55E-04 9.88E+01 7.14E+01 4.92E+01 2.16E-03 9.72E-01 1.94E-03 9.92E+01 7.81E+01 5.98E+01 45 11.9 2.16E-03 1.12E+00 2.41E-03 9.95E+01 8.58E+01 7.30E+01 12.8 1.925-03 1.15E+00 2.66E-03 9.98E+01 9.37E+01 8.76E+01 47 13.8 48 14.8 1.32E-03 9.15E-01 2.27E-03 1.00E+02 1.00E+02 1.00E+02

0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4 TOTALS: 6.50E-01 1.45E+01 1.82E-02

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 2.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DII. RATIO: 1:1 FFFIC COPRECT . DI

	DIL. RATIO: 1:1	EFFIC. CORRECT.:	D1	
1		~**		
	CONCENTRATIONS		AULATIVE %	V. 2.2
CHNL DIA	NUMBER SURFACE	MASS NUMBER		MASS
< .186	7.20E-04 4.35E-04			2.51E-04
1 .504	3.60E-04 2.88E-04		1 7.86E-03 1 1.75E-02	4.42E-04
2 .542 3 .581	9.60E-04 8.85E-04 2.64E-03 2.81E-03			1.07E-03 3.21E-03
	2.64E-03 2.81E-03 4.03E-03 5.01E-03			7.31E-03
4 .625 5 .673	6.60E-03 9.39E-03			1.56E-02
5 .673 6 .723 7 .777	9.24E-03 1.52E-02			3.00E-02
7 .777	1.39E-02 2.64E-02			5.69E-02
	1.94E-02 4.26E-02			1.04E-01
8 .835 9 .897	1.99E-02 5.05E-02			1.63E-01
10 .964	2.28E-04 6.67E-02			
11 1.03	2.04E-02 6.89E-02			
12 1.11	1.94E-02 7.58E-02			
13 1.19	1.40E-02 6.32E-02		1 4.65E+00	5.50E-01
14 1.28	1.43E-02 7.43E-02	1.59E-05 5.57E+0	1 5.46E+00	6.76E-01
15 1.38	1.33E-02 8.29E-02	1.91E-05 6.03E+0	1 6.36E+00	8.26E-01
16 1.43	8.52E-03 5.91E-02			9.405-01
17 1.59	8.04E-03 6.44E-02			
18 1.71	6.36E-03 5.88E-02			1.21E+00
19 1.84	7.30E-03 8.33E-02			
20 1.98	6.84E-03 8.43E-02			1.53E+00
21 - 2.12	6.12E-03 8.72E-02			1.87E+00
22 2.28	7.56E-03 1.24E-01			2.24E+00
23 2.45	7.20E-03 1.37E-01			2.68E+00
24 2.64	5.88E-03 1.29E-01			3.13E+00
25 2.83	5.83E-03 1.49E-01			3.68E+00
26 3.05	5.04E-03 1.47E-01			4.27E+00 4.73E+00
27 3.27	3.36E-03 1.13E-01			5.36E+00
28 3.52	3.36E-03 1.31E-01			5.92E+00
29 3.78	2.52E-03 1.13E-01			6.99E+00
30 1.06	3.84E-03 2.00E-01 2.28E-03 1.37E-01			7.77E+00
31 4.37	2.52E-03 1.75E-01			8.84E+00
32 4.69 33 5.04	2.16E-03 1.73E-01		-	9.99E+00
33 5.04 34 5.42	3.24E-03 3.00E-01			1.21E+01
35 5.82	3.00E-03 3.20E-01			1.46E+01
36 6.26	1.68E-03 2.07E-01			1.63E+01
37 6.73	2.76E-03 3.93E-01			1.97E+01
38 7.23	1.68E-03 2.76E-01		_	2.23E+01
39 7.77	1.80E-03 3.42E-01			2.58E+01
40 8.35	1.56E-03 3.42E-01		1 5.36E+01	2.96E+01
41 8.97	1.08E-03 2.73E-01		1 5.66E+01	3.28E+01
42 9.64	1.08E-03 3.16E-01	5.08E-04 9.77E+0	1 6.00E+01	3.68E+01
43 10.3	8.40E-04 2.84E-01	4.90E-04 9.79E+0		4.06E+01
44 11.1	9.60E-04 3.74E-01			
45 11.9	1.08E-03 4.86E-01			5.37E+01
46 12.8	1.32E-03 6.86E-01			6.52E+01
47 13.8	1.56E-03 9.37E-01	_		8.22E+01
48 14.8	1.32E-03 9.15E-01			1.00E+02
> 15.4	0.00E+00 0.00E+00		2 1.00E+02	1.00E+02
TOTALS:	3.03E-01 9.20E+00 1	.61E-UZ		

FILE NAME: EPX2 2 .002 01-01-1980
LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

			ENTRATIONS			ULATIVE %	
	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	8.40E-04	5.07E-04		4.57E-01	5.71E-03	2.81E-04
1	.504	3.60E-04	2.88E-04		6.52E-01	8.95E-03	4.64E-04
2	.542	3.60E-04	3.32E-04			1.27E-02	6.91E-04
3	.581	1.20E-03	1.28E-03		1.50E+00	2.71E-02	1.62E-03
4	.625	1.68E-03	2.06E-03	_	2.41E+00	5.03E-02	3.25E-03
5	.673	1.92E-03	2.73E-03		3.46E+00	8.10E-02	5.56E-03
6 7	.723	3.00E-03	4.93E-03		5.09E+00	1.37E-01	1.01E-02
	.777	5.04E-03	9.57E-03		7.83E+00	2.44E-01	1.94E-02
8	.835	6.24E-03	1.37E-02		1.12E+01	3.98E-01	3.38E-02
9	.897	6.72E-03	1.70E-02		1.49E+01	5.90E-01	5.30E-02
10	.964	7.80E-03	2.28E-02		1.91E+01	8.47E-01	8.07E-02
11	1.03	7.20E-03	2.43E-02		2.30E+01	1.12E+00	1.12E-01
12	1.11	9.12E-03	3.56E-02		2.80E+01	1.52E+00	1.62E-01
13	1.19	7.80E-03	3.51E-02		3.22E+01	1.92E+00	2.15E-01
14	1.28	9.96E-03	5.18E-02		3.76E+01	2.50E+00	2.99E-01
15	1.38	9.24E-03	5.55E-02		4.27E+01	3.12E+00	3.96E-01
16 17	1.48	6.84E-03	4.74E-02	1.17E-05	4.64E+01	3.66E+00	4.84E-01
	1.59	5.52E-03	4.42E-02	1.18E-05	4.94E+01	4.16E+00	5.73E-01
18 19	1.71	8.40E-03	7.77E-02		5.39E+01	5.03E+00	7.41E-01
20	1.98	6.48E-03	6.92E-02		5.75E÷01	5.81E+00	9.01E-01
21	2.12	6.00E-03	7.40E-02	2.44E-05	6.07E+01	6.61E+00	1.09E+00
22	2.12	4.80E-03	6.84E-02	2.43E-05	6.33E-01	7.41E+00	1.27E+00
23	2.45	6.84E-03	1.12E-01	4.29E-05	6.71E+01	8.68E+00	1.69E+00
24	2.64	4.44E-03	8.43E-02		6.95E+01	9.63E+00	1.85E+00
25	2.83	5.40E-03	1.18E-01	5.21E-05	7.24E+01	1.10E+01	2.25E-00
26	3.05	4.08E-03 3.60E-03	1.03E-01	4.89E-05	7.46E+01	1.21E÷01	1.61E-00
27	3.27	_	1.05E-01	5.35E-05	7.66E+01	1.33E+01	3.01E+00
28	3.52	4.08E-03 2.28E-03	1.38E-01	7.52E-05	7.88E+01	1.49E+01	3.59E+00
29	3.78	2.88E-03	8.89E-02	5.22E-05	8.00E+01	1.59E+01	3.98E÷00
30	4.06	1.80E-03	1.30E-01 9.36E-02	8.18E-05	8.16E+01	1.73E÷01	4.60E÷00
31	4.37	3.36E-03		6.34E-05	8.26E+01	1.84E+01	5.08E+00
32	4.69	3.36E-03	2.02E-01	1.47E-04	8.44E+01	2.06E+01	6.19E÷00
33	5.04	2.40E-03	2.25E-01	1.76E-04	8.62E+01	2.32E+01	7.52E+00
34	5.42	1.92E-03	1.92E-01	1.62E-04	8.75E+01	2.53E+01	8.74E÷00
35	5.82	1.52E-03	1.77E-01	1.60E-04	8.85E+01	2.73E+01	9.95E+(;0
36	6.26	1.92E-03	1.79E-01	1.74E-04	8.94E+01	2.94E+01	1.13E+01
37	6.73	1.68E-03	2.37E-01	2.47E-04	9.05E+01	3.20E+01	1.31E+01
38	7.23	1.80E-03	2.39E-01	2.68E-04	9.14E+01	3.47E+01	1.52E+01
39	7.23	1.80E-03	2.96E-01	3.57E-04	9.24E+01	3.80E+01	1.78E÷01
40	8.35	1.44E-03	3.42E-01	4.43E-04	9.33E+01	4.19E+01	2.12E+01
41	8.97	1.44E-03	3.16E-01 4.25E-01	4.40E-04	9.41E+01	4.54E+01	2.45E+01
42	9.64	8.40E-04	2.46E-01	6.36E-04	9.50E+01	5.02E+01	2.93E÷01
43	10.3	8.40E-04	2.46E-01 2.84E-01	3.95E-04	9.55E+01	5.30E+01	3.23E+01
44	11.1	1.44E-03	5.61E-01	4.90E-04	9.60E+01	5.62E+01	3.60E+01
45	11.9	1.56E-03	7.02E-01	1.04E-03 1.40E-03	9.67E+01	6.25E+01	4.39E+01
	12.8	1.44E-03	7.49E-01	1.40E-03	9.76E+01	7.04E+01	5.44E+01
	13.8	2.16E-03	1.30E+00	2.99E-03	9.84E+01	7.88E+01	6.66E+01
	14.8	8.40E-04	5.82E-01	1.44E-03	9.95E+01	9.34E+01	8.91E+C1
	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02 1.00E+02	1.00E+02	1.00E-02
TOTAL		1.84E-01 8			1.00E+02	1.00E+02	1.00E+02
				0 L L = 0 L	1	1	

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 2.003 01-01-1980

LAST CALIBRATION: 01-01-1980 5N 149 SAMPLE TIME: 500 SEC

DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

	•		TRATIONS			CHATIVE %	V
CHNL			URFACE	M.ASS	NUMBER	SURFACE	MASS
<	.486	1.20E-04		6.51E-09	1.17E-01	1.38E-03	7.62E-05
1	.504	2.40E-04		1.62E-08	3.50E-01	4.57E-03	2.65E-04
2	.512	F	3.32E-04	3.00E-08	6.992-01	1.01E-02	6.17E-04
3	.581		6.38E-04	6.13E-08	1.28E+00	2.07E-02	1.34E-03
4	.625	8.40E-01	1.035-03	1.07E-07	2.10E+00	3.78E-02	2.60E-03
4 5 6 7	.673	1.44E-03	2.05E-03	2.30E-07	3.50E+00	7.18E-02	5.29E-03
6	.723		2.57E-03	3.09E-07	5.01E+00	1.14E-01	8.90E-03
	. 777	1.92E-03	3.65E-03	4.72E-07	6.83E+00	1.75E-01	1.44E-02
8	.835	2.64E-03	5.79E-03	8.06E-07	9.115+00	2.71E-01	2.39E-02
9	.897	3.00E-03	7.60E-03	1.14E-06	1.24E+01	3.97E-01	3.72E-02
10	.951	3.21E-03	9.48E-03	1.52E-06	1.55E+01	5.55E-01	5.50E-02
11	1.03	2.765-03	9.32E-03	1.61E-06	1.82E+01	7.09E-01 8.73E-01	7.38E-02 9.52E-02
12	1.11	2.52E-03	9.83E-03	1.83E-06	2.06E+01		1.28E-01
1.3	1.19	3.125-03	1.40E-02	2.80E-06	2.37E+01	1.11E+00 1.49E+00	1.36E-C1
1 1	1.25	4.44E-03	2.31E-02	4.95E-06	2.80E÷01	1.49E+00	2.48E-01
¥5	1.33	3.84E-03	2.31E-02	5.31E-05	3.17E+01	2.38E-00	3.37E-01
/16	1.43	4.44E-03	3.08E-02	7.622-06	3.60E+01	2.69E+00	3.94E-01
17	1.59	2.28E-03	1.835-02	4.36E-05	3.82E+01 4.15E+01		4.93E-01
1,9	1.71	3.36E-03	3.11E-02	8.88E-06 1.46E-05	4.13E+01 4.58E+01	3.992+00	5.681-01
<b>i</b> 9	1.54	4.44E-03	4.74E-02	1.325-05	1.902+01	4.65E+00	3.23E-01
20	1.98	3.24E-03 2.04E-03	1.00E-02 2.91E-02	1.03E-05	5.095+01	5.13E+00	9.43E-01
21	2.12	3.24E-03	5.33E-02	2.03E-05	5.41E+01		1.18E+00
22	2.28	4.323-03	8.20E-02	3.36E-05	5.83E+01	7.33E+00	1.57E+00
23	$\frac{2.45}{2.45}$	3.24E-03	7.10E-02	3.132-05	6.145+01	8.56E+00	1.94E+CO
24 25	$\frac{2.51}{2.83}$	3.00E-03	7.59E-02	3.59E-05	6.43E+01	9.82E+00	2.35E+00
26	3.05	1.20E-03	1.23E-01	6.24E-05	6.84E+01	1.19E+01	3.03E+0C
27	3.27	1.92E-03	6.48E-02	3.54E-05	7.03E+01	1.29E+01	3.502+00
28	3.52	2.28E-03	8.89E-02	5.22E-05	7.25E+01	1.44E+01	4.11E+00
29	3.78	1.80E-03	8.10E-02	5.11E-05	7.42E+01	1.58E+01	4.71E+00
30	4.06	2.88E-03	1.50E-01	1.02E-04	7.70E+01	1.82E+01	5.90E+00
31	4.37	1.68E-03	1.01E-01	7.35E-05	7.87E+01	1.99E+01	6.76E+00
32	4.69	1.80E-03	1.25E-01	9.77E-05	8.04E+01	2.20E+01	7.90E+00
33	5.04	3.00E-03	2.40E-01	2.02E-04	8.33E+01	2.60E+01	1.03E+01
34	5.42	1.20E-03	1.11E-01	1.00E-04	8.45E+01		1.14E+01
35	5.82	2.16E-03	2.31E-01	2.24E-04	8.66E+01		1.41E+01
36	6.26	1.32E-03	1.63E-01	1.70E-04	8.79E+01		1.60E+01
37	6.73	7.20E-04	1.03E-01	1.15E-04			1.74E+01
38	7.23	1.92E-03	3.16E-01	3.81E-04	9.04E+01		2.18E+01
39	7.77	1.08E-03	2.05E-01	2.66E-04		4.47E+01	2.50E+01 3.10E+01
40	8.35	1.68E-03	3.68E-01	5.13E-04			3.68E+01
41	8.97	1.32E-03	3.34E-01	5.00E-04			4.21E+01
42	9.64	9.60E-04	2.81E-01	4.51E-04	9.53E+01 9.56E+01		4.37E+01
43	10.3	2.40E-04	8.10E-02 4.21E-01	1.40E-04 7.82E-04			5.29E+01
44	11.1	1.08E-03	4.21E-01 5.40E-01	1.08E-03			6.55E+01
45	11.9	1.20E-03 1.20E-03	6.24E-01	1.34E-03			8.11E+01
46 47	13.8	7.20E-04	4.32E-01	9.96E-04			9.28E+01
47	14.8	3.60E-04	2.50E-01	6.18E-04			1.00E+02
**O	15.4	0.00E+00	0.00E+00	0.00E+00			1.00E+02
TOTA		1.03E-01 6					
. •		= · · = · ·			•		

FILE NAME: EPX2 2.004 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		201125			ar:vr	·	
			INTRATIONS			LATIVE %	
	DIA		SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	-	6.74E-04	5.03E-08			4.29E-04
1	.504	7.20E-04		4.85E-08	1.05E+00		8.42E-04
2 3	.542		9.97E-04	9.01E-08	1.67E+00		1.61E-03
	.581	1.20E-03	1.28E-03	1.24E-07	2.37E+00	4.31E-02	2.66E-03
4	.625	1.08E-03	1.33E-03	1.38E-07	3.00E+00	5.94E-02	3.84E-03
5	.673	2.16E-03	3.07E-03	3.45E-07	4.26E+00	9.70E-02	6.78E-03
6 7	.723	3.48E-03		6.90E-07	6.28E+00	1.67E-01	1.27E-02
7	.777	4.68E-03	8.89E-03	1.15E-06	9.002+00	2.76E-01	2.25E-02
8	.835	5.76E-03	1.26E-02	1.76E-06	1.245+01	4.31E-01	3.75E-02
9	.897	7.08E-03	1.79E-02	2.68E-06	1.65E+01	6.50E-01	6.04E-02
10	.964	6.60E-03	1.93E-02	3.10E-06	2.03E+01	8.87E-01	8.69E-02
11	1.03	6.48E-03	2.19E-02	3.78E-06	2.41E+01	1.15E+00	1.192-01
12	1.11	8.16E-03	3.18E-02	5.91E-06	2.83E+01	1.54E+00	1.705-01
13	1.19	7.56E-03	3.40E-02	6.79E-06	3.32E+01	1.962+00	2.27E-01
14	1.28	9.24E-03	4.81E-02	1.03E-05	3.865+01	2.55E+00	3.15E-0:
15	1.33	7.20E-03	4.32E-02	9.96E-06	4.285+01	3.08E+00	4.00E-01
16	1.48	7.08E-03	4.91E-02	1.22E-05	4.695+01	3.68E+00	5.04E-01
17	1.59	9.12E-03	7.30E-02	1.94E-05	5.225+01	4.57E+00	6.70E-01
13	1.71	5.64E-03	5.21E-02	1.49E-05	5.55E÷01	5.21E+00	7.97E-01
19	1.34	6.602-03		2.16E-05	5.93E+01	6.08E+00	9.81E-01 1.16E+00
20	1.98	5.042-03	6.21E-02	2.05E-05 1.46E-05	6.22E+01 6.39E+01	6.84E+00 7.34E+00	1.182+00
21	2.12	2.335-03	4.102-02	3.33E-05	6.71E+01	8.43E+00	1.152+00 1.57E+00
22	2.28	5.40E-03 3.48E-03	8.38E-02 5.60E-02	2.71E-05	6.91E+01	9.24E+00	1.80E+00
2.3	2.45 2.64	3.12E-03	6.84E-02	3.01E-05	7.09E+01	1.01E+01	2.06E+00
2 <del>1</del> 2 5	2.83	4.55E-03	1.15E-01	5.46E-05	7.36E÷01	1.15E+01	2.52E+00
25	3.05	3.36E-03	9.82E-02	4.99E-05		1.27E+01	2.95E+CO
27	3.27	3.24E-03	1.09E-01			1.40E+01	3.45E+00
28	3.52	2.88E-03	1.12E-01	6.59E-05		1.54E+01	4.02E+00
29	3.78	2.285-03	1.03E-01	6.48E-05		1.67E+01	4.57E+00
30	4.06	3.24E-03	1.68E-01	1.14E-04	8.23E+01	1.87E+01	5.55E+00
31	4.37	2.88E-03	1.73E-01	1.26E-04	8,39E+01	2.08E+01	6.62E+00
32	4.69	1.92E-03	1.33E-01	1.04E-04	8.51E+01	2.25E+01	7.51E+00
33	5.04	2.28E-03	1.83E-01	1.54E-04	8.64E+01	2.47E+01	8.82E+00
34	5.42	3.36E-03	3.11E-01	2.81E-04	8.83E+01	2.85E+01	1.12E+01
35	5.82	1.68E-03	1.79E-01	1.74E-04	8.93E+01	3.07E+01	1.27E+01
36	6.26	1.44E-03	1.78E-01	1.85E-04	9.02E+01	3.29E+01	1.43E+01
37	6.73	1.68E-03	2.39E-01	2.68E-04	9.11E+01	3.58E+01	1.66E+01
38	7.23	1.56E-03	2.56E-01	3.09E-04	9.20E+01	3.90E+01	1.92E+01
39	7.77	2.04E-03	3.87E-01	5.02E-04	9.32E+01	4.37E+01	2.35E+01
40	8.35	1.44E-03	3.16E-01	4.40E-04	9.41E+01	4.76E+01	2.72E+01
41	8.97	1.20E-03	3.04E-01	4.55E-04	9.48E+01	5.13E+01	3.11E+01
42	9.64	1.44E-03	4.21E-01	6.77E-04	9.56E+01	5.64E+01	3.69E+01
43	10.3	1.44E-03	4.86E-01	8.40E-04	9.64E+01	6.24E+01	4.40E+01
44	11.1	1.44E-03	5.61E-01	1.04E-03	9.73E+01	6.93E+01	5.29E+01
45	11.9	1.80E-03	8.10E-01	1.62E-03	9.83E+01	7.92E+01	6.67E+01 7.81E+01
46	12.8	1.20E-03	6.24E-01	1.34E-03	9.90E+01	8.68E+01 9.39E+01	8.95E+01
47	13.8	9.60E-04	5.76E-01	1.33E-03	9.96E+01	1.00E+01	1.00E+02
48	14.8	7.20E-04 0.00E+00	4.99E-01	1.24E-03 0.00E+00	1.00E+02 1.00E+02	1.00E+02	1.00E+02
> TOTA	15.4		0.00E+00 .17E+00 1.		1.006702	1,006706	
TOTA	LJ:	1.742-01 0	.116400 1.	116-06			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 2.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		DIL. RAII	.0. 1 .1	EFFIC.	LORRECT.: I	Jι	
		COVC	ENTRATIONS		Ct:XII	'! \T!\'C &	
CHNL D	T 1	NUMBER	SURFACE	MASS	NUMBER	JLATIVE % SURFACE	MASS
	186		4.35E-04		6.67E-01		MASS
		2.40E-04	1.92E-04				3.01E-04
	204			1.62E-08			4.53E-04
	542	6.00E-01	5.54E-04	5.01E-08			9.24E-04
	581	8.40E-04		8.66E-08			1.74E-03
	625	1.08E-03	1.33E-03	1.38E-07			3.04E-03
	673	1.44E-03	2.05E-03	2.30E-07		7.97E-02	5.20E-03
	723	1.80E-03	2.96E-03	3.57E-07		1.23E-01	8.56E-03
	777	4.08E-03	7.75E-03			2.36E-01	1.80E-02
	835	3.72E-03	8.16E-03			3.55E-01	2.87E-02
	897	3.8 LE-03	9.73E-03	1.46E-06	1.70E+01	4.98E-01	4.24E-02
	961	3.24E-03	9.48E-03			6.36E-01	5.67E-02
	.03	3.00E-03		1.75E-06			7.32E-02
12 1	.11	2.76E-03	1.03E-02	2.00E-06	2.53E+01	9.42E-01	9.20E-02
13 1	.19	3.00E-03	1.35E-02	2.70E-06	2.81E+01	1.145+00	1.17E-01
14 1	.28	4.20E-03	2.18E-02	4.69E-06	3.20E+01	1.46E+00	1.61E-01
1.5 1	.38	2.64E-03	1.59E-02	3.65E-06	3.44E+01	1.695+00	1.96E-01
16 1	. 48	3.485-03	2.41E-02	5.97E-06	3.77E+01	2.04E+00	2.52E-01
1.7	.59	4.08E-03	3.27E-02	3.69E-06	4.14E+01	2.52E+00	3.34E-01
	.71	2.40E-03	2.22E-02	6.31E-06	4.37E+01	2.84E+00	3.93E-01
	.34	3.43E-03		1.14E-05		3.39E+00	5.01E-01
	.98	2.285-03	2.31E-02	9.23E-06		3.80E+00	5.88E-01
	.12	2.83E-03	4.10E-02	1.465-05	5.17F+01	4.40E+00	7.25E-01
99 9	.28	3.00E-03		1.382-05		5.12E+00	9.02E-01
	. 15	4.20E-03	7.97E-02				1.21E+00
	.54	2.16E-03		2.03E-05			1.40E+00
	.83	4.08E-03	1.03E-01	4.89E-05			1.86E+00
	.05	2.52E-03	7.37E-02	3.75E-05			2.22E+00
	.27	2.88E-03	9.72E-02	5.31E-05		1.10E+01	2.72E+00
	.52	2.28E-03	8.89E-02	5.22E-05			3.21E+00
	.78	3.72E-03	1.67E-01	1.06E-04			4.20E+00
	.06	2.04E-03	1.06E-01	7.19E-05		1.63E+01	4.202+00
	.37	1.92E-03	1.15E-01	8.40E-05		1.80E+01	5.67E+00
					8.08E+01	2.06E+01	7.02E+00
	.69	2.64E-03	1.83E-01 1.73E-01	1.43E-04		2.32E+01	8.38E+00
	.04	2.16E-03		1.45E-04		2.56E+01	9.80E+00
	.42	1.80E-03	1.66E-01	1.50E-04			1.16E+01
	.82	1.80E-03	1.92E-01	1.87E-04	•	2.84E+01	
	.26	1.08E-03	1.33E-01	1.39E-04		3.04E+01	1.29E+01
	.73	2.52E-03	3.59E-01	4.02E-04		3.56E+01	1.66E+01
	.23	1.92E-03	3.16E-01	3.81E-04		4.02E+01	2.02E+01
	.77	9.60E-04	1.82E-01	2.36E-04		4.29E+01	2.24E+01
	.35	6.00E-04	1.32E-01	1.83E-04	9.27E+01	4.48E+01	2.42E+01
	.97	7.20E-04	1.82E-01	2.73E-04		4.75E+01	2.67E+01
42 9	.64	1.08E-03	3.16E-01	5.08E-04		5.21E+01	3.15E+01
43 1	0.3	8.40E-04	2.84E-01	4.90E-04	9.51E+01	5.62E+01	3.61E+01
44 1	1.1	4.80E-04	1.87E-01	3.47E-04	9.56E+01	5.90E+01	3.94E+01
45 1	1.9	8.40E-04	3.78E-01	7.55E-04	9.63E+01	6.45E+01	4.65E+01
46 1	2.8	1.44E-03	7.49E-01	1.61E-03	9.77E+01	7.54E+01	6.16E+01
	3.8	7.20E-04	4.32E-01	9.96E-04	9.83E+01	8.18E+01	7.09E+01
	4.8	1.80E-03	1.25E+00	3.09E-03	1.00E+02	1.00E+02	1.00E+02
	5.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTALS		1.08E-01 6	.84E+00 1.	06E-02			

FILE NAME: EPX2 2.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DEMBITY: 1

DIL RATIO: 1 :1 EFFIC. CORRECT.: D1

					<b>.</b>		
	·		ENTRATIONS			JUATIVE %	. = =
ંતિલી.	_ 0[A	NUME ER		MASS			#ASS
	. 435	7.20E-04		3.43E-02		8.115-01	3 188-04
L	504	5.005-04	4.505-04	4.045-08			6.925-04
2	.542	3.5)2-04	3.32E-04	3.002-08		1.705-01	9.732-04
3	. 53 i	L.08E-03	1.152-03	1.115-07	1.302+30		2.002-03
4	. = 25	1.201-03	1.47E-C3	1.535-07	2.595+00	5.215-02	0.425-03
5	د <sup>7</sup> ت	1 305-03	2 . Sá E-03	2.375-07	3.752+00	8.548-02	z 092-33
=	.723	3.35E-03	5.538-00	5.552-37	5.95E+00	1.602-01	1.232-02
~	.777	5 408-03	1.035-02	1.335-06	7.48E+00	2.98E-01	2.455-02
2.	. 233	4.808-03	1.055-32	1.475-00	1.262+01	4.398-01	3 BIE-02
3	5-7	3 23 2 - 0.3	1.348-02	2.00E-0a	1.515-01	5.13E-01	5.578-02
10	, 964	4.325-05	1.252-02	2.03E-05	1.895+01	7.87E-01	7 55E-03
i t	1 03	s 725-03	0 076-01	5.722-06	2.335-01	1 092-00	2 <i>:-</i> ).
. 2	1.11	7.562-03	2.955-02	5.483-0:	2.525-01	1.495-00	1.68E-):
15	1 17	7.085-03	3.175-02		3 383-01	1 9.E-04	1 231.0.
i ÷	1.23	± . 245-03	5.255-32	د 9-3د9 ه	5 677-01	2.055+00	2 345-71
15	3,3	5 575-03	5 E1E-00	7.145-03	- 055-11	2.793-00	7 575-01
1.	1,27	± 005-05	4 158-02	1.008-05	4 442 - 04	3.351-33	- 50E-0.
7	• • <del></del> -	3 :-2-03	4 50E-01	1.205-03	4,8(5+3)	7 755700	1
		3 3 3 2 3 3 3 3	5 995-02	1.715-35	3 2-E-01	4 751-1	7 225-0:
		+ 305-05	3 121-02	575-13			212701 E 583-71
•.	. 🗦 4				3 351-01	5 44 5 30	
	7	- 326-03	5.205-01	7,5-13	5 373-71		175701
	7 1 2	775-00	5 20 3- 22	. :::::::	5 3 1 5 3 L		
		191-01		2 515-05	3	7.728-01	4 4 2 - 3 1
2	: :-	4 081-07	7 741-01	3 175-05			7:5-00
2 -	2 34	4 201-13	2 215-33		5.332-01	1.005-01	I LLEFOC
. 3	1 3:	3 483-03	3.315-02	4 (75-05	7.118701	(4. 125 <del>+</del> 01.	
Î:	3.03	5 2 4 5 - 3 3	9.471-01	# BII-05	7.321-01	1.250.01	I 90 E+30
27	3, 27	3.48E-03	i. 178-01	ق(د-II+) غ		L 4LEHOL	J. ∃4 E+00
_ = =	3.52	2.405-03	9.332-02	5.492-05		1.533+11	4.05E+00
20	5 7.3	2.648-03	1.195-01	7.505-05	' }	· L.59E+01	4.74E400
<b>3</b> 0	4.03	3.362-03	1.752-0_	1.132-04	5.105+01	r.92E+0.	5 34E+00
3 t	4.37	2.408-03	1.445-01	1.052-04	3.252+01	2.125-01	5.81E+00
32	4.69	2.52E-03	1.752-01	1.37E-04	3.42E+01	2.352+01	00+380.B
33	5.04	2.765-03	2.21E-01	1.852-04	8.60E+01	2.65E+01	9.50E+00
34	5.42	3.00E-03	2.77E-01	2.512-04	8.79E+01	3.02E+01	1.215+01
33	5.82	2.16E-03	2.315-01	2.248-04	3.935+01	3.332-01	1.425+01
30	0.20	1.92E-03	2.37E-01	2.47E-04	9.06E+01	3.64E+01	1.65E+01
37	6.73	1.80E-03	2.568-01	2.87E-04	9.18E+01	3.99E+01	1.92E÷01
38	7.23	1.56E-03	2.565-01	3.09E-04	9.285+01	4.33E+01	2.20E+01
39	7.77	1.80E-03	3.42E-01	4.43E-04	9.4CE+01	4.79E+01	2.61E+01
40	8.35	1.32E-03		4.03E-04	9.48E+01	5.18E+01	2.99E+01
41	8.97	1.325-03		5.00E-04	9.57E+01	5.52E+01	3.45E+01
42	9.64	1.08E-03	3.16E-01	5.08E-04	9.645+01	6.05E+01	3.92E+01
43	10.3	9.60E-04	3.24E-01	5.608-04	9.708+01	6.48E+01	4.44E+01
44	11.1	3.60E-04	1.40E-01	2.61E-04	9.73E+01	6.67E+C1	4.68E+01
45	11.7	6.00E-04		5.395-04	9.76E+01	7.03E+01	5.18E+01
46	12.8	9.60E-04	4.99E-01	1.078-03	9.83E+01	7.70E+01	6.17E+01
47	13.8	1.20E-03	7.20E-01	1.66E-03	9.91E+01	8.66E+01	7.71E+01
		1.44E-03	9.98E-01	2.47E-03	1.00E+02	1.00E+02	1.00E+02
48	14.8 15.4	0.COE+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
> TOT0			7.47E+00 1.		1.006702	1.006402	1.000.02
TOTA	1.3:	1.335-01	,.4/ETUU 1.	- VGE - VE			

# TSI AERODYNAMIO PARTICLE SIZER

FILE NAME: EPX2 2.007 01-01-1980

LAST CALIBRATION: 01-01-1950 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: L :L EFFIG. CORRECT.: DI

				C	·>·>·(, \ _  _ \		
		CONO	ENTRATIONS		CLIMI	JLATIVE %	
Chril	. OTA	MUMBER		MASS	NUMBER	SURFACE	<b>X</b> 4 V.3.3
	. 43ء		3.732-04			5.925-03	MASS
Ł	. 504		2.335-04		8.685-01		2.955-04
2	.542	2.40E-04	2.225-04	2.008-08	1.035+00	1.058-03	5.535-14
3	531	5.002-04	5.332-04	5.185-03		1.405-02	7.5c E-04
4	525		2.365-03			2.418-02	1.425-03
5	.573	1.532-03	2.228-03	2.498-07			3.715-03
خ	.723	1.275-05	1.975-03			9.225-02	o.3oE-03
-	777	3 242-03		2.385-07	5.645+00	1.245-01	8.878-03
3	335		5.155-03			2.215-01	1.748-01
- -			8.752-03			3.635-01	3.062-02
	. 3 7 7		175-)]	1.775-05		5.328-01	4.938-02
1.5	. <del>7</del> =4	3.72E-03	1.095-02	1.75E-05		7,248-01	c.8.2-00
Ll		4 )31-03	F 19E-05.			7.43E-01	9.35E-12
1.3	1 11		1.54E-02	3.875-)a	2.715-01	1.195+0.)	1.242-01
13		3.84E-03	1 738-02	3.45E-la	I.OoErOl	. +aE+00	E- ).
• •	1.23	3 723-03	1.932-00	4.151-06	3.393-01	1 775+00	2.053-01
, 5	53	4 208-03	1 303-11	5 315-0:			
. 3	± 3	3.30E-33	1 088-03	5 : 57-7.	- 75I+31	2.505+10	3 228-31
_	2.53	3 493-13	2 795-32	7 4:7-1-	# 75 E - 31	2.745+30	- 101·01
. :	- 1			9.002-15		3 45EF30	
2	1 3			221-15			4.585-1:
-	= 3		- 275-22				4 711-1.
						4 735+)0	
		1 11 11 11 1		152-16			3 3.2-1.
~ -			1.5.5-51		f BlECL	i [#::-]]	1111-00
• •		1 2:4-11	5 065-00	1 331-11			
	1 04	1 11 11 11	: (111-11	2 in 7-15	: I: F-1.	3.002+00	
1;	<u> </u>	] : : : : : : : :		[ La[-];	57 E - 1 L	3 0:2-0	<b>3</b> 7 7 - 3 3
J.S				÷ 455-15	: 332-1.	112-11	1 - 5 - 7 - 7
•	7.27	7.002-00	. j. [-j.	5 333-13		1 21E+11	
2:	3 50	F: 355-33	7 493-01	4 JFE-18			
2 7	5 7.3	3.125-03	1 40E-1.	3.955-05	7 331-3.	1:.536-0:	
\$3	ے . تو	2.405-03	25E-01		7 808-0.		
٤:		2 762-05	1 002-01	1.215-34		2.01E+01	
32	4.57	3.358-03	2.33E-01	1.825-04	E.35E-01	2.382+0.	3 572-00
33	5 04	1.305-03	1.445-01	1.218-04	3.5.2-01		7.355-00
54	5.42	8.40E-04	7.765-02		8.371+11		1 05E+01
33	5.32	1 581-03	1.795-)	1.748-14		2.025+01	1 135+01
3	o . 20	9 505-04	1:35-01	1.245-0-	3.335+31	3.202+01	
37	s.75	1.565-03	2 225-01	2.496-04	8.975+01		1.335+01
3.3	7.23	1.205-03	1.978-01	2.33E-04		3.56E+01	1.54E+01
57	7.77	1.585-03			9.085+01	3.87E+01	1.902+01
4.3			5.19E-01	4.135-04	9.235-01	4.38E+01	2.345+01
	3.35	1.508-03	3.425-01	4.762-04	9.375+01	4.92E+01	2.845+01
4 [	S. 97	1.033-03	2.738-01	4.09E-04	9.47E+01	5.35€+01	3.29E+01
42	9.64	5.00E-04	1.75E-01	2.82E-04	9.52E+01	5.63E+01	3.58E+01
4.5	10.3	3.405-04	2.846-01	4.905-04	9.502+01	6.08E+01	4.108+01
44	11.1	4.505-04	1.87E-01	3.47E-04	9.545+01	6.38E+01	4.47E+01
45	11.9	3.405-04	3.788-31	7.55E-04	9.725+01	6.98E+01	5.275+01
40	12.8	1.32E-03	5.362-01	1.475-03	10+3+6.6	8.07E+01	6.84E+01
47	13.8	3.50E-C4	2.16E-01	4.98E-04	9.27E+01	8.41E+01	7.37E+C1
48	14.8	1.44E-03	9.98E-01	2.47E-03	i.00E+02	1.00E+02	1.00E+02
	15.4	0.002+00	0.00E+00	0.00E+00	1.COE+02	1.00E+02	1.00E+02
TOTA	LS:	1.11E-01 6	.30E+00 9.	402-03	- <del>-</del>	- <del></del>	

TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 2.008 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1 DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCI	ENTRATIONS		CUMI	JLATIVE %	
CHNL	DTA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	6.00E-04	3.73E-04	2.78E-08	5.04E-01	5.98E-03	3.09E-04
ì	.504	4.80E-04	3.84E-04	3.23E-08	9.07E-01	1.21E-02	6.69E-04
2	.542	2.40E-04	2.22E-04	2.00E-08	1.11E+00	1.57E-02	8.92E-04
2 3	.581	6.00E-04	6.38E-04	6.18E-08	1.61E+00		1.58E-03
4	.625	6.00E-04	7.36E-04	7.67E-08	2.12E+00	3.77E-02	2.44E-03
78 5	.673	1.44E-03	2.05E-03	2.30E-07	3.33E+00		5.00E-03
5	.723	2.04E-03	3.35E-03	4.05E-07	5.04E+00	1.24E-01	9.50E-03
5 6 7	.777	2.88E-03	5.47E-03	7.09E-07	7.46E+00	2.12E-01	1.74E-02
8	.835	3.48E-03	7.63E-03	1.06E-06	1.04E+01	3.34E-01	2.92E-02
9	.897	4.68E-03	1.19E-02	1.77E-06	1.43E+01	5.24E-01	4.90E-02
10	.964	5.16E-03	1.51E-02	2.43E-06	1.86E+01	7.66E-01	7.60E-02
11	1.03	4.92E-03	1.66E-02	2.87E-06	2.28E+01	1.03E+00	1.08E-01
12	1.11	4.92E-03	1.92E-02	3.56E-06	2.69E+01	1.34E+00	1.48E-01
13	1.19	5.76E-03	2.59E-02	5.18E-06	3.18E+01	1.76E+00	2.05E-01
14	1.13	4.92E-03	2.56E-02	5.49E-06	3.59E+01	2.17E+00	2.67E-01
15	1.38	5.52E-03	3.31E-02	7.64E-06	4.05E+01	2.70E+00	3.52E-01
16	1.48	3.72E-03	2.58E-02	6.38E-06	4.36E+01	3.11E+00	4.23E-01
17	1.59	4.80E-03	3.84E-02	1.02E-05	4.77E+01	3.73E+00	5.37E-01
18	1.71	2.76E-03	2.55E-02	7.29E-06	5.00E+01	4.14E+00	6.18E-01
19	1.84	4.08E-03	4.36E-02	1.34E-05	5.34E+01	4.83E+00	7.67E-01
20	1.98	2.28E-03	2.81E-02	9.28E-06	5.53E+01	5.29E+00	8.70E-01
21	2.12	3.36E-03	4.78E-02	1.70E-05	5.82E+01	6.05E+00	1.06E+00
22	2.28	3.00E-03	4.93E-02	1.88E-05	6.07E+01	6.84E+00	1.27E+00
23	2.45	3.48E-03	6.60E-02	2.71E-05	6.36E+01	1.90E+00	1.57E+00
24	2.54	3.24E-03	7.10E-02	3.13E-05	6.63E+01	9.04E+00	1.92E+00
25	2.83	2.76E-03	6.99E-02	3.31E-05	6.86E+01	1.02E+01	2.29E+00
26	3.05	2.28E-03	6.67E-02	3.39E-05	7.06E+01	1.12E+01	2.66E+00
27	3.27	2.76E-03	9.32E-02	5.09E-05	7.29E+01	1.27E+01	3.23E+00
28	3.52	2.28E-03	8.89E-02	5.22E-05	7.48E+01	1.41E+01	3.81E+00
29	3.78	3.72E-03	1.57E-01	1.06E-04	7.79E+01	1.68E+01	4.99E+00
30	4.06	3.36E-03	1.75E-01	1.18E-04	8.07E-01	1.96E+01	6.31E-00
31	4.37	1.32E-03	7.93E-02	5.77E-05	8.19E+01	Ž.09E+01,	6.95E+00
32	4.69	1.56E-03	1.08E-01	8.47E-05	8.32E+01	2.26E+01	7.90E-00
33	5.04	2.40E-03	1.92E-01	1.62E-04	8.52E+01	1 2.57E+01	9.70E+00
34	5.42	8.40E-04	7.76E-02	7.02E-05	8.59E+01	2.70E+01	1.05E+01
35	5.82	1.44E-03	1.54E-01	1.49E-04	8.71E+01	2.94E+01	1.21E+01
36	6.26	1.80E-03	2.22E-01	2.32E-04	8.86E+01	3.30E+01	1.47E+01
37	6.73	2.28E-03	3.25E-01	3.64E-04	9.05E+01	3.82E+01	1.88E+01
38	7.23	1.80E-03	2.96E-01	3.57E-04	9.20E+01	4.29E+01	2.28E+01
39	7.77	1.32E-03	2.51E-01	3.25E-04	9.31E+01	4.69E+01	2.64E+01
40	8.35	1.08E-03	2.37E-01	3.30E-04	9.41E+01	5.07E+01	3.00E+01
41	8.97	1.20E-03	3.04E-01	4.55E-04	9.51E+01	5.56E+01	3.51E+01
42	9.64	7.20E-04	2.10E-01	3.38E-04	9.57E+01	5.90E+01	3.89E+01
43	10.3	1.08E-03	3.65E-01	6.30E-04	9.66E+01	6.48E+01	4.59E+01
44	11.1	6.00E-04	2.34E-01	4.34E-04	9.71E+01	6.86E+01	5.07E+01
45	11.9	1.20E-03	5.40E-01	1.08E-03	9.81E+01	7.72E+01	6.27E+01
46	12.8	4.80E-04	2.50E-01	5.35E-04	9.85E+01	8.12E+01	6.87E+01
47	13.8	8.40E-04	5.04E-01	1.16E-03	9.92E+01	8.93E+01	8.16E+01
48	14.8	9.60E-04	6.66E-01	1.65E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02

TOTALS: \ 1.19E-01 6.24E+00 8.98E-03

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 2.009 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		DIC. KAI	10. 1 .1	Erric.	.ORRECT.		
		CONC	ENTRATIONS		CUMI	ULATIVE %	
CHNI	. DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486		8.32E-05	6.51E-09		1.58E-03	8.34E-05
ì	.504	3.60E-04		2.42E-08	5.36E-01		3.94E-04
2	.542	4.80E-04	4.43E-04	4.00E-08	1.07E+00		9.07E-04
$\bar{3}$	.581	4.80E-04		4.95E-08			1.54E-03
	.625	6.00E-04	7.36E-04	7.67E-08	2.28E+00		
- <del>- 1</del>	.673	1.56E-03	2.225-03	2.49E-07	4.02E+00		5.71E-03
4 5 6 7	.723	2.28E-03	3.75E-03	4.52E-07	6.57E+00	1.53E-01	1.15E-02
7	.777	2.52E-03	4.79E-03		9.38E+00		_
	.835	2.04E-03	4.47E-03	6.23E-07	1.17E+01		1.95E-02
8 9	.897	3.48E-03	8.81E-03	1.32E-06	1.55E+01		
		4.20E-03				4.96E-01	4.43E-02
10	.964	2.16E-03	1.23E-02 7.29E-03	1.98E-06	2.02E+01	7.29E-01	6.96E-02
11	1.03			1.26E-06	2.27E+01	8.682-01	
12	1.11	2.52E-03	9.83E-03		2.55E+01	1.05E+00	1.09E-01
13	1.19	2.40E-03	1.08E-02	2.16E-06	2.82E+01	1.25E+00	1.37E-01
14	1.23	2.64E-03	1.37E-02	2.94E-06	3.11E+01	1.525+00	1.75E-01
15	1.33	3.12E-03	1.87E-02	4.32E-06	3.45E+01	1.83E+00	2.30E-01
16	1.43	3.24E-03	2.25E-02	5.56E-06		2.30E+00	3.01E-01
17	1.59	3.36E-03	2.69E-02	7.16E-06	4.20E+01	2.815+00	3.93E-01
18	1.71	3.00E-03	2.77E-02	7.93E-06	4.53E+01	3.34E+00	4.94E-01
19	1.34	2.54E-03	2.82E-02	8.66E-06	4.83E+01	3.83E+00	6.05E-01
20	1.98	2.76E-03	$3.40 \pm -02$	1.12E-05		4.52E+00	
21	2.12	3.43E-03	4.96E-02	1.76E-05		5.472+00	$9.75 \pm -01$
22	2.29	2.04E-03	3.35E-02	1.28E-05	5.75E+01	6.10E+00	1.14E+00
2.3	2.45	1.80E-03	3.42E-02	1.40E-05		6.73E+00	1.32E+J0
24	2.54	2.38E-03	6.31E-02	2.78E-05	6.27E+01		
25	2.93	1.80E-03	4.56E-02	2.16E-05	6.47E+01	8.82E+00	1.95E+00
26	3.05	2.76E-03	8.07E-02	4.10E-05	6.78E+01	1.03E+01	2.48E+00
27	3.27	2.76E-03	9.32E-02	5.09E-05		1.21E+01	3.13E+00
29	3.52	2.04E-03	7.95E-02	4.67E-05		·1.36E+01	3.73E+00
29	3.78	1.30E-03	8.10E-02	5.115-05	7.52E+01	1.52E+01	4.38E+00
30	4.06	1.92E-03	9.98E-02	6.77E-05	7.73E+01	1.71E+01	
31	4.37	1.80E-03	1.08E-01	7.87E-05	7.94E+01	1.91E+01	
32	4.69	2.28E-03	1.58E-01	1.24E-04	8.19E+01	2.21E+01	7.84E+00
33	5.04	9.60E-04	7.69E-02	6.47E-05	8.30E+01	2.36E+01	8.57E+00
34	5.42	1.56E-03	1.44E-01	1.30E-04	8.47E+01	2.63E+01	1.03E+01
35	5.82	1.56E-03	1.67E-01	1.62E-04	8.65E+01	2.95E+01	1.24E+01
36	6.26	9.60E-04	1.18E-01	1.24E-04	8.75E+01	3.17E+01	1.40E+01
37	6.73	1.56E-03	2.22E-01	2.49E-04	8.93E+01	3.60E+01	1.72E+01
38	7.23	1.32E-03	2.17E-01	2.62E-04	9.08E+01	4.01E+01	2.05E+01
39	7.77	9.60E-04	1.82E-01	2.36E-04	9.18E+01	4.35E+01	2.36E+01
40	8.35	9.60E-04	2.10E-01	2.93E-04	9.29E+01	4.75E+01	2.73E+01
41	8.97	1.56E-03	3.95E-01	5.91E-04	9.46E+01	5.50E+01	3.49E+01
42	9.64	6.00E-04	1.75E-01	2.82E-04	9.53E+01	5.84E+01	3.85E+01
43	10.3	6.00E-04	2.03E-01	3.50E-04	9.60E+01	6.22E+01	4.30E+01
44	11.1	2.40E-04	9.36E-02	1.74E-04	9.62E+01	6.40E+01	4.52E+01
45	11.9	9.60E-04	4.32E-01	8.62E-04	9.73E+01	7.22E+01	5.63E+01
46	12.8	8.40E-04	4.37E-01	9.36E-04	9.83E+01	8.05E+01	6.83E+01
47	13.8	6.00E-04	3.60E-01	8.30E-04	9.89E+01	8.74E+01	7.89E+01
48	14.8	9.60E-04	6.66E-01	1.65E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
	LS:		5.26E+00 7.				
• •		- <del></del>					

# 19

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 3.000 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

			NTRATIONS			ULATIVE %	
CHNL			SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	6.16E-01	3.85E-01	2.88E-05	1.182-01	6.06E-03	4.26E-04
1	.504	4.43E-01	3.55E-01	2.98E-05	2.03E-01	1.16E-02	8.67E-04
2	.542	8.145-01	7.52E-01	6.79E-05	3.60E-01	2.35E-02	1.87E-03
3	.581	1.45E÷00	1.54E+00	1.492-04	6.38E-01	4.77E-02	4.08E-03
4	.625	2.81E+00	3.45E+00	3.59E-04	1.18E+00	1.02E-01	9.38E-03
1 5 6 7	.673	6.05E+00	8.61E+00	9.66E-01	2.34E+00	2.37E-01	2.37E-02
6	.723	1.26E+01	2.07E+01	2.49E-03	4.75E+00	5.63E-01	6.05E-02
	.777	2.46E+01	4.68E+01	6.06E-03	9.48E+00	1.30E+00	1.50E-01
8 9	.835	3.84E+01	8.41E+01	1.17E-02	1.68E+01	2.62E+00	3.23E-01
9	.897	4.61E+01	1.17E+02	1.75E-02	2.57E+01	4.46E+00	5.82E-01
10	.964	4.63E+01	1.36E+02	2.18E-02	3.46E+01	6.59E+00	9.04E-01
11	1.03	4.48E+01	1.51E+02	2.61E-02	4.325+01	8.97E+00	1.29E+00
12	1.11	4.22E+01	1.65E+02	3.06E-02	5.13E+01	1.16E+01	1.74E+00
1.3	1.19	3.94E+01	1.77E+02	3.54E-02	5.89E+01	1.44E+01	2.25E+00
14	1.28	3.67E+01	1.91E+02	4.10E-02	6.59E+01	1.74E+01	2.87E+00
1.5	1.38	3.27E+01	1.97E+02	4.53E-02	7.22E+01	2.05E+01	3.54E+00
16	1.48	2.85E+01	1.97E+02	4.89E-02	7.77E+01	2.36E+01	4.26E+00
17	1.59	2.37E+01	1.90E+02	5.06E-02	8.22E+01	2.655+01	5.01E+00
13	1.71	1.902+01	1.76E+02	5.03E-02	8.59E-01	2.93E+01	5.752+00
19	1.84	1.472+01	1.57E+02	4.82E-02	8.87E+01	3.18E+01	$6.432 \pm 00$
20	1.93	1.12E+31	1.33E+02	4.54E-02	9.03E+01	3.392-01	7.14E+00
21	2.12	8.56E+00	1.225+02	4.33E-02	9.25E+01	3.59E+01	7.73E-00
2.1	2.23	8.21E+UC	1.02E+02	3.89E-02	9.37£+01	3.752+01	8.35E+00
23	2.45	4.61E+00	8.75E+01	3.58E-01	9.462+01	3.39E+01	8.835+00
24	2.64	3.34E+00	7.32E+01	3.22E-02	9.52E+01	4.00E+01	9.36E+00
25	2.83	2.43E+00	6.19E+01	2.93E-02	9.57E+01	4.10E+01	9.79E+00
26	3.05	1.952+00	5.71E+01	2.90E-02	9.60E+01	4.19E+01	1.025+01
27	3.27	1.59E+00	5.37E+01	2.932-02	9.64E+01	4.27E+01	1.07E+01
28	3.52	1.38E+00	5.38E+01	3.16E-02	9.66E+01	4.362+01	1.11E+01
29	3.73	1.28E+00	5.75E+01	3.63E-02	9.695+01	4.45E+01	1.17E+01
30	4.06	1.18E+00	6.11E+01	4.14E-02	9.74E+01	4.54E+01	1.23E+01
31	4.37	1.14E+00	6.86E+01	5.00E-02	9.7,3E+01	4:65E+01	1.30E+01
32	4.69	1.12E+00	7.80E+01	6.10E-02	9.75E+01	4.77E+01	1.39E+01
33	5.04	1.09E+00	8.72E+01	7.34E-02	9.77E+01	4.91E+01	1.50E+01
34	5.42	1.01E+00	9.32E+01	8.42E-02	9.79E+01	5.06E+01	1.62E+01
35	5.82	1.01E+00	1.08E+02	1.05E-01	9.81E+01	5.23E+01	1.78E+01
36	6.26	9.48E-01	1.17E+02	1.22E-01	9.83E+01	5.41E+01	1.96E+01
37	6.73	8.80E-01	1.25E+02	1.40E-01	9.85E+01	5.61E+01	2.17E+01
38	7.23	8.86E-01	1.46E+02	1.76E-01	9.86E+01	5.84E+01	2.43E+01
39	7.77	8.39E-01	1.59E+02	2.06E-01	9.88E+01	6.09E+01	2.73E+01
40	8.35	8.31E-01	1.82E+02	2.54E-01	9.90E+01	6.38E+01	3.11E+01
41	8.97	8.38E-01	2.12E+02	3.17E-01	9.91E+01	6.71E+01	3.57E+01
42	9.64	7.48E-01	2.19E+02	3.51E-01	9.93E+01	7.05E+01	4.09E+01
43	10.3	6.86E-01	2.32E+02	4.00E-01	9.94E+01	7.42E+01	4.69E+01
44	11.1	6.66E-01	2.60E+02	4.82E-01	9.95E+01	7.83E+01	5.40E+01
45	11.9	6.34E-01	2.85E+02	5.69E-01	9.97E+01	8.27E+01	6.24E+01
46	12.8	6.20E-01	3.22E+02	6.91E-01	9.98E+01	8.78E+01	7.26E+01
47	13.8	6.14E-01	3.68E+02	8.49E-01	9.99E+01	9.36E+01	8.51E+01
48	14.8	5.86E-01	4.06E+02	1.01E+00	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	5.21E+02 6	.36E+03 6	.77E+00			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 3.001 01-01-1930

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIL. KAI	10. 1 .1	Erric.	JORRES I		
		CONC	ENTRATIONS		CUM	ULATIVE %	
CHNI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< · · · ·	.486	1.32E+00				4.52E-03	2.73E-04
ì	.504	9.02E-01			1.86E-01		5.43E-04
2	.542	1.63E+00	1.50E+00	1.36E-04			
3	.581	2.84E+00			5.61E-01		1.15E-03
4							2.45E-03
<del>1</del> 5	.625	5.41E+00			1.02E+00		5.53E-03
o C	.673	1.16E+01	1.65E+01		1.99E+00		1.37E-02
6 7	.723	2.54E+01	1.182+01	5.04E-03			3.62E-02
	.777		1.02E+02	1.32E-02		<del>-</del>	9.48E-02
8	.835	8.865+01			1.61E+01		2.15E-01
9	.897	1.10E+02	2.79E+02	4.18E-02	2.53E+01		4.01E-01
10	.964	1.11E+02	3.23E+02	5.20E-02	3.46E+01		6.32E-01
11	1.03	1.05E+02	3.56E+02		4.34E+01		$9.06 \Xi - 01$
12	1.11	9.81E+01			5.17E+01		1.22E+00
13	1.19	8.92E+01		8.02E-02		1.16E+01	1.58E+00
14	1.28	8.23E+01	4.28E+02	$9.18\Xi - 02$	6.61E+01	1.39E+01	1.99E÷00
15	1.38	7.20E+01			7.21E+01		
16	1.48	6.18E+01	4.29E+02	1.06E-01	7.73E+01	1.37E+01	2.90E+00
17	1.59	5.10E+01	4.08E+02	1.09E-01	8.16E+01	2.09E+01	3.39E+00
13	1.71	4.05E+01	3.74E+02	1.07E-01	8.50E+01	2.29E+01	3.86E+00
19	1.34	3.12E+01	3.33E+02	1.025-01	3.76E+01	2.43E+01	4.32E+00
20	1.98	2.40E+01	2.96E+02	9.78E-02	8.962+01	2.64E+01	4.75E+00
21	2.12	1.845+01		9.31E-02	9.115+01	2.73E+01	5.17E+00
22	2.28	1.385+01		8.65E-02	9.235-01	2.91E+01	5.55E+00
23	2.45	1.05E+01			9.322+01		5.91E+00
24	2.64	7.97E+00				3.11E+01	
25	2.83	5.99E+00	1.52E+02		9.445+01		
	3.05	5.01E+00	1.47E+02	7.49E-02	9.48E+01	3.23E+01	6.91E+00
27	3.27	4.40E+00			9.51E+01		7.27E+00
28	3.52	4.01E+00	1.56E+02	9.18E-02	9.55E+01		7.68E+00
$\frac{29}{29}$	3.78	3.70E+00	1.67E+02	1.05E-01	9.38E+01		8.14E+00
30	4.06	3.35E+00	1.74E+02	1.18E-01			8.67E+00
31	1.37	3.33E+00	1.92E+02	1.40E-01	9.63E+01		9.29E+00
		3.01E+00	2.09E+02	1.63E-01	9.66E+01	3.85E+01	1.00E+01
32	4.69			-			1.00E+01
33	5.04	2.98E+00	2.39E+02	2.01E-01	9.68E+01		
34	5.42	2.88E+00		2.41E-01			1.20E+01
35	5.82	2.87E+00			9.73E+01		1.33E+01
36	6.26	2.71E+00	3.35E+02	3.49E-01	9.76E+01	4.48E+01	1.49E+01
37	6.73	2.68E+00	3.82E+02	4.29E-01	9.78E+01	4.69E+01	1.68E+01
38	7.23	2.61E+00	4.29E+02	5.18E-01			1.91E+01
39	7.77	2.56E+00	4.86E+02	6.30E-01			2.19E+01
40	8.35	2.51E+00	5.50E+02	7.66E-01	9.84E+01		2.53E+01
41	8.97	2.55E+00	6.46E+02	9.66E-01	9.86E+01	5.85E+01	2.96E+01
42	9.64	2.47E+00	7.23E+02	1.16E+00	9.88E+01	6.25E+01	3.48E+01
43	10.3	2.36E+00	7.95E+02	1.37E+00	9.90E+01		4.09E+01
44	11.1	2.30E+00	8.97E+02	1.67E+00	9.92E+01		4.83E+01
45	11.9	2.26E+00	1.02E+03	2.03E+00	9.94E+01	7.73E+01	5.73E+01
46	12.8	2.27E+00	1.18E+03	2.53E+00	9.96E+01	8.38E+01	6.86E+01
47	13.8	2.29E+00	1.37E+03	3.17E+00	9.98E+01	9.14E+01	8.26E+01
48	14.8	2.27E+00	1.58E+03	3.90E+00	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
	LS:		.82E+04 2.		_		
							•

FILE NAME: EPX2 3.002 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC	ENTRATIONS		CUMI	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	6.45E-01	4.04E-01	3.02E-05	1.32E-01		4.32E-04
i	.504	4.62E-01	3.70E-01	3.11E-05	2.27E-01		8.77E-04
2	.542	8.36E-01	7.72E-01	6.98E-05	3.99E-01		1.88E-03
3	.581	1.48E+00	1.57E+00	1.52E-04	7.02E-01	4.77E-02	4.05E-03
4	.625	2.86E+00	3.52E+00	3.66E-04	1.29E+00	1.02E-01	9.30E-03
5	.673	5.94E+00	8.46E+00	9.48E-04	2.51E+00	2.31E-01	2.29E-02
6	.723	1.14E+01	1.87E+01	2.25E-03	4.84E+00	5.17E-01	5.51E-02
5 6 7	.777	2.05E+01	3.90E+01	5.05E-03	9.05E+00	1.11E+00	1.27E-01
8	.835	3.01E+01	6.60E+01	9.19E-03	1.52E+01	2.12E+00	2.59E-01
9	.897	3.63E+01	9.19E+01	1.38E-02	2.27E+01	3.53E+00	4.56E-01
10	.964	3.75E+01	1.10E+02	1.77E-02	3.04E+01	5.21E+00	7.09E-01
11	1.03	3.75E+01	1.27E+02	2.19E-02	3.81E+01	7.15E+00	1.02E+00
12	1.11	3.68E+01	1.43E+02	2.66E-02	4.56E+01	9.35E+00	1.40E+00
13	1.19	3.57E+01	1.61E+02	_	5.30E+01	1.18E÷01	1.86E+00
14	1.28	3.47E+01	1.81E+02	3.87E-02		1.46E+01	2.42E+00
15	1.38	3.20E+01	1.92E+02	4.43E-02	6.67E+01	1.75E+01	3.05E+00
16	1.48	2.91E+01	2.02E+02	5.00E-02	7.26E+01	2.06E+01	3.77E+00
17	1.59	2.56E+01	2.05E+02	5.44E-02		2.37E+01	4.55E+00
18	1.71	2.10E+01	1.94E+02	5.55E-02		2.67E÷01	5.34E+00
19	1.84	1.71E+01	1.82E+02	5.60E-02	8.57E+01	2.95E+01	6.14E+00
20	1.98	1.34E+01	1.66E+02	5.48E-02	8.81E+01	3.20E-01	6.93E+00
21	2.12	1.08E+01	1.54E+02	5.46E-02	,	3.44E+01	7.71E+00
55	2.28	8.24E+00		5.16E-02	•	3.65E+01	8.45E+00
23	2.45	6.04E+00	1.15E÷02	4.69E-02	9.36E+01	3.82E+01	9.12E+00
24	2.64	4.35E+00		4.19E-02	9.45E+01	3.97E+01	9.72E+00
25	2.83	3.06E+00		3.67E-02		4'.09E+01	1.02E+01
26	3.05	2.36E+00	6.90E+01	3.51E-C2	9.56E+01	4.19E+01	1.07E+01
27	3.27	1.89E+00	6.38E+01	3.49E-02	9.60E+01	4.29E+01	1.12E+01
28	3.52	1.56E+00		3.57E-02		4.38E+01	1.18E+01
29	3.78	1.36E+00	6.14E+01	3.87E-02			1.23E+01
30	4.06	1.21E+00	6.31E+01	4.28E-02	•	4.57E+01	1.29E+01
31	4.37	1.18E+00		5.17E-02	9.71E+01	4.68E+01	1.37E+01
32	4.69	1.13E+00		6.16E-02			1.45E+01
33	5.04	1.06E+00		7.17E-02			1.56E+01
34	5.42	1.05E+00		8.74E-02		5.08E+01	1.68E+01
35	5.82	9.91E-01	1.06E+02	1.03E-01			1.83E+01
36	6.26	9.67E-01	1.19E+02	1.24E-01		5.43E+01	2.01E+01
37	6.73	9.22E-01	1.31E+02	1.47E-01			2.22E+01
38	7.23	8.97E-01	1.47E+02	1.78E-01	9.85E+01	5.85E+01	2.47E+01
39	7.77	8.53E-01	1.62E+02	2.10E-01	9.87E+01	6.10E+01	2.77E+01
40	8.35	8.15E-01		2.49E-01			3.13E+01
41	8.97	8.64E-01	2.19E+02	3.27E-01		6.71E+01	3.60E+01
42	9.64	7.57E-01	2.21E+02	3.56E-01		7.05E+01	4.11E+01
43	10.3	6.92E-01		4.04E-01			4.69E+01
44	11.1	6.90E-01		5.00E-01			5.40E÷01
45	11.9	6.50E-01		5.84E-01		8.27E+01	6.24E+01
46	12.8	6.45E-01	3.35E+02	7.19E-01		8.78E+01	7.27E+01
.47	13.8	6.22E-01		8.60E-01		9.35E+01	8.50E+01
48	14.8	6.11E-01		1.05E+00			1.00E+02
>	15.4	0.00E+00		0.00E+00			1.00E+02
ATOT			6.53E+03 6	•		<u>.</u>	

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 3.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC DENSITY: 1

		covica	3.470 1 T. T. C. 1.4		<b></b>		
CII).I	DIA		ENTRATIONS	W. C.C.		CLATIVE %	
	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486 .504	3.90E-01 2.76E-01	2.44E-01 2.21E-01	1.82E-05	1.49E-01	7.17E-03	5.10E-04
1 2	.542	5.29E-01	4.88E-01	1.86E-05 4.41E-05	2.54E-01	1.37E-02	1.03E-03
3	.581	9.58E-01	1.02E+00	9.87E-05	4.56E-01 8.22E-01	2.80E-02	2.26E-03
4	.625	1.84E+00	2.26E+00	2.36E-04	1.53E+00	5.79E-02	5.02E-03
5	.673	3.69E+00	5.25E+00	5.89E-04	2.94E+00	1.24E-01 2.79E-01	1.16E-02
6	.723	7.01E+00	1.15E+01	1.39E-03	5.61E+00	6.17E-01	2.81E-02
6 7	.777	1.22E+01	2.32E+01	3.01E-03	1.03E+01	1.30E+00	6.70E-02 1.51E-01
8	.835	1.72E+01	3.76E+01	5.24E-03	1.63E+01	2.40E+00	2.98E-01
9	.897	2.00E+01	5.05E+01	7.57E-03	2.45E+01	3.89E+00	5.09E-01
10	.961	2.03E+01	5.95E+01	9.56E-03	3.22E+01	5.64E+00	7.77E-01
11	1.03	1.99E+01	6.72E+01	1.16E-02	3.985+01	7.61E+00	1.10E+00
12	1.11	1.95E+01	7.61E+01	1.41E-02	4.73E+01	9.85E+00	1.50E-00
13	1.19	1.35E+01	8.33E+01	1.66E-02	5.44E+01	1.23E+01	1.95E-00
14	1.23	1.785+01	9.24E+01	1.985-02	6.11E+01	1.50E+01	2.52E+00
1.5	1.38	1.6 (E+01	9.87E+01	2.27E-02	6.74E+01	1.79E+01	3.15E+00
ได้	1.48	1.50E+01	1.04E+02	2.57E-02	7.31E+01	2.10E+01	3.87E+00
1.7	1.59	1.30E+01	1.045+02	2.77E-02	7.81E+01	2.40E+01	4.64E+00
13	1.71	1.09E+01	1.01E+02	2.895-02	8.235+01	2.70E+01	5.45E+00
19	1.9;	8.59E+00	9.49E+01	2.92E-02	8.57E+01	2.982+01	6.25E+00
2)	1.98	7.225+00	8.91E+01	2.945-02	8.545+01	3.24E+01	7.09E+00
21	2.12	5.81E+00	8.235+01	2.94E-02	9.065+01	3.432+01	7.91E+00
2.2	2.28	4.41E+00	7.25E+01	2.76E-02	9.23E+01	3.69E+01	S.68E+00
23	2.45	3.382+00	6.41E+01	2.632-02	9.365+01	3.88E+01	9.42E+00
24	2.61	2.40E+00	5.26E+01	2.32E-02	9.45E+01	4.04E+01	1.01E+01
2.5	2.83	1.725+00	4.34E+01	2.06E-02	9.52E+01	4.16E+01	1.062+01
28	3.05	1.35E+00	3.96E+01	2.01E-02	9.57E-01	4.28E+01	1.12E+01
27	3.27	1.05E+00	3.54E+01	1.93E-02	9.61E+01	4.38E+01	1.17E+01
23	3.52	8.64E-01	3.37E+01	1.98E-02	9.64E+01	4.48E+01	1.23E+01
29	3.78	7.62E-01	3.43E+01	2.16E-02	9.67E+01	4.585+01	1.29E+01
30	4.06	6.43E-01	3.34E+01	2.27E-02	9.70E+01	4.68E+01	1.35E+01
31	4.37	6.11E-01	3.67E+01	2.67E-02	9.72E+01	4.79E+01	1.43E+01
32	4.69	5.90E-01	4.09E+01	3.20E-02	9.74E+01	4.91E+01	1.52E+01
33	5.04	5.48E-01	4.39E+01	3.69E-02	9.76E+01	5.04E+01	1.62E+01
34	5.42	5.67E-01	5.24E+01	4.74E-02	9.79E+01	5.19E+01	1.75E+01
35	5.82	5.15E-01	5.50E+01	5.34E-02	9.80E+01	5.35E+01	1.90E+01
36	6.26	5.01E-01	6.17E+01	6.44E-02	9.82E+01	5.54E+01	2.08E+01
37	6.73	4.83E-01	6.88E+01	7.72E-02	9.84E+01	5.74E+01	2.30E+01
38	7.23	4.53E-01	7.45E+01	8.98E-02	9.86E+01	5.96E+01	2.55E+01
39	7.77	4.33E-01	8.21E+01	1.06E-01	9.88E+01	6.20E+01	2.85E+01
40	8.35	4.20E-01	9.21E+01	1.28E-01	9.89E+01	6.47E+01	3.21E+01
41	8.97	4.18E-01	1.06E+02	1.58E-01	9.91E+01	6.78E+01	3.65E+01
42	9.64	4.07E-01	1.19E+02	1.91E-01	9.92E+01	7.13E+01	4.18E+01
43	10.3	3.64E-01	1.23E+02	2.12E-01	9.94E+01	7.49E+01	4.78E+01
44	11.1	3.51E-01	1.37E+02	2.54E-01	9.95E+01	7.89E+01	5.49E+01
45	11.9	3.51E-01	1.58E+02	3.15E-01	9.96E+01	8.36E+01	6.37E+01
46	12.8	3.12E-01	1.62E+02	3.48E-01	9.98E+01	8.83E+01	7.34E+01
47	13.8	3.17E-01	1.90E+02	4.38E-01	9.99E+01	9.39E+01	8.57E+01
48	14.8	2.98E-01	2.07E+02	5.12E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	2.62E+02 3	3.40E+03 3.	58E+00			

FILE NAME: EPX2 3.004 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		covici	CN:TDATIONS		CIIMI	ULATIVE %	
CHNL	DIA	NUMBER	ENTRATIONS SURFACE	MASS	NUMBER	SURFACE	MASS
CHNL	.486	6.01E-01	3.77E-01	2.81E-05	1.25E-01	6.28E-03	4.27E-04
ì	.504	4.33E-01	3.47E-01	2.92E-05	2.15E-01		8.71E-04
2	.542	8.14E-01	7.52E-01	6.79E-05	3.85E-01		1.90E-03
3	.581	1.47E+00	1.56E+00	1.52E-04	6.91E-01		4.21E-03
4	.625	2.87E+00	3.53E+00	3.67E-04	1.29E+00	1.09E-01	9.78E-03
5	.673	6.12E+00	8.70E+00	9.76E-04	2.56E+00	2.54E-01	2.46E-02
6	.723	1.26E+01	2.07E+01	2.50E-03	5.18E+00	6.00E-01	6.26E-02
7	.777	2.46E+01	4.66E+01	6.04E-03	1.03E+01	1.38E+00	1.54E-01
8	.835	3.80E+01	8.34E+01	1.16E-02	1.82E+01	2.77E+00	3.31E-01
9	.897	4.57E+01	1.16E+02	1.73E-02	2.77E+01	4.70E+00	5.94E-01
10	.964	4.47E+01	1.31E+02	2.10E-02	3.70E+01	6.88E+00	9.13E-01
11	1.03	4.21E+01	1.42E+02	2.46E-02	4.58E+01	9.25E+00	1.29E+00
12	1.11	3.86E+01	1.50E+02	2.79E-02	5.38E+01	1.18E+01	1.71E+00
13	1.19	3.50E+01	1.57E+02	3.14E-02	6.11E+01	1.44E+01	2.19E+00
14	1.28	3.18E+01	1.66E+02	3.55E-02	6.77E+01	1.71E+01	2.73E+00
15	1.38	2.79E+01	1.67E+02	3.86E-02	7.35E+01	1.99E+01	3.31E+00
16	1.48	2.40E+01	1.66E+02	4.12E-02	7.85E+01	2.27E+01	3.94E+00
17	1.59	1.98E+01	1.59E+02	4.22E-02	8.26E+01	2.53E+01	4.58E÷00
18	1.71	1.59E+01	1.47E÷02	4.20E-02	8.59E+01	2.78E+01	5.22E+00
19	1.84	1.25E+01	1.34E+02	4.12E-02	8.85E+01	3.00E+01	5.84E+00
20	1.98	9.80E+00	1.21E+02	3.99E-(2	9.05E+01	3.20E+01	6.45E+00
21	2.12	7.70E+00	1.10E+02	3.89E-(2	9.21E+01	3.39E+01	7.04E-00
22	2.28	5.86E+00	9.63E+01	3.67E-02	9.34E+01		7.60E+00
23	2.45	4.42E+00	8.38E+01	3.43E-01	9.43E+01/		8.12E+00
24	2.64	3.26E+00	7.15E+01	3.15E-02	9.50E+01	3.81E+01	8.60E-00
25	2.83	2.43E+00	6.14E+01	2.91E-02	9.55E+01	3.91E+01	9.04E+00
26	3.05	1.90E+00	5.55E+01	2.82E-02	9.59E+01	4.00E+01	9.47E-00
27	3.27	1.60E÷00	5.39E+01	2.95E-02	9.62E+01	4.09E+01	9.91E+00
28	3.52	1.38E+00	5.36E+01	3.15E-02	9.65E÷01	4.18E+01	1.04E÷01
29	3.78	1.24E+00	5.59E+01	3.53E-02	9.67E+01	4.27E+01	1.09E+01
30	4.06	1.12E+00	5.82E+01	3.95E-02	9.70E+01 9.72E+01	4.37E+01	1.15E+01 1.22E+01
31	4.37	1.08E+00 1.06E+00	6.49E+01 7.35E+01	4.73E-02 5.75E-02	9.74E+01	4.48E+01 4.60E+01	1.31E+01
32	4.€9 5.04	1.04E+00	8.29E+01	6.97E-02		4.74E+01	1.42E+01
33 34	5.42	9.80E-01	9.06E+01	8.19E-02	9.78E+01	4.89E+01	1.54E+01
35	5.82	9.63E-01	1.03E+02	9.99E-02	9.80E+01	5.06E+01	1.69E+01
36	6.26	9.26E-01	1.14E+02	1.19E-01	9.82E+01	5.25E+01	1.88E+01
37	6.73	8.54E-01	1.22E+02	1.36E-01	9.84E+01	5.45E+01	2.08E+01
38	7.23	8.41E-01	1.38E+02	1.67E-01	9.86E+01	5.68E+01	2.34E+01
39	7.77	7.88E-01	1.50E+02	1.94E-01	9.87E+01	5.93E+01	2.63E+01
40	8.35	7.76E-01	1.70E+02	2.37E-01	9.89E+01	6.22E+01	2.99E+01
41	8.97	7.78E-01	1.97E+02	2.95E-01	9.91E+01	6.55E+01	3.44E+01
42	9.64	6.91E-01	2.02E+02	3.25E-01	9.92E+01	6.88E+01	3.93E+01
43	10.3	6.89E-01	2.33E+02	4.02E-01	9.94E+01	7.27E+01	4.54E+01
44	11.1	6.53E-01	2.55E+02	4.73E-01	9.95E+01	7.69E+01	5.26E+01
45	11.9	6.16E-01	2.77E+02	5.53E-01	9.96E+01	8.16E+01	6.1CE+01
46	12.8	6.17E-01	3.21E+02	6.88E-01	9.97E+01	8.69E+01	7.14E+01
47	13.8	6.15E-01	3.69E+02	8.51E-01	9.99E+01	9.31E+01	8.44E+01
48	14.8	6.00E-01	4.16E+02	1.03E+00	1.00E+02	1.00E+02	1.00E÷02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	4.81E+02 6	6.00E+03 6.	58E+00			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 3.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC DENSITY: 1

	20112					
2007 55		ENTRATIONS	W . 0.5		CLATIVE %	
CHNL DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< .496	5.38E-01	3.36E-01	2.51E-05	1.05E-01	5.49E-03	3.82E-04
1 .504	3.82E-01	3.05E-01	2.57E-05	1.80E-01	1.05E-02	7.72E-04
2 .512	7.17E-01	6.62E-01	5.985-05	3.20E-01	2.13E-02	1.68E-03
3 .581	1.27E+00	1.35E+00	1.31E-04	5.68E-01	4.33E-02	3.67E-03
4 .625	2.45E+00	3.01E+00	3.14E-04	1.05E+00	9.25E-02	8.44E-03
5 .673	5.53E+00	7.87E+00	8.83E-04	2.13E+00 4.51E+00	2.21E-0i	2.19E-02
6 .723	1.22E+01	2.00E+01	2.41E-03 6.25E-03	9.47E+00	5.47E-01	5.85E-02
	2.54E+01	4.82E+01 9.10E+01	1.27E-02		1.33E+00	1.53E-01
8 .835 9 .897	1.15E+01 5.05E+01	1.28E+02	1.92E-02	1.76E+01 2.75E+01	2.82E+00	3.46E-01
	4.91E+01	1.44E+02	2.32E-02	3.71E+01	4.91E+00 7.26E+00	6.37E-01 9.90E-01
10 .964	4.54E+01	1.57E+02	2.71E-02	4.62E+01	9.82E+00	1.40E+00
11 1.03	4.23E+01	1.65E+02	3.07E-02	5.44E+01	1.25E+01	1.40E+00 1.87E+00
12 1.11	3.79E+01	1.71E+02	3.40E-02	6.18E+01	1.53E+01	2.38E+00
13 1.19 11 1.23	3.45E+01	1.30E+02	3.85E-02	6.86E+01	1.825+01	2.97E+00
15 1.38	3.00E+01	1.80E+02	4.15E-02	7.44E+01	2.125+01	3.60E+00
16 1.48	2.56E+01	1.78E+02	4.10E-02	7.94E+01	2.41E+01	1.27E+00
17 1.59	2.09E+01	1.635+02	4.465-02	8.35E+01	2.635+01	4.94E+00
18 1.71	1.65E+01	1.53E+02	4.37E-02	8.68E+01	2.935+01	5.61E+00
19 1.31	1.275+01	1.36E+02	1.13E-02	8.93E+01	3.15E+01	6.242+00
20 1.93	9.86E+00	1.225+02	4.01E-02	9.12E+01	3.35E+01	6.85E+00
21 2.12	7.82E+00	1.09E+02	3.85E-02	9.27E+01	3.53E+01	7.142+00
99 9 99	5.63E+00	9.26E+01	3.53E-02	9.38E+01	3.685+01	7.97E+00
23 2.45	1.30E+30	8.17E+01	3.35E-02	9.46E+01	3.815+01	8.48E+00
24 2.64	3.15E+00	6.91E+01	3.04E-02	9.525+01	3.92E+01	8.94E+00
25 2.83	2.38E+00	6.03E+01	2.85E-02	9.57E+01	1.025+01	9.33E+00
26 3.05	1.90E+00	5.54E+01	2.82E-02	9.61E+01	4.11E+01	9.30E+00
27 3.27	1.60E+00	5.39E+01	2.94E-02	9.64E+01	4.20E+01	1.03E+01
28 3.52	1.41E+00	5.49E+01	3.22E-02	9.66E+01	4.29E+01	1.07E+01
29 3.78	1.27E+0C	5.70E+01	3.60E-02	9.69E+01	4.38E+01	1.13E+01
30 1.06	1.15E+00	5.95E+01	4.04E-02	9.71E+01	4.48E+01	1.19E+01
31 4.37	1.12E+00	6.75E+01	4.92E-02	9.73E+01	4.59E+01	1.26E+01
32 4.69	1.08E+00	7.49E+01	5.87E-02	9.76E+01	4.71E+01	1.35E+01
33 5.04	1.04E+00	8.34E+01	7.02E-02	9.78E+01	4.85E+01	1.46E+01
34 5.42	9.98E-01	9.23E+01	8.34E-02	9.80E+01	5.00E+01	1.59E+01
35 5.82	9.65E-01	1.03E+02	1.00E-01	9.81E+01	5.17E+01	1.74E+01
36 6.26	8.97E-01	1.11E+02	1.15E-01	9.83E+01	5.35E+01	1.91E+01
37 6.73	9.00E-01	1.28E+02	1.44E-01	9.85E+01	5.56E+01	2.13E+01
38 7.23	8.37E-01	1.38E+02	1.66E-01	9.87E+01	5.78E+01	2.39E+01
39 7.77	8.11E-01	1.54E+02	2.00E-01	9.88E+01	6.03E+01	2.69E+01
40 8.35	7.81E-01	1.71E+02	2.38E-01	9.90E+01	6.31E+01	3.05E+01
41 8.97	8.02E-01	2.03E+02	3.04E-01	9.91E+01	6.64E+01	3.51E+01
42 9.64	7.27E-01	2.13E+02	3.42E-01	9.93E+01	6.99E+01	4.03E+01
43 10.3	7.00E-01	2.36E+02	4.08E-01	9.94E+01	7.37E+01	4.65E+01
44 11.1	6.55E-01	2.56E+02	4.74E-01	9.95E+01	7.79E+01	5.37E+01
45 11.9	6.13E-01	2.90E+02	5.78E-01	9.97E+01	8.26E+01	6.25E+01
46 12.8	6.02E-01	3.13E+02	6.71E-01	9.98E+01	8.77E+01	7.27E+01
47 13.8	6.12E-01	3.67E+02	8.47E-01	9.99E+01	9.37E+01	8.56E+01
48 14.8	5.54E-01	3.84E+02	9.51E-01	1.00E+02	1.00E+02	1.00E+02
> 15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTALS:	5.12E+02 (	6.13E+03 6.	28E+00			

FILE NAME: EPX2 3.006 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC	CNITO ATTONIC		21:14		
CHNI.	DIA	NUMBER	ENTRATIONS SURFACE			ULATIVE %	VA 6.6
< CHAL	.486	3.44E-01	2.16E-01	MASS 1.61E-05	NUMBER	SURFACE	MASS
ì	.504	2.53E-01	2.10E-01 2.03E-01	1.70E-05	1.13E-01	5.95E-03	4.07E-04
2	.542	4.52E-01	4.17E-01	3.77E-05	1.96E-01 3.45E-01		8.37E-04
3	.581	8.15E-01	8.66E-01	8.40E-05	6.12E-01	2.31E-02	1.79E-03
4	.625	1.57E+00	1.93E+00	2.01E-04	1.13E+00	4.70E-02	3.91E-03
5	.673	3.50E+00	4.98E+00	5.59E-04	2.28E+00	1.00E-01 2.38E-01	8.99E-03
6	.723	7.79E+00	1.28E+01	1.55E-03	4.84E+00		2.31E-02
6 7	.777	1.63E+01	3.09E+01	4.01E-03	1.02E+01	5.92E-01 1.45E+00	6.21E-02
8	.835	2.63E+01	5.77E+01	8.03E-03	1.88E+01	3.04E+00	1.63E-01
9	.397	3.16E+01	8.00E+01	1.20E-02	2.92E+01	5.25E+00	3.66E-01 6.68E-01
10	.964	3.07E+01	8.97E+01	1.44E-02	3.93E+01	7.73E+00	
11	1.03	2.85E+01	9.61E+01	1.66E-02	4.86E+01	1.04E+01	1.03E+00 1.45E+00
12	1.11	2.54E+01	9.90E+01	1.84E-02	5.70E+01	1.31E+01	1.45E+00 1.92E+00
13	1.19	2.22E+01	1.00E+02	2.00E-02	6.43E+01	1.59E+01	2.42E+00
14	1.28	2.00E+01	1.04E+02	2.24E-02	7.08E+01	1.88E+01	2.98E+00
15	1.38	1.70E+01	1.02E+02	2.35E-02	7.64E+01	2.16E+01	3.58E+00
16	1.18	1.44E+01	9.98E+01	2.47E-02	8.11E+01	2.43E+01	4.20E+00
17	1.59	1.14E+01	9.17E+01	2.44E-02	8.49E+01	2.69E+01	4.82E+00
18	1.71	8.84E+00	8.13E+01	2.34E-02	8.78E+01	2.91E+01	5.41E+00
19	1.34	6.66E+00	7.11E+01	2.19E-02	9.00E+01	3.11E+01	5.96E+00
20	1.58	5.06E+00	6.24E+01	2.06E-02	9.17E+01	3.28E+01	6.48E+00
21	2.12	3.93E+00	5.67E+01	2.01E-02	9.30E+01	3.44E+01	6.99E÷00
2.2	2.28	3.01E+00	4.95E+01	1.89E-02	9.40E+01	3.57E+01	7.46E+00
23	2.45	2.28E+00	4.33E+01	1.77E-02	9.47E+01	3.69E+01	7.91E+00
24	2.64	1.72E+00	3.77E+01	1.66E-02	9.53E+01	3.80E+01	8.33E+00
25	2.33	1.27E+00	3.22E+01	1.52E-02	9.57E+01	3.89E+01	8.71E+00
26	3.05	1.03E+00	3.15E+01	1.60E-02	9.60E+01	3.97E+01	9.12E+00
27	3.27	3.80E-01	2.97E+01	1.62E-02	9.63E+01	4.06E+01	9.53E+00
28	3.52	8.30E-01	3.23E+01	1.90E-02	9.66E+01	4.15E+01	1.00E+01
29	3.78	7.56E-01	3.40E+01	2.15E-02	9.69E+01	4.24E+01	1.05E+01
30	4.06	6.93E-01	3.60E+01	2.44E-02	9.71E+01	4,34E+01	1.12E+01
31	4.37	6.69E-01	4.02E+01	2.93E-02	9.73E+01	4.45E+01	1.19E-01
32	4.69	6.22E-01	4.31E+01	3.37E-02	9. T5E+01	4.57E+01	1.28E+01
33	5.04	6.28E-01	5.02E+01	4.23E-02	9.77E+01	4.71E+01	1.38E+01
34	5.42	6.10E-01	5.64E+01	5.09E-02	9.79E+01	4.86E+01	1.51E+01
35	5.82	5.84E-01	6.23E+01	6.05E-02	9.81E+01	5.03E+01	1.66E+01
	6.26	5.53E-01	6.82E+01	7.12E-02	9.83E+01	5.22E+01	1.84E+01
	6.73	5.28E-01	7.52E+01	8.44E-02	9.85E+01	5.43E+01	2.06E+01
38	7.23	5.17E-01	8.49E+01	1.02E-01	9.86E+01	5.67E+01	2.31E+01
39	7.77	4.75E-01	9.02E+01	1.17E-01	9.88E+01	5.91E+01	2.61E+01
	8.35	4.71E-01	1.03E+02	1.44E-01	9.89E+01	6.20E+01	2.97E+01
	8.97	4.83E-01	1.22E+02	1.83E-01	9.91E+01	6.54E+01	3.43E+01
	9.64	4.41E-01	1.29E+02	2.07E-01	9.92E+01	6.89E+01	3.96E+01
	10.3	4.27E-01	1.44E+02	2.49E-01	9.94E+01	7.29E+01	4.59E+01
_	11.1 11.9	4.15E-01 3.73E-01	1.62E+02 1.68E+02	3.01E-01	9.95E+01	7.74E+01	5.34E+01
	12.8	3.74E-01	1.08E+02 1.95E+02	3.35E-01	9.96E+01	8.20E+01	6.19E+01
	13.8	3.64E-01	2.18E+02	4.17E-01	9.98E+01	8.74E+01	7.24E+01
	14.8	3.43E-01	2.18E+02 2.38E+02	5.03E-01 5.89E-01	9.99E+01	9.34E+01	8.51E+01
	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02 1.00E+02	1.00E+02 1.00E+02	1.00E+02
TOTAL		3.04E+02 3	_		1.002702	1.002702	1.00E+02
		. =					

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 3.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

	DIL. K		211101			
	co	NCENTRATIONS		CUMI	ULATIVE %	
CHNL DI		SURFACE	MASS	NUMBER	SURFACE	MASS
	86 2.38E-		1.11E-05	1.59E-01	7.85E-03	5.49E-04
	04 1.64E-		1.11E-05	2.69E-01	1.48E-02	1.10E-03
	42 3.14E-		2.62E-05	4.79E-01	3.01E-02	2.39E-03
	81 5.84E-		6.02E-05	8.69E-01	6.29E-02	5.37E-03
4 .6	25 1.12E+		1.43E-04	1.62E+00	1.35E-01	1.24E-02
	73 2.25E+	00 3.20E+00	3.59E-04	3.12E+00	3.04E-01	3.02E-02
	23 4.20E+	00 6.91E+00	8.34E-04	5.93E+00	6.69E-01	7.14E-02
7.7	77 7.17E+	00 1.36E+01	1.76E-03	1.07E+01	1.39E+00	1.59E-01
8.8	35 1.01E+	01 2.21E+01	3.08E-03	1.75E+01	2.55E+00	3.11E-01
	97 1.18E+	01 2.99E+01	4.48E-03	2.54E+01	4.13E+00	
10 .9	64 1.22E+	01 3.56E+01	5.72E-03	3.35E+01	6.01E+00	8.16E-01
11 1.	03 1.22E+	01 4.11E+01	7.11E-03	4.16E+01	8.18E+00	1.17E+00
12 1.	11 1.18E+	01 4.61E+01	8.56E-03	4.95E+01	1.06E+01	1.59E+00
13 1.	19 1.13E+		1.01E-02	5.71E+01	1.33E+01	2.09E+00
14 1.	28 1.07E+		1.19E-02	6.42E+01	1.62E+01	2.68E+00
15 1.	38 9.56E+		1.32E-02	7.06E+01	1.93E+01	3.34E+00
16 1.	48 8.51E+	00 5.90E+01	1.46E-02	7.63E+01	2.24E+01	4.06E+00
17 1.	59 7.04E+	00 5.64E+01	1.50E-02			4.80E+00
19 1.	71 5.56E+	00  5.14E+01	1.47E-02	8.47E+01		5.53E+00
19 1.	81 4.39E+		1.44E-02	8.76E+01		6.24E+00
20 1.	98 3.39E+	00 4.19E+01	1.38E-02			6.92E+00
21 2.	12 2.70E+	00 3.84E + 01	1.36E-02			7.60E+00
22 2.	28 2.04E+	·00 3.36E+01	1.28E-02	9.31E+01		
	45 1.52E+	·00 2.88E+01	1.18E-02	9.41E+01		8.82E+00
	64 1.09E+	-00 2.39E+01	1.05E-02			9.34E+00
	83 7.74E-		9.27E-03			9.79E+00
26 3.	05 6.33E-	-01 1.85E+01	9.41E-03	9.58E+01	4.13E+01	1.03E+01
	27 5.23E-	-01 1.77E+01	9.65E-03	9.61E+01		
28 3.	52 4.47E-	-01 1.74E+01	1.02E-02			1.12E+01
	78 4.00E-	01 1.80E+01	1.14E-02			1.18E+01
	06 3.61E-	-01 1.87E+01	1.27E-02			1.24E+01
31 4.	37 3.48E-	-01 2.09E÷01	1.52E-02			1.32E+01
32 4.	69 3.43E-	-01 2.38E+01	1.86E-02			1.41E+01
	04 3.29E-	-01 2.63E+01	2.22E-02			1.52E+01
34 5.	42 3.29E-	-01 3.04E+01				1.66E+01
35 5.	82 3.19E-	-01 3.40E+01	3.31E-02			1.82E+01
36 6.	26 3.00E-	-01 3.70E+01	3.86E-02			2.01E+01
37 6.	73 2.80E-	-01 3.98E+01	4.47E-02			
38 7.	23 2.78E-	-01 4.57E+01				
39 7.	77 2.47E-	-01 4.69E+01				
40 8.	35 2.38E-	-01 5.22E+01	7.26E-02			
41 8.	97 2.53E-	-01 6.42E+01	9.60E-02			3.64E+01
	64 2.23E-	-01 6.53E+01				4.16E+01
43 10	1.96E-					
44 11	.1 1.98E-					5.43E+01
45 11	.9 1.89E-		1.70E-01			6.27E+01
46 12	2.8 1.84E-					7.29E+01
47 13	3.8 1.75E-					8.48E+01
48 14	1.8 1.78E-			•		1.00E+02
	0.00E			1.00E+02	1.00E+02	1.00E+02
TOTALS:	1.50E+0	02 1.89E+03 2	.02E+CO			

FILE NAME: EPX2 3.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CON'C	EVTD4TIONS		~	•••	
CHY	L DIA	NUMBER	ENTRATIONS SURFACE			ULATIVE %	
< · · ·	.486			MASS	NUMBER	SURFACE	MASS
ì	.504	8.04E-02	6.70E-02				• •
			6.43E-02			<del>-</del>	1.24E-03
2	.542	1.51E-01	1.39E-01	1.26E-05			2.73E-03
	.581	2.69E-01	2.86E-01	2.77E-05	9.75E-01	6.88E-02	6.02E-03
4 5	.625	5.00E-01	6.13E-01	6.39E-05	1.78E+00	1.45E-01	1.36E-02
<b>5</b>	.673	9.63E-01	1.37E+00	1.54E-04	3.32E+00	3.14E-01	3.19E-02
6 7	.723	1.81E+00	2.97E+00	3.58E-04	6.22E+00	6.82E-01	7.44E-02
	.777	2.98E+00	5.66E+00	7.34E-04	1.10E+01	1.38E+00	1.62E-01
8 9	.835	4.07E+00	8.92E+00	1.24E-03	1.75E+01	2.49E+00	3.09E-01
	.897	4.75E+00	1.20E+01	1.80E-03	2.52E+01	3.98E+00	5.23E-01
10	.964	4.74E+CO	1.39E+01	2.23E-03	3.28E+01	5.69E+00	7.88E-01
11	1.03	4.71E+00	1.59E+01	2.75E-03	4.04E+01	7.66E+00	1.11E+00
12	1.11	4.63E+00	1.81E+01	3.35E-03	4.78E+01	9.89E+00	1.51E+00
13	1.19	4.43E+00	1.99E+01	3.98E-03	5.49E+01	1.24E+01	1.99E+00
14	1.28	4.23E+00	2.20E+01	4.71E-03	5.17E+01	1.51E+01	2.55E+00
15	1.38	3.91E+00	2.35E+01	5.41E-03	6.80E÷01	1.80E+01	3.19E+00
16	1.48	3.56E+00	2.47E+01	6.11E-03	7.37E-01	2.10E+01	3.91E+00
17	1.59	3.(SE+00	2.45E+01	6.51E-03	7.95E+01	2.41E+01	4.69E+00
19	1.71	2.45E+00	2.26E+01	6.47E-03	8.25E+01	2.69E+01	5.45E+00
19	1.84	2.04E+00	2.18E+01	6.70E-03	8.58E+01	2.96E+01	6.25E+00
20	1.98	1.82E+00	2.00E+01	6.60E-03	3.3 E+01	3.20E+01	7.03E+00
	2.12	1.3-E-00	1.91E+01	6.78E-03	9.0 <b>6E-</b> 01	3.44E+01	7.84E+00
55	2.28	1.01E-00	1.67E+01	6.35E-03	9.22E+01	3.55E+01	8.89E+90
23	2.45	7.99E-01	1.52E+01	6.21E-03	9.35E+01	3.83E+01	9.33E+00
24	2.64	5.64E-01	1.24E+01	5.44E-03	9.44E+01	3.99E+01	9.98E+00
25	2.83	4.02E-01	1.02E+01	4.81E-03	9.50E+01	4.11E+01	1.06E+01
26	3.05	3.19E-01	9.31E+00	4.74E-03	9.55E+01	(4.23E+01	1.11E+01
27	3.27	2.44E-01	8.24E+00	4.50E-03	9.59E+01	4.33E+01	1.16E+01
28	3.52	2.28E-01	5.83E+00	5.18E-03	9.63E+01	4.44E+01	1.23E+01
29 30	3.78	1.89E-01	3.52E+00	5.38E-03	9.6#E+01	4.54E+01	1.29E+01
30 31	4.06	1.63E-01	8.48E+00	5.75E-03	9.68E+01	4'.65E+01	1.36E+01
32	4.37	1.55E-01	9.31E+00	6.79E-03	9.71E+01	4.76E+01	1.44E+01
33	4.69	1.48E-01	1.02E+01	8.01E-03	9.73E+01	4.89E+01	1.53E+01
	5.04	1.55E-01	1.24E+01	1.04E-02	9.76E+01	5.05E+01	1.66E+01
34 35	5.42	1.39E-01	1.29E+01	1.16E-02	9.73E+01	5.20E+01	1.80E+01
36	5.82	1.23E-01	1.31E+01	1.27E-02	9.80E+01	5.37E+01	1.95E+01
37	6.26 6.73	1.32E-01	1.63E+01	1.70E-02	9.82E+01	5.57E+01	2.15E+01
38	7.23	1.25E-01	1.79E+01	2.00E-02	9.84E+01	5.79E+01	2.39E+01
39	7.23	1.08E-01	1.78E+01	2.15E-02	9.86E+01	6.01E+01	2.64E+01
40	8.35	1.09E-01 1.07E-01	2.07E+01	2.68E-02	9.88E+01	6.27E+01	2.96E+01
41	8.97		2.35E+01	3.28E-02	9.89E+01	6.56E+01	3.35E+01
42	9.64	1.07E-01	2.71E+01	4.06E-02	9.91E+01	6.89E+01	3.83E+01
43	10.3	9.72E-02	2.84E+01	4.57E-02	9.93E+01	7.24E+01	4.37E+01
44	11.1	9.09E-02	3.07E+01	5.30E-02	9.94E+01	7.62E+01	5.00E+01
45	11.1	8.22E-02	3.20E+01	5.95E-02	9.95E+01	8.02E+01	5.71E+01
46		7.29E-02	3.28E+01	6.55E-02	9.97E+01	8.43E+01	6.49E+01
47	12.8	6.78E-02	3.52E+01	7.56E-02	9.98E+01	8.36E+01	7.39E+01
	13.8	7.38E-02	4.43E+01	1.02E-01	9.99E+01	9.41E+01	8.60E+01
48	14.8	6.87E-02	4.76E+01	1.18E-01	1.00E+02	1.00E+02	1.00E+02
> TOTA	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
IOIA	LJ.	6.23E+01 8.	USE+02 8.4	12E-01			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: .009 01-01-1980 LAST CALIERATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC DENSITY: 1

					~~		
			ENTRATIONS			CUREAGE %	MACC
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 186	7.95E-02	4.96E-02	3.70E-06	1.54E-01	7.39E-03	5.38E-04
1	.501	5.43E-02	4.34E-02	3.65E-06	2.58E-01	1.39E-02	1.07E-03 2.25E-03
$\frac{2}{3}$	.512	9.78E-02	9.03E-02	8.16E-06	4.47E-01	2.73E-02	4.99E-03
	.581	1.83E-01	1.95E-01	1.89E-05	8.01E-01	5.62E-02 1.20E-01	1.15E-02
4	.625	3.49E-01	4.29E-01	4.47E-05 1.10E-04	1.48E+00 2.80E+00	2.66E-01	2.74E-02
5	.673	6.87E-01	9.78E-01	2.56E-04	5.30E+00	5.81E-01	6.46E-02
6	.723	1.29E+00	2.12E+00	5.54E-04	9.65E+00	1.22E+00	1.45E-01
7	.777	2.25E+00	4.28E+00	9.76E-04	1.58E+01	2.26E+00	2.87E-01
8	.835	3.20E+00	7.01E+00 9.61E+00	1.44E-03	2.31E+01	3.69E+00	4.96E-01
9	.897	3.79E+00 3.94E+00	1.15E+01	1.85E-03	3.08E+01	5.40E+00	7.65E-01
10	.961	3.87E+00	1.31E+01	2.26E-03	3.82E+01	7.35E+00	1.09E+00
11	1.03	3.83E+00	1.495+01	2.77E-03	4.56E+01	9.57E+00	1.50E+C0
12	1.11	3.73E+00	1.68E+01	3.35E-03	5.28E+01	1.21E+01	1.98E+00
13	1.28	3.65E+00	1.90E+01	4.08E-03	5.99E+01	1.49E+01	2.57E+00
1 k 15	1.38	3.42E+00	2.06E+01	4.74E-03	6.65E+01	1.80E+01	3.26E+00
16	1.49	3.11E+00	2.18E+01	5.39E-03	7.26E+01	2.12E+01	4.05E+00
17	1.59	2.665+00	2.13E+91	5.66E-C3	7.77E+01	2.445+01	4.87E+00
18	1.71	2.18E+00	2.02E+01	5.77E-03	8.19E+C1	2.74E+C1	5.71E+00
19	1.94	1.802+00	1.92E+01	5.90E-03	8.51E+01	3.02E+01	6.56E+00
20	1.98	1.44E+00	1.77E+01	5.85E-03	8.82E+01	3.29E+01	7.41E+00
21	2.12	1.17E+00	1.67E-01	5.93E-03	9.04E+01	3.5/E+01	8.27E+00
22	2.28	9.10E-01	1.50E+01	5.70E-03	9.22E+01	3.75E-01	9.10E+00
23	2.45	6.68E-01	1.27E+01	5.19E-C3	9.35E+01	3.95E+01	9.86E+00
$\frac{24}{24}$	2.64	1.79E-01	1.05E+01	4.62E-C3	9.44E+01	4.10E+01	1.05E+01
25	2.83	3.52E-01	8.90E+00	4.21E-03	9.51E+01	4.23E+01	1.11E+01
26	3.05	2.67E-01	7.81E+00	3.97E-03	9.56E+01	4.35E÷01	1.17E+01
27	3.27	2.13E-01	7.19E+00	3.93E-03	9.60E+01	4.46E+01	1.23E+01
28	3.52	1.75E-01	6.84E+00	4.02E-03	9.63E+01		1.29E+01
29	3.78	1.52E-01	6.86E+00	4.33E-03	9.66E+01		1.35E+01
30	4.06	1.36E-01	7.05E+00	4.78E-03	9.69E+01	4.77E+01	1.42E+01
31	4.37	1.29E-01	7.75E+00	5.64E-03			1.50E+01
32	4.69	1.35E-01	9.34E+00	7.31E-03			1.61E+01
33	5.04	1.18E-01	9.42E+00	7.92E-03			1.72E+01
34	5.42	1.15E-01	1.07E+01	9.65E-03			1.86E+01
35	5.82	1.08E-01	1.16E+01	1.12E-02			2.03E+01
36	6.26	1.03E-01		1.32E-02			2.22E+01
37	6.73	1.03E-01	1.46E+01	1.64E-02			2.46E+01
38	7.23	9.03E-02	1.48E+01	1.79E-02			2.72E+01
39	7.77	8.91E-02		2.19E-02			3.04E+01
40	8.35	7.98E-02		2.44E-02			3.39E+01
41	8.97	8.37E-02		3.17E-02			3.85E+01 4.38E+01
42	9.64	7.71E-02		3.62E-02			5.02E+01
43	10.3	7.65E-02		4.46E-02			5.66E+01
44	11.1	6.06E-02		4.39E-02			6.57E+01
45	11.9	6.93E-02		6.22E-02			7.53E+01
46	12.8	5.97E-02		6.65E-02			8.65E+01
47	13.8	5.58E-02		7.72E-02			1.00E+02
48	14.8	5.40E-02		9.27E-02			1.00E+02
>	15.4	0.00E+00		0.00E+00	1.00E+02	1.00E+02	1.006702
ATOT	LS:	5.18E+01	6.72E+02 6	.88E-01			

FILE NAME: EPX2 4.000 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CONCESTRATIONS  (**) A186** (*								
1			CONC					
1	CHNL	DIA	NUMBER					
1	<	.486	3.96E-03	2.47E-03	1.84E-07	1.76E-01		2.46E-04
1	1	.504	2.76E-03					
1		.542	4.44E-03					
6         .66         .3         1.62E-02         2.31E-02         2.59E-06         1.88E+00         8.28E-02         1.38E-02           7         .7777         4.50E-02         4.32E-02         5.21E-06         3.05E+00         1.55E-01         1.38E-02           8         .835         7.64E-02         1.68E-01         2.33E-05         8.44E+00         5.80E-01         1.22E-01         1.26E-01           10         .964         1.88E-01         3.45E-01         5.54E-05         1.80E+01         1.59E+00         1.86E-01           11         1.03         1.22E-01         4.13E-01         5.54E-05         1.82E+01         1.59E+00         2.82E-01           12         1.11         1.31E-01         5.13E-01         9.52E-05         2.95E+01         3.15E-04         2.98E-01           13         1.91         1.33E-01         6.95E-01         1.49E-04         4.74E-01         5.71E-00         2.86E-01           14         1.23         1.34E-01         9.40E-01         2.96E-04         4.74E-01         5.71E-00         1.02E+00           15         1.28         1.34E-01         9.40E-01         2.96E-04         4.99E-01         1.77E-00         1.69E-01           15         1.12 <td>3</td> <td>.581</td> <td>6.36E-03</td> <td></td> <td>6.55E-07</td> <td></td> <td>2.61E-02</td> <td>1.87E-03</td>	3	.581	6.36E-03		6.55E-07		2.61E-02	1.87E-03
6         .723         2.63E-02         4.32E-02         5.21E-06         3.05E+00         1.55E-01         1.38E-02           8         .835         7.64E-02         1.68E-01         2.33E-05         8.44E+00         5.80E-01         5.99E-02           9         .897         1.02E-01         2.66E-01         2.38E-05         1.30E+01         1.02E-01         1.86E-01           10         .964         1.8E-01         3.45E-01         5.4E-05         1.30E+01         1.5E+00         1.86E-01           11         1.03         1.22E-01         4.13E-01         5.4E-05         1.30E+01         3.15E+00         2.98E+01           12         1.11         1.31E-01         5.13E-01         9.52E-05         2.95E+01         3.15E+00         4.09E-01           13         1.9         1.33E-01         6.96E-01         1.25E-01         3.54E+01         4.16E+00         5.69E-01           14         1.28         1.38E-01         8.98E-01         1.98E-04         4.74E-01         6.32E+00         1.02E+00           15         1.37         1.25E-01         9.98E-01         2.96E-04         8.90E+01         9.97E+00         1.24E+00           17         1.57         1.25E-01         9.98E-01 </td <td>1</td> <td>.625</td> <td>8.76E-03</td> <td>1.08E-02</td> <td>1.12E-06</td> <td>1.17E+00</td> <td>4.41E-02</td> <td></td>	1	.625	8.76E-03	1.08E-02	1.12E-06	1.17E+00	4.41E-02	
7         .7777         4.50E-02         8.55E-02         1.11E-05         5.05E+00         2.99E-01         2.86E-02           9         .897         1.02E-01         2.60E-01         3.38E-05         1.30E+01         1.02E+00         1.12E-01           10         .964         1.18E-01         3.45E-01         5.54E-05         1.82E+01         1.59E+00         1.86E-01           11         1.03         1.22E-01         4.13E-01         5.54E-05         2.96E+01         3.15E+00         2.92E-01           12         1.11         1.31E-01         5.13E-01         9.52E-05         2.95E+01         3.15E+00         4.09E-01           13         1.19         1.33E-01         6.00E-01         1.29E-04         4.13E+01         5.32E+00         7.69E-01           14         1.28         1.34E-01         6.95E-01         1.91E-04         4.74E-01         6.71E+00         7.69E-01           15         1.28         1.28E-01         9.92E-04         4.74E-01         6.71E+00         7.69E-01           16         1.18         1.36E-01         9.40E-01         2.36E-04         5.90E+01         9.97E+00           17         1.28         1.23E+01         3.29E-01         1.73E+01         3.2		.673	1.62E-02	2.31E-02	2.59E-06		8.28E-02	6.83E-03
8         .835         7.64E-02         1.68E-01         2.33E-05         8.44E+00         5.80E-01         5.99E-02           9         .897         1.02E-01         2.66E-01         3.88E-05         1.30E+01         1.02E+00         1.12E-01           10         .964         1.18E-01         3.45E-01         5.54E-05         1.82E+01         1.35E+00         2.82E-01           11         1.03         1.22E-01         4.13E-01         7.14E-05         2.36E+01         2.29E+00         2.82E-01           13         1.19         1.33E-01         6.00E-01         1.20E-04         3.54E+01         4.15E+00         5.69E-01           14         1.28         1.34E-01         6.93E-01         1.49E-04         4.74E+01         5.71E+00         7.69E-01           15         1.38         1.38E-01         8.29E-01         1.91E-04         4.74E+01         6.71E+00         1.02E+00           16         1.18         1.36E-01         9.40E-01         2.33E-04         5.34E+01         6.79E+00         1.34E+00           17         1.59         1.02E-01         9.99E-02         2.66E-04         5.94E-02         1.17E+01         2.09E+00           18         1.71         1.12E-01         1.04	6	.723	2.63E-02	4.32E-02	5.21E-06	3.05E+00	1.55E-01	1.38E-02
9 .897	7	.777	4.50E-02	8.55E-02	1.11E-05	5.05E+00	2.99E-01	2.86E-02
10	3	.835	7.64E-02	1.68E-01	2.33E-05	8.44E+00	5.80E-01	5.99E-02
11         1.03         1.22E-01         4.13E-01         7.14E-05         2.36E+01         2.29E+00         2.92E+01           12         1.11         1.31E-01         5.13E-01         9.52E-05         2.95E+01         3.15E+00         4.09E-01           13         1.19         1.33E-01         6.06E-01         1.20E-04         3.34E+01         4.16E+00         5.69E-01           14         1.28         1.38E-01         8.29E-01         1.49E-04         4.13E+01         6.75E+00         7.69E-01           15         1.38         1.36E-01         9.40E-01         2.33E-04         5.34E+01         8.29E+00         1.02E+00           16         1.18         1.36E-01         9.40E-01         2.33E-04         5.34E+01         8.29E+00         1.69E-00           17         1.59         1.25E-01         9.99E-01         2.66E-04         5.90E+01         9.97E+00         1.69E-00           18         1.71         1.12E-01         1.06E+00         2.26E-04         6.83E+21         1.33E+01         2.50E+00           20         1.98         8.92E-02         1.10E+00         3.63E-04         7.22E+01         1.57E+01         2.56E+02           21         2.15         8.14E-02         1.	9	.897	1.02E-01	2.60E-01	3.88E-05	1.30E+01	1.02E+00	1.12E-01
1.11	10	.964	1.18E-01	3.45E-01	5.54E-05	1.82E+01	1.59E+00	1.86E-01
1	11	1.03	1.22E-01	4.13E-01	7.14E-05	2.36E+01	2.29E+00	2.82E-01
1	12	1.11	1.31E-01	5.13E-01	9.52E-05	2.95E+01	3.15E+00	4.09E-01
11         1.28         1.34E-01         6.95E-01         1.49E-04         4.13E+01         5.32E+00         7.69E-01           15         1.38         1.38E-01         9.40E-01         2.33E-04         4.74E-01         6.71E+00         1.02E+00           16         1.18         1.36E-01         9.40E-01         2.33E-04         5.34E+01         8.29E+00         1.24E+00           17         1.59         1.25E-01         9.98E-01         2.66E-04         5.90E+01         9.97E+00         1.69E+00           18         1.71         1.12E-01         1.04E+00         2.96E-04         6.40E+01         1.17E+01         2.09E+00           19         1.84         9.90E-02         1.06E+00         3.63E-04         6.40E+01         1.17E+01         2.09E+00           20         1.98         8.92E-02         1.10E+00         3.63E-04         7.23E-01         1.53E+01         3.01E+00           21         2.12         8.14E-02         1.15E+00         4.1E-04         7.53E+01         1.53E+01         3.66E+00           22         2.23         7.34E-02         1.15E+00         4.72E-04         8.19E-01         2.22E+01         5.52E+01         4.51E+00           23         2.83         4.0			1.33E-01	6.00E-01	1.20E-04	3.54E+01	4.16E+00	5.69E-01
15         1.38         1.38E-01         8.28E-01         2.38E-04         4.74E-01         6.71E+00         1.02E+00           16         1.18         1.36E-01         9.40E-01         2.38E-04         5.34E+01         8.29E+00         1.24E+00           17         1.79         1.25E-01         1.04E+00         2.96E-04         5.90E+01         1.17E+01         2.09E+00           18         1.71         1.12E-01         1.04E+00         2.96E-04         6.40E+01         1.17E+01         2.09E+00           19         1.54         9.90E-02         1.06E+00         3.25E-04         6.40E+01         1.17E+01         2.09E+00           20         1.88         8.92E-02         1.10E+00         3.63E+00         7.23E-01         1.57E+01         3.01E+00           21         2.12         8.14E-02         1.15E+00         4.60E+04         7.92E+01         1.75E+01         4.17E+02           22         2.23         7.34E-02         1.22E+00         5.35E+04         7.92E+01         1.57E+01         4.17E+02           23         2.83         4.07E+02         1.03E+00         4.7E+04         8.61E+01         2.50E+01         6.17E+03           25         2.83         4.07E+02         1.0	1 4		1.34E-01	6.95E-01	1.49E-04	4.13E+01	5.32E+00	7.69E-01
16         1.18         1.36E-01         9.40E-01         2.33E-04         5.34E+01         8.29E+00         1.34E+00           17         1.79         1.25E-01         9.98E-01         2.66E-04         5.90E+01         1.79E+00         1.69E+00           18         1.71         1.12E-01         1.04E+00         2.96E-04         6.40E+01         1.17E+01         2.09E+00           19         1.84         9.90E-02         1.06E+00         3.25E-04         6.40E+01         1.25E+01         2.52E+00           20         1.98         9.92E-02         1.10E+00         3.63E-04         7.23E-01         1.5E+01         3.01E+00           21         2.12         8.14E-02         1.21E+00         4.60E-04         7.92E+01         1.58E+01         4.17E+00           22         2.23         7.34E-02         1.21E+00         4.60E-04         7.92E+01         1.58E+01         4.51E+00           24         2.51         5.54E-02         1.03E+00         5.3E-04         8.19E+01         2.20E+01         5.5E+00           25         2.83         4.07E-02         1.03E+00         5.3E-04         8.7E+01         2.57E+01         6.86E+00           26         3.05         3.4E-02         1.01E+00				8.28E-01	1.91E-04	4.74E+01	6.71E+00	1.02E+00
1.7						5.34E+01	8.19E+00	1.34E+00
1.						5.90E+01		
19 1.94 9.90E-02 1.08E+00 3.28E-04 6.83E+01 1.38E+01 2.52E+00 2.0 1.98 8.92E-02 1.10E+00 3.63E-04 7.23E+01 1.38E+01 3.56E+00 2.10E+00 2.11 8.14E-02 1.16E+00 4.11E-04 7.59E+01 1.78E+01 3.56E+00 2.2 2.23 7.34E-02 1.21E+00 4.60E-04 7.92E+01 1.98E+01 4.17E+00 2.3 2.45 6.07E-02 1.15E+00 4.72E-04 8.19E+01 2.12E+01 4.51E+03 2.4 2.61 5.54E-02 1.22E+00 5.35E-04 8.19E+01 2.12E+01 4.51E+03 2.4 2.61 5.54E-02 1.22E+00 5.35E-04 8.19E+01 2.25E+01 6.17E+00 2.3 2.83 4.07E-02 1.03E+00 4.87E-04 8.61E+01 2.50E+01 6.17E+00 2.3 2.83 4.07E-02 1.03E+00 5.12E-04 8.77E+01 2.67E+01 6.86E+00 2.7 3.27 2.88E-02 9.72E-01 5.31E-04 8.99E+01 2.32E+01 6.37E+03 2.8 3.52 2.51E-02 9.78E-01 5.74E-04 9.06E+01 2.00E+01 8.34E+00 2.9 3.78 2.02E-02 9.08E-01 5.73E-04 9.09E+01 3.15E+01 9.16E+00 2.0 4.06 1.85E-02 9.61E-01 6.51E-04 9.18E+01 3.31E+01 9.98E+00 31 4.37 1.86E-02 1.12E+00 8.14E-04 9.26E+01 3.50E+01 1.11E+01 3.2 4.69 1.67E-02 1.16E+00 9.06E-04 9.33E+01 3.50E+01 1.11E+01 3.2 4.69 1.67E-02 1.16E+00 9.06E-04 9.33E+01 3.50E+01 1.37E+01 3.5 5.2 1.10E-02 1.16E+00 1.03E-03 9.40E+01 3.90E+01 1.37E+01 3.5 5.82 1.10E-02 1.16E+00 1.03E-03 9.46E+01 4.09E+01 1.37E+01 3.5 5.82 1.10E-02 1.16E+00 1.03E-03 9.46E+01 4.09E+01 1.51E+01 3.5 5.82 1.10E-02 1.16E+00 1.03E-03 9.56E+01 4.56E+01 1.51E+01 3.5 5.82 1.10E-02 1.169E+00 1.03E-03 9.56E+01 4.56E+01 1.51E+01 3.5 5.82 1.10E-02 1.69E+00 1.90E-03 9.61E+01 4.84E+01 2.13E+01 3.5 5.82 1.10E-02 1.69E+00 1.90E-03 9.66E+01 5.12E+01 3.50E+01 1.51E+01 3.5 5.82 1.10E-02 1.59E+00 1.90E-03 9.66E+01 5.12E+01 3.50E+01 1.51E+01 3.5 5.82 1.10E-02 1.59E+00 1.90E-03 9.56E+01 5.79E+01 1.56E+01 4.84E+01 2.73E+01 4.99E+01 1.56E+01 4.99E+01 1.59E+01 4.99E+01 4.59E+01 4.99E+01 4.59E+01								
1.98								
21         2.12         8.14E-02         1.16E+00         4.11E-04         7.59E+01         1.73E+01         3.56E+30           22         2.25         7.34E-02         1.21E+00         4.60E-04         7.92E+01         1.59E+01         4.17E+30           24         2.66         6.07E-02         1.15E+00         4.72E-04         8.19E+01         2.22E+01         4.81E+02           25         2.83         4.07E-02         1.03E+00         4.87E-04         8.61E+01         2.50E+01         6.17E+00           26         3.05         3.44E-02         1.01E+00         5.12E-04         8.77E+01         2.57E+01         6.86E+00           27         3.27         2.88E-02         9.72E-01         5.31E-04         8.89E+01         2.93E+01         7.57E+00           28         3.52         2.51E-02         9.78E-01         5.73E-04         9.09E+01         3.15E+01         9.10E+00           30         4.06         1.85E-02         9.61E-01         6.51E-04         9.18E+01         3.21E+01         9.98E+00           31         4.37         1.86E-02         1.12E+00         8.14E-04         9.26E+01         3.50E+01         1.1E+01           32         4.69         1.67E-02         1.6								
22         2.23         7.34E-02         1.21E-00         4.60E-04         7.92E+01         1.93E+01         4.17E+00           22         2.15         6.07E-02         1.15E+00         4.72E-04         8.19E+01         2.12E+01         4.81E+01           24         2.61         5.54E-02         1.22E+00         5.35E-04         8.43E+01         2.33E+01         5.5E+06           25         2.83         4.07E-02         1.01E+00         5.12E-04         8.77E+01         2.67E+01         6.17E+00           26         3.05         3.44E-02         1.01E+00         5.12E-04         8.77E+01         2.67E+01         6.36E+00           27         3.27         2.88E-02         9.72E-01         5.31E-04         8.89E+01         2.02E+01         8.34E+00           29         3.78         2.02E-02         9.08E-01         5.73E-04         9.09E+01         3.15E+01         9.16E+03           30         4.06         1.85E-02         9.61E-01         6.51E-04         9.18E+01         3.31E+01         9.98E+00           31         4.37         1.86E-02         1.12E+00         8.14E-04         9.26E+01         3.50E+01         1.11E+01           32         4.69         1.67E-02         1.1								
23         2.45         6.07E-02         1.15E+00         4.72E-04         8.19E+01         2.12E+01         4.81E+02           24         2.61         5.54E-02         1.22E+09         5.35E-04         8.43E+01         2.30E+01         5.5EE+06           25         2.83         4.07E-02         1.03E+00         4.87E-04         8.61E+01         2.50E+01         6.17E+00           26         3.05         3.44E-02         1.01E+00         5.12E-04         8.77E+01         2.57E+01         6.86E+00           27         3.27         2.88E-02         9.72E-01         5.31E-04         8.89E+01         2.93E+01         7.57E+00           28         3.52         2.51E-02         9.78E-01         5.74E-04         9.06E+01         3.00E+01         8.34E+00           29         3.78         2.02E-02         9.08E-01         5.73E-04         9.09E+01         3.15E+01         9.10E+03           30         4.06         1.85E-02         9.61E-01         6.51E-04         9.18E+01         3.31E+01         9.98E+00           31         4.37         1.86E-02         1.16E+00         9.06E-04         9.33E+01         3.69E+01         1.23E+01           32         4.69         1.67E-02         1.								
24								
2.83								
26       3.05       3.44E-02       1.01E+00       5.12E-04       8.77E+01       2.67E+01       6.86E+00         27       3.27       2.88E-02       9.72E-01       5.31E-04       8.89E-01       2.32E+01       7.57E+00         28       3.52       2.51E-02       9.78E-01       5.74E-04       9.06E+01       2.00E+01       8.34E+00         29       3.78       2.02E-02       9.08E-01       5.73E-04       9.09E+01       3.15E+01       9.16E+03         30       4.06       1.85E-02       9.61E-01       6.51E-04       9.18E+01       3.31E+01       9.98E+30         31       4.37       1.86E-02       1.12E+00       8.14E-04       9.26E+01       3.50E+01       1.11E+01         32       4.69       1.67E-02       1.16E+00       9.06E-04       9.33E+01       3.69E+01       1.23E+01         33       5.04       1.54E-02       1.23E+00       1.03E-03       9.40E+01       3.90E+01       1.37E+01         34       5.42       1.26E-02       1.16E+00       1.05E-03       9.46E+01       4.09E+01       1.51E+01         35       5.82       1.10E-02       1.18E+00       1.14E-03       9.51E+01       4.29E+01       1.56E+01         36 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
27								
28								
29								
30       4.06       1.85E-02       9.61E-01       6.51E-04       9.18E+01       3.31E+01       9.98E+00         31       4.37       1.86E-02       1.12E+00       8.14E-04       9.26E+01       3.50E+01       1.11E+01         32       4.69       1.67E-02       1.16E+00       9.06E-04       9.33E+01       3.69E+01       1.23E+01         33       5.04       1.54E-02       1.23E+00       1.03E-03       9.40E+01       3.90E+01       1.37E+01         34       5.12       1.26E-02       1.16E+00       1.05E-03       9.46E+01       4.09E+01       1.51E+01         35       5.82       1.10E-02       1.18E+00       1.14E-03       9.51E+01       4.29E+01       1.66E+01         36       6.26       1.27E-02       1.57E+00       1.64E-03       9.56E+01       4.8E+01       2.13E+01         37       6.73       1.19E-02       1.66E+00       2.00E-03       9.61E+01       4.84E+01       2.13E+01         38       7.23       1.01E-02       1.91E+00       2.48E-03       9.70E+01       5.4E+01       2.73E+01         40       8.35       9.48E-03       2.07E+00       3.09E-03       9.75E+01       5.79E+01       3.53E+01         42								
31       4.37       1.86E-02       1.12E+00       8.14E-04       9.26E+01       3.50E+01       1.11E+01         32       4.69       1.67E-02       1.16E+00       9.06E-04       9.33E+01       3.69E+01       1.23E+01         33       5.04       1.54E-02       1.23E+00       1.03E-03       9.40E+01       3.90E+01       1.37E+01         34       5.42       1.26E-02       1.16E+00       1.05E-03       9.46E+01       4.09E+01       1.51E+01         35       5.82       1.10E-02       1.18E+00       1.14E-03       9.51E+01       4.29E+01       1.66E+01         36       6.26       1.27E-02       1.57E+00       1.64E-03       9.56E+01       4.56E+01       1.88E+01         37       6.73       1.19E-02       1.69E+00       1.90E-03       9.61E+01       4.84E+01       2.13E+01         38       7.23       1.01E-02       1.66E+00       2.00E-03       9.66E+01       5.12E+01       2.40E+01         39       7.77       1.01E-02       1.91E+00       2.48E-03       9.70E+01       5.44E+01       2.73E+01         41       8.97       8.16E-03       2.07E+00       3.09E-03       9.75E+01       5.79E+01       3.53E+01         42 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
32       4.69       1.67E-02       1.16E+00       9.06E-04       9.33E+01       3.69E+01       1.23E+01         33       5.04       1.54E-02       1.23E+00       1.03E-03       9.40E+01       3.90E+01       1.37E+01         34       5.42       1.26E-02       1.16E+00       1.05E-03       9.46E+01       4.09E+01       1.51E+01         35       5.82       1.10E-02       1.18E+00       1.14E-03       9.51E+01       4.29E+01       1.66E+01         36       6.26       1.27E-02       1.57E+00       1.64E-03       9.56E+01       4.36E+01       1.88E+01         37       6.73       1.19E-02       1.66E+00       2.00E-03       9.61E+01       4.84E+01       2.13E+01         38       7.23       1.01E-02       1.66E+00       2.00E-03       9.66E+01       5.12E+01       2.40E+01         39       7.77       1.01E-02       1.91E+00       2.48E-03       9.70E+01       5.44E+01       2.73E+01         40       8.35       9.48E-03       2.07E+00       3.09E-03       9.75E+01       5.79E+01       3.12E+01         41       8.97       8.16E-03       2.07E+00       3.09E-03       9.78E+01       6.13E+01       3.53E+01         42 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
33 5.04 1.54E-02 1.23E+00 1.03E-03 9.40E+01 3.90E+01 1.37E+01 34 5.12 1.26E-02 1.16E+00 1.05E-03 9.46E+01 4.09E+01 1.51E+01 35 5.82 1.10E-02 1.18E+00 1.14E-03 9.51E+01 4.29E+01 1.66E+01 36 6.26 1.27E-02 1.57E+00 1.64E-03 9.56E+01 4.56E+01 1.88E+01 37 6.73 1.19E-02 1.69E+00 1.90E-03 9.61E+01 4.84E+01 2.13E+01 38 7.23 1.01E-02 1.66E+00 2.00E-03 9.66E+01 5.12E+01 2.40E+01 39 7.77 1.01E-02 1.91E+00 2.48E-03 9.70E+01 5.44E+01 2.73E+01 40 8.35 9.48E-03 2.08E+00 2.89E-03 9.75E+01 5.79E+01 3.12E+01 41 8.97 8.16E-03 2.07E+00 3.09E-03 9.78E+01 6.13E+01 3.53E+01 42 9.64 7.32E-03 2.14E+00 3.44E-03 9.81E+01 6.49E+01 3.99E+01 43 10.3 6.72E-03 2.27E+00 3.92E-03 9.84E+01 6.87E+01 4.52E+01 44 11.1 6.60E-03 2.57E+00 4.78E-03 9.87E+01 7.31E+01 5.16E+01 45 11.9 7.20E-03 3.24E+00 6.47E-03 9.91E+01 7.85E+01 6.02E+01 46 12.8 7.80E-03 4.05E+00 8.69E-03 9.94E+01 8.53E+01 7.19E+01 47 13.8 6.12E-03 3.67E+00 8.47E-03 9.97E+01 9.15E+01 8.32E+01 48 14.8 7.32E-03 5.07E+00 1.26E-02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
34       5.42       1.26E-02       1.16E+00       1.05E-03       9.46E+01       4.09E+01       1.51E+01         35       5.82       1.10E-02       1.18E+00       1.14E-03       9.51E+01       4.29E+01       1.66E+01         36       6.26       1.27E-02       1.57E+00       1.64E-03       9.56E+01       4.56E+01       1.88E+01         37       6.73       1.19E-02       1.69E+00       1.90E-03       9.61E+01       4.84E+01       2.13E+01         38       7.23       1.01E-02       1.66E+00       2.00E-03       9.66E+01       5.12E+01       2.40E+01         39       7.77       1.01E-02       1.91E+00       2.48E-03       9.70E+01       5.44E+01       2.73E+01         40       8.35       9.48E-03       2.08E+00       2.89E-03       9.75E+01       5.79E+01       3.12E+01         41       8.97       8.16E-03       2.07E+00       3.09E-03       9.78E+01       6.13E+01       3.53E+01         42       9.64       7.32E-03       2.14E+00       3.44E-03       9.81E+01       6.49E+01       3.99E+01         43       10.3       6.72E-03       2.27E+00       3.92E-03       9.87E+01       7.31E+01       5.16E+01         45 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
35       5.82       1.10E-02       1.18E+00       1.14E-03       9.51E+01       4.29E+01       1.66E+01         36       6.26       1.27E-02       1.57E+00       1.64E-03       9.56E+01       4.56E+01       1.88E+01         37       6.73       1.19E-02       1.69E+00       1.90E-03       9.61E+01       4.84E+01       2.13E+01         38       7.23       1.01E-02       1.66E+00       2.00E-03       9.66E+01       5.12E+01       2.40E+01         39       7.77       1.01E-02       1.91E+00       2.48E-03       9.70E+01       5.44E+01       2.73E+01         40       8.35       9.48E-03       2.08E+00       2.89E-03       9.75E+01       5.79E+01       3.12E+01         41       8.97       8.16E-03       2.07E+00       3.09E-03       9.78E+01       6.13E+01       3.53E+01         42       9.64       7.32E-03       2.14E+00       3.44E-03       9.81E+01       6.49E+01       3.99E+01         43       10.3       6.72E-03       2.27E+00       3.92E-03       9.87E+01       7.31E+01       5.16E+01         44       11.1       6.60E-03       2.57E+00       4.78E-03       9.97E+01       7.85E+01       6.02E+01         45 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
36       6.26       1.27E-02       1.57E+00       1.64E-03       9.56E+01       4.56E+01       1.88E+01         37       6.73       1.19E-02       1.69E+00       1.90E-03       9.61E+01       4.84E+01       2.13E+01         38       7.23       1.01E-02       1.66E+00       2.00E-03       9.66E+01       5.12E+01       2.40E+01         39       7.77       1.01E-02       1.91E+00       2.48E-03       9.70E+01       5.44E+01       2.73E+01         40       8.35       9.48E-03       2.08E+00       2.89E-03       9.75E+01       5.79E+01       3.12E+01         41       8.97       8.16E-03       2.07E+00       3.09E-03       9.78E+01       6.13E+01       3.53E+01         42       9.64       7.32E-03       2.14E+00       3.44E-03       9.81E+01       6.49E+01       3.99E+01         43       10.3       6.72E-03       2.27E+00       3.92E-03       9.84E+01       6.87E+01       4.52E+01         44       11.1       6.60E-03       2.57E+00       4.78E-03       9.87E+01       7.31E+01       5.16E+01         45       11.9       7.20E-03       3.24E+00       6.47E-03       9.91E+01       7.85E+01       6.02E+01         46 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
37       6.73       1.19E-02       1.69E+00       1.90E-03       9.61E+01       4.84E+01       2.13E+01         38       7.23       1.01E-02       1.66E+00       2.00E-03       9.66E+01       5.12E+01       2.40E+01         39       7.77       1.01E-02       1.91E+00       2.48E-03       9.70E+01       5.44E+01       2.73E+01         40       8.35       9.48E-03       2.08E+00       2.89E-03       9.75E+01       5.79E+01       3.12E+01         41       8.97       8.16E-03       2.07E+00       3.09E-03       9.78E+01       6.13E+01       3.53E+01         42       9.64       7.32E-03       2.14E+00       3.44E-03       9.81E+01       6.49E+01       3.99E+01         43       10.3       6.72E-03       2.27E+00       3.92E-03       9.84E+01       6.87E+01       4.52E+01         44       11.1       6.60E-03       2.57E+00       4.78E-03       9.87E+01       7.31E+01       5.16E+01         45       11.9       7.20E-03       3.24E+00       6.47E-03       9.91E+01       7.85E+01       6.02E+01         46       12.8       7.80E-03       4.05E+00       8.69E-03       9.94E+01       8.53E+01       7.19E+01         47 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
38       7.23       1.01E-02       1.66E+00       2.00E-03       9.66E+01       5.12E+01       2.40E+01         39       7.77       1.01E-02       1.91E+00       2.48E-03       9.70E+01       5.44E+01       2.73E+01         40       8.35       9.48E-03       2.08E+00       2.89E-03       9.75E+01       5.79E+01       3.12E+01         41       8.97       8.16E-03       2.07E+00       3.09E-03       9.78E+01       6.13E+01       3.53E+01         42       9.64       7.32E-03       2.14E+00       3.44E-03       9.81E+01       6.49E+01       3.99E+01         43       10.3       6.72E-03       2.27E+00       3.92E-03       9.84E+01       6.87E+01       4.52E+01         44       11.1       6.60E-03       2.57E+00       4.78E-03       9.87E+01       7.31E+01       5.16E+01         45       11.9       7.20E-03       3.24E+00       6.47E-03       9.91E+01       7.85E+01       6.02E+01         46       12.8       7.80E-03       4.05E+00       8.69E-03       9.94E+01       8.53E+01       7.19E+01         47       13.8       6.12E-03       3.67E+00       8.47E-03       9.97E+01       9.15E+01       8.32E+01         48 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
39       7.77       1.01E-02       1.91E+00       2.48E-03       9.70E+01       5.44E+01       2.73E+01         40       8.35       9.48E-03       2.08E+00       2.89E-03       9.75E+01       5.79E+01       3.12E+01         41       8.97       8.16E-03       2.07E+00       3.09E-03       9.78E+01       6.13E+01       3.53E+01         42       9.64       7.32E-03       2.14E+00       3.44E-03       9.81E+01       6.49E+01       3.99E+01         43       10.3       6.72E-03       2.27E+00       3.92E-03       9.84E+01       6.87E+01       4.52E+01         44       11.1       6.60E-03       2.57E+00       4.78E-03       9.87E+01       7.31E+01       5.16E+01         45       11.9       7.20E-03       3.24E+00       6.47E-03       9.91E+01       7.85E+01       6.02E+01         46       12.8       7.80E-03       4.05E+00       8.69E-03       9.94E+01       8.53E+01       7.19E+01         47       13.8       6.12E-03       3.67E+00       8.47E-03       9.97E+01       9.15E+01       8.32E+01         48       14.8       7.32E-03       5.07E+00       1.26E-02       1.00E+02       1.00E+02       1.00E+02         > <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
40 8.35 9.48E-03 2.08E+00 2.89E-03 9.75E+01 5.79E+01 3.12E+01 41 8.97 8.16E-03 2.07E+00 3.09E-03 9.78E+01 6.13E+01 3.53E+01 42 9.64 7.32E-03 2.14E+00 3.44E-03 9.81E+01 6.49E+01 3.99E+01 43 10.3 6.72E-03 2.27E+00 3.92E-03 9.84E+01 6.87E+01 4.52E+01 44 11.1 6.60E-03 2.57E+00 4.78E-03 9.87E+01 7.31E+01 5.16E+01 45 11.9 7.20E-03 3.24E+00 6.47E-03 9.91E+01 7.85E+01 6.02E+01 46 12.8 7.80E-03 4.05E+00 8.69E-03 9.94E+01 8.53E+01 7.19E+01 47 13.8 6.12E-03 3.67E+00 8.47E-03 9.97E+01 9.15E+01 8.32E+01 48 14.8 7.32E-03 5.07E+00 1.26E-02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
41 8.97 8.16E-03 2.07E+00 3.09E-03 9.78E+01 6.13E+01 3.53E+01 42 9.64 7.32E-03 2.14E+00 3.44E-03 9.81E+01 6.49E+01 3.99E+01 43 10.3 6.72E-03 2.27E+00 3.92E-03 9.84E+01 6.87E+01 4.52E+01 44 11.1 6.60E-03 2.57E+00 4.78E-03 9.87E+01 7.31E+01 5.16E+01 45 11.9 7.20E-03 3.24E+00 6.47E-03 9.91E+01 7.85E+01 6.02E+01 46 12.8 7.80E-03 4.05E+00 8.69E-03 9.94E+01 8.53E+01 7.19E+01 47 13.8 6.12E-03 3.67E+00 8.47E-03 9.97E+01 9.15E+01 8.32E+01 48 14.8 7.32E-03 5.07E+00 1.26E-02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
42       9.64       7.32E-03       2.14E+00       3.44E-03       9.81E+01       6.49E+01       3.99E+01         43       10.3       6.72E-03       2.27E+00       3.92E-03       9.84E+01       6.87E+01       4.52E+01         44       11.1       6.60E-03       2.57E+00       4.78E-03       9.87E+01       7.31E+01       5.16E+01         45       11.9       7.20E-03       3.24E+00       6.47E-03       9.91E+01       7.85E+01       6.02E+01         46       12.8       7.80E-03       4.05E+00       8.69E-03       9.94E+01       8.53E+01       7.19E+01         47       13.8       6.12E-03       3.67E+00       8.47E-03       9.97E+01       9.15E+01       8.32E+01         48       14.8       7.32E-03       5.07E+00       1.26E-02       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
43 10.3 6.72E-03 2.27E+00 3.92E-03 9.84E+01 6.87E+01 4.52E+01 44 11.1 6.60E-03 2.57E+00 4.78E-03 9.87E+01 7.31E+01 5.16E+01 45 11.9 7.20E-03 3.24E+00 6.47E-03 9.91E+01 7.85E+01 6.02E+01 46 12.8 7.80E-03 4.05E+00 8.69E-03 9.94E+01 8.53E+01 7.19E+01 47 13.8 6.12E-03 3.67E+00 8.47E-03 9.97E+01 9.15E+01 8.32E+01 48 14.8 7.32E-03 5.07E+00 1.26E-02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
44 11.1 6.60E-03 2.57E+00 4.78E-03 9.87E+01 7.31E+01 5.16E+01 45 11.9 7.20E-03 3.24E+00 6.47E-03 9.91E+01 7.85E+01 6.02E+01 46 12.8 7.80E-03 4.05E+00 8.69E-03 9.94E+01 8.53E+01 7.19E+01 47 13.8 6.12E-03 3.67E+00 8.47E-03 9.97E+01 9.15E+01 8.32E+01 48 14.8 7.32E-03 5.07E+00 1.26E-02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
45 11.9 7.20E-03 3.24E+00 6.47E-03 9.91E+01 7.85E+01 6.02E+01 46 12.8 7.80E-03 4.05E+00 8.69E-03 9.94E+01 8.53E+01 7.19E+01 47 13.8 6.12E-03 3.67E+00 8.47E-03 9.97E+01 9.15E+01 8.32E+01 48 14.8 7.32E-03 5.07E+00 1.26E-02 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
46 12.8 7.80E-03 4.05E+00 8.69E-03 9.94E+01 8.53E+01 7.19E+01 47 13.8 6.12E-03 3.67E+00 8.47E-03 9.97E+01 9.15E+01 8.32E+01 48 14.8 7.32E-03 5.07E+00 1.26E-02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
47 13.8 6.12E-03 3.67E+00 8.47E-03 9.97E+01 9.15E+01 8.32E+01 48 14.8 7.32E-03 5.07E+00 1.26E-02 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
48 14.8 7.32E-03 5.07E+00 1.26E-02 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
					_			
TOTALS: 2.25E+00 5.96E+01 7.47E-02					•	1.00E+02	1.00E+02	1.00E+02
	TOTAL	LS:	2.25E+00 5	3.96E+01 7.	47E-02			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 4.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

			ENTRATIONS			ULATIVE %	
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	4.20E-03		1.97E-07	1.30E-01	4.03E-03	2.65E-04
1	.504	3.24E-03	2.59E-03	2.18E-07	2.31E-01		5.58E-04
2	.542	4.80E-03	4.43E-03	4.00E-07	3.80E-01	1.48E-02	1.10E-03
3	.581	6.84E-03	7.27E-03	7.05E-07	5.92E-01	2.59E-02	2.04E-03
4	.625	1.13E-02	1.38E-02	1.44E-06	9.42E-01	4.71E-02	3.98E-03
5	.673	2.08E-02	2.95E-02	3.31E-06	1.59E+00		8.44E-03
6	.723	3.32E-02	5.47E-02	6.59E-06	2.62E+00	1.76E-01	1.73E-02
7	.777	6.83E-02	1.30E-01	1.68E-05	4.74E+00	3.74E-01	3.99E-02
8	.835	1.12E-01	2.45E-01	3.41E-05	8.20E+00	7.48E-01	8.57E-02
9	.897	1.54E-01	3.90E-01	5.84E-05	1.30E+01	1.34E+00	1.64E-01
10	.964	1.78E-01	5.21E-01	8.38E-05	1.85E+01	2.14E+00	2.77E-01
11	1.03	2.00E-01	6.75E-01	1.17E-04	2.47E+01	3.17E+00	4.34E-01
12	1.11	2.02E-01	7.89E-01	1.46E-04	3.10E+01	4.38E+00	6.31E-01
13	1.19	2.205-01	9.92E-01	1.98E-C4	3.78E+01	5.90E+00	8.97E-01
1 1	1.23	2.13E-01	1.11E+00	2.38E-04	4.44E+01	7.59E+00	1.22E+00
15	1.38	2.18E-01	1.31E+00	3.02E-04	5.12E+01	9.60E+00	1.62E+00
15	1.18	2.15E-01	1.49E+00	3.69E-04	5.79E+01	1.19E+01	2.12E+00
17	1.59	1.91E-01	1.53E+00	4.06E-04	5.33E+01	1.42E-01	2.67E+00
13	1.71	1.69E-01	1.56E+00	4.47E-04	6.30E-01	1.66E+01	3.27E+00
19	1.84	1.43E-01	1.52E+00	4.67E-04	7.34E+01	1.89E+01	3.89E+00
20	1.98	1.23E-01	1.52E+00	5.03E-04	7.73E+01	2.13E+01	4.57E+00
21	2.12	1.135-01	1.63E+00	5.80E-04	8.08E+01	2.38E+01	£.35E+00
22	2.23	9.31E-02	1.53E+00	5.85E-04	3.37E+01	2.61E+01	6.14E+00
23	2.45	8.46E-02	1.61E+00	6.53E-04	8.63E+01	2.86E+01	7.02E+00
24	2.64	6.29E-02	1.33E+00	6.07E-04	8.83E+01	3.07E+01	7.94E+00
25	2.33	4.35E-02	1.23E+00	5.82E-04	8.98E+01	3.25E+01	8.62E+00
26	3.05	1.25E-02	1.24E+00	6.31E-04	9.11E+01	3.44E+01	9.47E+00
27	3.27	3.34E-02	1.13E+00	6.15E-04	9.22E+01	3.62E+01	1.03E+01
28	3.52	3.14E-02	1.23E+00	7.20E-04	9.31E+01		1.13E+01
29	3.78	1.98E-02	8.91E-01	5.52E-04	9.37E+01	3.94E+01	1.20E+01
30	1.06	1.73E-02	8.98E-01	6.09E-04	9.43E+01	4.08E+01	1.28E+01
31	4.37	1.80E-02	1.08E+00	7.87E-04	9.48E+01	4.24E+01	1.39E+01
32	4.69	1.72E-02	1.19E+00	9.32E-04	9.54E+01	4.43E+01	1.52E+01
33	5.04	1.28E-02	1.03E+00	8.65E-04	9.58E+01	4.58E+01	1.63E+01
34	5.42	1.55E-02	1.43E+00	1.29E-03	9.63E+01	4.80E+01	1.81E+01
35	5.82	1.48E-02	1.58E+00	1.53E-03	9.67E+01	5.04E+01	2.01E-01
36	6.26	1.02E-02	1.26E+00	1.31E-03		5.23E+01	2.19E+01
37	6.73	1.16E-02	1.66E+00	1.86E-03	9.74E+01	5.49E+01	2.44E+01
38	7.23	1.09E-02	1.80E+00	2.16E-03	9.77E+01	5.76E+01	2.73E+01
39	7.23	9.84E-03	1.87E+00	2.42E-03	9.80E+01	6.05E+01	3.05E+01
	8.35	8.40E-03	1.84E+00	2.56E-03			3.40E+01
40		8.52E-03	2.16E+00	3.23E-03	9.86E+01	6.66E+01	3.83E+01
41	8.97		2.18E+00	3.50E-03	9.88E+01	6.99E+01	4.30E+01
42	9.64	7.44E-03					4.82E+01
13	10.3	6.60E-03	2.23E+00	3.85E-03	9.90E+01 9.92E+01	7.33E+01 7.65E+01	5.34E+01
44	11.1	5.28E-03	2.06E+00	3.82E-03	9.94E+01		6.19E+01
45	11.9	7.08E-03	3.19E+00	6.36E-03	9.94E+01 9.96E+01	8.68E+01	7.22E+01
46	12.8	6.84E-03	3.56E+00	7.62E-03			8.42E+01
47	13.8	6.48E-03	3.89E+00	8.96E-03	9.98E+01	9.27E+01	1.00E+02
48	14.8	6.84E-03	4.74E+00	1.17E-02	1.00E+02	1.00E+02 1.00E+02	1.00E+02
> TOT 4.1	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.002+02	1.002+02
TOTAL	.5:	3.22E+00	5.54E+01 7.	446-02			

FILE NAME: EPX2 4.002 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

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			ENTRATIONS			JLATIVE %	W. C.C
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	7.80E-03	4.84E-03	3.60E-07	1.28E-01	4.55E-03	3.13E-04
1	.504	4.68E-03	3.74E-03	3.15E-07	2.05E-01	8.07E-03	5.85E-04
2	.542	7.32E-03	6.76E-03	6.11E-07	3.25E-01	1.41E-02	1.12E-03
3	.581	1.21E-02	1.29E-02	1.25E-06	5.24E-01	2.65E-02	2.20E-03
1	.625	1.88E-02	2.31E-02	2.41E-06	8.33E-01	4.83E-02	4.29E-03
5	.673	3.67E-02	5.23E-02	5.86E-05	1.44E+00	9.74E-02	9.38E-03
5 6 7	.723	7.50E-02	1.23E-01	1.49E-05	2.67E+00	2.13E-01	2.23E-02
	. 777	1.42E-01	2.70E-01	3.50E-05	5.00E+00	4.63E-01	5.27E-02
8	.835	2.30E-01	5.04E-01	7.02E-05	8.78E+00	9.42E-01	1.14E-01
9	.897	3.04E-01	7.70E-01	1.15E-04	1.38E+01	1.67E+00	2.14E-01
10	.961	3.59E-01	1.05E+00	1.69E-04	1.97E+01	2.65E+00	3.60E-01
11	1.03	3.82E-01	1.29E+00	2.23E-04	2.59E+01	3.87E+00	5.54E-01
12	1.11	4.15E-01	1.62E+00	3.00E-04	3.28E+01	5.39E+00	3.15E-01
13	1.19	1.25E-01	1.915+00	3.81E-04	3.97E+01	7.19E+00	1.15E+00
1 4	1.28	4.19E-01	2.33E+00	5.00E-04	4.71E+01	9.38E+00	1.58E+00
15	1.03	4.24E-01	2.55E+00	5.87E-04	5.41E+01	1.18E+01	2.09E÷00
16	1.;3	:.:7E-01	2.89E+00	7.15E-04	6.09E+01	1.45E+01	C.71E+00
17	1.53	0.88E-01	2.93E+00	7.80E-04	6.69E+01	1.72E+01	3.395+00
18	1.71	3.11E-01	2.87E+00	8.21E-04	7.20E+01	1.99E+01	4.10E-00
1.2	1.84	2.99E-01	2.87E+00	8.83E+04	7.64E+01	2.275+01	4.87E+00
20	1.99	1.28E-01	2.82E+00	9.30E-01	8.02E+01	2.50E+01	8.87E+00
21	2.12	2.68E-01	2.365+00	1.05E-03	8.36E+01	2.81E+01	6.59E+00
22	2.29	1.725-01	2.83E+00	1.08E-03	8.64E+01	3.07E+01	7.82E+00
23	2.45	1.45E-01	2.75E+00	1.13E-03	8.88E+01	3.33E+31	9.80E-00
2;	2.64	1.15E-01	2.51E+00	1.11E-03	9.07E+01	3.57E+01	9.46E+00
25	2.53	8.05E-02	2.04E+00	9.64E-04	9.20E+01	3.76E+01	1.03E+01
26	3.05	6.73E-02	1.97E+00	1.00E-03	9.31E+01	3.95E+01	1.12E+01
27	3.27	4.99E-02	1.69E+00	9.21E-04	9.39E+01	4.10E-01	1.20E+01
28	3.52	4.25E-02	1.66E+00	9.72E-04	9.46E+01	4.26E÷01	1.28E+01
29	3.78	3.04E-02	1.37E+00	8.62E-04	9.51E+01	4.39E+01	1.36E+01
30	1.06	2.98E-02	1.55E+00	1.05E-03	9.56E+01	1.53E+01	1.45E+01
31	4.37	2.47E-02	1.48E+00	1.08E-03	9.60E+01	1.67E+01	1.54E+01
32	1.69	2.15E-02	1.49E+00	1.17E-03	9.64E+01	4.91E+01	1.64E+01
33	5.04	2.08E-02	1.65E+00	1.40E-03	9.67E+01	4.97E+01	1.76E+01
34	5.42	2.21E-02	2.04E+00	1.85E-03	9.71E+01	5.16E+01	1.92E+01
35	5.82	1.82E-02	1.95E+00	1.89E-03	9.74E+01	5.35E+01	2.09E+01
36	6.26	1.72E-02	2.12E+00	2.21E-03	9.77E+01	5.54E+01	2.28E+01
37	6.73	1.56E-02	2.22E+00	2.49E-03	9.79E+01	5.75E+01	2.50E+01
38	7.23	1.45E-02	2.39E+00	2.88E-03	9.82E+01	5.98E+01	2.75E+01
39	7.23	1.38E-02	2.62E+00	3.39E-03	9.84E+01	6.22E+01	3.04E+01
40	8.35	1.07E-02	2.34E+00	3.26E-03	9.86E+01	6.44E+01	3.32E+01
41	8.97	1.26E-02	3.19E+00	4.77E-03	9.88E+01	6.74E+01	3.74E+01
		1.25E-02	3.65E+00	5.87E-03	9.90E+01	7.09E+01	4.25E+01
42 43	9.64 10.3	1.25E-02 1.20E-02	4.05E+00	7.00E-03	9.92E+01	7.47E+01	4.85E+01
44	11.1	9.84E-03	3.84E+00	7.12E-03	9.93E+01	7.83E+01	5.47E+01
45	11.1	1.07E-02	4.81E+00	9.59E-03	9.95E+01	8.28E+01	6.30E+01
46	12.8	9.12E-03	4.81E+00	1.02E-02	9.97E+01	8.73E+01	7.19E+01
47		1.09E-02	6.56E+00	1.51E-02	9.98E+01	9.34E+01	8.50E+01
	13.8 14.8	1.09E-02	6.99E+00	1.73E-02	1.00E+02	1.00E+02	1.00E+02
48 >	14.8	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
			.06E+02 1.		1.0067,02	1.002702	1.006+04
TOTAL	.5:	0.032+00 1	.002+02 1.	125-01			

EFFIC. CORRECT.: D1

TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 4.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 CONCENTRATIONS CUMULATIVE % SURFACE NUMBER SURFACE CHNL DIA NUMBER MASS MASS 1.43E-02 8.98E-03 6.73E-07 9.65E-02 3.78E-03 2.73E-04 .486 1.15E-02 9.22E-03 7.75E-07 1.74E-01 7.65E-03 5.88E-04 2.04E-02 1.88E-02 1.70E-06 3.12E-01 1.56E-02 1.28E-03 3.01E-02 3.20E-02 3.10E-06 5.16E-01 2.90E-02 2.54E-03 5.02E-02 6.16E-02 6.41E-06 8.55E-01 5.49E-02 5.14E-03 9.16E-02 1.30E-01 1.46E-05 1.47E+00 1.10E-01 1.11E-02 .673 1.82E-01 2.99E-01 3.61E-05 2.70E+00 2.36E-01 2.57E-02 3.51E-01 6.67E-01 8.64E-05 5.08E+00 5.16E-01 6.08E-02 5.75E-01 1.26E+00 1.76E-04 8.96E+00 1.05E+00 1.32E-01 7.56E-01 1.92E+00 2.87E-04 1.41E+01 1.85E+00 2.48E-01 8.73E-01 2.55E+00 4.11E-04 2.00E+01 2.93E+00 4.15E-01 9.75E-01 3.29E+00 5.69E-04 2.66E+01 4.31E+00 6.46E-01 11 1.06E+00 4.15E+00 7.71E-04 3.38E+01 6.06E+00 9.59E-01 1.08E+00 4.88E+00 9.73E-04 4.11E+01 8.11E+00 1.35E+00 13 1.12E+00 5.80E+00 1.24E-03 4.86E+01 1.06E+01 1.86E+00 1 1 1.08E+00 6.47E+00 1.49E-03 5.59E+01 1.33E+01 2.46E+00 15 9.93E-01 6.88E+00 1.70E-03 6.26E-01 1.62E+01 3.16E+00 16 1.59 3.74E-01 7.00E+00 1.85E-03 6.85E+01 1.91E+01 3.91E+00 1.71 7.51E-01 6.94E+00 1.98E-03 7.36E-01 2.20E+01 4.72E+00 6.39E-01 6.83E+00 2.10E-03 7.79E+01 -2.49E+01 5.57E+00 2.78E+01 5.60E-01 6.91E+00 2.28E-03 3.17E+01 4.32E-01 7.00E+00 2.49E-03 8.53E-01 3.08E+01 3.98E-01 6.54E+00 2.49E-03 8.77E-01 3.38E+01 2.45 3.30E-01 8.27E+00 2.57E-03 3.98E-01 3.51E+01 3.35E+00 2.35E-03 9.16E-01 3.84E+01 1.05E+01 2.44E-01 2.25E-03 2.33 1.88E-01 4.75E+00 9.29E+01 4.04E+01 1.14E+01 1.48E-01 i.33E+00 2.20E-03 9.39E-01 4.22E+01 1.23E+01 4.03E+00 2.20E-03 9.47E+01 4.39E+01 1.32E+01 1.13E-01 1.99E-03 9.52E-01 4.53E+01 1.40E+01 8.68E-02 3.38E+00 7.27E-02 3.27E+00 2.07E-03 9.57E-31 4.67E+01 1.49E+01 3.78 3.23E+00 2.19E-03 9.62E+01 4.81E+01 1.57E+01 30 4.06 6.20E-02 4.37 5.09E-02 3.05E+00 2.23E-03 9.65E+01 4.93E+01 1.66E+01 31 32 1.69 4.99E-02 3.46E+00 2.71E-03 9.69E+01 5.08E+01 1.77E+01 3.92E-02 3.14E+00 2.64E-03 9.71E+01 5.21E+01 1.88E+01 33 5.04 3.73E-02 3.45E+00 3.12E-03 9.74E-01 5.36E+01 2.01E+01 34 4.42E-03 9.76E+01 5.55E+01 2.19E+01 4.26E-02 1.55E+00 35 3.71E-02 4.57E+00 4.77E-03 9.79E+C1 5.74E+01 2.38E+01 36 3.40E-02 4.83E+00 5.42E-03 9.81E+01 5.94E+01 2.60E+01 37 6.73 3.18E-02 5.23E+00 6.30E-03 9.83E+01 38 6.16E+01 2.86E+01 39 3.18E-02 6.04E+00 7.82E-03 9.86E+01 6.42E+01 3.17E+01 2.92E-02 6.39E+00 8.90E-03 9.88E+01 6.69E+01 3.54E+01 40 8.97 2.75E-02 6.96E+00 1.04E-02 9.89E+01 6.98E+01 3.96E+01 11 2.68E-02 7.82E+00 1.26E-02 9.91E+01 7.31E+01 4.47E+01 12 2.44E-02 8.22E+00 1.42E-02 9.93E+01 7.66E+01 5.05E+01 43 7.99E+01 5.65E+01 1.1 2.06E-02 8.05E+00 1.49E-02 9.94E+01 2.33E-02 1.05E+01 2.09E-02 9.96E+01 8.43E+01 6.50E+01 2.20E-02 1.14E+01 2.45E-02 9.97E+01 8.91E+01 7.49E+01 2.05E-02 1.23E+01 2.94E-02 9.99E+01 9.43E+01 8.65E+01 47 13.8 1.94E-02 1.35E+01 3.34E-02 1.00E+02 1.00E+02 1.00E+02 14.8 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 > 15.1

1.48E+01 2.38E+02 2.46E-01

TOTALS:

FILE NAME: EPX2 4.004 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: DI

		CONC	ENTRATIONS		CUMI	ULATIVE %	
CUNI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
CHN1	.486		1.34E-02	1.00E-06	1.13E-01	4.42E-03	3.24E-04
ì	.504	1.43E-02	1.14E-02	9.61E-07	1.88E-01	8.18E-03	6.35E-04
2	.542	2.60E-02	2.40E-02	2.17E-06	3.26E-01	1.61E-02	1.34E-03
3	.581	4.15E-02	4.41E-02	4.28E-06	5.44E-01		2.72E-03
4	.625	6.61E-02	8.12E-02	8.45E-06	8.93E-01	5.74E-02	5.46E-03
5	.673	1.38E-01	1.96E-01	2.20E-05	1.62E+00	1.22E-01	1.26E-02
6	.723	2.46E-01	4.05E-01	4.88E-05	2.92E+00	2.55E-01	2.84E-02
7	.777	4.59E-01	8.71E-01	1.13E-04	5.33E+00		6.49E-02
8	.835	7.11E-01	1.56E+00	2.17E-04	9.08E+00	1.06E+00	1.35E-01
9	.897	9.44E-01	2.39E+00	3.58E-04	1.41E+01	1.84E+00	2.51E-01
10	.964	1.09E+00	3.19E+00	5.13E-04	1.98E+01	2.89E+00	4.17E-01
11	1.03	1.21E+00	4.10E+00	7.08E-04	2.62E+01	4.24E+00	6.47E-01
12	1.11	1.29E+00	5.03E+00	9.35E-04	3.30E+01	5.90E+00	9.49E-01
13	1.19	1.34E+00	6.03E+00	1.20E-03	4.01E+01	7.89E+00	1.34E+00
14	1.28	1.37E+00	7.11E+00	1.53E-03	4.73E+01	1.02E+01	1.83E+00
13	1.33	1.33E+00	8.01E+00	1.85E-03	5.43E+01	1.29E+01	2.43E+00
16	1.;3	1.27E+00	8.82E+00	2.18E-03	6.10E+01	1.58E+01	3.1;E+00
17	1.39	1.15E+00	9.24E+00	2.46E-03	6.71E+01	1.88E+01	3.93E+00
13	7.71	9.73E-01	9.04E+00	2.58E-03	7.22E+01	2.18E+01	4.77E+00
19	1.84	8.58E-01	9.16E+00	2.81E-03	7.67E+01	2.48E+01	3.68E+00
20	1.98	7.48E-01	9.22E+00	3.05E-03	3.07E+01	2.79E+01	6.67E+00
21	2.12	6.64E-01	9.45E+00	3.33E-03	8.42E+01	J.10E+01	7.73E+00
22	2.28	5.61E-01	9.22E+00	3.52E-03	3.71E+01	3.40E+01	S.SSE+CO
23	2.45	4.49E-01	8.52E+00	3.49E-03	8.95E÷01	3.68E+01	1.00E+01
24	2.64	3.54E-01	7.76E+C0	3.42E-03	9.14E+01	3.945+01	1.11E+01
25	2.83	2.76E-01	6.98E+00	3.30E-03	9.28E+01	4.17E+01	1.22E+01
26	3.05	2.09E-01	6.10E+00	3.10E-03	9.39E+01	4.37E+01	1.32E+01
27	3.27	1.61E-01	5.42E+00	2.96E-03	9.48E+01	4.55E#01	1.42E+01
28	3.52	1.14E-01	4.43E+00	2.60E-03	9.54E+01	1.69E+01	1.50E+31
29	3.78	9.28E-02	4.13E+00	2.63E-03	9.59E+01	4.83E+01	1.59E+01
30	4.06	7.67E-02	3.99E+00	2.70E-03	9.63E+01	1.96E+01	1.67E+01
31	4.37	6.55E-02	3.93E+00	2.87E-03	9.66E+01		1.77E+01
32	1.69	6.26E-02	4.34E÷00	3.40E-03	9.69E+01	5.23E+01	1.88E÷01
33	5.04	5.33E-02	4.27E+00	3.59E-03	9.72E+01	5.37E+01	1.99E+01
34	5.42	5.15E-02	4.76E+00	4.30E-03	9.75E+01	5.53E+01	2.13E+01
35	5.82	5.03E-02	5.37E+00	5.21E-03	9.77E+01	5.71E+01	2.30E+01
36	6.26	4.64E-02	5.73E+00	5.98E-03	9.8CE+01	5.90E+01	2.49E+01
37	6.73	4.42E-02	6.29E+00	7.05E-03	9.82E+01	6.10E+01	2.72E+01
38	7.23	3.59E-02	5.90E+00	7.11E-03	9.84E+01	5.30E+01	2.95E+01
39	7.77	3.94E-02	7.47E+00	9.68E-03	9.86E+01	6.54E+01	3.27E+01
40	8.35	3.28E-02	7.18E÷00	1.00E-02	9.88E+01	6.78E+01	3.59E+01
41	8.97	3.59E-02	9.08E+00	1.36E-02	9.90E+01	7.08E+01	4.03E+01
42	9.64	3.25E-02	9.51E+00	1.53E-02	9.92E+01	7.39E+01	4.53E+01
43	10.3	2.83E-02	9.56E+00	1.65E-02	9.93E+01	7.71E+01	5.06E+01
44	11.1	2.66E-02	1.04E+01	1.93E-02	9.91E+01	8.05E+01	5.69E+01
4.5 4.6	11.9	2.80E-02	1.26E+01	2.51E-02	9.96E+01	8.47E+01	6.50E+01
46	12.8	2.65E-02	1.38E+01	2.96E-02	9.97E+01	8.92E+01	7.16E+01
47	13.8	2.58E-02	1.55E+01	3.57E-02	9.99E+01	9.43E+01	8.61E+01
4,8	14.8	2.50E-02	1.73E+01	4,28E-02	1,00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
<b>ATOT</b>	rp:	1.305+01 3	.04E+02 3.	OAF-01			

### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 4.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

			CONCE	NTRATIONS		CUMI	LATIVE %	
÷	CHNL	DIA		SURFACE	MASS	NUMBER	SURFACE	MASS
		.486	3.06E-02	1.90E-02	1.41E-06	1.21E-01	4.50E-03	3.29E-04
	<b>(</b>		1.80E-02	1.44E-02	1.21E-06	1.92E-01	7.92E-03	6.12E-04
	1	.504	3.43E-02		2.86E-06	3.27E-01		
	2	.542		3.17E-02			1.54E-02	1.28E-03
	3	.581	5.45E-02	5.79E-02	5.61E-06	5.42E-01	2.92E-02	2.59E-03
	4	.625	9.40E-02	1.15E-01	1.20E-05	9.12E-01	5.65E-02	5.39E-03
	5	.673	1.80E-01	2.57E-01	2.88E-05	1.62E+00	1.17E-01	1.21E-02
	6	.723	3.46E-01	5.69E-01	6.86E-05	2.99E+00	2.52E-01	2.81E-02
	7	.777	6.12E-01	1.16E+00	1.51E-04	5.40E+00	5.28E-01	6.32E-02
	8	.835	9.78E-01	2.15E+00	2.99E-04	9.26E+00	1.04E+00	1.33E-01
	9	.897	1.25E+00	3.16E+00	4.73E-04	1.42E+01	1.79E+00	2.43E-01
	10	.964	1.41E+00	4.13E+00	6.65E-04	1.98E+01	2.77E+00	3.98E-01
	11	1.03	1.55E+00	5.24E+00	9.06E-04	2.59E+01	4.01E+00	6.09E-01
	12	1.11	1.64E+00	6.39E+00	1.19E-03	3.23E+01	5.52E+00	8.86E-01
	13	1.19	1.67E+00	7.53E+00	1.50E-03	3.89E+01	7.31E+00	1.24E+00
	14	1.28	1.71E+00	8.91E+00	1.91E-03	4.57E+01	9.12E+00	1.68E+00
	15	1.38	1.69E+00	1.02E+01	2.34E-03	5.23E+01	1.18E+01	2.23E+00
	16	1.43	1.63E-00	1.13E+01	2.80E-03	5.S8E+01	1.45E+01	2.88E+00
	17	1.59	1.49E+00	1.19E+01	3.17E-03	6.46E+01	1.73E+01	3.62E+00
	18	1.71	1.31E-00	1.21E+01	3.47E-03	6.98E+01	2.02E+01	4.43E+00
	19	1.84	1.19E+00	1.27E+01	3.91E-03	7.45E+01	2.32E+01	5.34E+00
	20	1.93	1.06E+00	1.31E+01	1.32E-03	7.37E+01	2.63E+01	6.35E+00
	0 1	2.12	9.79E-01	1.39E+01	4.95E-03	8.28E+01	2.96E+01	7.50E+00
	90	2.23	3.19E-01	1.36E+01	5.19E-03	8.58E-01	3.29E+01	8.71E+00
				1.36E+01	5.17E-03	8.85E+01	3.59E+01	9.92E+00
	23	2.43	6.85E-01					
	2 1	2.64	5.39E-01	1.18E+01	5.20E-03	9.06E+01	3.87E+01	1.11E+01
	25	2.80	1.09E-01	1.04E+01	4.90E-03	9.22E+01	4.11E+01	1.23E+01
	26	3.05	3.15E-01	9.22E+00	4.69E-03	9.34E÷01	4.33E+01	1.34E+01
	27	3.27	2.39E-01	8.06E-00	4.40E-03	9.44E+01	4.52E+01	1.44E+01
	23	3.52	1.73E-01	6.75E+00	3.96E-03			
	29	3.78	1.43E-01	6.42E+00	4.05E-03	9.56E+01	4.84E+01	1.63E+01
	30	4.06	1.15E-01	5.98E+00	4.06E-03	9.61E+01	4.98E+01	1.72E+01
	31	4.37	9.38E-02	5.63E+00	4.11E-03	9.65E+01		1.82E+01
	32	4.69	8.54E-02	5.92E+00	4.64E-03	9.68E+01		1.92E+01
	33	5.04	7.81E-02	6.25E+00	5.26E-03	9.71E+01	5.40E+01	2.05E+01
	34	5.42	7.12E-02	6.58E+00	5.95E-03	9.74E+01	5.56E+01	2.19E+01
	35	5.82	7.08E-02	7.56E+00	7.34E-03	9.77E+01	5.73E+01	2.36E+01
	36	6.26	7.01E-02	8.64E+00	9.02E-03	9.79E+01	5.94E+01	2.57E+01
	37	6.73	5.69E-02	8.10E+00	9.08E-03	9.82E+01	6.13E+01	2.78E+C1
	38	7.23	5.50E-02	9.03E+00	1.09E-02	9.84E+01	6.35E+01	3.03E+01
	39	7.77	5.63E-02	1.07E+01	1.38E-02	9.86E+01	6.60E+01	3.36E+01
	40	8.35	4.80E-02	1.05E+01	1.47E-02	9.88E+01		3.70E+01
	41	8.97	4.60E-02	1.16E+01	1.74E-02	9.90E+01	7.12E+01	4.10E+01
	42	9.64	4.39E-02	1.28E+01	2.06E-02	9.91E+01	7.43E+01	1.58E+01
			3.85E-02	1.30E+01	2.25E-02		7.74E+01	5.11E+01
	43	10.3	3.85E-02	1.50E+01	2.79E-02	9.94E+01		5.76E+01
	44	11.1		1.64E+01	3.28E-02	9.96E+01	8.48E+01	6.52E+01
	15	11.9	3.65E-02		3.25E-02 3.61E-02	9.97E+01	8.88E+01	7.36E+01
		12.8	3.24E-02	1.68E+01		9.97E+01 9.99E+01	9.38E+01	8.48E+01
	47	13.8	3.47E-02	2.08E+01	4.80E-02			1.00E+02
	48	14.8	3.79E-02	2.63E+01	6.51E-02	1.00E+02		
	>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
	TOTAL	LS:	2.54E+01 4	.22E+02 4.	29E-01			

FILE NAME: EPX2 4.006 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

#### CUMULATIVE % CONCENTRATIONS NUMBER SURFACE SURFACE MASS NUMBER CHNL DIA 3.40E-02 2.11E-02 1.57E-06 1.26E-01 4.21E-03 3.04E-04 .486 1.97E-02 1.57E-02 1.32E-06 1.99E-01 7.35E-03 5.60E-04 .504 3.59E-02 3.31E-02 2.99E-06 3.32E-01 1.40E-02 5.77E-02 6.13E-02 5.95E-06 5.47E-01 2.62E-02 2.29E-03 1.03E-01 1.26E-01 1.31E-05 9.28E-01 5.14E-02 4.84E-03 1.86E-01 2.65E-01 2.97E-05 1.62E+00 1.04E-01 1.06E-02 .673 3.20E-01 5.27E-01 6.35E-05 2.81E+00 2.10E-01 2.29E-02 .723 5.76E-01 1.09E+00 1.42E-04 4.95E+00 4.28E-01 5.04E-02 .777 .835 8.83E-01 1.95E+00 2.71E-04 8.25E+00 8.17E-01 1.03E-01 .897 1.15E+00 2.91E+00 4.35E-04 1.25E+01 1.40E+00 1.87E-01 1.26E+00 3.70E+00 5.95E-04 1.72E+01 2.14E+00 3.03E-01 .964 3.08E+00 4.61E-01 1.40E+00 4.72E+00 8.16E-04 2.24E+01 1.03 11 1.51E+00 5.89E+00 1.09E-03 2.80E+01 4.26E+00 6.73E-01 1.11 5.66E+00 9.45E-01 1.56E+00 7.04E+00 1.40E-03 3.38E+01 13 1.19 1.65E+00 8.56E+00 1.84E-03 3.99E+01 7.37E+00 1.30E+00 1.23 1 1 1.69E+00 1.01E+01 2.33E-03 4.62E+01 1.75E+00 9.40E+00 15 1.38 2.91E-03 5.25E+01 1.17E+01 2.32E÷00 1.17E+01 1.69E÷00 16 2.39E+00 1.63E+00 1.31E+01 3.48E-03 5.85E+01 1.44E+01 1.591.52E+00 1.41E+01 4.02E-03 6.42E+01 1.72E+01 3.77E+00 1.71 1.43E+00 1.52E+01 4.68E-03 6.95E+01 2.02E+01 4.68E±00 1.64E+01 5.41E-03 7.44E+01 2.35E+01 5.72E+00 1.33E+00 1.98 1.22E+00 1.73E-01 6.14E-03 7.89E+01 2.69E+01 2.12 1.07E+00 1.76E+01 6.72E-03 8.29E+01 3.05E+01 8.22E+00 9.51E+0) 8.59E-01 1.63E+01 6.68E-03 8.61E+01 3.37E+01 2.157.04E-01 1.54E+01 6.80E-03 8.87E+01 3.68E+01 1.08E+01 2.64 5.44E-01 1.38E+01 6.52E-03 9.07E+01 3.95E+01 1.21E+01 2.834.16E-01 1.22E+01 6.18E-03 9.23E+01 4.20E+01 1.33E-01 3.05 1.44E÷01 3.20E-01 1.08E+01 5.91E-03 9.35E+01 4.41E+01 3.27 4.60E+01 1.55E+01 2.41E-01 9.41E+00 5.52E-03 9.44E+01 3.52 1.77E-01 7.98E+00 5.04E-03 9.50E+01 4.76E+01 1.65E+01 3.78 1.45E-01 7.52E+00 5.10E-03 9.56E+01 4.91E+01 1.75E-01 30 4.06 1.10E-01 6.60E+00 4.31E-03 9.60E+01 5.04E+01 31 4.37 5.19E+01 1.95E+01 7.56E+00 5.92E-03 9.64E+01 4.69 1.09E-01 9.32E-02 7.46E+00 6.28E-03 9.67E+01 5.34E+01 2.08E+01 5.04 8.94E-02 8.26E+00 7.47E-03 9.70E+01 5.51E+01 2.22E+01 5.42 7.82E-02 8.35E+00 8.11E-03 9.73E+01 5.68E+01 2.33E+01 7.88E-02 9.72E+00 1.01E-02 9.76E+01 5.87E+01 2.57E+01 36 7.58E-02 1.09E+01 1.23E-02 9.79E+01 6.09E+01 2.81E+01 5.73 6.60E-02 1.08E+01 1.31E-02 9.82E+01 6.30E+01 3.07E+01 7.23 6.08E-02 1.15E+01 1.50E-02 9.84E+01 6.54E+01 3.36E+01 7.77 5.78E-02 1.27E+01 1.77E-02 9.86E+01 6.79E+01 3.70E+01 8.35 40 5.94E-02 1.50E+01 2.25E-02 9.88E+01 7.09E+01 4.13E+01 41 8.97 5.06E-02 1.48E+01 2.38E-02 9.90E+01 7.38E+01 4.60E+01 42 9.64 4.74E-02 1.60E+01 2.76E-02 9.92E+01 7.70E+01 5.13E+01 43 10.3 4.58E-02 1.79E+01 3.32E-02 9.94E+01 8.06E+01 5.77E+01 11.1 45 11.9 4.32E-02 1.94E+01 3.88E-02 9.95E+01 8.45E+01 6.53E+01 46 12.8 4.86E-02 2.53E+01 5.42E-02 9.97E+01 8.95E+01 7.58E+01 13.8 4.36E-02 2.62E+01 6.03E-02 9.99E+01 9.48E+01 8.74E+01 48 14.8 3.78E-02 2.62E+01 6.49E-02 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 TOTALS: 2.69E+01 5.01E+02 5.16E-01

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 4.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		DID. KAI	10. 1 .1	EFFIC. (	CORRECT 1	<b>01</b>	
		COV.CI	ENTRATIONS		CUM	ULATIVE %	
CHNI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< <	.486		2.36E-02	1.76E-06		4.06E-03	2.97E-04
ì	.504	2.52E-02	2.02E-02	1.70E-06		7.52E-03	5.82E-04
2	.542	4.02E-02	3.71E-02	3.35E-06			1.15E-03
3	.581	6.13E-02		6.32E-06			2.21E-03
4	.625	1.01E-01	1.24E-01			4.64E-02	4.39E-03
5	.673	1.93E-01	2.75E-01	3.08E-05	1.50E+00		9.58E-03
6	.723	3.39E-01	5.57E-01	6.72E-05	2.61E+00	1.89E-01	2.09E-02
6 7	.777	5.72E-01	1.09E+00	1.41E-04	4.48E+00		4.46E-02
8	.835	8.88E-01	1.95E+00	2.71E-04	7.39E+00		9.03E-02
9	.897	1.11E+00	2.82E+00	4.22E-04	1.10E+01	1.20E+00	1.62E-01
10	.964	1.27E+00	3.71E+00	5.97E-04	1.52E+01	1.84E+00	2.62E-01
11	1.03	1.43E+00	4.84E+00	8.36E-04	1.99E+01	2.67E+00	4.03E-01
12	1.11	1.54E+00	5.99E+00	1.11E-03		3.70E+00	5.90E-01
13	1.19	1.59E+00	7.60E÷00		3.04E+01	5.00E+00	8.46E-01
14	1.28	1.84E+00	9.56E+00	2.05E-03	3.65E±01	6.65E+00	1.19E+00
15	1.38	1.92E+00	1.15E÷01	2.66E-03		8.63E+00	1.61E+00
16	1.48	1.94E+00	1.35E+01		1.91E+01		1.67E+00
37	1.59	1.92E±00	1.53E+01		5.54E+01		1.89E+00
18	1.71	1.82E+00	1.69E+01	4.82E-03		1.65E+01	2.882+00 3.70E+00
19	1.81	1.62E+00					
20	1.65		1.85E-01	5.68E-03			4.66E+00
21	2.12	1.64E+00	2.03E+01		7.24E+01	2.31E+01	E.78E+00
		1.52E+00	2.16E+01		7.74E+01	2.69E+01	7.08E+30
22	2.28	1.33E÷00	2.19E+01	8.36E-03	8.17E+01	3.06E+01	8.49E+00
23	2.45	1.11E+00	2.11E÷01	8.64E-03			9.94E+00
24	2.64	8.66E-01	1.90E+01	8.35E-03	8.82E+01	3.75E+01	1.14E+01
25	2.83	6.61E-01	1.67E+01	7.91E-03	9.04E+01	4.04E+01	1.27E+01
26	3.05	5.18E-01	1.51E+01	7.70E-03	9.21E+01	4.30E+01	1.40E-01
27	3.27	3.90E-01	1.32E+01	7.20E-03	9.34E+01	· · · · · ·	1.52E+01
28	3.52	2.87E-01	1.12E+01	6.56E-03	9.43E+01	4.72E+01	1.63E+01
29	3.78	2.20E-01	9.89E+00	6.24E-03	9.50E÷01	4.89E+01	1.74E+01
30	4.06	1.67E-01	8.70E+00	5.90E-03	9.56E+01		1.83E+01
31	4.37	1.39E-01	8.32E+00	6.06E-03	9.60E+01	5.18E+01	1.94E+01
32	4.69	1.17E-01	8.15E+00	6.38E-03	9.64E+01	5.32E+01	2.04E+01
33	5.04	1.13E-01	9.01E+00	7.58E-03	9.68E+01	5.48E+01	2.17E+01
34	5.42	1.02E-01	9.47E+00	8.56E-03	9.71E+01		2.32E+01
35	5.82	8.96E-02	9.57E+00	9.30E-03	9.74E+01		2.47E+01
36	6.26	8.18E-02	1.01E+01	1.05E-02	9.77E+01	5.98E+01	2.65E+C1
37	6.73	7.63E-02	1.09E+01	1.22E-02	9.79E+01		2.86E+01
38	7.23	7.30E-02	1.20E+01	1.45E-02	9.82E+01		3.10E+01
39	7.77	7.37E-02	1.40E+01	1.81E-02	9.84E+01		3.41E+01
40	8.35	6.32E-02	1.39E÷01	1.93E-02	9.86E+01	6.85E+01	3.73E+01
41	8.97	6.31E-02	1.60E+01	2.39E-02	9.88E+01	7.13E+01	4.13E+01
42	9.64	5.52E-02	1.61E+01	2.59E-02	9.90E+01		4.57E+01
43	10.3	5.57E-02	1.88E+01	3.25E-02		7.73E+01	5.12E+01
44	11.1	5.27E-02	2.05E+01	3.81E-02	9.93E+01	8.08E+01	5.76E+01
45	11.9	5.39E-02	2.43E+01	4.84E-02	9.95E+01	8.50E+01	6.58E+01
46	12.8	4.85E-02	2.52E+01	5.40E-02	9.97E+01	8.93E+01	7.49E+01
47	13.8	4.78E-02		6.61E-02	9.98E+01	9.42E+01	8.60E±01
48	14.8	4.84E-02		8.30E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00		0.00E+00	1.00E+02	1.00E+02	1:00E+02
TOTAL	.5:	3.05E+01 5	.81E+02 5.	93E-01	•		

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

	CONCE	ENTRATIONS	CUMULATIVE %			
CHNL DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< .486		2.38E-02	1.77E-06	1.30E-01	4.23E-03	3.10E-04
1 .504	<del>-</del>	1.67E-02	1.41E-06	2.01E-01		5.55E-04
2 .542		3.45E-02	3.11E-06	3.27E-01	1.33E-02	1.10E-03
3 .583		6.85E-02	6.64E-06	5.45E-01	2.54E-02	2.26E-03
4 .62		1.31E-01	1.36E-05	9.06E-01	4.86E-02	4.64E-03
5 .67		2.52E-01	2.83E-05	1.51E+00	9.33E-02	9.58E-03
6 .723		5.12E-01	6.17E-05	2.56E+00	1.84E-01	2.04E-02
7 .77		1.02E+00	1.32E-04	4.38E+00	3.65E-01	4.35E-02
		1.85E+00	2.58E-04	7.23E+00	6.93E-01	8.85E-02
8 .835 9 .897		2.72E+00	4.07E-04	1.09E+01	1.17E+00	1.60E-01
10 .964		3.56E+00	5.73E-04	1.50E+01	1.81E+00	2.60E-01
11 1.03		4.59E+00	7.93E-04	1.96E+01	2.62E+00	3.98E-01
		5.83E+00	1.08E-03	2.46E+01	3.65E+00	5.87E-01
		7.22E+00	1.44E-03	3.00E+01	4.93E+00	8.39E-01
		9.18E+00	1.97E-03	3.60E+01	6.56E+00	1.18E+00
		1.12E+01	2.60E-03	4.24E+01	8.56E+00	1.54E+00
15 1.38		1.31E+01	3.25E-03	4.88E+01	1.09E+01	2.20E+00
16 1.48			3.98E-03	5.51E+01	1.35E+01	2.90E+00
17 1.59		1.49E+01	4.64E-03	6.10E+01	1.54E+01	3.71E+00
18 1.73		1.02E+01			1.97E+01	4.70E+00
19 1.8-		1.83E+01	5.64E-03	6.68E-01	2.32E+61	5.84E+00
20 1.98		1.99E+01	6.57E-03	7.23E+01		7.1 (E+00
		2.08E+01	7.40E-08	7.72E-01	2.69E+01	
		2.09E+01	7.95E-03	S.15E+01	3.0(E+01	8.52E+00
23 2.48		2.00E-01	8.18E-03	8.51E-01	3.41E+01	8.88E+00
24 2.0		1.91E+01	8.41E-03	8.80E+01	3.75E+01	1.11E÷01
25 2.80		1.67E+01	7.91E-03	9.03E+01	14.05E-01	1.18E+01
16 3.03		1.48E+01	7.54E-03	9.20E-01	4.31E+01	1.41E+01
		1.33E-01	7.26E-03		4.88E+01	1.54E+01
28 3.53		1.11E+01	6.51E-03	9.43E+01	4.74E+01	1.65E+01
29 3.78		9.75E+00	6.1EE-03	9.50E+01	4.92E+01	1.76E+01
30 4.06		8.19E+00	5.55E-03	9.55E+01	5.06E+01	1.86E+01
31 4.37		8.12E+00	5.92E-03	9.60E+01	5.20E+01	1.96E+01 2.07E+01
32 4.69		8.16E+00	6.39E-03	9.64E+01	5.35E+01	_
33 5.04		8.43E+00	7.09E-03	9.68E+01	5.50E+01	2.20E+01
34 5.42		9.26E+00	8.37E-03	9.71E+01	5.66E+01	2.34E+01
35 5.83		9.26E+00	9.00E-03	9.74E+01	5.83E+01	2.50E+01
36 6.26		9.51E+00	9.93E-03	9.77E+01	6.00E+01	2.67E÷01
37 5.73		1.16E+01	1.30E-02	9.79E+01	6.20E+01	2.90E+01 3.15E+01
38 7.23		1.19E+01	1.44E-02	9.82E+01	6.41E+01	
39 7.77		1.24E+01	1.60E-02	9.84E+01	6.63E+01	3.43E+01
40 8.33		1.35E+01	1.88E-02	9.86E+01	6.87E+01	3.76E+01
41 8.93		1.57E+01	2.35E-02	9.88E+01	7.15E+01	4.17E+01
42 9.64		1.68E+01	2.71E-02	9.90E+01	7.45E+01	4.64E+01
43 10.3		1.90E+01	3.28E-02	9.92E+01	7.78E+01	5.22E+01
44 11.1		1.94E+01	3.60E-02	9.94E+01	8.13E+01	5.85E+01
45 11.9		2.29E+01	4.56E-02	9.95E+01	8.53E+01	6.64E+01
46 12.8		2.44E+01	5.23E-02	9.97E+01	8.96E+01	7.50E+01
47 13.8		2.80E+01	6.46E-02	9.99E+01	9.46E+01	8.69E+01
48 14.8		3.03E+01	7.50E-02	1.00E+02	1.00E+02	1.0GE+02
> 15.4		9.61E-02	2.56E-04	1.00E+02	1.00E+02	1.00E+02
TOTALS:	2.96E+01 5	5.64E+02 5.	12E-01			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 4.009 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

			ENTRATIONS			JLATIVE %	
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	4.12E-02	2.56E-02	1.91E-06	1.20E-01	3.87E-03	2.84E-04
1	.504	2.62E-02	2.09E-02	1.76E-06	1.96E-01	7.03E-03	5.46E-04
2	.542	4.06E-02	3.75E-02	3.38E-06	3.13E-01	1.27E-02	1.05E-03
3	.581	6.80E-02	7.23E-02	7.01E-06	5.11E-01	2.36E-02	2.09E-03
4	.625	1.18E-01	1.44E-01	1.50E-05	8.52E-01	4.54E-02	4.33E-03
5	.673	2.15E-01	3.05E-01	3.43E-05	1.48E+00	9.16E-02	9.43E-03
6	.723	3.55E-01	5.85E-01	7.05E-05	2.51E+00	1.80E-01	1.99E-02
7	.777	6.41E-01	1.22E+00	1.58E-04	4.37E+00	3.64E-01	4.34E-02
8	.835	9.90E-01	2.17E+00	3.02E-04	7.24E+00	6.92E-01	8.84E-02
9	. 297	1.25E+00	3.16E+00	4.73E-04	1.09E+01	1.17E+00	1.59E-01
10	.964	1.40E+00	4.10E÷00	6.59E-04	1.49E+01	1.79E+00	2.57E-01
11	1.03	1.56E+00	5.26E+00	9.10E-04	1.95E+01	2.58E+00	3.92E-01
12	1.11	1.73E+00	€.76E+00	1.25E-03	2.45E+01	3.61E+00	5.79E-01
13	1.19	1.85E+00	8.33E+00	1.66E-03	2.99E+01	4.86E+00	8.26E-01
1.4	1.28	2.05E+00	1.06E+01	2.28E-03	3.58E+01	6.47E+00	1.17E+00
15	1.58	2.19F+00	1.31E÷01	3.03E-03	4.22E+01	8.46E+00	1.62E+00
16	1.48	2.22E+00	1.54E+01	3.81E-03	4.86E+01	1.08E+01	2.18E+00
17	1.59	2.17E+00	1.74E-01	4.63E-03	5.49E+01	1.34E÷01	2.87E+00
3.7	1.71	2.06E+00	1.91E+01	5.45E-03	6.09E+01	1.63E+01	3.6SE+00
: 3	1.84	1.99E+00	2.13E+01	6.53E-03	6.57E+(·1	1.95E+01	4.65E+(%)
20	3 4 . 1	1.87E+00	2.31E+01	7.03E-03	7.21E+01	2.80E+01	5.79E+00
21	2.12	1.70E+00	2.47E+01	8.75E-03	7.72E+01	1.67E+01	7.65E-00
2.2	2.18	1.50E+60	2.46E-01	9.39E-03	8.15E+01	3.04E+01	8.48 <b>E</b> +60
2.3	2.45	1.26E+00	2.08E-01	9.77E-03	8.822-01	3.40E+01	9.6 E-UT
- 1	2.64	9.84E-01	2.10E-01	9.49E-00	8.80E+01	3.73E+01	1.14E+01
25	2.83	7.30E-01	1.80E+01	8.99E-03	9.01E+01	4.(1E+01	1.17E-01
1.6	3.65	6.00E-01	1.75E+01	8.91E-03	9.19E+(·]	1.25E+01	1.4(E+01
	3,47	4.43E-01	1.50E+01	S.17E-03	9.32E+01	4.51E-01	1.82E+61
28	3.52	3.33E-01	1.30E+01	7.02E-03	9.42E+(1	4.70E+01	1.64E+01
<u> </u>	3.78	2.47E-01	1.11E+01	7.02E-03	9.49E+01	4.87E+01	1.74E+01
÷ 0	4.06	1.86E-01	9.64E+00	6.54E-03	9.54E-01	5.02E+01	1.84E+01
3:	4.37	1.55E-01	9.33E+00	6.80E-03	9.59E-01	5.16E+01	1.94E+01
32	4.69	1.38E-01	9.58E+00	7.50E-03	9.63E+01	E.20E+01	2.05E+01
33	5.04	1.22E-01	9.73E+00		9.67E+01	5.45E+01	2.17E+01
3.4	5.42	1.22E-01	1.13E+01	1.02E-02	9.70E+01	5.62E+01	2.32E+01
35	5.82	1.04E-01	1.11E÷01	1.07E-02	9.73E+01	5.79E+01	2.48E+01
3.6	6.26	1.02E-01	1.26E+01	1.31E-02		5.98E+01	2.68E+01
37	6.73	8.98E-02	1.28E+01	1.43E-02	9.79E+01	6.17E+01	2.89E+01
2.8	7.23	9.06E-02	1.49E+01	1.80E-02	9.S1E+01	6.40E+01	3.10E+01
39	7.77	7.88E-02	1.50E+01	1.94E-02	9.84E+01	6.62E+01	3.45E+01
40	8.35	7.78E-02	1.70E+01	2.37E-02	9.86E+01	6.88E+01	3.80E+01
41	8.97	7.54E-02	1.91E+01	2.85E-02	9.88E+01	7.17E+01	4.23E+01
42	9.64	7.32E-02	2.14E+01	3.44E-02	9.90E+01	7.49E+01	4.74E+01
43	10.3	6.79E-02	2.29E+01	3.96E-02	9.92E+01	7.84E+01	5.33E+01
44	11.1	5.58E-02	2.18E+01	4.04E-02	9.94E+01	8.17E+01	5.93E+01
45	11.9	5.76E-02	2.59E+01	5.17E-02	9.95E+01	8.56E+01	6.70E+01
46	12.8	5.28E-02	2.74E+01	5.89E-02	9.97E+01	8.97E+01	7.58E+01
47	13.8	4.93E-02	2.96E+01	6.82E-02	9.98E+01	9.42E+01	8.59E+01
48	14.8	5.52E-02	3.83E÷01	9.47E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00		0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	3.44E+01 6	6.62E+02 6.	72E-01			•

FILE NAME: EPX2 5.000 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCI	CNTDATIONS		CIWI	'' ATTUR &	
CHNI	T TOTA	NUMBER	ENTRATIONS SURFACE			CUREAGE %	V4.50
CHN1	L DIA .486			MASS	NUMBER	SURFACE	MASS
	.504	9.78E+00	6.06E+00			1.19E-02	5.05E-04
1 2	.542	5.49E+00	4.39E+00		2.83E+00		9.18E-04
3		7.83E+00	7.23E+00		4.27E+00		1.65E-03
	.581	1.06E+01	1.13E+01	1.10E-03	6.24E+00		2.88E-03
4 5	.625	1.35E+01	1.66E+01	1.73E-03	8.75E+00	8.94E-02	4.82E-03
5 6	.673	1.68E+01	2.39E+01	2.68E-03	1.19E+01	1.36E-01	7.82E-03
7	.723	1.94E+01	3.19E+01	3.85E-03	1.55E+01	1.99E-01	1.21E-02
	.777	2.16E+01	4.11E+01	5.32E-03	1.95E+01	2.79E-01	1.81E-02
8	.835	2.12E+01	4.66E+01	6.49E-03	2.34E+01	3.70E-01	2.53E-02
9	.897	1.95E+01	4.93E+01	7.38E-03	2.70E+01	4.67E-01	3.36E-02
10	. 964	1.70E+01	4.98E+01	8.00E-03	3.01E+01	5.64E-01	4.26E-02
11	1.03	1.53E+01	5.16E+01	8.91E-03	3.30E+01	6.65E-01	5.25E-02
12	1.11	1.38E+01	5.40E+01	1.00E-02	3.55E+01	7.71E-01	6.37E-02
13	1.19	1.30E+01	5.84E+01	1.16E-02	3.79E+01	8.85E-01	7.68E-02
14	1.28	1.29E+01	6.73E+01	1.44E-02	4.03E+01	1.02E+00	9.29E-02
15	1.38	1.33E+01	7.99E÷01	1.84E-02	4.28E+01	1.17E+00	1.14E-01
16	1.48	1.41E÷01	9.80E+01	2.43E-02	4.54E+01	1.37E+00	1.41E-01
: 7	1.59	1.17E+01	9.33E+01	2.48E-02	4.75E+01	1.55E+00	1.08E-01
18	1.71	9.21E±00	8.52E+01	2.48E-02	4.93E+01	1.72E+00	1.9FE-01
19	1.84	00±388.8	9.42E÷01	2.90E-02	5.03E+01	1.90E+00	2.18E-01
10	1.98	8.76E+00	1.08E+02	3.57E-01	5.25E+01	2.11E+00	1.69E-01
21	2.12	9.2fE+00	1.32E+02	4.67E-(2	5.42E+01	2.37E+00	3.10E-01
2.2	2.28	8.87 <b>E</b> +00	1.57E-02	6.0(E-02	5.00E+01	2.(SE+00	2.56E-01
23	2.45	9.98E+00	1.89E+02	7.76E-02	5.78E+01	3.05E+06	4.74E-(:
24	2.64	9.53E+00	2.09E+01	9.20E-02	5.96E-01	3.46E+00	:.TTE-01
25	2.83	8.93E+00	2.24E+02	1.06E-01	€.12E÷01	3.90E+00	6.96E-()
26	3.05	8.74E-00	2.55E-02	1.30E-01	6.29E+01	4.40E+00	8.41E-01
27	2.27	8.49E+00	2.86E÷02	1.56E-01	6.44E+01	4.96E+00	1.02F+00
28	3.52	8.46E-00	3.30E-02	1.94E-01	6.00E+01	5.60E+00	1.22E+00
29	2.78	8.21E+00	3.70E+02	2.33E-01	6.75E±01	6.33E+00	1.49E+00
3 <b>0</b>	4.06	7.87E+00	4.09E+02	2.77E-(1	6.90E+01	7.18E+00	1.80E+00
31	4.37	7.93E+00	4.76E+02	3.47E-01	7.04E+01	8.06E+00	2.19E+00
32	4.69	8.04E+00	5.57E+02	4.36E-01	7.19E+01	9.15E+00	2.65E+00
33	5.04	8.32E+00	6.66E±02	5.60E-01	7.35E+01	1.05E+01	3.31E+00
3.4	5.42	8.52E+00	7.88E+02	7.12E-01	7.50E+01	1.20E+01	4.11E+CO
€5	5.82	8.65E+00	9.23E+02	8.97E-01	7.66E+01	1.38E+01	5.11E+00
36	6.26	8.77E+00	1.08E+03	1.13E÷00	7.83E+01	1.59E+01	6.87E+00
37	6.73	8.92E+00	1.27E+03	1.42E÷00	7.99E÷01	1.84E+01	7.97E+00
38	7.23	8.93E+00	1.47E+03	1.77E+00	8.16E+01	2.13E+01	9.95E+00
39	7.77	9.21E+00	1.75E+03	2.27E+00	8.33E+01	2.47E+01	1.25E+01
40	8.35	9.34E+00	2.05E+03	2.85E÷00	8.50E+01	2.87E+01	1.57E+01
41	8.97	9.69E+00	2.45E+03	3.67E+00	8.68E+01	3.35E+01	'
42	9.64	9.58E+00	2.80E÷03	4.50E+00	8.86E+01		1.98E+01
43	10.3	9.74E+00	3.29E+03	5.68E÷00	9.04E+01	3.90E+01	2.48E+01
14	11.1	9.83E+00	3.83E+03	7.12E+00		4.55E+01	3.12E÷01
15	11.9	1.00E+01	4.52E+03	9.02E+00	9.22E+01	5.30E+01	3.92E-01
46	12.8	1.00E+01	5.40E+03		9.41E+01	6.18E+01	4.92E÷01
47	13.8	1.07E+01		1.16E+01	9.60E+01	7.24E+01	6.22E+01
48	14.8	1.10E+01	6.43E+03	1.48E÷01	9.80E+01	8.50E+01	7.88E+01
>	15.4	0:00E+00	7.65E+03	1.89E÷01	1.00E+02	1.00E+02	1.00E+02
TOTA			0.00E÷00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
.014	20.	5.40E+02 5	. 102704 8.	33E7U1		•	

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 5.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIU. KAI		211101		-	
		· conci	ENTRATIONS		CUM	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	9.08E+00	5.63E+00	4.19E-04	1.57E+00	9.46E-03	4.00E-04
1	.504	5.09E+00	4.07E+00	3.43E-04	2.45E+00	1.63E-02	7.28E-04
2	.542	7.33E+00	6.77E+00	6.12E-04	3.72E+00	2.77E-02	1.31E-03
3	.581	9.93E+00	1.d6E+01	1.02E-03	5.44E+00	4.54E-02	2.29E-03
4	.625	1.26E+01	1.55E+01	1.61E-03	7.62E+00	7.15E-02	3.84E-03
4 5	.673	1.57E+01	2.23E+01	2.50E-03	1.03E+01	1.09E-01	6.23E-03
6 7	.723	1.83E+01	3.01E+01	3.63E-03	1.35E+01	1.60E-01	9.70E-03
	.777	2.07E+01	3.92E+01	5.08E-03	1.71E+01	2.25E-01	1.46E-02
8 9	.835	2.04E+01	4.47E+01	6.23E-03	2.06E+01	3.01E-01	2.05E-02
	.897	1.88E+01	4.76E+01	7.12E-03	2.38E+01	3.81E-01	2.73E-02
10	. 964	1.67E+01	4.89E+01	7.87E-03	2.67E+01	4.63E-01	3.48E-02
11	1.03	1.51E+01	5.09E+01	8.79E-03	2.93E+01	5.48E-01	4.33E-02
12	1.11	1.40E+01	5.44E+01	1.01E-02	3.18E+01	6.40E-01	5.29E-02
13	1.19	1.32E+01	5.96E+01	1.19E-02		7.40E-01	
11	1.18	1.38E+01	7.16E+01	1.54E-02		8.60E-01	7.90E-02
15	1.28	1.43E+01	8.59E+01	1.98E-02	3.89E+01	1.00E+00	9.79E-02
16	1.48	1.53E+01	1.06E+02	2.62E-02		1.18E÷00	1.23E-01
	1.50	1.25E+01	1.00E+02	2.66E-02			1.48E-01
18	1.71	1.00E+01	9.25E+01	2.65E-02			1.74E-01
10	1.84	9.70E+00	1.04E + 02	3.18E-02	4.71E+01	1.085+00	2.01E-01
20	1.88	1.00E+01	1.23E+02	4.07E-02		1.89E+00	2.48E-01
21	2.12	1.08E+01	1.46E+02	5.18E-02		2.10E+06	2.50F-31
2.2	2.28	1.0CE+01	1.74E-C2	6.62E-02		2.40E-00	0.89 <b>E-</b> 01
2.7	2.48	1.12E+01	2.13E+02	8.72E-02	5.44E+01	2.78E+60	
24	2.04	1.07E+01	2.35E-02	1.04E-01			F.08E-01
25	2.:3	9.87E+00	2.50E+02	1.18E-01	5.80E-01	3.60E+00	
2.6	0.05	9.82E+00	2.87E+02	1.46E-01	5.97E-01	4.09E+00	7.91E-01
2	3.17	9.72E+00	3.28E+62	1.79E-01	6.13E+01	4.60E+00	9.63E-01
28	1.72	9.53E+00		2.18E-01	6.20E+01	5.26E+00	1.17E+00 1.42E+00
. o	3.78	9.24E+00	4.16E÷02	2.63E-01	6.46E+01	5.90E+00 6.75E+00	1.42E+00
30	4.06	9.08E+00		3.20E-01	6.62E+01 6.77E+01		2.11E+00
31	4.37	9.13E+00		3.99E-01	6.94E+01		2.60E+00
32	4.69	9.39E+00		5.10E-01	7.10E+01	1.01E+01	3.22E+00
33	5.04	9.73E+00	7.79E+02	6.55E-01	7.10E+01 7.27E+01	1.16E+01	4.01E+00
34	5.42	9.86E+00	9.12E+02 1.07E+03	8.24E-01 1.04E+00		1.34E+01	5.01E+00
35	5.82	1.00E+01 1.02E+01	1.07E+03	1.31E+00			6.26E+00
- 36 37	6.26	1.02E+01 1.03E+01	1.47E+03	1.65E+00		1.80E+01	7.84E+00
	6.73	1.03E+01	1.72E÷03	2.07E+00		2.09E+01	9.82E+00
38	7.23	1.07E+01	2.03E+03	2.63E+00			1.23E+01
39	7.77 8.35	1.07E+01	2.39E+03	3.33E+00			1.55E+01
40		1.12E+01	2.83E+03	4.24E+00		3.31E+01	1.96E+01
41	8.97 9.64	1.12E+01 1.13E+01	3.31E÷03	5.32E÷00			2.47E+01
42 43		1.13E+01 1.14E+01	3.85E+03	6.65E+00			3.10E+01
4.4	10.3	1.14E+01 1.16E+01	4.51E+03	8.38E+00			3.90E+01
15	11.1	1.18E+01	5.33E+03	1.06E+01	9.35E+01		4.92E+01
46	12.8	1.18E+01	6.32E+03	1.36E+01	9.56E+01	7.23E+01	6.22E+01
47	13.8	1.25E+01	7.50E-03	1.30E+01	9.78E+01		7.87E+01
48	14.8	1.30E+01	9.00E+03	2.23E+01	1.00E+01		1.00E+02
, >	15.4	0.00E+00		0.00E+00			1.00E+02
TOTA			5.95E÷04 1.	•			
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FILE NAME: EPX2 5.002 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC	ENTRATIONS			LATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	1.00E+01	6.21E+00	4.62E-04	1.40E+00	7.87E-03	3.32E-04
1	.504	5.70E+00	4.56E+00	3.84E-04	2.19E+00	1.36E-02	6.08E-04
2	.542	8.10E+00	7.48E+00	6.76E-04	3.32E+00	2.31E-02	1.09E-03
3	.581	1.10E+01	1.16E+01	1.13E-03	4.85E+00	3.79E-02	1.90E-03
4	.625	1.40E+01	1.72E+01	1.79E-03	6.81E+00	5.96E-02	3.19E-03
5	.673	1.76E+01	2.50E+01	2.81E-03	9.26E+00	9.13E-02	5.21E-03
6	.723	2.03E+01	3.33E+01	4.02E-03	1.21E+01	1.34E-01	8.09E-03
7	.777	2.31E+01	4.38E+01	5.67E-03	1.53E+01	1.89E-01	1.22E-02
8	.835	2.28E+01	5.00E+01	6.96E-03	1.85E+01	2.52E-01	1.72E-02
9	.897	2.11E+01	5.36E+01	8.02E-03	2.14E+01	3.20E-01	2.29E-02
10	.964	1.88E+01	5.50E+01	8.84E-03	2.41E+01	3.90E-01	2.93E-02
11	1.03	1.74E+01	5.87E+01	1.01E-02	2.65E+01	4.64E-01	3.66E-02
12	1.11	1.62E+01	6.33E+01	1.18E-02	2.87E+01	5.44E-01	4.50E-02
13	1.19	1.57E+01	7.08E+01	1.41E-02	3.09E+01	6.34E-01	5.51E-02
14	1.28	1.63E+01	8.49E+01	1.82E-02	3.32E+01	7.41E-01	6.82E-02
15	1.38	1.74E+01	1.05E+02	2.41E-02	3.56E+01	8.74E-01	8.55E-02
16	1.48	1.85E+01	1.28E+02	3.17E-02	3.82E+01	1.04E+00	1.08E-01
17	1.59	1.53E+01	1.22E+02	3.25E-02	4.04E+01	1.19E+00	1.32E-01
18	1.71	1.27E+01	1.17E+02	3.35E-02		1.34E+00	1.56E-01
19	1.84	1.23E+01	1.31E+02	4.04E-02	4.38E+01	1.51E+00	1.85E-01
20	1.98	1.27E+01	1.57E+02	5.17E-02	4.56E+01	1.70E+00	2.22E-01
21	2.12	1.33E+01	1.89E+02	6.71E-02	4.75E+01	1.94E+00	2.70E-01
22	2.28	1.39E+01	2.29E+02	8.73E-02	4.94E+01	2.23E+00	3.33E-01
23	2.45	1.45E+01	2.76E+02	1.13E-01	5.14E+01	2.88E+00	4.14E-01
24	2.64	1.38E+01	3.02E+02	1.33E-01	5.34E+01	2.50E+00	5.09E-01
25	2.83	1.28E+01	3.25E+02	1.54E-01	5.51E+01	3.38E+00	6.20E-01
26	3.05	1.27E+01	3.72E+02	1.89E-01	5.69E+01	3.85E+00	7.55E-01
27	3.27	1.26E+01	4.25E+02	2.32E-01	5.87E+01	4.38E+00	9.22E-01
28	3.52	1.26E+01	4.90E+02	2.88E-01	6.04E+01	5.00E+00	1.13E+00
29	3.78	1.21E+01	5.47E÷02	3.45E-01	6.21E+01	5.70E+00	1.38E+00
30	4.06	1.19E+01	6.16E+02	4.18E-01	6.38E+01	6.48E+00	1.68E+00
31	4.37	1.21E+01	7.26E+02	5.29E-01	6.55E+01	7.40E+00	2.06E+00
32	4.69	1.23E+01	8.56E+02	6.70E-01	6.72E+01	8.48E+00	2.54E+00
33	5.04	1.27E+01	1.02E+03	8.56E-01	6.90E+01	9.77E+00	3.15E+00
34	5.42	1.30E+01	1.20E+03	1.09E+00	7.08E+01	1.13E+01	3.94E+00
35	5.82	1.33E+01	1.42E+03	1.38E+00	7.26E+01	1.31E+01	4.92E+00
36	6.26	1.33E+01	1.64E+03	1.71E+00	7.45E+01	1.52E+01	$6.15E \pm 00$
37	6.73	1.37E+01	1.94E+03	2.18E+00	7.64E+01	1.76E+01	7.72E+00
38	7.23	1.39E+01	2.29E+03	2.76E+00	7.83E÷01	2.05E+01	9.70E+00
39	7.77	1.41E+01	2.68E+03	3.47E+00	8.03E+01	2.39E+01	1.22E+01
40	8.35	1.45E+01	3.19E+03	4.43E+00	8.23E+01	2.79E+01	1.54E+01
4 1	8.97	1.50E+01		5.69E+00	8.44E+01	3.28E+01	1.95E+01
42	9.54	1.50E+01	4.40E+03	7.07E+00	8.65E+01	3.83E+01	2.45E+01
43	10.3	1.52E+01	5.13E+03	8.86E+00	8.86E+01	4.48E+01	3.09E+01
4 4	11.1	1.55E+01		1.12E+01	9.08E+01	5.25E+01	3.90E+01
45	11.9	1.57E+01		1.41E+01	9.30E+01		4.91E+01
46	12.8	1.62E+01	8.43E+03	1.81E+01	9.53E+01	7.21E+01	6.21E+01
47	13.8	1.67E+01		2.31E+01	9.76E+01	8.48E+01	7.86E+01
48	14.8	1.73E+01		2.97E+01	1.00E+02		1.00E+02
>	15.4	0.00E+00		0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	7.17E+02	7.90E+04 1.	39E+02		•	

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 5.003 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

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		CONC	ENTRATIONS		CUMI	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	1.01E+01		4.65E-04	1.43E+00	8.17E-03	3.45E-04
1	.504	5.68E+00	4.54E+00	3.82E-04	2.23E+00	1.41E-02	6.29E-04
2	.542	8.13E+00	7.50E+00	6.78E-04	3.38E+00	2.39E-02	1.13E-03
3	.581	1.10E+01	1.17E+01	1.13E-03	4.94E+00	3.92E-02	1.97E-03
4	.625	1.41E+01	1.74E+01	1.81E-03		6.19E-02	3.32E-03
5	.673	1.75E+01	2.49E+01	2.79E-03		9.44E-02	5.39E-03
6	.723	2.03E+01	3.35E+01	4.03E-03	1.23E+01	1.38E-01	8.39E-03
7	.777	2.30E+01	4.37E+01	5.67E-03	1.56E+01	1.95E-01	1.26E-C2
8	.835	2.29E+01	5.03E+01	7.00E-03	1.88E+01	2.61E-01	1.78E-02
9	.897	2.13E+01	5.39E+01	8.06E-03	2.18E+01	3.32E-01	2.38E-02
10	. 964	1.89E+01	5.54E+01	8.90E-03	2.45E+01	4.04E-01	
11	1.03	1.74E+01	5.89E+01	1.02E-02	2.45E+01 2.70E+01	4.81E-01	3.04E-02
12	1.11	1.62E+01	6.32E+01	1.02E-02	2.70E+01 2.93E+01	5.63E-01	3.80E-02
13	1.19	1.55E+01	6.98E+01	1.39E-02			4.67E-02
14	1.13	1.60E+01	8.34E+01			6.55E-01	5.70E-02
				1.79E-02	3.37E+01	7.64E-01	7.03E-02
15	1.38	1.69E+01	1.02E+02	2.34E-02	3.61E+01	8.97E-01	8.77E-02
16	1.48	1.78E+01	1.23E+02	3.06E-02	3.87E+01	1.06E+00	1.10E-01
17	1.59	1.51E+01	1.21E+02	3.23E-02		1.22E+00	1.34E-C1
18	1.71	1.24E+01	1.15E+C2	3.29E-02	4.26E+01	1.37E+00	1.59E-01
19	1.84	1.23E+01	1.31E+02	4.03E-02	4.43E+01	1.54E+00	1.89F-(1
20	1.98	1.20E+01	1.55E+02	5.12E-02	4.61E+01	1.74E+00	2.27E-01
21	2.12	1.82E+01	1.87E+02	6.65E-02	4.79E+01	1.99E+00	2.76E+01
22	2.28	1.37E+01	2.25E+02	8.59E-02	4.00E+01	2.28E+00	0.40 <b>E-0</b> 1
53	2.45	1.42E+01	2.70E+02	1.16E-01	5.19E+01	2.60F+00	4.22E-01
24	2.64	1.37E+01	2.99E+02	1.32E-01	5.38E+01	3.02E+00	8.20E-01
25	2.83	1.28E+01	3.23E+02	1.53E-01	5.56E+01	3.45E+00	6.33E-01
26	3.05	1.26E+01	3.67E÷02	1.87E-01	5.74E+01	3.93E+00	7.72E-01
27	3.27	1.24E+01	4.20E+02	2.29E-01	5.92E+01	4.47E+(10	9.42E+01
28	3.52	1.26E+C1	4.89E+02	2.87E-01	6.10E+01	5.11E+00	1.16E+00
29	3.78	1.20E+01	5.41E+02	3.42E-01	6.27E + 01	5.82E+00	1.41E+00
30	4.06	1.17E+01	6.10E+02	4.14E-01	6.40E+01	6.60E+00	1.72E+00
31	4.37	1.19E+01	7.15E+32	5.21E-01	6.60E+01	7.55E+00	2.10E+00
32	4.69	1.21E+01	8.42E+02	6.59E-01	6.77E+01	8.65E+00	2.59E+00
33	5.04	1.25E+01	1.00E+03	8.42E-01	6.95E+01	9.96E+00	3.22E+00
34	5.42	1.26E+01	1.17E+03	1.06E+00	7.13E+01	1.15E+01	4.00E+00
35	5.82	1.29E+01	1.37E+03	1.34E+00			5.00E+00
36	6.26	1.31E+01	1.61E+03	1.68E+00		1.54E+01	6.25E+00
37	6.73	1.33E+01	1.89E+03	2.13E+00	7.68E+01	1.79E+01	7.82E+00
38	7.23	1.35E+01	2.22E+03	2.67E+00	7.87E+01	2.08E+01	9.81E+00
39	7.77	1.37E+01	2.59E+03	3.36E+00		2.42E+01	1.23E+01
40	8.35	1.41E+01	3.08E+03	4.29E+00	8.27E+01	2.82E+01	1.55E+01
41	8.97	1.45E+01	3.67E+03	5.49E+00	8.47E+01	3.30E+01	1.96E+01
42	9.64	1.45E+01	1.25E+03	6.83E+00	8.68E+01	3.85E+01	2.46E+01
43	10.3	1.47E+01	4.95E+03	8.55E+00	8.89E+01	4.50E+01	3.10E+01
44	11.1	1.49E+01	5.81E+03	1.08E+01	9.10E+01	5.26E+01	3.10E-01 3.90E+01
	11.9	1.53E+01	6.91E+03	1.38E+01	9.31E+01	6.16E+01	4.92E+01
46	12.8	1.57E+01	8.16E+03	1.75E+01			
47	13.8	1.61E+01	9.65E+03	_	9.54E+01	7.23E+01	6.22E+01
48	14.8			2.22E+01	9.76E+01	8.49E+01	7.88E+01
>	15.4	1.67E+01	1.16E+04	2.86E+01	1.00E+02		1.00E+02
TOTAL		0.00E+00	.0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	٠٠.	1.00E+02 1	.65E+04 1.	33E+UZ		•	

FILE NAME: EPX2 5.004 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		DIL. RATIO	): 1:1	EFFIC.	CORRECT.: I	71	
		2011221	IMD A M T ON C		CUMI	JLATIVE %	
	5.7.4		NTRATIONS	MACC		SURFACE	MASS
CHNL			SURFACE	MASS	1.51E+00		3.85E-04
<	.486	7.19E+00	4.45E+00				6.99E-04
1	.504	4.02E+00	3.22E+00	2.71E-04			1.25E-03
2	.542	5.69E+00	5.26E+00	4.75E-04	3.55E+00		2.17E-03
3	.581	7.71E+00	8.19E+00	7.94E-04			3.64E-03
4	.625	9.90E+00	1.21E+01	1.27E-03			
5	.673	1.23E+01	1.75E+01	1.96E-03	9.84E+00		5.92E-03
6 7	.723	1.41E+01	2.32E+01	2.80E-03		1.50E-01	9.17E-03
	.777	1.60E+01	3.03E+01	3.93E-03	1.62E+01		1.37E-02
8	.835	1.59E+01	3.48E+01	4.85E-03	1.95E+01		1.94E-02
9	.897	1.47E+01	3.73E+01	5.58E-03	2.26E+01	3.58E-01	2.59E-02
10	.964	1.29E+01	3.78E+01	6.08E-03	2.53E+01	4.35E-01	3.29E-02
11	1.03	1.19E+01	4.01E+01	6.93E-03			4.10E-02
12	1.11	1.11E+01	4.33E+01	8.04E-03			5.03E-02
13	1.19	1.06E+01	4.78E+01	9.54E-03	3.24E+01		6.14E-02
14	1.28	1.12E+01	5.81E+01	1.25E-02	3.47E+01	8.19E-01	7.58E-02
15	1.38	1.19E+01	7.15E+01	1.65E-02	3.72E+01	9.64E-01	9.50E-02
16	1.48	1.27E+01	8.80E+01	2.18E-02	3.99E+01	1.14E+00	1.20E-01
17	1.59	1.64E+01	8.34E+01	2.22E-02	4.21E+01	1.31E+00	1.46E-01
18	1.71	8.46E+00	7.82E+01	2.24E-02	4.39E+01	1.47E+00	1.72E-01
19	1.84	8.18E+00	8.70E+01	2.68E-02	4.56E+01	1.65/E+00	2.03E-01
20	1.98	8.51E+00	1.05E+02	3.47E-62		1.86E+00	2.43E-01
21	2.12	8.81E+00	1.25E+02	4.4EE-02		2.12E+00	1.95E-01
22	2.18	9.30E+00	1.53E+02	5.83E-02	I	2.40E+00	3.63E-01
	2.45	9.53E+00	1.82E+02	7.45E-02		2.8(E+66	4.48E-01
24	2.64	9.23E+00	2.02E+02	8.91E-02		3.21E+00	8.88E-01
25	2.83	8.55E+00	2.16E+02	1.02E-01		3.65E+00	8.71E-01
26	3.05	8.48E+00	2.48E+02	1.26E-01	5.87E+01	4.15E+00	8.18E-01
27	3.27	8.41E+00	2.84F+02	1.55E-01			9.98E-01
28	3.52	8.46E+00	3.30E+02	1.94E-01	6.23E÷01	5.40E+00	1.22E+00
_ 5 _ 5	3.78	8.02E+00	3.61E+02	2.28E-01	6.4CE+01	6.13E+00	1.49E÷00
	4.05	7.82E+00	4.06E+02	2.76E-01	6.56E+C1	6.45E+00	1.81E+00
30 31	4.37	8.00E+00	4.80E+02	3.50E-01	6.73E+01	7.93E+00	2.21E+00
		· · · · · · · · · · · · · · · · · · ·	5.57E+02	4.36E-01	6.90E+01		2.72E+00
32	4.69	8.04E+00		5.57E-01		1.04E+01	3.37E+00
33	5.04	8.26E+00	6.61E+C2		_		4.18E+00
34	5.42	8.36E+00	7.72E+02	6.98E-01		1.38E+01	5.21E+00
35	5.82	8.56E+00	9.14E÷02	8.8E-01			
36	6.26	8.66E+00	1.07E+03	1.12E+00	7.61E+01	1.60E+01	6.51E+00
37	6.73	8.72E+00	1.24E+03	1.39E+00			8.12E+00
38	7.23	8.83E+00	1.45E+03	1.75E+00			1.02E+01
39	7.77	8.86E+00	1.68E+03	2.18E+00			1.27E+01
40	8.35	9.09E+00	1.99E+03	2.78E+00		2.89E+01	1.59E+01
41	8.97	9.50E+00	2.41E+03	3.60E+00			2.01E+01
42	9.64	9.35E+00	2.73E+03	4.39E+00			2.52E+01
43	10.3	9.39E+00	3.17E+03	5.48E+00			3.16E+01
44	11.1	9.56E+00	3.73E+03	6.92E+00	9.15E+01		3.96E+01
45	11.9	9.73E+00	4.38E+03	8.74E+00			4.98E+01
46	12.8	9.90E+00	5.15E+03	1.10E+01			6.26E+01
47	13.8	1.02E+01	6.12E+03	1.41E+01	9.78E+01		7.90E+01
48	14.8	1.06E+01	7.32E+03	1.81E+01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	4.76E+02 4	.93E+04 8.	61E+01			

### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 5.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC DENSITY: 1

		CONC	ENTRATIONS		CUM	U ATTUE W	
CHNI	DIA	NUMBER	SURFACE	MASS	NUMBER	JLATIVE %	MACC
CHAL	.486	7.36E+00	4.56E+00		1.71E+00	SURFACE	MASS
ì	.504	4.15E+00	3.32E+00		2.67E+00	1.12E-02 1.93E-02	4.79E-04
2	.542	5.83E+00	5.39E+00		4.03E+00		8.74E-04
3	.581	7.88E+00	8.37E+00		5.86E+00	3.25E-02 5.30E-02	1.56E-03
4	.625	1.02E+01	1.26E+01	1.31E-03	8.23E+00	8.38E-02	2.71E-03
5	.673	1.25E+01	1.78E+01		1.11E+01	1.27E-01	4.56E-03 7.38E-03
6	.723	1.44E+01	2.37E+01		1.45E+01	1.86E-01	1.14E-02
7	.777	1.62E+01	3.08E+01	3.99E-03	1.83E+01	2.61E-01	1.71E-02
8	.835	1.61E+01	3.53E+01	4.92E-03	2.20E+01	3.48E-01	2.40E-02
9	.897	1.48E+01	3.74E+01	5.60E-03	2.54E+01	4.39E-01	3.19E-02
10	.964	1.29E+01	3.78E+01	6.08E-03	2.84E+01	5.32E-01	4.05E-02
11	1.03	1.18E+01	3.97E+01	6.86E-03	3.12E+01	6.29E-01	5.02E-02
12	1.11	1.07E+01	4.18E+01	7.77E-03	3.37E+01	7.32E-01	6.12E-02
13	1.19	1.01E+01	4.55E+01	9.08E-03	3.60E+01	8.44E-01	7.40E-02
14	1.28	1.02E+01	5.29E+01		3.84E+01		9.00E-02
15	1.38	1.09E+01	6.52E+C1	1.50E-02	4.09E+01	1.13E+00	1.11E-C1
16	1.48	1.14E+01	7.93E+01	1.96E-02	4.35E+01	1.33E+00	1.39E-01
17	1.59	9.26E+00	7.42E+01	1.97E-02	4.57E+01	1.53E+00	1.67E-01
8:	1.71	7.56E+00	€.99E+01	2.00E-02	4.75E+01	1.68E+00	
19	1.84	7.34E+00	7.83E+01	2.41E-02	4.92E+01	1.65E+00	1.95E-01 2.19E-01
20	1.88	7.45E+00	9.13E+01	3.05E-02	5.09E-01	2.10E+60	
21	1.12	7.72E+00	1.10E+(2	3.90E-02	5.07E+01	2.37E+00	1.70E-01
22	2.28	7.88E+00	1.30E+01	3.84E-01	5.45E+01	2.09E+00	3.17E-01 3.67E-01
	2.45	8.36E-00	1.88E-02	6.50E-02	5.65E+01	27E+00	
2.4	2.64	8.08E+00	1.77E+02	7.78E-02	5.83E+(1		4.89E-(1
25	1.83	7.47E-00	1.99E+02	8.94E-02	6.01E+01	0.81E+00	5.98E-01
26	3.05	7.42E+00	2.17E+02	1.10E-01	6.18E+01	3.97E+00	7.28E-01
27	3.27	7.33E+00	2.47E+02	1.35E-01	6.35E+01	4.50E+00	8.80F-01
18	3.52	7.24E+00	2.82E-02		6.53E+01	5.11E+00 5.80E+00	1.07E+00
19	3.78	6.91E+00	3.11E+32	1.96E-01	6.68E+(4)	6.56E+00	1.81E+00
30	4.06	6.78E+00	3.52E+02	2.39E-01	6.83E÷01	7.43E+00	1.58E+00 1.92E+00
31	4.37	6.86E+00	4.12E+02	3.00E-01	6.99E+01	8.43E+00	
32	4.69	6.88E+00	4.77E+02	3.74E-01	7.15E+01		2.34E÷00
3 <b>3</b>	5.04	7.10E+00	5.68E+62	4.78E-01		9.60E+00	2.87E+00
34	5.42	7.13E+00			7.32E+01	1.10E+01	3.55E+00
35 35	5.82	7.13E+00 7.26E+00	6.59E+02	5.96E-01	7.48E÷01	1.26E+01	4.35E+00
3 <b>5</b>	6.26	7.26E+00	7.75E+02	7.53E-01	7.65E+01	1.45E+01	5.45E+00
37	6.73	7.39E+00	9.01E+02	9.41E-01	7.82E+01	1.67E+01	6.78E+00
3 <i>1</i>	7.23	7.35E+00	1.05E+03	1.18E+00	7.99E÷01	1.93E+01	8.44E+00
3 <b>9</b>	7.77		1.21E+03	1.46E+00	8.16E+01	2.23E+01	1.05E+01
40		7.38E+00	1.40E+03	1.81E+00	8.34E+01	2.57E+01	1.31E+01
41	8.35	7.55E÷00	1.66E+03	2.30E-00	8.51E+01	2.97E+01	1.63E+01
	8.97	7.84E+00	1.99E+03	2.97E+00	8.69E+01	3.46E+01	2.05E+01
42 13	9.64	7.71E+00	2.25E+03	3.62E+00	8.87E+01	4.01E+01	2.56E+01
13 14	10.3	7.71E+00	2.60E+03	4.50E+00	9.05E+01	4.65E+01	3.20E+01
44	11.1	7.81E+00	3.04E+03	5.65E+00	9.23E+01	5.40E+01	4.00E+01
45 46	11.9	7.89E+00	3.55E+03	7.09E+00	9.42E+01	6.27E+01	5.00E+01
46	12.8	8.26E+00	4.30E+03	9.21E+00	9.61E+01	7.32E+01	6.30E+01
47	13.8	8.30E+00	4.98E+03	1.15E+01	9.80E+01	8.54E+01	7.92E+01
48	14.8	8.59E+00	5.95E+03	1.47E÷01	1.00E+02	1.00E+02	1.00E+02
> TOT 4	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+62
TOTA	ro:	4.31E+02 4	.UBE+U4 7.	USF+01			

FILE NAME: EPX2 5.006 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

					CIN	:1 4 TT 1 1 TT	
			NTRATIONS	MACC		JLATIVE % SURFACE	MASS
CHNL		NUMBER	SURFACE	MASS	NUMBER 1.66E+00	1.09E-02	4.68E-04
<	.486	5.60E+00	3.47E+00	2.58E-04 2.14E-04	2.61E+00	1.89E-02	8.56E-04
1	.504	3.18E+00	2.55E+00	3.75E-04	3.94E+00	3.19E-02	1.53E-03
2	.542	4.49E+00	4.15E+00 6.42E+00	-	5.73E+00	5.13E-02 5.20E-02	2.66E-03
3	.581	6.04E+00	9.54E+00	9.94E-04	8.04E+00	8.20E-02	4.46E-03
4	.625	7.77E+00	1.37E+01	1.53E-03	1.09E+01	1.25E-01	7.24E-03
5	.673	9.60E+00 1.11E+01	1.83E+01	2.21E-03	1.42E+01	1.82E-01	1.12E-02
6 7	.723	1.11E+01 1.24E+01	2.35E+01	3.04E-03	1.79E+01	2.56E-01	1.67E-02
	.777	1.23E+01	2.70E+01	3.76E-03	2.15E+01	3.41E-01	2.36E-02
8 9	.835 .897	1.13E+01	2.87E+01	4.29E-03	2.49E+01	4.31E-01	3.13E-02
10	.964	1.00E+01	2.93E+01	4.70E-03	2.78E+01	5.23E-01	3.99E-02
11	1.03	9.09E+00	3.07E+01	5.30E-03	3.05E+01	6.19E-01	4.95E-02
12	1.11	8.36E+00	3.26E+01	6.05E-03	3.30E+01	7.21E-01	6.04E-02
13	1.19	7.97E+00	3.59E+01	7.16E-03	3.54E+01	8.34E-01	7.34E-02
14	1.28	8.27E÷00	4.30E÷01	9.22E-03	3.78E+01	9.69E-01	9.01E-01
15	1.38	8.70E+00	5.22E+01	1.20E-02	4.04E+01	1.13E+00	1.12E-01
16	1.48	9.23E+00	6.40E+01	1.58E-02	4.32E+01	1.33E+00	1.41E-(1
17	1.:9	7.45E÷00	5.98E÷01	1.59E-02	4.54E+01	1.52E+00	1.69E-01
18	1.71	6.01E+00	5.56E+01	1.59E-02	1.72E+01	1.70E+00	1.98E-01
19	1.84	5.82E+00	6.21E+01	1.91E-02	4.89E+01	1.89E+00	2.23E-01
20	1.98	5.92E+00	7.30E+01	2.41E-02	5.06E+01	2.12E+00	2.76E-01
21	2.12	6.16E+00	8.78E+01	3.12E-02	5.25E+01	2.29E+00	0.33E-01
2.0	2.28	6.37E+00	1.05E+02	3.99E-02	5.44E+01	2.72E+00	1.06E-C1
23	2.45	6.65E+00	1.26E÷02	5.17E-02	5.63E÷01	3.12E+00	4.89E-(]
24	2.64	6.42E÷00	1.41E+C2	5.20E-02	5.82E+01	3.06E+00	6.11E-(1
25	2.83	5.87E+00	1.48E+02	7.03E-02	6.00E+01	4.03E+00	7.38E-01
26	3.05	5.83E+00	1.71E+02	8.67E-02	6.17E+01	4.56E+00	8.95E-(1)
27	3.27	5.74E+00	1.94E+02	1.06E-01	6.34E+01	5.17E+00	1.09E+00
28	3.52	5.81E+00	2.26E+02	1.33E-01	6.51E+01	5.88E+00	1.33E+00
29	3.78	5.52E+00	2.48E+02	1.57E-01	6.68E+01	6.66E+00	1.61E+00
30	4.06	5.40E+00	2.81E+02	1.90E-01	6.84E-01	7.54E+00	1.96E+00
31	4.37	5.46E+00	3.28E+C2	2.39E-01	7.00E+01	8.57E+00	2.09E+00
32	4.69	5.45E+00	3.78E+02	2.96E-01	7.16E+01	9.76E+00	2.92E+00
33	5.04	5.49E+00	4.40E+02	3.70E-01	7.32E+01	1.11E+01	3.59E+00
34	5.42	5.62E+00	5.19E+02	4.69E-01	7.49E+01	1.28E+01	4.44E+00
35	5.82	5.70E+00	6.08E+02	5.91E-01	7.65E+01	1.47E+01	5.51E+00
36	6.26	5.68E+00	7.00E+02	7.31E-01	7.83E+01	1.69E+01	6.84E+00
37	6.73	5.75E+00	8.18E+02	9.18E-01	8.00E+01	1.94E+01	8.50E+00
38	7.23	5.78E+00	9.49E+02	1.14E+00	8.17E+01		1.0GE+01
39	7.77	5.91E+00	1.12E+03	1.45E+00		2.59E+01	1.32E+01
40	8.35	5.89E+00	1.29E+03	1.80E÷00			1.65E+01
41	8.97	6.05E+00	1.53E+03	2.29E+00			
42	9.64	6.02E+C0	1.76E+03	2.83E+00			2.57E+01
43	10.3	6.07E+00	2.05E+03	3.54E+00			3.21E+01
44	11.1	6.07E+00	2.37E+03	4.39E+00			4.01E+01
45	11.9	6.18E+00	2.78E+03	5.55E+00			5.02E÷01
46	12.8	6.27E+00	3.26E+03	6.99E+00		7.31E+01	6.28E+01
47	13.8	6.48E+00	3.89E+03	8.96E+00			7.91E+01
48	14.8	6.74E+00	4.67E+03	1.16E+01			1.00E+02
> TOT4:	15.4	0.00E+00	0.00E+00	0.00E+C0	1.00E+02	1.00E+02	1.00E+02
TOTA	ro:	3.3/E+02 3	3.19E+04 5.	52E+U1			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 5.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		•					
		CONC	ENTRATIONS		CUMI	CLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	9.40E+00				9.69E-03	4.12E-04
1	.504	5.36E+00				1.68E-02	7.56E-04
2	.542	7.65E+00		•	3.73E+00	2.86E-02	1.36E-03
3	.581	1.03E+01	1.09E+01	1.06E-03	5.44E+00	4.67E-02	2.37E-03
4	.625	1.32E+01	1.62E+01	1.69E-03	7.64E+00	7.37E-02	3.98E-03
5	.673	1.64E+01	2.33E+01		1.04E+01	1.12E-01	6.47E-03
6	.723	1.92E+01	3.16E+01	3.81E-03	1.36E+01	1.65E-01	<del>_</del>
7	.777	2.16E+01	4.10E+01	5.32E-03	1.72E+01		1.01E-02
8	.835	2.16E+01	4.73E+01	6.59E-03	_	2.33E-01	1.51E-02
9	.897	2.00E+01	5.07E+01	7.59E-03		3.12E-01	2.14E-02
10	. 964	1.76E+01	5.13E+01	8.26E-03		3.96E-01	2.86E-02
11	1.03	1.60E+01	5.40E+01		2.70E+01	4.81E-01	3.65E-02
12	1.11	1.48E+01		9.33E-03	2.97E+01	5.71E-01	4.53E-02
13			5.76E+01	1.07E-02	3.21E+01	6.67E-01	5.55E-02
	1.19	1.39E+01	6.27E+01		· · · · - · •	7.71E-01	6.74E-02
1.4	1.28	1.43E+01	7.42E+01	1.59E-02	3.68E+01	8.94E-01	8.25E-02
15	1.38	1.45E+01	8.72E+01	2.01E-02	3.92E+01	1.04E÷00	1.02E-01
16	1.18	1.53E+01	1.06E+02	2.63E-02	4.1EE+01	1.22E+00	1.27E-01
17	1.59	1.27E+01	1.02E+02		4.39E+01	1.39E+00	1.52E-01
; 8	1.71	1.07E-01	9.90E+01	2.83E-02	4.57E+01	1.55E+00	1.79E-01
<u>: 9</u>	1.84	1.00E+01	1.10E±02	3.37E-02	4.74E+01	1.73E+00	2.11E-01
20	1.68	1.06E+01	1.31E+02	4.31E-02	4.92E+01	1.98E+00	2.52E-01
7.1	2.12	1.09E+01	1.56E±02	8.81E-82	5.10E-01	2.21E+00	3.(:E+01
22	2.29	1.10E+01	1.85E+02	7.07E-02	5.28E+01	2.525+00	T1F-01
41.71 - 27	2.45	1.18E+01	2.24E+02	9.18E-02	5.48E+01	2.8.E-06	
21	1.64	1.10E+01	2.48E+02	1.09E-01	5.67E+01	3.00E+00	1.60F-01
25	2.83	1.76E+01	2.68E-02	1.27E-01	€.é€E-01	3.70E+00	5.84E-01
25	:.OE	1.05E+01	3.06E+02	1.80E-01	6.01E+01	4.26E+00	6.82E-01
	2.2	1.00E=(1			5.19E+01		1.01E+00
	3.82		4.01E+02	1.05E-01	6.36E+01		1.01E+00
20	2.18	9.825+00	4.42E-(2	2.79E-01	6.53E+01	6.24E+00	
	4.06	9.62E+00	5.00E+(2	3.89E-01			1.50E+00
	1.37	9.78E+00	5.87E+02	4.28E-01	6.69E+01	7.0TE+00	1.82E+00
	1.69	9.73E+00			6.85E+01	8.01E+00	2.20E+00
23	3.04	1.00E+01		6.29E-01	7.01E+01	9.16E÷00	2.73E+00
34			8.04E+02	6.77E-01	7.18E+01	1.0EE+01	3.28E+00
35	5.42	1.01E+01	9.29E+02	5.40E-01	7.35E+01		4.18E+00
	5.82	1.04E+01		1.08E+00	7.52E+01		5.20E+00
36	6.26	1.05E÷01		1.35E+00	7.69E+01	1.60E+01	6.48E+00
37	€.73	1.06E+01	1.51E+03	1.70E+00	7.87E+01	1.85E+01	8.03E+00
38	7.23	1.07E+01	1.76E+03	2.12E+00		2.15E+01	1.01E+01
39	7.77	,1.08E+01	2.06E+03	2.66E÷00		2.49E+01	1.26E+01
	8.35	1.10E+01		3.36E+00	8.41E+01	2.89E+01	1.5SE+01
	8.97	1.14E+01	2.89E+03	4.33E+00	8.50E+01	3.37E+01	2.00E+01
42	9.64	1.14E÷01	3.34E÷03	5.37E+00	8.79E+01	3.93E+01	2.51E+01
	10.3	1.15E+01	3.90E+03	6.74E+00	8.98E+01	4.57E+01	3.15E+01
	11.1	1.18E+01	4.59E+03	8.51E+00	9.18E+01	5.34E+01	3.86E+01
	11.9	1.18E+01	5.32E÷03	1.06E÷01	9.38E+01	6.22E-01	4.97E+01
	12.8	1.21E÷01	6.29E+03	1.35E÷01	9.58E+01	7.26E+01	6.25E+01
	13.8	1.25E+01	7.49E+03	1.73E+01	9.78E+01	8.51E+01	7.89E+01
	14.8	1.29E+01	8.97E÷03	2.22E+01	1.00E+02	1.00E+02	1.00E+02
	15.4	0.00E+00	0.0CE+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL		6.01E+02 6					
			• •				

FILE NAME: EPX2 5.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		DID. KAI	10. 1 .1	EFF10.	CORRECT I		
		CONC	ENTRATIONS		Climi	ULATIVE %	
CHNI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< <	.486	6.04E+00	3.75E+00	2.79E-04	1.72E+00	1.17E-02	5.06E-04
ì	.504	3.38E+00	2.71E+00	2.28E-04	2.68E+00		9.19E-04
2	.542	4.83E+00	4.46E+00	4.03E-04	4.05E+00		1.65E-03
3	.581	6.55E+00	6.97E+00	6.75E-04	5.92E+00		2.88E-03
4	.625	8.37E+00	1.03E+01	1.07E-03	8.30E+00		4.82E-03
5	.673	1.05E+01	1.49E+01	1.67E-03	1.13E+01	1.35E-01	7.85E-03
6	.723	1.22E+01	2.00E+01	2.41E-03	1.47E+01	1.98E-01	1.22E-02
6	.777	1.36E+01	2.59E+01	3.36E-03	1.86E+01	2.79E-01	1.83E-02
8	.835	1.36E+01	2.98E+01	4.15E-03	2.25E+01	3.72E-01	2.59E-02
9	.897	1.26E+01	3.18E+01	4.76E-03	2.60E+01	4.72E-01	3.45E-02
10	.964	1.11E+01	3.23E+01	5.20E-03	2.92E+01	5.73E-01	4.39E-02
11	1.03	9.97E+00	3.37E+01	5.82E-03	3.20E+01	6.78E-01	5.45E-02
12	1.11	9.13E+00	3.56E+01	6.62E-03	3.46E+01	7.90E-01	6.65E-02
13	1.19	8.56E+00	3.85E+01	7.69E-03	3.70E+01	9.11E-01	8.04E-02
14	1.28	8.56E+00	4.45E+01	9.55E-03	3.95E+01	1.05E+00	9.78E-02
15	1.38	8.96E+00	5.38E+01	1.24E-02	4.20E+01	1.22E+00	1.20E-01
16	1.18	9.38E+00	6.50E+01	1.61E-02	4.47E+01	1.42E+00	1.49E-01
17	1.59	7.68E+00	6.15E+01	1.64E-02	4.69E÷01	1.62E+00	1.79E-01
18	1.71	6.26E+00	5.79E-01	1.05E-02	4.87E÷01	1.80E+00	2.09F-01
19	1.84	6.01E+00	6.41E+01	1.97E-02	5.04E+01	2.00E+00	2.45E-01
20	1.98	6.01E+00	7.68E-01	2.53E-02	5.21E+01		
21	2.12	6.31E+00	8.98E±01	3.19E-02	5.39E±01	1.52E+00	3.49E-61
		6.51E+00	1.07E-02	4.09E-(2	5.58E+01	2.80E+00	4.20E-01
	2.28			5.30E-02	5.77E+01	3.26E+00	F.19E-01
		6.81E+00 6.53E+00	1.29E+02	6.30E-02	5.98E+01	3.71E+00	
24	$\frac{2.64}{2.83}$		1.48E+02		6.13E-01	4.19E+00	7.68E-01
23 26	3.05	0.11E+00 5.88E+00	1.55E+02 1.75E+02	7.32E-02 8.90E-02	6.30E-01	4.74E+00	9.28E-11
27	3.27	6.02E+00		1.11E-01	6.47E±01	5.88E+00	
		5.89E+00	2.03E+02 2.29E+02	1.35E-01	6.64E+01	€.10E÷00	1.37E+00
28	3.52 3.78	5.88E+00 5.86E+00	2.55F÷02	1.61E-01	6.80E+01	6.90E+00	1.67E+00
29 30	4.06	5.49E+00	2.86E+02	1.94E-01	6.96E-01	7.79E+00	2.01E+00
		5.51E+00	3.31E÷02	2.41E-01	7.11E+01	8.83E+00	2.45E+00
31	4.37		3.89E+02	3.04E-01	7.11E+01 7.27E+01	1.00E+01	3.01E+00
32	4.69	5.59E+00			7.48E+01	1.14E+01	3.69E+00
33	5.04	5.60E+00	4.48E+02	3.77E-01 4.75E-01	7.59E+01	1.31E+01	4.55E+00
34	5.42	5.68E+00	5.25E+02	5.99E-01	7.76E+01	1.50E+01	5.64E+00
25 26	5.82	5.78E+00	6.17E+02		7.76E=01 7.92E+01	1.72E+01	6.98E+00
36 37	6.26	5.73E+00	7.00E÷02	7.37E-01	8.08E+01	1.98E+01	8.63E+00
38	6.73	5.69E+00 5.82E+00	8.11E+02 9.57E+02	9.10E-01	8.25E±01	2.28E+01	1.07E+01
	7.23			1.15E+00 1.46E+00	8.42E+01	2.63E+01	1.34E+01
39 40	7.77 8.35	5.92E+00	1.12E+03	1.46E+00	8.59E+01	3.04E+01	1.67E+01
		5.98E÷00	1.31E+03				2.09E+01
41	8.97 9.64	6.09E+00	1.54E+03	2.31E+00	8.76E+01 8.93E+01	3.52E+01 4.08E+01	2.60E+01
42 43	10.3	6.06E+00 5.98E+00	1.77E+03 2.02E+03	2.85E+00 3.48E+00	9.10E+01	4.71E+01	3.24E+01
44	11.1	6.07E+00	2.02E+03 2.36E+03	4.39E+00	9.10E+01 9.27E+01	5.45E+01	4.03E÷01
44	11.1	6.07E+00	2.36E+03 2.74E+03	5.47E+00	9.45E+01	6.31E+01	5.03E+01
46	12.8	6.26E+00	3.26E+03	6.98E+00	9.43E+01 9.63E+01	7.33E÷01	6.29E+01
47	13.8	6.46E+00	3.26E+03	8.94E+00	9.81E+01	8.55E+01	7.92E+01
48		6.69E+00				1:00E+01	1.00E+02
4 B	14.8 15.4	0.00E+00	4.64E+03	1.15E+01	1.0CE+02 1.00E+02	1.00E+02	1.00E+02
TOTA			0.00E+00 0.19E+04 5.	0.00E+00	1.002702	1.006702	I.VUETUL
1014	LO.	J. J & E T U Z 3	, . 1 SET U4 3.	DILTUI			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 5.009 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

	DIL. RATI	0: 1:1	EFFIC.	CORRECT.: 1	)1	
	CONCE	ENTRATIONS		CUMI	JLATIVE %	,
CHNL DIA	NUMBER	SURFACE	MASS		SURFACE	MASS
< .486	5.19E+00	3.22E+00	2.40E-04		1.08E-02	4.67E-04
1 .504	2.95E+00	2.36E+00	1.99E-04	2.57E+00	1.88E-02	8.54E-04
	4.19E+00	3.87E+00	3.50E-04	3.90E+00	3.18E-02	1.53E-03
2 .542 3 .581	5.68E+00		5.86E-04	5.69E+00	5.22E-02	2.68E-03
4 .625	7.35E+00	9.02E+00	9.39E-04	8.01E+00	8.25E-02	4.50E-03
5 .673	9.00E+00	1.28E+01	1.44E-03	1.09E+01	1.26E-01	7.30E-03
6 .723	1.04E+01	1.71E+01	2.06E-03	1.41E+01	1.83E-01	1.13E-02
7 .777	1.17E+01	2.22E+01	2.88E-03	1.78E+01	2.58E-01	1.69E-02
8 .835	1.16E+01	2.54E+01	3.54E-03	2.15E+01	3.44E-01	2.38E-02
9 .897	1.08E+01	2.73E+01	4.09E-03	2.49E+01	4.36E-01	3.18E-02
10 .964	9.38E+00	2.74E+01	4.41E-03	2.79E+01	5.28E-01	4.01E-02
11 1.03	8.53E+00	2.88E+01	4.98E-03	3.06E+01	6.25E-01	5.01E-02
12 1.11	8.03E+00	3.1 <sup>1</sup> 3E+01	5.82E-03	3.31E+01	7.30E-01	6.14E-02
13 1.19	7.51E+00	3.38E+01	6.75E-03	3.55E+01	8.44E-01	7.45E-02
14 1.28	7.79±+00	4.05E+01	8.69E-03	3.79E+01	9.81E-01	9.14E-02
15 1.38	8.11E+00	4.87E+01	1.12E-02	4.05F+01	1.14E+00	1.10E-01
16 1.48	8.89E-00	5.95E+01	1.47E-02	4.02E+01		1.42E-01
17 1.59	7.04E+00	5.64E+01	1.50E-02	4.54E+01	1.53E+00	1.71E-01
18 1.71	F.78E+00	5.30E+01	1.52E-02	4.72E+01	1.73F+00	2.01E-01
1.84	E.E0E+00	5.87E+01	1.80E-02	4.90E+01	1.91E+00	2.06E-01
20 1.98	E.00E+00	6.91E+01	2.28E-02	E.CTE+01	2.14E+00	2.80E-01
21 2.12	5.79E+(C	8.24E+01	2.92E-02	F.20E+01	2.42E+00	0.07E-01
22 2.28	F.90E-00	9.78E+01	3.72E-02	5.44E-01	2.7FE+00	4.1(E-01
23 2.48	8.1 <b>7E+</b> U0	1.17E+02	4.80E-02	ē.:4E+(1	3.14E+00	₹.11. <b>%</b> -11.
24 2.64	5.98E-00	1.31E+02	5.77E-02	5.83E+01	3.58 <b>E</b> +60	6.18E-11
25 2.80	8.89E+00	1.41E+02	6.69E-02	5.00E+01	4.00E- (	7.48E-01
26 3.05	5.61E-00	1.64E-02	8.34E-02	0.18E+01	4.61E+00	6.08E-01
27 - 3.27	5.48E+00	1.85E÷02	1.01E-01	6.36E±01	5.24E+00	1.10E-06
18 3.52	E.47E+00	2.13E+02	1.25E-01	6.50E÷01	5.85E-00	1.8FE-00
29 3.78	5.28E+00	2.37E+02	1.49E-01	£.69E+01	6.75E+00	1.64E-CC
30 - 4.06	5.11E-00	2.65E+02	1.80E-01	6.80E+01	7.65E+00	1.86E-30
31 - 4.37	5.15E-00	3.09E+02	2.25E-01	7.02E-01	8.69E+00	2.48E+00
32 4.69	.5.11E+00	3.54E+02	2.78E-01	7.18E+01	9.882+00	2.87E+00
33 5.04	5.26E+00	4.21E+02	3.54E-01	7.35E+01	1.13E+01	3.66E-00
34 5.42	5.23E+00	4.83E+02	4.37E-01	7.51E+01	1.29E+01	4.51E+00
05 5.82	5.46E+00	5.83E+02	5.67E-01	7.08E+01	1.49E+01	5.61E÷00
36 6.26	5.31E-00	6.54E÷02	6.83E-01	7.85E÷01	1.71E+01	6.94E-00
37 6.73	5.30E+00	7.55E-02	8.47E-01	8.02E÷01	1.96E+01	8.59E+00
38 7.23	5.39E-00	8.87E+02	1.07E+00	8.19E+01	2.20E+01	1.07E+01
39 7.77	5.42E+00	1.03E+03	1.33E+00	3.36E+01	2.51E+01 3.02E+01	1.33E+01 1.05E+01
40 8.35	5.52E+00	1.21E+03 1.44E+03	1.68E+00 2.16E+00	8.53E+01 8.71E+01	3.50E+01	2.07E-01
41 8.97 42 9.64	,5.69E÷00 5.57E÷00	1.63E-03	2.62E+00	E.ESE+01	4.05E+01	2.58E+(-1
42 9.64 43 10.3	5.57E+00 5.60E+00	1.89E+03	3.27E+00	9.07E+01	4.69E+01	3.22E+01
44 11.1	5.70E÷00	2.22E+03	4.13E+00	9.072-01 9.25E+01	5.43E+(1	4.02E+01
45 11.9	5.70E-00	2.62E+03	5.22E+00	9.43E+01	6.32E+01	5.04E+01
46 12.8	5.83E+00	3.03E+03	6.50E+00	9.61E+01	7.84E+01	6.81E+01
47 13.8	5.00E+00	3.60E+03	8.30E+00	9.80E+01	8.55E+01	7.92E+01
48 14.8	6.22E+00	4.31E+03	1.07E+01	1.00E+02	1.00E+02	1.00E+02
> 15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+(2
TOTALS:		.97E+04 5.			·	

FILE NAME: EPX2 6.000 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 400 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

			ENTRATIONS	• • • • • •		ULATIVE %	
	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<b>〈</b>	.486	1.40E-01	8.67E-02	6.45E-06	2.18E+00	3.65E-02	1.73E-03
1	.504	7.87E-02	6.3CE-02	5.30E-06	3.40E+00	6.31E-02	3.14E-03
2	.542	1.14E-01	1.05E-01	9.50E-06	5.18E+00	1.07E-01	5.69E-03
3	.581	1.62E-01	1.72E-01	1.66E-05	7.69E+00	1.80E-01	1.01E-02
4 5	.625 .673	2.14E-01 2.75E-01	2.62E-01 3.91E-01	2.73E-05 4.39E-05	1.10E+01	2.91E-01	1.75E-02
6	.723	3.25E-01	5.34E-01	6.44E-05	1.53E+01 2.04E+01	4.56E-01	2.92E-02
7	.723	3.72E-01	7.06E-01	9.15E-05	2.62E+01	6.81E-01	4.65E-02
8	.835	3.94E-01	8.64E-01	1.20E-04	3.23E+01	9.79E-01 1.34E+00	7.10E-02
9	.897	3.88E-01	9.83E-01	1.47E-04	3.83E+01	1.76E+00	1.03E-01 1.43E-01
10	.964	3.47E-01	1.01E+00	1.63E-04	4.37E+01	2.19E+00	1.86E-01
11	1.03	3.10E-01	1.05E+00	1.81E-04	4.86E+01	2.63E+00	2.35E-01
12	1.11	2.83E-01	1.10E+00	2.05E-04	5.30E+01	3.09E+00	2.89E-01
13	1.19	2.71F-01	1.22E+00	2.43E-04	5.72E+01	3.61E+00	3.85E-01
14	1.28	2.49E-01	1.30E+00	2.78E-04	6.11E+01	4.15E+00	4.29E-01
15	1.38	2.33E-01	1.40E+00	3.23E-04	6.47E+01	4.74E+00	5.15E-01
16	1.48	2.08E-01	1.43E+00	3.54E-04	G.79E+01	5.35E+00	6.10E-01
17	1.89	1.81E-01	1.45E+00	3.85E-04	7.07E-01	5.96E+00	7.13E-01
3 5	1.71	1.58E-01	1.36E+00	3.90E-04	7.30E+01	6.58E+00	8.18E-01
10	1.54	1.27E-01	1.35E+00	4.16E-04	7.F0E+01	7.10E+00	9.19E-01
20	1.00	1.11E-01	1.37E+00	4.53E-04	7.67E+01	7.68E+00	1.05E+00
21	2.12	9.40E-02	1.84E+00	4.75E-04	7.82E-01	8.28E+00	1.18E-00
22	2.28	8.50E-02	1.48E+00	5.52E-04	7.95E+01	8.80E+00	1.11E+00
22	2.45	9.04E-02	1.72E+00	7.03E-04	8.10E±01	9.88E+08	J.FIE+00
24	2.64	8.01E-02	1.76E+00	7.74E-04	8.22E+01	1.03E+01	1.71E+00
25	2.83	7.09E-02	1.80E+00	8.50E-04	8.33E+01	1.11E+01	1.85E+00
26	3.05	6.61E-02	1.93E+00	9.83E-04	8.43E+01	1.19E+01	2.21E+00
27	3.27	6.30E-02	2.13E+00	1.16E-03	8.53E+01	1.28E÷01	2.52E+00
28	3.52	0.10E-02	2.38E+00	1.40E-03	8.63E÷01	1.38E+01	2.90E+00
29	3.78	5.73E-02	2.58E+00	1.63E-03	8.72E+01	1.49E+01	3.33E+00
30	4.06	4.78E-02	2.49E+00	1.69E-03	8.79E+01	1.89E+01	8.78E+00
31	4.37	5.22E-02	3.13E+00	2.28E-03	8.87E+01	1.73E+01	4.36E+00
32	4.69	5.14E-02	3.57E+00	2.79E-03	8.95E+01	1.88E+01	5.14E+00
33	5.04	4.55E-02	3.72E+00	3.13E-03	9.02E+01	2.03E+01	5.98E+00
34	5.42	4.72E-02	4.37E+00	3.95E-03	9.10E+01	2.22E+01	7.04E+00
35	5.82	4.42E-02	4.72E+00	4.59E-03	9.17E+01	2.42E+01	8.27E-00
36	6.26	4.78E-02	5.90E+00	6.16E-03	9.24E+01	2.67E+01	9.92E+00
37	6.73	4.36E-02	6.21E+00	6.97E-03	9.31E+01	2.93E+01	1.18E+01
38	7.23	4.39E-02	7.22E+00	8.71E-03	9.38E+01	3.23E+01	1.41E+01
39	7.77	3.66E-02	6.95E+00	9.00E-03	9.44E+01	$3.52E \pm 01$	1.65E+01
40	8.35	3.87E-02	8.48E+00	1.18E-02	9.50E+01	3.88E+01	1.97E+01
41	8.97	3.97E-02	1.01E+01	1.51E-02	9.56E+01	4.31E+01	2.37E+01
42	9.64	4.17E-02	1.22E+01	1.96E-02	9.62E+01	4.82E+01	2.90E+01
43	10.3	3.54E-02	1.19E+01	2.06E-02	9.68E+01	5.33E+01	3.45E+01
44	11.1	3.87E-02	1.51E+01	2.80E-02	9.74E+01	5.96E+01	4.20E+01
45 46	11.9	4.30E-02	1.94E+01	3.87E-02	9.80E+01	6.78E+01	5.28E+01
47	12.8 13.8	4.00E-02 4.00E-02	2.08E+01	4.46E-02	9.87E+01	7.66E+01	6.43E+01
48	14.8	4.54E-02	2.40E+01 3.15F+01	5.54E-02	9.93E+01	8.67E+01	7.91F+01
>	15.4	0.00E+00	0.002.00	7.80E-02 0.00E+00	1.00E+02	1.00E+02	1.00E+02 1.00E+02
TOTA		6.42E+00 2			1.00E+02	1,00E+02	1.00E.702
· · ·	<del></del>	J.762700 6		176"01			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 6.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 400 SEC

DENSITY: 1

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		<i>D10.</i>				-	
		CONCE	ENTRATIONS		CUMI	ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 186	6.24E-02	3.87E-02	2.88E-06	2.03E+00	4.68E-02	2.38E-03
i	. 504	3.57E-Q2	2.86E+02	2.40E-06	3.19E+00	8.13E-02	4.36E-03
2	.542	5.32E-02	4.92E-02	4.44E-06	4.92E+00	1.41E-01	8.03E-03
3	.581	7.44E-02	7.91E-02	7.67E-06	7.33E+00	2.36E-01	1.44E-02
4	.625	9.85E-02	1.21E-01	1.26E-05	1.05E+01	3.83E-01	2.48E-02
5	.673	1.21E-01	1.72E-01	1.93E-05	1.45E+01	5.90E-01	4.07E-02
6	.723	1.56E-01	2.57E-01	3.10E-05	1.95E+01	9.01E-01	6.63E-02
7	.777	1.85E-01	3.52E-01	4.56E-05	2.56E+01	1.33E+00	1.04E-01
8	.835	1.85E-01	4.05E-01	5.64E-05	3.16E+01	1.82E+00	1.51E-01
9	.897	1.86E-01	4.72E-01	7.06E-05	3.76E+01	2.39E+00	2.09E-01
10	.964	1.82E-01	5.33E-01	8.56E-05	4.35E+01	3.03E+00	2.80E-01
11	1.03	1.78E-01	6.00E-01	1.04E-04	4.93E+01	3.76E+00	3.65E-01
	1.11	1.49E-01	5.80E-01	1.08E-04	5.41E+01	4.46E+00	4.54E-01
12		1.38E-01	6.20E-01	1.24E-04	5.86E÷01	5.21E+00	5.57E-01
13	1.19		6.86E-01	1.47E-04	6.29E+01	6.04E+00	6.78E-01
14	1.28	1.32E-01			6.71E÷01	6.98E+00	8.26E-01
15	1.38	1.29E-01	7.75E-01	1.79E-04			
10	1.48	1.11E-01	7.72E-01	1.91E-04	7.07E+01	7.91E+00	9.83E-01
17	1.59	9.03E-02	7.23E-01	1.92E-04	7.36E+01	8.78E+00	1.14E+00
18	1.71	7.89E-02	7.29E-C1	2.09E-04	7.62E+01	9.66E+00	1.31E+00
1 9	1.84	6.78E-02	7.03E-01	2.16E-04	7.83E+01	1.05E+01	1.49E+00
2.0	3.58	5.65E-02	6.97E-01	2.30E-04	8.02E+01	1.14E+01	1.08E+00
21	2.12	4.TTE-02	6.77E-61	2.40E-04	8.17E+01	1.22E+01	00+333.C
<u> </u>	2.28	4.50E-02	7.40E-01	2.82E-04	8.32E+01	1.81E+01	2.11E+00
23	; 5	4.88E-02	8.34E-01	2.42E-04	8.46E+01	1.41E+01	2.40E-00
2;	2.64	3.58E-02	7.86E-01	3.40E-04	8.58E÷01	1.50E+01	2.88 <b>E</b> +80
2.5	2.83	3.24E-02	8.20E-01	3.88E-04	8.68E+01	1.60E+01	3.00E+00
2€	3.05	2.92E-02	8.55E-01	4.35E-04	8.78E+C1	1.71E+01	3.36F+00
27	2.27	3.00E-02	1.01E+00	5.53E-04	8.87E÷01	1.83E÷01	3.82E+00
28	3.52	2.56E-02	1.00E+00	5.87E-04	8.96E+01	1.95E+01	4.30E+00
2.8	2.78	2.59E-02	1.17E+00	7.37E-04	9.04E+01	2.09E+01	4.91E+00
30	4.06	2.26E-02	1.18E+00	7.98E-04	9.12E+01	2.23E+01	5.57E+00
31	4.37	2.25E-02	1.35E+00	9.84E-04	9.19E+01	2.40E+01	6.39E+00
€2	4.69	1.99E-02	1.38E+00	1.08E-03	9.25E+01	2.56E+01	7.28E+00
33	5.04	2.08E-02	1.57E+00	1.40E-03	9.32E+01	2.77E+01	8.44E+00
24	5.42	2.08E-02	1.93E+00	1.74E-03	9.39E+01	3.00E+01	9.88E+00
35	5.82	1.93E-02	2.07E+00	2.01E-03	9.45E+01	3.25E+01	1.15E+01
36	6.26	1.86E-02	2.29E+00	2.39E-03	9.51E+01	3.53E+01	1.35E+01
37	6.73	1.95E-02	2.78E+00	3.11E-03	9.58E+01	3.86E+01	1.61E+01
38	7.23	1.74E-02	2.86E+00	3.45E-03	9.63E+01	4.21E+01	1.89E+01
39	7.77	1.23E-02	2.33E+00	3.03E-03	9.67E+01	4.49E+01	2.14E+01
40	8.35	7.50E-03	1.64E+00	2.29E-03	9.70E+01	4.69E+01	2.33E+01
41	8.97	1.02E-02	2.58E+00	3.86E-03	9.73E+01	5.00E+01	2.65E+01
42	9.64	8.70E-03	2.54E+00	4.09E-03	9.76E+01	5.31E+01	2.99E+01
+3	10.3	9.00E-03	3.04E+00	5.25E-03	9.79E+01	5.68E+01	3.42E+01
4.4	11.1	8.70E-03		6.30E-03	9.82E+01	6.09E+01	3.94E+01
15	11.9	1.29E-02	5.81E+00	1.16E-02	9.86E+01	6.79E+01	4.90E+01
46	12.8	1.57E-02	8.19E+00	1.76E-02	9.91E+01	7.78E+01	6.35E+01
47	13.8	1.27E-02	7.65E+00	1.76E-02	9.95E+01	8.70E+(1)	7.81E+01
48	14.8	1.54E-02	1.07E+01	2.65E-02		1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00		1.00E+02	1.00E+02
TOTAL			2.27E+01 1				
		J. 50 D. 60 C				•	

FILE NAME: EPX2 6.002 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 400 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

			ENTRATIONS		CUMI	L'LATIVE %	
	NL DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.186	8.91E-02	5.52E-02		2.29E+00	4.74E-02	2.37E-03
1	.504	4.95E-02	3.96E-02		3.56E+00	8.14E-02	4.30E-03
2	.542	7.71E-02	7.12E-02		5.55E+00	1.43E-01	8.02E-03
3	.581	1.07E-01	1.13E-01	1.10E-05	8.29E+00	2.40E-01	1.44E-02
4	.625	1.38E-01	1.69E-01	1.76E-05	1.18E+01	3.85E-01	2.46E-02
5	.673	1.77E-01	2.52E-01	2.83E-05	1.64E+01	6.02E-01	4.09E-02
6	.723	2.00E-01	3.30E-01	3.97E-05	2.15E+01	8.85E-01	6.39E-02
7	.777	2.31E-01	4.38E-01	5.68E-05	2.75E+01	1.26E+00	9.67E-02
8	.835	2.43E-01	5.33E-01	7.41E-05	3.37E+01	1.72E+00	1.40E-01
9	.897	2.33E-01	5.90E-01	8.82E-05	3.97E+01	2.23E+00	1.91E-01
10	. 964	2.15E-01	6.30E-01	1.01E-04	4.52E+01	2.77E+00	2.49E-01
11	1.03	1.96E-01	6.63E-01	1.14E-04	5.03E+01	3.34E÷00	3.15E-01
12	1.11	1.77E-01	6.89E-01	1.28E-04	5.48E+01	3.93E+00	3.90E-01
13	1.19	1.6FE-01	7.56E-01	1.51E-04	5.91E+01	4.58E+00	4.77E-01
1 ‡	1.28	1.16E-01	7.58E-01	1.62E-04	6.29E+01	5.23E÷00	5.71E-01
15	1.08	1.8TE-01	8.22E-01	1.90E-04	6.64E+01	5.93E÷00	6.80E-01
16	1.18	1.29E-01	8.93E-C1	2.21E-04	6.97E+01	6.70E+00	8.08E-01
7	1.50	1.06E-01	8.50E-01	2.26E-04	7.24E+01	7.43E+00	9.39E-01
18	1.71	9.24E-02	8.54E-01	2.44E-04	7.48E+01	8.17F+00	1.08E+00
10	1.81	7.66E-02	8.18E-07	2.51E-04	7.68F+01	8.87F+00	1.20E+00
<b>a.</b> €. • •	1.98	6.66E-02	8.21E-01	2.71E-04	7.8EE+01	9.57E+00	00+333.1
- A	0.00	6.11E-02	8.84E-01	3.14E-04	8.01E-01	1.((E+[]	1.56F+00
es de	2.28	5.78E-02	9.47E-01	3.61E-04	8.10E+01	1.11E÷(1	1.77E+30
	2.45	5.16E-02	9.79E-01	4.01E-04	8.29E-01	1.20E-01	2.00E±00
15	2.64	1.92E-02	1.08E+00	4.75E-04	8.4CE+01	1.19E+01	2.28E÷00
26	2.83	3.8FE-02	9.76E-01	4.62E-04	8.52E+01	1.08E+01	2.55F÷00
2.7	3.05	4.12E-02	1.21E+00	6.13E-04	8.62E+01	1.48E+01	2.90E+00
28	3.27 3.52	3.99E-02	1.35E+00	7.36E-04	8.73E-01	1.59E-01	3.03E+00
29	3.78	3.28E-02	1.28E÷00	7.52E-04	8.81E+01	1.7(E+01	3.76E+00
30	4.06	3.07E-02	1.38E+00	8.73E-04	8.89E÷01	1.81E+01	4.27E+00
31	4.37	3.10E-02	1.61E+00	1.09E-03	8.97E+01	1.96E+01	4.90E+00
32	1.69	3.03E-02	1.82E+00	1.33E-03	9.05E+01	2.12E+01	5.67E+00
33	5.04	3.30E-02	2.33E+00	1.82E-03	9.13E+01	2.32E+01	5.72E+00
34	5.42	2.68E-02	2.15E+00	1.81E-03	9.20E+01	2.50E+01	7.77E+00
35	5.82	2.86E-02 2.74E-02	2.65E÷00	2.39E-03	9.28E+01	2.70E+01	9.15E+00
36	6.26		2.93E+00	2.85E-03	9.35E+01	2.98E+01	1.08E+01
37	6.73	2.74E-02	3.38E+00	3.53E-03	9.42E+01	3.27E+01	1.28E+01
38	7.23	2.56E-02 2.56E-02	3.65E+00	4.10E-03	9.48E+01	3.59E+01	1.52E+01
39	7.77	2.40E-02	4.22E+00	5.08E-03	9.55E+01	3.95E+01	1.82E+01
40	8.35	1.68E-02	4.56E+00	5.90E-03	9.61E+01	4.34E+01	2.16E+01
41	8.97	1.60E-02	3.68E+00	5.13E-03	9.65E+01	4.06E+01	2.45E+01
42	9.64	1.26E-02	4.06E+00 3.68E+00	6.08E-03	9.70E+01	5.01E+01	2.81E+01
43	10.3	1.41E-02	4.76E÷00	5.92E-03	9.73E+01	5.82E+01	3.15E+01
44	11.1	1.35E-C2	5.26E+00	8.22E-03 9.77E-03	9.76E+01	5.73E+01	3.62E+01
45	11.9	1.86E-02	8.37E÷00	1.67E-02	9.30E+01	6.18E+01	1.19E+01
46	12.8	2.07E-02	1.08E÷01	2.31E-02	9.85E+01	6.90E+01	5.15E+01
47	13.8	1.87E-02	1.13E+01	2.59E-02	9.90E+01 9.95E+01	7.93E+01	6.49E+01
48	14.8	2.02E-02	1.40E+01	3.48E-02	1.00E+02	8.79E+01 1.00E+02	7.99E+01
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02 1.00E+02
·TOT	ALS:	3.89E+00 1			1.00L+02	INVETUE	1.002702
_		- •	· • • •	v.			

## TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 6.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 400 SEC

DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCI	ENTRATIONS			LATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	2.47E-02	'1.53E-02	1.14E-06	1.96E+00	3.33E-02	1.61E-03
1	.504	1.41E-02	1.13E-02	9.49E-07	3.08E+00	5.78E-02	2.96E-03
2	.542	2.17E-02	2.01E-02	1.81E-06	4.80E+00	1.01E-01	5.52E-03
3	.581	2.89E-02	3.08E-02	2.98E-06	7.10E+00	1.68E-01	9.74E-03
4	.625	3.87E-02	4.75E-02	4.95E-06	1.02E+01	2.71E-01	1.67E-02
5	.673	5.05E-02	7.19E-02	8.07E-06	1.42E+01	4.28E-01	2.81E-02
6	.723	6.09E-02	1.00E-01	1.21E-05	1.90E+01	6.45E-01	4.52E-02
7	.777	6.99E-02	1.33E-01	1.72E-05	2.45E+01	9.33E-01	6.96E-02
8	.835	7.24E-02	1.59E-01	2.21E-05	3.03E+01	1.28E+00	1.01E-01
9	.897	7.53E-02	1.91E-01	2.85E-05	3.62E+01	1.69E+00	1.41E-01
10	.964	6.19E-02		2.91E-05	4.11E+01	2.09E+00	1.82E-01
11	1.03	5.97E-02	2	3.48E-05	4.59E+01	2.52E+00	2.32E-01
12	1.11	5.52E-02		4.00E-05	5.02E+01	2.99E+00	2.88E-01
13	1.19	4.81E-02		4.33E-05	5.41E+01	3.46E+00	3.49E-01
1 4 4 4 1 4	1.28	4.60E-02		5.14E-05	5.77E+01	3.98E+00	4.22E-01
15	1.38	4.05E-02	2.43E-01	5.60E-05	6.09E+01	4.51E+00	5.91E-01
		3.87E-02		6.64E-05	6.40E+01	5.09E+00	5.95E-01
<u>: 6</u>	1.48	3.82E-01		3.15E-05	6.70E+01	5.76E+00	7.10E-01
17	1.59			8.44E-05	6.96E+01	6.10E+00	8.30E-01
19	1.71	3.19E-02		8.02E-05	7.15E+01	6.97E+00	9.40E-01
10	1.34	2.14F-(2		1.01E-04	7.31E+01	7.63E+00	1.08E+00
20	1.98	2.47E-02		1.07E-04	7.51E+01	8.28E+00	1.14F-00
21	2.12	2.11E-02		1.24E-04	7.67E÷01	8.66E+00	1.41E+00
2.2	2.28	1.98E-02		1.64E-04	7.84E÷31	9.86E+60	1.64E-00
22	2.45	2.11E-02			8.01E+01	1.09F+01	1.91E-00
24	2.64	2.16E-02		2.08E-04		1.18E+01	2.23E-30
23	2.83	1.74E-02		2.08E-04	3.15E-01	1.30E+01	2.01E-00
26	3.05	1.80E-02		2.6SE-04	8.29E-01	1.41E+01	3.02E-00
61 T	2.27	1.54E-02		2.85E-04	3.41E+01	1.54E+01	3.51E+00
28	3.52	1.51E-02		3.47E-04			
2.9	3.78	1.44E-02		4.09E-04		1.8:E-01	4.77E+00
30	4.06	1.38E-02		1.86E-04			5.83E+00
31	4.37	1.23E-02		5.38E-04		2.00E+01	6.41E+00
32	4.69	1.14E-02		6.19E-04			
33	5.04	1.27E-02		8.59E-04			7.62E+00
34	5.42	1.09E-02		9.15E-04			8.92E+00
35	5.82	1.26E-02		1.31E-03			1.08E+01
36	6.26	1.03E-02	1.28E+00	1.33E-03			1.26E+01
37	6.73	8.85E-03	1.26E÷00	1.41E-03			1.46E÷01
38	7.23	1.09E-02	1.80E+00	2.17E-03			1.77E+01
39	7.77	8.85E-03	1.682+00	2.18E-03			2.08E+01
40	8.35	4.50E-03	9.87E-01	1.37E-03			2.27E+01
41	8.97	3.75E-03		1.42E-03	9.60E+01		2.47E+01
.42	9.64	6.60E-03		3.10E-03	9.66E+01		2.91E+01
43	10.3	4.65E-03		2.71E-03			3.30E+01
44	11.1	4.35E-03		3.15E-03			3.71E+01
4.5	11.9	8.40E-03		7.55E-03	9.79E÷01		4.81E+01
16	12.8	8.70E-C3		9.70E-03		7.5GE+01	6.18E+01
47	13.8	7.80E-03		1.08E-02	9.93E+01	8.58E-01	7.71E+01
48	14.8	9.45E-03		1.62E-02		1.00E+02	1.00E+02
>	15.4	0.00E+00	-	0.00E+00			1.00E+02
TOTA			4.61E+01 7				
1017		,		<del>_</del>		•	

FILE NAME: EPX2 6.004 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 400 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		001101			CLW	HATTUE W	
~****	574		ENTRATIONS	MACC		JLATIVE % SURFACE	MASS
CHNL		NUMBER	SURFACE	MASS	NUMBER 2.08E+00	3.55E-02	1.79E-03
<	.486	1.96E-02	1.22E-02	9.04E-07		6.08E-02	3.22E-03
1	.504	1.08E-02	8.64E-03	7.27E-07			
2	.542	1.53E-02	1.41E-02	1.28E-06	4.84E+00	1.02E-01	5.75E-03
3	.581	2.01E-02		2.07E-06	•	1.64E-01	9.84E-03
4	.625	2.76E-02	3.39E-02	3.53E-06	9.89E+00	2.63E-01	1.68E-02
5	.673	3.66E-02	5.21E-02	5.84E-06	1.38E+01	4.16E-01	2.84E-02
6	.723	4.06E-02	6.69E-02	8.06E-06	1.81E+01	6.11E-01	4.43E-02
7	.777	4.93E-02	9.37E-02	1.21E-05		8.85E-01	6.83E-02
8	.835	5.47E-02	1.20E-01	1.67E-05	2.91E+01	1.24E+00	1.01E-01
9	.897	5.19E-02	1.31E-01	1.97E-05	3.46E+01	1.62E+00	1.40E-01
10	. 964	4.98E-02	1.46E-01	2.34E-05	3.98E+01	2.05E+00	1.86E-01
11	1.03	4.21E-02	1.42E-01	2.46E-05	4.43E+01	2.46E+00	2.35E-01
12	1.11	3.79E-02	1.48E-01	2.75E-05	4.83E+01	2.89E+00	2.89E-01
13	1.19	3.94E-02	1.78E-01	3.54E-05	5.25E+01	3.41E+00	3.59E-01
14	1.28	3.49E-02	1.82E-01	3.90E-05	5.62E+01	3.91E+00	4.36E-01
15	1.38	3.36E-02	2.02E-01	4.65E-05	5.98E+01	4.53E+00	5.28E-01
16	1.48	3.33E-02	2.31E-01	5.72E-05	6.33E+01	5.21E+00	0.41E-01
17	1.59	2.80E-02	2.25E-01	5.98E-05	6.62E+01	5.86E+00	7.59E-01
18	1.71	2.38E-02	2.20E-01	6.30E-05	5.88E+01	6.F1E+00	8.84E-01
19	1.81	2.10E-02	2.24E-01	6.89E-05	7.10E+01	7.10E-00	1.02E+00
20	1.98	1.71E-02	2.11E-01	6.96E-08	7.28E+01	7.78E+00	1.16E+00
21	2.12	1.95E-02	2.78E-01	9.855-05	7.49E-01	8.595400	1.08E+00
22	2.18	1.59E-02	2.61E-01	9.9tE-(5	7.60E+01	9.88E-00	1.50E+00
20	2.15	1.425-02	2.7CE-01	1.115-(4	7.8:E-01	1.61F+61	7.7E+06
24	2.64	1.38E-02	3.02E-01	1.33E-(4	7.95E+01	1.105-01	1.005-00
2.5	2.80	1.44E-02	3.65E-01	1.72E-05		1.21E-01	2.07E+00
26	3.05	1.27E-02	3.73E-01	1.90E-04	8.14E+01	1.31E+01	2. T5E+00
17	2.27	1.23E-02	4.15E-01	2.27E-04	8.37E+01	1.44E+01	3.19E+00
28	3.52	9.90E-03	3.88E-01	2.27E-04	8.47E-01	1.88E+01	3.64E+06
7.6 7.0		8.25E-03	3.71E-01	2.34E-04	8.56E+01	1.66E+01	4.11E+00
	3.78		6.08E-01	4.12E-04	8.69E+01	1.84E+(1	1.52E+00
3Q	4.06	1.17E-02			8.77E+01	1.98E+01	5.62E+00
31	4.37	8.10E-03	4.86E-01	3.54E-04		2.19E+01	6.71E+00
32	1.69	1.02E-02	7.07E-01	5.54E-04	9.88E+(1		
33	5.04	1.17E-02	9.37E-01	7.88E-04	9.00E÷01	2.46E+01	8.27E±00
34	5.42	8.55E-03	7.90E-01	7.15E-04	9.09E+01	2.69E+01	9.68E+00
35	£.82	8.40E-03	8.97E-01	8.71E-04	9.18E+01	2.95E+01	1.14E+01
36	€.25	7.80E-03	9.62E-01	1.00E-03	9.26E+01	3.23E+01	1.34E+01
37	6.73	3.10E-03	1.15E+00	1.29E-03	9.35E+01	3.57E+01	1.59E+01
38	7.23	1.05E-02	1.73E+00	2.08E-03	9.46E+01	4.08E+01	2.01E+01
39	7.77	7.20E-03	1.37E+00	1.77E-03	9.54E+01	4.48E+01	2.36E+01
40	8.35	4.65E-03	1.02E+00	1.42E-03	9.59E+01	4.77E+01	2.64E+01
41	8.97	3.00E-03	7.60E-01	1.14E-03	9.62E+01	4.99E+01	2.86E÷01
42	9.64	4.65E-03	1.36E+00	2.19E-03	9.67E+01	5.39E+01	3.29E+01
43	10.3	5.40E-03	1.82E+00	3.15E-03	9.73E+01	5.92E+01	3.92E+01
44	11.1	2.70E-03	1.05E+00	1.95E-03	9.75E+01	6.23E+01	4.30E+01
15	11.9	7.05E-03	3.17E+00	6.33E-03	9.83E+01	7.36E+01	5.55E+01
46	12.8	5.40E-03	2.81E+00	6.02E-03	9.89E+01	, 17.98E+01	6.74E+01
47	13.8	6.15E-03	3.69E+00	8.51E-03	9.95E+01	9.06E+01	8.42E+01
48	14.8	4.65E-03	3.22E+00	7.98E-03	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	, 1.00E+02	1.00E+02
TOTAL	.s:	9.45E-01 3	3.42E+01 5.	06E-02			

### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 6.005 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 400 SEC

DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

	. DID. KAII		Dirio. (	omited i i i		
	CONCE	ENTRATIONS		CUMI	ULATIVE %	
CHNL DIA	NUMBER (	SURFACE	MASS	NUMBER	SURFACE	MASS
< .486	1.81E-02	1.12E-02	8.33E-07	2.08E+00	4.17E-02	2.19E-03
1 .504	9.45E-03	17.56E-03	6.36E-07	3.17E+00		3.86E-03
	1'.42E-02	1.32E-02	1.19E-06	4.80E+00	1.19E-01	6.98E-03
			2.06E-06	7.09E+00	1.19E-01	1.24E-02
	1.99E-02	2.12E-02				
4 .625	2.52E-02	3.09E-02	3.22E-06	9.99E+00	3.13E-01	2.08E-02
5 .673	3.04E-02	4.33E-02	4.86E-06	1.35E+01	4.74E-01	3.36E-02
6 .723	4.66E-02	7.67E-02	9.25E-06	1.88E+01	7.59E-01	5.79E-02
7 .777	5.41E-02	1.03E-01	1.33E-05	2.51E+01	1.14E+00	9.28E-02
8 .835	5.28E-02	1.16E-01	1.61E-05	3.11E+01	1.57E+00	1.35E-01
9 .897	4.99E-02	1.27E-01	1.89E-05	3.68E+01	2.04E+00	1.85E-01
10 .964	4.51E-02	11.32E-01	2.12E-05	4.20E+01	2.53E+00	2.41E-01
11 1.03	4.00E-02	1.35E-01	2.34E-05	4.66E+01	3.04E+00	3.02E-01
12 1.11	3475E-02	1.46E-01	2.72E-05	5.09E+01	3.58E+00	3.73E-01
13 1.19	3.54E-02	1.59E-01	3.18E-05	5.50E+01	4.17E+00	4.57E-01
14 1.28	3.27E-02	1.70E-01	3.65E-05	5.87E+01	4.80E+00	5.52E-01
15 1.38	3.16E-02	1.90E-01	4.38E-05	6.24E+01	5.51E+00	6.67E-01
16 1.48	2.89E-02	2.01E-C1	4.97E-05	6.57E+01	6.26E+00	7.98E-01
17 1.59	2.71E-02	2.17E-01	5.78E-05	6.88E+01	7.07E+00	9.50E-01
18 1.71	2.16E-02	1.98E-01	5.67E-05	7.13E+01	7.80E+00	1.10F+00
19 1.84	1.81E-02	1.94E-01	5.95E-05	7.34E+01	8.52E+00	1.25E+0C
20 1.98	1.53E-02	1.89E-01	6.23E-05	7.51E+01	9.22E+00	1.42E-00
21 2.12	1.71E-02	2.44E-01	8.64E-05	7.71E-01	1.01E+01	1.64E-00
21 1.12	1.61E-02	2.54E-01	9.68E-05	7.89E+01	1.11E+01	1.90E-00
22 1.15	1.38E-02	2.62E-01	1.07E-04	8.04E+01	1.10E+01	2.18E+00
24 2.64	1.26E-02	2.7GE-01	1.22E-04	8.15E+01	1.31E+01	2.5(E+00
25 2.83	1.17E-02	2.96E-01	1.40E-04	8.32E+01	1.42E+01	2.87E+00
26 2.05	1.05E-02	3.07E-C1	1.56E-04	8.4JE+01	1.53E+01	3.28E+00
27 3.27	1.14E-02	3.85E-01	2.10E-04	8.57E+01	1.67E+01	3.83E+00
28 2.72	9.90E-03	3.86E-01	2.27E-04	8.69E+01	1.82E+01	4.42E+00
20 3.75	7.95E-03	3.58E-01	2.26E-04	8.78E+01	1.95E+01	5.02E+00
30 4.06	8.85E-03	4.60E-01	3.12E-04	8.88E+01	2.12E+01	5.83E+00
		4.23E-01	3.08E-04	8.96E+01	2.28E+01	6.64E÷00
31 4.37	7.05E-03					7.65E+00
32 4.69	7.05E-03	4.89E-01	3.83E-04	9.04E+01	2.46E+01	
33 5.04	7.50E-03	6.00E-01	5.05E-04	9.13E+01	2.68E+01	8.97E+00
34 5.42	8.10E-03	7.49E-01	6.77E-04	9.22E+01	2.96E+01	1.08E+01
35 5.82	7.80E-03	8.33E-01	8.09E-04	9.31E+01	3.27E+01	1.29E+01
36 6.26	6.75E-03	8.32E-01	8.69E-04	9.39E+01	3.5EE+01	1.52E+01
37 6.73	7.50E-03	1.07E+00	1.20E-03	9.47E+01	3.98E+01	1.83E+01
38 7.23	7.20E-03	1.18E+00	1.43E-03	9.56E+01	4.42E+01	2.20E+01
39 7.77	6.45E-03	1.22E÷00	1.59E-03	9.63E+01	4.87E+01	2.62E+01
10 8.35	3.15E-03	6.91E-01	9.61E-04	9.67E+01	5.13E+01	2.87E+01
41 8.97	2.70E-03	6.84E-01	1.02E-03	9.70E+01	5.39E+01	$3.14E \div 01$
42 9.64	4.50E-03	1.32E+00	2.12E-03	9.75E+01	5.87E+01	3.70E+01
43 10.3	2.25E-03	7.60E-01	1.31E-03	9.78E+01	6.16E+01	4.04E+01
4.4 11.1	3.00E-03	1.17E+00	2.17E-03	9.81E+01	6.59E+01	4.61E+01
45 - 11.9	5.55E-03	2.50E+00	4.99E-03	9.87E+01	7.52E+01	5.92E+01
46 12.8	3.15E-03	1.64E+00	3.51E-03	9.91E+01	8.13E+01	6.84E+01
47 13.8	4.0EE-03	2.43E+00	5.60E-03	9.96E+01	9.03E+01	8.31E+01
48 14.8	3.75E-03	2.60E+00	6.44E-03	1.00E+02	1.00E+02	1.00E+02
> 15.4	0.00E+d0	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTALS:	8.71E-01 2	.69E+01 3.	81E-02		•	

FILE NAME: EPX2 6.006 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 400 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONCI	ENTRATIONS		CUMI	ULATIVE %	
CHNI	LDIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< ·	.486	2.10E-03	1.31E-03		1.05E+00		5.14E-04
ì	.504	1.20E-03	9.60E-04		1.65E+00	1.90E-02	9.40E-04
2	.542	1.50E-03	1.39E-03		2.40E+00	3.06E-02	1.60E-03
3		1.80E-03	1.91E-03				
	.581				3.30E+00	4.66E-02	2.58E-03
4	.625	2.55E-03	3.13E-03		4.58E+00	7.28E-02	4.30E-03
5	.673	6.30E-03	8.97E-03		7.73E+00	1.48E-01	9.60E-03
6	.723	4.95E-03	8.14E-03		1.02E+01	2.16E-01	1.48E-02
7	.777	5.85E-03	1.11E-02		1.31E+01	3.09E-01	2.24E-02
8	.835	6.45E-03	1.41E-02	1.97E-06	1.64E+01	4.28E-01	3.28E-02
9	.897	6.75E-03	1.71E-02	2.56E-06	1.97E+01	5.71E-01	4.63E-02
10	. 964	9.90E-03	2.90E-02	4.66E-06	2.47E+01	8.13E-01	7.08E-02
11	1.03	6.45E-03	2.18E-02	3.76E-06	2.79E+01	9.96E-01	9.07E-02
12	1.11	7.05E-03	2.75E-02	5.11E-06	3.14E+01	1.23E+00	1.18E-01
13	1.19	6.30E-03	2.84E-02			1.46E+00	1.47E-01
14	1.28	7.50E-03	3.90E-02		3.83E+01	1.79E+00	1.92E-01
15	1.38	6.60E-03	3.96E-02		4.16E+01	2.12E+00	2.40E-01
16	1.48	6.00E-03	4.16E-02		4.46E+01	2.47E+00	2.94E-01
17	1.59	5.25E-03	4.20E-02				
						2.82E+00	3.52E-01
18	1.71	8.10E-03	7.49E-02		5.13E+01	3.45E+00	4.66E-C1
19	1.84	5.70E-03	6.08E-02	1.87E-05	5.42E+01	2.96E+00	5.65E-01
20	1.98	5.70E-03	7.03E-02	2.32E-05	5.70E+01	4.5EE+00	6.87E-01
2.1	2.12	4.05E-03	6.19E-02		5.92E401	5.07E+00	8.00E-01
22	2.28	8.28E-00	8.63E-02	3.29E-(5	6.18E+01	5.72E+00	9.77E-01
23	2.45	4.85 <b>E-</b> 03	8.26E-02	3.38E-08	6.40E+01	6.48E-00	1.16E+10
24	2.64	€.1€E+03	1.35E-01	-5.93E-05	6.71E±01	7.61E+00	1.47E+00
25	2.83	4.65E-03	1.18E-01	5.57E-05	6.94E+01	8.60E+00	1.76E-00
26	3.05	3.15E-03	9.21E-02	4.68E-08	7.10E+01	9.57E+00	2.01E+00
27	3.27	4.6fE-03	1.57E-01	8.57E-05	7.33E+01	1.07E+01	2.465+00
28	3.52	4.50E-03	1.75E-01	1.03E-04	7.55E+01	1.22E+01	3.00E-00
29	3.78	3.75E-03	1.69E-01	1.07E-04	7.74E+01	1.26E-01	2.57E-00
30	4.06	3.60E-03	1.87E-01	1.27E-04	7.92E+01	1.51E+01	4.24E+00
31	4.37	3.60E-03	2.16E-01	1.57E-04	8.10E+01	1.69E+01	5.07E+00
32	4.69	3.00E-03		1.63E-04			
33		2.85E-03	2.08E-01		8.25E+01	1.87E+61	5.88 <b>E</b> 400
	5.04		2.28E-01	1.92E-04	8.39E+01	2.06E+01	5.84E-00
34	5.42	3.00E-03	2.77E-01	2.51E-04	8.54E+01	2.29E+01	8.1(E+0(
35	5.82	2.10E-03	2.24E-01	2.18E-04	8.65E+01	2.48E+01	6.41E-00
36	6.26	2.55E-03	3.14E-01	3.28E-04	8.78E±01	2.74E+01	1.11E+01
37	6.73	2.40E-03	3.42E-01	3.89E-04	8.90E±01	3.02E+01	1.32E-01
38	7.23	2.25E-03	2.70E-01	4.45E-04	9.01E+01	3.34E+01	1.88E+01
39	7.77	2.70E-03	5.13E-01	6.64E-04	9.14E+01	3.77E+01	1.9(E+0)
40	8.35	2.85E-03	6.25E-01	8.70E-04	9.29E+01	4.29E+01	2.26E+01
41	8.97	4.50E-04	1.14E-01	1.70E-04	9.31E+01	4.39E±01	2.48E+01
;2	9.64	2.10E-03	6.14E-01	9.87E-04	9.41E+C1	4.90E+01	2.97E-01
43	10.3	1.80E-03	6.08E-01	1.05E-03	9.50E+01	5.41E+01	3.53E-01
44	11.1	1.05E-03	4.09E-01	7.60E-04	9.56E+01	5.75E+01	3.98E+01
45	11.9	1.80E-03	8.10E-01	1.62E-03	9.65E+01	6.43E+01	4.78E+01
46	12.8	2.25E-03	1.17E+00	2.51E-03	9.76E+01	7.40E+01	
47	13.8	2.55E-03	1.53E+00				6.10E+01
48	14.8			3.53E-03	9.89E+01	8.69E+01	7.96E+01
, ,		2.25E-03	1.56E+00	3.86E-03	1.00E÷02	1.00E+02	1.00E+02
TOTA	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+C2	1.00E=02
101A	LJ.	2.00E-01 1	.182401 1	301102			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 6.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 400 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

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			ENTRATIONS			JLATIVE %	
CHNL		NUMBER *	SURFACE	MASS	NUMBER	SURFACE	MASS
	.486	7.35E-02	4.55E-02	3.39E-06	1.94E+00	2.89E-02	1.42E-03
	.504	4.09E-02	13.28E-02	2.76E-06	3.02E+00	4.97E-02	2.57E-03
	.542	6.13E-02	5.66E-02	5.12E-06 8.53E-06	4.64E+00 6.82E+00	8.57E-02 1.42E-01	4.72E-03 8.29E-03
	.581	8.28E-02	8.80E-02 1.31E-01	1.36E-05	9.64E+00	2.25E-01	1.40E-02
	.625 .673	1.06E-01 1.40E-01	1.99E-01	2.23E-05	1.33E+01	3.51E-01	2.33E-02
	.723	1.80E-01	2.96E-01	3.57E-05	1.81E+01	5.39E-01	3.83E-02
	.723	2.07E-01	3.94E-01	5.10E-05	2.35E+01	7.89E-01	5.97E-02
	.835	2.08E-01	4.57E-01	6.36E-05	2.90E+01	1.08E+00	8.63E-02
	.897	2.03E-01	15.15E-01	7.71E-05	3.44E+01	1.41E+00	1.19E-01
	.964	1.88E-01	5.50E-01	8.85E-05	3.94E+01	1.76E+00	1.56E-01
	1.03	1.66E-01	5.59E-01	9.66E-05	4.37E+01	2.11E+00	1.96E-01
	1.11	1'.51E-01	5.88E-01	1.09E-04	4.77E+01	2.48E+00	2.42E-01
	1.19	1.33E-01	5.97E-01	1.19E-04	5.12E+01	2.86E+00	2.92E-01
	1.28	1.33E-01	6.93E-01	1.49E-04	5.47E+01	3.30E+00	3.54E-01
	1.38	1.21E-01	7.29E-01	1.68E-04	5.79E+01	3.77E+00	4.24E-01
	1.48	1.14E-01	7.92E-01	1.96E-04	6.10E+01	4.27E+00	E.06E-01
	1.59	9.79E-02	7.84E-01	2.09E-04	6.3FE+01	4.77E+00	8.94E-01
	1.71	8.07E-02	7.46E-01	2.13E-04	6.ETE+01	5.24E+00	6.88E-01
	1.34	7.86E-02	8.07E-01	2.48E-04	6.77E-01	5.75E+00	7.87E-01
	1.98	7.11E-02	5.77E-01	2.88E-04	6.98E-01	8.31E-00	9.08E-01
	2	6.90E-02	9.91E-01	3.52E-04	7.14E-(1	6.94E-60	1.00E+00
	2.18	6.85E-02	1.13E+00	4.30E-04	7.32E+01	7.60E+00	1.24E-00
	2. 5	6.90E-02	1.31E+00	5.36E-04	7.50E+01	8.49E+00	1.10E+00
	2.04	6.99E-02	1.53E+00	6.74E-04	7.69E+01	8.46E+00	1.74E+00
	2.83	5.26E-02	1.33E+00	6.31E-04	7.82E±01	1.00E+01	1.01E+00
	3.65	5.38E-02	1.57E+00	S.00E-04	7.97E-01	1.10E+01	2.34E+00
	3.17	5.48E-02	1.80E+00	1.00E-03	8.11E+01	1.25E+01	2.78E+00
	3.52	5.46E-02		1.25E-03	8.25E+01	1.38E+01	3.28E+00
	2.78	5.08E-02	2.29E+00	1.44E-03			3.89E+00
	4.06	4.75E-02	2.47E+00	1.68E-03	8.51E+01	1.68E+01	4.59E÷00
	4.37	4.50E-02	2.70E+00	1.97E-03	8.53E+01	1.86E+01	5.42E+00
	4.€9	4.09E-02	2.84E+00	2.22E-03	8.74E+01	2.04E+01	6.35E+00
	5.64	3.84E-02	3.07E+00	2.59E-03	8.84E+01	2.23E+01	7.43E+00
	5.42	3.90E-02	3.61E+00	3.26E-03	8.94E+01	2.46E+01	8.80E+00
35	5.82	3.91E-02	4.18E+00	4.06E-03	9.35E+01	2.73E-01	1.05E+01
36	6.26	3.55E-02	4.3SE+00	4.58E-03	9.14E+01	3.00E+01	1.24E+01
37	6.73	3.54E-02	5.04E+00	5.65E-03	9.24E-01		1.48E+01
38	7.23	3.67E-02	6.04E+00	7.28E-03	9.33E÷01	3.71E+01	1.TEE+01
39	7 . 7,7	3.04E-02	5.78E+00	7.49E-03		4.08E+01	2.10E+01
40	8.35	2.59E-02	5.69E+00	7.92E-03	9.48E+01		2.43E+01
41	8.97	2.76E-02	€.99E+00	1.05E-02			2.87E+01
	9.64	2.28E-02	6.67E+00	1.07E-02	9.61E+01	5.30E+01	3.31E+01
	10.3	2.20E-02	7.44E+00	1.29E-02		5.78E+01	3.85E+01
	11.1	2.23E-02	8.71E+00	1.62E-02			4.53E+01
	11.9	2.37E-02	1.07E+01	2.13E-02		7.01E+01	5.42E+01
	12.8	2.71E-02	1.41E+01	3.03E-02	9.87E-01	7.90E+01	5.69E+01
	13.8	2.55E-02	1.53E+01	3.53E-02		E.88E+01	8.17E+01
	14.8	2.55E-02		4.38E-02		1.00E+02	1.00E+02
	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	<b>S</b> :	3.79E+00	1.57E+02 2.	39E-01			

FILE NAME: EPX2 6.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 400 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC	ENTRATIONS		CUM	JLATIVE %	
CHAIL	DIA	NUMBER	ENTRATIONS SURFACE	MASS	NUMBER	SURFACE	MASS
	. DIA .486	3.66E-01	2.27E-01	1.68E-05	2.43E+00	4.13E-02	1.99E-03
< 1	.504	2.01E-01	1.60E-01	1.35E-05	3.77E+00	7.05E-02	3.59E-03
1 2	.542	2.93E-01	2.70E-01	2.44E-05	5.72E+00	1.20E-01	6.48E-03
3	.581	3.97E-01	4.22E-01	4.09E-05	8.35E+00	1.97E-01	1.13E-02
4	.625	5.36E-01	6.58E-01	6.86E-05	1.19E+01	3.17E-01	1.94E-02
5	.673	6.69E-01	9.51E-01	1.07E-04	1.64E+01	4.90E-01	3.20E-02
6	.723	7.85E-01	1.29E+00	1.56E-04	2.16E+01	7.25E-01	5.05E-02
7	.777	8.99E-01	1.71E+00	2.21E-04	2.76E+01	1.04E+00	7.66E-02
8	.835	9.17E-01	2.01E+00	2.80E-04	3.37E+01	1.40E+00	1.10E-01
9	.897	8.55E-01	2.16E÷00	3.24E-04	3.94E+01	1.80E+00	1.48E-01
10	.964	7.80E-01	2.28E+00	3.67E-04	4.46E+01	2.21E+00	1.91E-01
11	1.03	7.00E-01	2.36E+00	4.08E-04	4.92E+01	2.64E+00	2.40E-01
12	1.11	6.41E-01	2.50E+00	4.65E-04	5.35E+01	3.10E+00	2.95E-01
13	1.19	5.71E-01	2.57E+00	5.13E-04	5.73E+01	3.57E+00	3.55E-01
14	1.28	₹.34 <b>É-</b> 01	2.78E+00	5.96E-04	6.08E+01	4.03E+00	4.26E-01
15	1.38	5.06E-01	3.04E+00	7.00E-04	6.42E+01	4.63E±00	F.09E-01
16	1.48	4.89E-01	3.19E-00	8.40E-04	6.7fE÷01	5.25E±00	0.08E-01
17	1.59	3.91E-01	3.13E + 00	8.33E-04	7.01E+01	5.82E+00	7.(GE-01
18	1.71	3.(EE-01	2,82E+00	8.00E-04	7.21E+01	6.33E+00	8.01E=01
ī ô	1.84	2.6FE-01	2.80E±00	8.70E=04	7.28E+01	6.8EE+00	9.(FE-()
20	1.98	2.47E-01	3.05E+00	1.01E-03	7.88E±01	7.45E+00	1.01E-00
21	2.12	2.23E-01	3.17E-00	1.13E-03	7.7(E-01	7.98E÷00	1.10E-44
22	2.28	2.11E-01	3.17E-00	1.30E-08	7.84E+01	8.01E-00	1.31E+00
2.0	2.45	1.98E-(1	3.78E+00	1.54E-03	7.97E-01	9.20E+00	1.5(E-()
2.4	2.51	1.98E-01	4.88E+00	1.91E-03	8.1(E+01	1.01E+01	1.72E=00
25	2.83	1.86E-01	4.71E÷00	2.23E-03	8.23E±01	1.10E+01	1.99E+(0
26	3.05	1.77E-01	5.18E+00	2.63E-03	8.34E+01	1.19E+01	2.00E+00
27	3.27	1.725-01	5.81E-00	3.17E-63	8.46E÷01	1.30E÷01	2.675+00
28	3.52	1.47E-01	5.73E+00	3.36E-03	8.56E+01	1.4CE+01	3.0TE+00
29	3.78	1.42E-01	6.40E÷00	4.03E-03	8.65E±01	1.52E+01	2.88E+00
30	4.06	1.36E-01	7.06E+00	4.78E-03	8.74E+01	1.64E+01	4.11E+00
31	4.37	1.39E-01	8.05E+00	6.08E-03	8.83E+01	1.80E÷01	4.83E÷00
32	1.69	1.34E-01	9.27E+00	7.26E-03	8.92E+01	1.97E+01	5.69E+60
33	5.04	1.31E-01	1.05E+01	8.83E-03	9.01E÷01	2.16E+01	6.72E+06
34	5.42	1.16E-01	1.16E+01	1.05E-02	9.09E÷01	2.27E+01	7.98E÷(0
35 26	5.82	1.23E-01	1.31E+01	1.27E-02	9.17E+01	2.61E+01	9.48E+00 1.12E+01
3 <b>6</b>	6.26	1.14E-01	1.41E+01	1.47E-02	9.25E+01	2.86E+01	1.04E+01
37	6.73	1.13E-01	1.61E+01	1.81E-02	9.33E+01	3.16E+01 3.50E+01	1.60E+01
38	7.23	1.14E-01	1.8SE+01 1.92E+01	2.27E-02 2.49E-02	9.40E+01 9.47E+01	3.85E+01	1.80E+01
39 40	7.77 8.35	1.01E-01 8.56E-02	1.88E+01	2.49E-02 2.61E-02		4.19E+01	2.21E÷01
41	8.97	9.51E-02	2.41E+01	3.50E-02	9.59E+01	4.63E+01	2.63E+01
42	9.64	8.86E-02	2.59E+01	4.17E-02	9.65E+01	5.11E+01	3.13E+01
42	10.3	7.77E-02	2.89E+01 2.82E+01	4.53E-02	9.70E+01	5.58E+01	2.66E+01
44	11.1	7.86E-02	3.06E+01	5.69E-02	9.75E+01	6.14E+01	4.34E-01
45	11.1	9.00E-02	4.05E+01	8.08E-02	9.81E+01	6.88E+01	5.29E+01
46	12.8	9.31E-02	4.84E+01	1.04E-01	9.87E+01	7.76E+01	6.52E÷01
47	13.8	9.25E-02	5.56E+01	1.28E-01	9.94E+01	8.78E+01	8.03E+01
48	14.8	9.69E-02		1.66E-01	1.00E+02	1.00E+02	1.00F+02
>	15.4	0.00E+00	0.72E-01	0.00E+00	1.00E+02	·1.00E÷02	1.00E+02
TOTA			5.49E+C2 8.		1.002.02	1.002.02	1
		1.002.01					

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 6.009 01-01-1930

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 400 SEC DENSITY: 1

			NTRATIONS			LATIVE %	
CHNL D	•		SURFACE	MASS	NUMBER	SURFACE	MASS
٠.	136	2.85E-03	1.75E-03	1.29E-07	8.30E-01	8.07E-03	3.87E-04
	50 <del>1</del>	1.20E-03	9.60E-04	8.085-08	1.13E÷00	1.252-02	6.292-04
	5 ! 2	3.15E-03	2.91E-03	2.635-07	2.10E+00	2.59E-02	1.42E-03
3 .	531	4.35E-03	4.62E-03	4.48E-07	3.37E+00	4.735-02	2.76E-03
	625	6.15E-03	7.5\$E-03	7.86E-07	5.16E+00	8.21E-02	5.11E-03
5 .	9 <b>7</b> 3	5.25E-03	7.47E-03	8.38E-07	6.69E+00	1.17E-01	7.62E-03
6 . 7 .	723	7.20E-03	1.13E-02	1.43E-06	8.78E+00	1.71E-01	1.19E-02
ī.	777	1.05E-02	1.99E-02	2.585-06	1.135+01	2.63E-01	1.965-02
	335	1.02E-0.2	2.24E-02	3.11E-06	1.432-01	3.67E-01	2.90E-02
9 .	337	1.39E-02	3.532-02	5.29E-06	1.89E+01	5.305-01	1.43E-02
	931	1.05E-02	3.07E-02	4.91E-06	2.19E+01	6.71E-01	5.96E-02
	. ).)	8.10E-03	2.742-02	4.73E-06	2.435+01	7.935-01	7.37E-02
	.11	1.00E-02	3.97E-02	7.232-06	2.72E+01	3.79E-01	9.55E-02
	.19	1.185-02	5.3 (E-02	1.05E-05	3.07E+01	1.232+00	1.27E-01
	. 23	1.08E-02	5.62E-02	1.20E-05	3.38E+01	1.485+00	1.635-01
	. 33	9.45E-03	5.63E-02	1.315-05	3.662+01	1.752+00	2.03E-01
	. 13	1.00E-02	6.97E-02	1.722-05	3.95E÷01	2.07E-00	2.51E-01
	. 3	1.175-02	9.37E-02	2.49E-05	4.295-01	2.5)E+))	3.29E-01
	. 7 1	9.30E-03	8.60E-02	2.16E-05	1.56E+01	2.90E+00	1.02E-01
	. 3 1	3.10E-03	3.65E-02	2.552-05	4.80E+01	3.30E+3)	4.825-01
	93	3.85E-03	1.09E-01	3.60E-05	5.06E-01	0.80E-03	5.90E-01
	• 7	1.052-02	1.505-01	5.312-05	5.36E+01	4.432+10	7.495-01
22 2	.23	9.00E-03	1.48E-01	5.642-05	5.62E-01	5.17E-00	9.17E-01
	. 13	1.232-02	2.332-01	9.56E-03	5.982-01	5.25E+00	1.202+00
		9.15E-03	2.01E-01	\$.83E-05	6.25E+01	7.132+00	1.47E+00
	.61				6.51E+31	3.23E+00	1.795+00
	.83	9.00E-03	2.23E-01	1.03E-01	6.79E+01	9.52E+00	2.22E÷00
-	.05	9.60E-03	2.81E-01	1.43E-01			
	. 27	7.65E-03	2.53E-01	1.412-04	7.01E+01	1.07E+01	2.64E+00 3.13E+00
	.52	7.20E-03	2.81E-01	1.65E-04	7.22E+01	1.20E+01	
	.73	8.10E-03	3.78E-01	2.39E-04	7.47E-01	1:382+01	3.85E+70
	.06	6.75E-03	3.51E-01	2.38E-04	7.67E+01	1.5 (E+01	1.56E+00
	.37	8.25E-03	4.95E-01	3.61E-04	7.91E+01	1.77E+01	5.64E+00
	.69	4.35E-03	3.02E-01	2.36E-04	8.03E+01	1.91E+01	6.35E+00
	.04	5.40E-03	4.32E-01	3.64E-04	8.19E+01	2.11E+01	7.44E+00
	. 42	6.75E-03	6.24E-01	5.64E-04	8.39E+01	2.39E+01	9.12E+00
	.82	6.15E-03	6.57E-01	6.38E-04	8.57E+01	2.70E+01	1.10E+01
	.26	4.95E-03	6.10E-01	6.37E-04	8.71E+01	2.98E+01	1.29E+01
	.73	5.55E-03	7.90E-01	8.86E-04	8.87E+01	3.34E+01	1.56E+01
	.23	4.95E-03	8.14E-01	9.81E-04		3.72E+01	1.85E+01
	.77	4.35E-03	8.26E-01	1.07E-03	9.14E+01	4.10E+01	2.17E+01
	.35	3.15E-03	6.91E-01	9.61E-04	9.24E+01	4.42E+01	2.46E+01
	.97	2.10E-03	5.32E-01	7.95E-04	9.30E+01	4.66E+01	2.70E+01
	.64	2.70E-03	7.89E-01	1.27E-03	9.37E+01	5.03E+01	3.08E+01
	0.3	2.85E-03	9.62E-01	1.66E-03	9.46E+01	5.47E+01	3.58E+01
	1.1	2.85E-03	1.11E+00	2.06E-03	9.54E+01	5.99E+01	4.19E+01
	1.9	4.50E-03	2.03E+00	4.04E-03	9.67E+01	6.92E+01	5.40E+01
	2.8	4.50E-03	2.34E+00	5.02E-03	9.80E+01	8.00E+01	6.91E+01
47 1	3.8	3.75E-03	2.25E+00	5.19E-03	9.91E+01	9.04E+01	8.46E+01
48 1	4.8	3.00E-03	2.08E+00	5.15E-03	1.00E+02	1.00E+02	1.00E+02
> 1	5.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTALS	:	3.43E-01 2	.17E+01 3.	34E-02			

FILE NAME: EPX2 7.000 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		20\:C1	THE ATTONO		CI'V	:	
CHAIL	DIL		ENTRATIONS			JLATIVE %	MACC
CHNL		NUMBER	SURFACE	MASS F 53F 06	NUMBER	SURFACE	MASS
<	.486	1.20E-01	7.44E-02	5.53E-06			2.54E-04
1	.504	6.72E-02	5.38E-02	4.52E-06	1.63E-01		4.62E-04
2	.542	1.00E-01	9.25E-02	8.36E-06	2.50E-01		8.47E-04
3	.581	1.41E-01	1.50E-01	1.45E-05	3.73E-01		1.52E-03
4	.625	1.78E-01	2.19E-01	2.28E-05	5.29E-01		2.57E-03
5	.673	2.42E-01	3.45E-01	3.87E-05	7.40E-01	4.52E-02	4.35E-03
6	.723	3.20E-01	5.26E-01	6.34E-05	1.02E+00		7.26E-03
7	.777	4.90E-01	9.30E-01	1.20E-04	1.45E+00		1.28E-02
.8	.835	1.10E+00	2.41E+00	3.36E-04	2.40E+00		2.83E-02
9	.897	2.86E+00	7.23E+00	1.08E-03	4.89E+00	5.83E-01	7.81E-02
10	.964	5.32E+00	1.56E+01	2.50E-03	9.53E+00		1.93E-01
11	1.03	7.64E+00	2.58E+01	4.46E-03	1.62E+01	2.59E+00	3.98E-01
12	1.11	8.99E+00	3.51E+01	6.51E-03	2.40E+01	4.28E+00	6.98E+01
13	1.19	9.62E+00	4.33E+01	8.65E-03	3.24E+01	6.38E+00	1.10E+00
14	1.23	9.66E+00	5.02E+01	1.08E-02	4.08E+01	8.81E+00	1.59E+00
15	1.38	9.20E+00	5.53E+01	1.27E-02	4.89E+01	1.15E÷01	2.18E+00
16	1.48	8.55E+00	5.93E+01	1.47E-02	5.63E÷01	1.44E+01	2.85E+00
17	1.59	7.78E+00	6.22E+01	1.65E-02	6.31E+01	1.74E+01	3.61E+00
18	1.71	6.93E+00	6.41E+01	1.83E-02	6.91E+01	2.05E+01	:.46E+00
19	1.84	3.05E+00	6.46E+01	1.985-02	7.44E+01		5.37E÷00
20	1.38	5.13E+00	6.33E+01	2.09E-02	7.89E+01	2.67E+01	6.33E+00
21	2.12	4.36E+00	6.22E+01	2.21E-02	8.27E+01	2.97E-01	7.34E+00
2 0	2.23	3.69E+00	6.07E+01	2.31E-02	8.59E+01	3.26E-01	8.41E+00
23	2.45	3.02E+00	5.72E+01	2.34E-02	8.85E+01	3.54E+01	9.495+00
24	2.64	2.26E-00	4.96E+01	2.18E-02	9.05E÷01	3.78E+01	1.05E+01
25	2.83	1.78E÷00	4.51E+01	2.14E-02	9.20E÷01	4.00E+01	1.15E+01
26	3.05	1.36E+00	3.97E+01	2.02E-02	9.32E-01	4.19E+01	1.24E+01
27	3.27	1.03E+00		1.90E-02		4.36E+01	1.335+01
23	3.52	7.90E-01	3.08E+01	1.81E-02	9.48E+01	4.51E+01	1.415+01
29	3.78	5.94E-01	2.68E+01	1.51E-02 1.69E-02	9.53E+01		1.415-01 1.49E+01
30	4.06	4.99E-01	2.59E+01		9.53E+01 9.58E+01	4.63E+01	
				1.76E-02		4.75E÷01	1.57E+01
31	4.37	4.09E-01	2.46E+01	1.79E-02	9.61E÷01	4.88E+01	1.65E+01
32	4.69	3.68E-01	2.55E+01	2.00E-02	9.64E+01	5.00E+01	1.74E+01
33	5.04	3.50E-01	2.81E+01	2.36E-02	9.67E÷01	5.14E+01	1.85E÷01
34	5.42	3.29E-01	3.04E+01	2.75E-02	9.70E+01	5.29E-01	1.98E+01
35	5.82	3.32E-01	3.55E+01	3.45E-02	9.73E+01	5.46E+01	2.14E+01
36	6.26	3.18E-01	3.92E+01	4.09E-02	9.76E+01	5.65E+01	2.33E+01
37	6.73	2.90E-01	4.13E+01	4.64E-02	9.79E+01	5.85E+01	2.54E+01
38	7.23	2.70E-01	4.44E+01	5.35E-02	9.81E+01	6.06E÷01	2.79E+01
39	7.77	2.64E-01	5.02E+01	6.50E-02	9.83E+01	6.30E+01	3.08E+01
40	8.35	2.66E-01	5.83E+01	8.11E-02	9.86E+01	6.59E+01	3.46E+01
41	8.97	2.63E-01	6.65E+01	9.95E-02	9.88E+01	6.91E+01	3.92E+01
12	9.64	2.25E-01	6.59E+01	1.06E-01	9.90E+01	7.23E+01	4.40E+01
43	10.3	2.17E-01	7.33E+01	1.27E-01	9.92E+01	7.58E+01	1.99E+01
11	11.1	2.16E-01	8.41E+01	1.56E-01		7.99E+01	5.70E+01
<b>45</b>	11.9	1.87E-01	8.44E+01	1.68E-01	9.95E+01	8.40E+01	5.48E±01
46	12.8	2.05E-01	1.07E+32	2.28E-01		3.91E+01	7.53E+01
47	13.8	1.80E-01	1.08E+02	2.49E-01	9.99E+01	9.44E+01	3.68E+01
18	14.8	1.68E-01	1.16E+02	2.88E-01	1.00E+02	1.00E÷02	1.00E+C2
>	15.4	0.00E+00	0.00E+00	0.00E-00	1.00E+02	1.00E+02	1.00E+02
TOTAL	.s:	1.15E+02 2	.07E+03 2.	17E+00			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 7.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIL. RATIO: I	:1 EFFIC.	CORRECT: 1	) L	
		CONCENTRAT	TOVE	CIWI	JLATIVE %	
CH7.1	DT 1	CONCENTRAT		NUMBER	SURFACE	MASS
	DIA	NUMBER SURFA				2.15E-04
<b>〈</b>	. 486	,	E-02 4.80E-06 E-02 3.76E-06			3.84E-04
1	. 504	•				
2	.542		E-02 7.81E-06			7.34E-04
	.581	1.35E-01 1.43			1.64E-02	1.36E-03
4	.625	1.83E-01 2.25				2.41E-03
5	.673		E-01 3.99E-05	· ·	4.45E-02	4.20E-03
6 7	.723	3.19E-01 5.25			6.99E-02	7.04E-03
	.777		E-01 1.09E-04		1.11E-01	1.20E-02
8	.835		E+00 3.32E-04			2.69E-02
9	.897		E+00 1.14E-03			7.79E-02
10	.964	6.03E+00 11.76			1.45E+00	2.05E-01
11	1.03		E+01 5.06E-03			4.32E-01
12	1.11	1.03E+01 4.00	E+01 7.43E-03		4.80E+00	7.65E-01
13	1.19	1.07E+01 4.83	E+01 9.64E-03		7.14E+00	1.20E+00
14	1.28	1.06E+01 5.54	E+01 1.19E-02	4.43E+01	9.81E+00	1.73E+00
15	1.38	9.82E+00 5.90	E+01 1.36E-02	5.27E+01	1.27E+01	2.34E+00
16	1.48	8.93E+00 6.19	E+01 1.53E-02	6.03E+01	1.57E+01	3.03E+00
17	1.59		E+01 1.66E-02	6.69E-01	1.87E+01	3.77E+00
13	1.71		E+01 1.75E-02	7.25E+01	2.16E+01	4.56E+00
19	1.34		E+01 1.86E-02		2.46E+01	5.39E+00
20	1.98		E+01 1.88E-02		2.73E+01	6.23E+00
21	2.12		E+01 1.97E-02		3.00E-01	7.12E+00
22	2.28		E+01 2.01E-02		3.26E+01	8.02E+00
23	2.45		E+01 1.98E-02		3.49E+01	8.90E+00
24	2.64		E+01 1.94E-03			9.77E+00
28	2.83		E+01 1.82E-02		3.89E+01	1.05E+01
25	3.05		E+01 1.73E-02		4.05E+01	1.14E+01
27	3.27		E+01 1.69E-02			_
28	3.52		E-01 1.62E-02		4.34E+01	1.29E+01
29	3.78		E+01 1.63E-02		4.46E+01	1.36E+01
30	4.06	4.68E-01 2.43			•	1.43E+01
31	4.37		E+01 1.78E-02			1.51E+01
32	4.69		E+01 2.04E-02			1.60E+C1
			E+01 2.43E-02			1.71E+01
33	5.04					1.84E+01
34	5.42					1.99E+01
35 50	5.82		E+01 3.48E-02			2.18E+01
36	6.26		E+01 4.06E-02			2.39E+01
37	6.73		E+01 4.73E-02			2.62E+01
38	7.23		E+01 5.23E-02			2.91E+01
39	7.77			9.83E+01		
40	8.35		E+01 7.88E-02			3.26E+01
41	8.97		E+01 1.01E-01		6.73E+01	3.72E+01
42	9.64		E+01 1.21E-01			4.26E+01
43	10.3	2.25E-01 7.59				4.85E+01
44	11.1	2.14E-01 8.34				5.54E+01
45	11.9		E+01 1.85E-01		8.31E+01	6.37E+01
46	12.8		E+02 2.33E-01			7.42E+01
47	13.8		E+02 2.67E-01			3.61E+01
48	14.8		E+02 3.09E-01	-	1.00E+02	1.00E+02
>	15.4		E+00 0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	1.17E+02 2.07E+	03 2.23E+00			

FILE NAME: EPX2 7.002 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		DIG: NAT	10. 1 .1	Erric. (	connect	<i>0</i> 1	
		CONCI	ENTRATIONS		CHM	ULATIVE %	
CHN	L DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MACC
<	.486	1.06E+00		4.90E-05			MASS
ì	.504	6.19E-01		4.90E-05	1.04E-01		1.86E-04
			· · · · <del>-</del> · ·		1.65E-01		3.44E-04
2	.542	9.48E-01	8.75E-01	7.91E-05	2.58E-01	9.55E-03	6.44E-04
3	.591	1.35E+00	1.44E+00	1.39E-04	3.91E-01	1.63E-02	1.17E-03
4	.625	1.78E+00		2.28E-04	5.66E-01	2.66E-02	2.04E-03
5	.673	2.42E+00	3.45E+00	3.87E-04	8.04E-01	4.29E-02	3.50E-03
6	.723	3.24E+00	5.33E+00	6.43E-04	1.12E+00	6.80E-02	5.94E-03
7	.777	5.20E+00	9.87E+00	1.28E-03	1.63E÷00	1.14E-01	1.08E-02
8	.835	1.19E÷01	2.60E+01	3.62E-03	2.80E+00	2.37E-01	2.45E-02
9	.897	3.04E+01	7.69E+01	1.15E-02	5.79E+00	5.99E-01	5.82E-02
10	.964	5.60E+01	1.64E+02	2.63E-02	1.13E+01	1.37E+00	1.68E-01
11	1.03	7.83E÷01	2.6+E+02	4.57E-02	1.90E+01	2.62E+00	3.415-01
12	1.11	3.05E-01	3.53E÷02	6.56E-02	2.79E+01	4.29E+00	5.90E-01
13	1.19	9.40E+01	4.23E+02	8.44E-02	3.71E+01	6.27E+00	9.10E-01
14	1.28	9.295+01	4.83E+02	1.04E-01	4.63E+01	8.53E+00	1.30E+00
15	1.33	3.50E+01	5.10E+02	1.19E-31			
16	1.48	7.59E+01			5.46E+01	1.10E+01	1.75E+00
			5.26E+02	1.30E-01	6.21E+01	1.34E+01	2.2;E÷00
17	1.59	5.57E+01	5.26E÷02	1.40E-01	6.83E+01	1.59E+01	2.77E+00
1 3	1.71	5.50E+01	5.10E+02	1.465-01	7.40E+01	1.83E+01	3.33E+00
19	1.34	4.55E-01	4.86E+02	1.49E-01	7.34E+01	2.06E+01	3.89E+00
20	1.98	3.65E+01	4.51E+C2	1.49E-01	8.10E-01	2.27E+01	1.46E-00
21	2.12	2.96E+01	4.21E+02	1.50E-01	3.+8E+01	2.47E+01	3.03E-00
22	2.28	2.34E+01	3.83E+02	1.47E-01	8.72E+01	2.65E+01	5.38E+30
23	2.45	1.87E+01	3.56E+02	1.45E-01	8.91E+01	2.82E+01	6.13E+00
24	2.54	1.42E+01	3.10E+02	1.37E-01	9.05E+01	2.97E+01	6.63E+00
25	2.33	1.07E+01	2.72E+02	1.29E-01	9.15E+01	3.09E+01	7.14E+00
26	3.05	3.70E+C0	2.54E+02	1.29E-01	9.24E+01	3.21E+01	7.63E-00
27	3.27	7.00E+00	2.36E+02	1.29E-01	9.31E+J1	3.32E+01	8.12E+00
28	3.52	5.82E+00	2.27E+02	1.33E-C1	9.37E+01	3.43E-01	8.63E+00
29	3.78	5.03E+00	2.27E+02	1.43E-01	9.41E+01	3.54E+01	9.17E÷00
30	4.06	4.47E+00	2.32E+02	1.58E-01	9.46E+01	3.65E+01	9.77E+00
31	4.37	1.07E+00	2.44E+02	1.78E-01	9.50E+01	3.76E+01	1.04E+01
32	4.69	3.70E+00	2.57E+02	2.01E-01	9.54E+01	3.88E+01	1.12E+01
33	5.04	3.55E+00	2.84E+02	2.39E-01	9.57E+01	4.02E+01	1.21E+01
34	5.42	3.42E+00	3.16E+02	2.86E-01	9.60E+01		
35	5.82	3.30E+00				4.17E+01	1.32E+01
			3.52E+02	3.42E-01	9.64E+01	4.33E+01	1.45E+01
36 37	6.26	3.22E+00	3.97E+02	4.14E-01	9.67E+01	4.52E+01	1.61E+01
37	6.73	3.13E+00	4.46E+02	5.00E-01	9.70E+01	4.73E+01	1.80E+01
38	7.23	3.10E+00	5.09E+02	6.14E-01	9.73E+01	4.97E+01	2.03E+01
39	7.77	2.97E+00	5.65E+02	7.31E-01	9.76E+01	5.23E+01,	2.31E+01
40	8.35	2.90E+00	6.35E÷02	8.84E-01	9.79E+01	5.53E+01 !	2.64E+01
41	8.97	2.99E+00	7.58E+02	1.13E+00	9.82E+01	5.89E+01	3.07E÷01
42	9.64	2.82E+00	8.25E+02	1.33E+00	9.84E+01	6.28E+01	3.57E+01
43	10.3	2.70E+00	9.13E+02	1.58E+00	9.87E+01	6.71E+01	4.17E-01
44	11.1	2.64E+00	1.03E+03	1.91E+00	9.90E+01	7.19E+01	4.90E+01
45	11.9	2.64E+00	1.19E+03	2.37E+00	9.92E+01	7.75E+01	5.80E+01
46	12.8	2.65E+00	1.38E+03	2.95E+00	9.95E+01	8.40E+01	6.92E-01
47	13.8	2.61E+00	1.57E+03	3.61E+00	9.97E+01	9.14E+01	8.28E+01
48	14.8	2.63E+00	1.83E+03	4.52E+00	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+0:
TOTA			.12E+04 2.		1.006+02	1.006+02	I TOOL TO.
			1165107 61	0 1 L 1 U I			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 7.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIG. RAII	0: 1:1	Erric. (	ORRECT.: I	) [	
		CONCE	NTRATIONS		CUMI	CLATIVE %	
CUNI	DIA		SURFACE	MASS	NUMBER	SURFACE	MASS
CHNL	.486	1.63E-01	1.01E-01	7.53E-06	1.01E-01		2.34E-04
	.504	9.24E-02	7:39E-02	6.22E-06	1.58E-01	5.78E-03	4.28E-04
1 2				1.19E-05	2.46E-01		7.98E-04
3	.542	1.42E-01	1.32E-01 2.31E-01			1.01E-02 1.77E-02	
	.581	2.17E-01		2.23E-05	3.80E-01		1.49E-03
4	.625	2.86E-01	3.51E-01	3.66E-05	5.57E-01		2.63E-03
5 6 7	.673	3.57E-01	5.08E-01	5.69E-05	7.78E-01	4.61E-02	4.41E-03
6	.723	4.66E-01	7.67E-01	9.25E-05	1.07E+00	7.14E-02	7.29E-03
	.777	6.67E-01	1.27E+00	1.64E-04	1.48E+00		1.24E-02
8	.835	1.42E+00	3.12E+00	4.34E-04	2.36E+00		2.59E-02
9	.897	3.35E+00	8:48E+00	1.27E-03	4.43E+00	4.96E-01	6.54E-02
10	.964	6.40E+00	1'.87E+01	3.01E-03	8.39E+00	1.12E+00	1.59E-01
11	1.03	9.56E+00	3.23E+01	5.58E-03	1.43E+01	2.18E+00	3.33E-01
12	1.11	1.18E+01	4.60E+01	8.54E-03	2.16E+01	3.70E+00	5.99E-01
13	1.19	1.30E+01	5.87E+01	1.17E-02	2.97E+01	5.64E+00	9.64E-01
14	1.28	1.36E+01	7.06E+01	1.51E-02	3.81E+01	7.97E-00	1.44E+00
15	1.38	1.33E+01	8.00E+01	1.84E-02	4.63E+01	1.06E+01	2.01E+00
16	1.48	1.26E+01	8.75E+C1	2.17E-02	5.41E+01	1.35E-01	2.68E+00
17	1.59	1.17E+01	9.36E+01	2.49E-02	6.13E+01	1.66E+01	3.46E+00
18	1.71	1.04E+01	9.66E÷01	2.76E-02	6.78E+01	1.98E+01	4.32E+00
19	1.34	9.15E+00	9.77E+01	3.00E-02	7.34E+01	2.30E+01	5.25E+00
20	1.98	7.73E+00	9.54E+01	3.15E-02	7.82E+01	2.62E+01	6.23E+00
21	2.12	6.48E+00	9.24E+01	3.28E-02	8.22E-01	2.92E-01	7.25E+00
22	2.28	5.28E+00	8.68E+01	3.31E-02	3.55E÷01	3.21E+01	3.29E+00
23	2.45	4.27E+00	8.11E+01	3.32E-02	8.92E+01	3.48E+01	9.32E-00
24	2.64	3.31E+00	7.26E+01	3.20E-32	9.02E-01	3.72E+01	1.03E+01
25	2.33	2.40E+00	6.08E+01	2.88E-02	9.17E+01	3.91E+01	1.12E+01
26	3.05	1.92E+00	5.62E+01	2.86E-02	9.29E+01	4.10E+01	1.21E+01
	$\frac{3.05}{3.27}$	1.45E+00		2.67E-02	9.38E+01		
28	3.52	1.43E+00	4.41E+01	2.59E-02			1.37E+01
29	3.78	8.59E-01	3.91E-01	2.47E-02	9.50E+01	4.54E+01	1.45E+01
30		7.16E-01	3.72E+01	2.52E-02	9.55E+01	4.66E+01	1.53E+01
	4.06			2.86E-02	9.59E+01		1.62E+01
31	4.37	5.55E-01	3.93E+01			4.79E+01	1.72E+01
32	1.69	5.91E-01	4.10E+01	3.21E-C2	9.62E+01	· · · ·	1.83E+01
33	5.04	5.35E-01	4.29E+01	3.61E-02	9.66E+01	5.07E÷01	
34	5.42	5.22E-01	4.82E+01	4.36E-02	9.69E+01		1.97E+01
35	5.82	4.73E-01	5.05E+01	4.91E-02			2.12E+01
36	6.26	4.61E-01	5.68E+01	5.94E-02	9.75E+01		2.30E+01
37	5.73	4.27E-01	6.09E+01	6.83E-02	9.77E+01		2.52E+01
38	7.23	4.24E-01	6.97E+01	8.41E-02	9.80E+01		2.78E+01
39	7.77	4.02E-01	7.64E+01	9.89E-02			3.09E+01
10	8.35	3.78E-01	8.29E+01	1.15E-01	9.85E+01		3.45E+01
41	8.97	4.03E-01	1.02E+02	1.53E-01	9.87E+01	6.83E+01	3.92E+01
42	9.64	3.55E-01	1.04E+02	1.67E-01	9.89E+01	7.22E+01	4.44E+01
43	10.3	3.31E-01	1.12E+02	1.93E-01	9.91E+01	7.59E+01	5.04E+01
44	11.1	3.07E-01	1.20E+02	2.23E-01	9.93E+01		5.74E+01
45	11.9	2.97E-01	1.34E+02	2.67E-01	9.95E+01	8.43E+01	6.57E+01
46	12.8	2.91E-01	1.51E+02	3.24E-01	9.97E+01	8.93E+01	7.57E+01
47	13.8	2.54E-01		3.51E-01	9.98E+01	9.43E+01	8.67E+01
18	14.8	2.49E-01	_	4.28E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	_	0.00E+00	1.00E+02	1.00E+02	1.00E+02
	LS:	1.62E+02 3			<del>-</del>		
. •							

FILE NAME: EPX2 7.004 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC	ENTRATIONS		CUM	ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	3.65E-01	2.27E-01	1.69E-05	9.10E-02	3.15E-03	2.13E-04
1	.504	2.11E-01	1.69E-01	1.42E-05	1.43E-01		3.92E-04
$\frac{2}{3}$	.542	3.31E-01	3.06E-01	2.77E-05	2.26E-01		7.41E-04
3	.581	4.85E-01	5.16E-01	5.00E-05	3.47E-01		1.37E-03
4	.625	6.47E-01	7.94E-01	8.27E-05	5.08E-01	2.79E-02	2.42E-03
5	.673	8.49E-01	1.21E+00	1.35E-04	7.19E-01	1.47E-02	4.13E-03
6	.723	1.14E+00	1.88E+00	2.27E-04	1.00E+00	7.08E-02	6.99E-03
7	.777	1.93E+00	3.76E+00	4.88E-04	1.50E+00	1.23E-01	1.32E-02
8	.835	4.95E+00	1.09E÷01	1.51E-03	2.73E+00	2.74E-01	3.22E-02
9	.897	1.16E+01	2.94E+01	4.40E-03	5.62E+00	6.82E-01	8.78E-02
10	.964	2.00E+01	5.84E+01	9.39E-03	1.06E+01	1.49E÷00	2.06E-01
11	1.03	2.76E÷01	9.31E+01	1.61E-02	1.75E+01	2.79E+00	4.10E-01
12	1.11	3.25E+01	1.27E+02	2.35E-02	2.55E+01	4.54E+00	7.07E-01
13	1.19	3.49E+01	1.57E+02	3.13E-02	3.42E+01	6.72E+00	1.10E+00
14	1.28	3.58E+01	1.86E+02	3.99E-02	4.31E+01	9.30E+00	1.61E+0C
15	1.38	3.40E+01	2.04E+02	4.71E-02	5.16E+01	1.21E+01	2.20E+00
16	1.48	3.15E+01	2.18E+02	5.40E-02	5.91E-C1	1.52E+01	2.88E+00
17	1.59	2.30E+01	2.24E+02	5.95E-02	6.64E+01	1.83E+01	3.63E+00
18	1.7i	2.43E+01	2.25E+02	6.44E-02	7.25E+01	2.14E+01	4.45E+00
19	1.84	2.03E+01	2.17E+02	6.65E-02	7.75E+01	2.44E+01	5.292+00
20	1.98	1.68E+01	2.07E+02	6.82E-02	8.17E+01	2.73E+01	6.15E+00
21	2.12	1.36E+01	1.94E+02	6.89E-02	8.51E+01	3.COE+01	7.02E÷00
2.1	2.28	1.09E+01	1.79E-02	6.83E-02	S.78E+01		7.885+00
2.3	2.45	8.47E+00	1.61E+02	6.59E-02	8.992+01	3.47E+01	8.71E+00
24	2.64	6.41E+00	1.40E+02	6.18E-01	9.15E+01	3.66E+01	9.50E+00
25	2.83	4.74E+00	1.20E+02	5.67E-02	9.27E+01	3.83E÷01	1.02E-01
26	3.05	3.64E+00	1.06E+02	5.41E-02	9.36E+Ci	3.98E+01	1.09E+C1
27	3.27	2.75E+00	9.30E+01	5.08E-02	9.43E+01	4.11E+01	1.15E+01
28	3.52	2.15E+00	8.38E+01	4.92E-02			1.22E+01
29	3.78	1.78E+00	8.02E+01	5.06E-02	9.53E+01		1.282+01
30	4.06	1.51E+C0	7.86E+01	5.33E-02	9.56E+01	4.44E+01	1.35E+01
31	4.37	1.36E+00	8.16E+01	5.95E-02	9.60E+01	4.56E+01	1.42E+01
32	4.69	1.31E+00	9.07E+01	7.10E-02	9.63E+01	4.68E+01	1.51E+01
33	5.04	1.22E+00	9.80E+01	8.25E-02	9.66E+01	1.82E+01	1.62E+01
34	5.42	1.19E+00	1.10E+02	9.95E-02	9.69E+01	4.97E+01	1.74E+01
35	5.82	1.15E+00	1.22E+02	1.19E-01	9.72E+01	5.14E+01	1.89E+01 2.07E+01
36	6.26	1.11E+00	1.36E+02	1.42E-01	9.75E+01		2.07E+01 2.29E+01
37	6.73	1.06E+00	1.51E+02	1.70E-01	9.77E+01		2.53E+01
38	7.23	9.82E-01	1.61E+02	1.95E-01	9.80E+01	6.02E+01	2.83E+01
39	7.77	9.49E-01	1.80E+02	2.34E-01	9.82E+01 9.84E+01		3.18E+01
40	8.35	9.28E-01	2.03E+02	2.83E-01 3.55E-01			3.63E+01
41	8.97	9.38E-01	2.37E+02	4.12E-01	9.89E+01	6.98E+01	
42	9.64	8.77E-01	2.56E+02	4.83E-01	9.91E+01	7.37E+01	
43	10.3	8.27E-01	2.79E+02	5.40E-01	9.93E+01		5.44E+01
44	11.1	7.45E-01	2.91E+02 3.38E+02	6.75E-01			6.30E+01
45 46	11.9	7.51E-01 7.13E-01	3.38E+02 3.71E+02	7.95E-01	9.97E+01	8.76E+01	7.30E+01
46	12.8		4.28E+02	9.86E-01	9.98E+01	9.35E+01	8.55E+01
47	13.8	7.13E-01 6.71E-01		1.15E+00		1.00E+02	1.00E+02
48 >	14.8 15.4	0.00E+00		0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA			7.20E+03 7		1.002.02	2.002.08	
IOIA	no.	7.022.02					

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 7.005 01-01-1980

LAST CALIBRATION: 01-01-1930 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

				Cilic. (	Court Circ	-`▲	
		COXC	ENTRATIONS		CI.MI	CLATIVE %	
CHNI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	· 2.36E-01	1.47E-01	1.09E-05	9.78E-02	3.29E-03	2.30E-04
1	.504	1.40E-01	1.12E-01	9.45E-06	1.56E-01		4.28E-04
2	.542	1.99E-01	1.83E-01	1.66E-05		9.90E-03	7.76E-04
3	.581	2.84E-01	3,.02E-01	2.92E-05		1.67E-02	1.39E-03
4	.625	3.82E-01	A.69E-01	4.89E-05			2.42E-03
5	.673	5.36E-01	7.62E-01	8.55E-05	7.36E-01	4.42E-02	4.22E-03
6	.723	7.12E-01	1.17E-00	1.41E-04	1.03E+00	7.01E-02	7.18E-03
6 7	.777	1.10E+00	2.09E+00	2.70E-04	1.48E+00	1.17E-01	1.29E-02
ģ	.835	2.14E+00	5.36E+00	7.46E-04	2.50E+00	2.37E-01	2.85E-02
9	.897	5.69E+00	1.44E+01	2.16E-03	4.85E+00	5.60E-01	
10	.964	1.02E+01	2.99E÷01	4.80E-03	9.08E+00	1.23E+00	7.39E-02
11	1.03	1.45E+01	4.91E÷01	8.49E-03			1.75E-01
1 2	1.03	1.76E÷01	6.86E+01	1.27E-02	1.51E+01	2.33E+00	3.53E-01
	1.11	1.93E+01			2.24E+01	3.86E+00	6.21E-01
13			'8.69E+01	1.73E-02	3.04E+01		9.85E-01
14	1.28	2.03E+01	1.06E+02	2.26E-02	3.88E+01	8.17E÷00	1.46E+00
15	1.38	1.96E+01	1.18E+02	2.72E-02	4.69E+01	1.085+01	2.03E+00
16	1.43	1.885+01	1.31E+02	3.23E-02	5.47E+01		2.71E+00
17	1.59	1.73E+01	1.39E+02	3.69E-02	6.18E+01	1.68E+01	3.48E+00
13	1.71	1.55E+01	1.43E+02	4.09E-02	6.82E+01	2.00E-C1	4.34E+00
19	1.84	1.35E+01	1.44E+02	4.44E-02	7.38E+01	2.33E+01	5.28E÷00
20	1.93	1.14E+01	1.40E÷02	4.63E-02		2.64E÷01	6.25E+00
21	2.12	9.65E÷00	1.37E+02	4.88E-02	8.25E+01	2.95E+01	7.27E+00
5.5	2.28	7.90E+00	1.30E+02	1.95E-02	8.585-01	$3.24E \pm 01$	8.31E+00
2.3	2.45	6.39E+00	1.21E+02	4.97E-02	8.84E+01	3.51E+01	9.38E+03
24	2.64	4.91E+00	1.08E+01	4.74E-02	9.05E+01	3.75E+01	1.04E+01
25	2.83	3.70E+00	9.37E+01	4.43E-02	9.20E+01	3.98E+01	1.13E-01
26	3.05	2.77E+00	8.09E+01	4.11E-02	9.32E+01	4.14E-01	1.21E+01
27	3.27	2.08E+00	7.01E+01	3.83E-02	9.40E+01	4.30E+01	1.30E+01
28	3.52	1.60E+00	6.24E+01	3.66E-02	9.47E+01	4.44E+01	1.37E+01
29	3.78	1.24E+00	5.60E+01	3.53E-02	9.52E+01	4.56E+01	1.45E+01
30	4.06	1.02E+00	5.33E+01	3.61E-02	9.56E+01	4.68E+01	1.52E+01
31	4.37	8.74E-01	5.25E+01	3.82E-02	9.60E+01	4.80E+01	1.60E+01
3 <b>2</b>	1.69	7.96E-01	5.52E+01	4.32E-02	9.63E+01	4.92E+01	1.69E+01
33	5.04	7.55E-01	6.05E+01	5.09E-02	9.66E+01	5.06E+01	1.80E+01
34	5.42	7.22E-01	6.68E+01	6.03E-02	9.69E+01	5.21E+01	1.93E+01
35	5.82	7.37E-01	7.87E+01	7.64E-02	9.72E+01		2.09E+01
36	6.26	6.71E-01	8.27E+01	8.63E-02	9.75E+01	5.57E+01	2.27E+01
37	6.73	6.32E-01	9.00E+01	1.01E-01	9.78E+01	5.77E+01	2.48E+01
3 <b>8</b>	7.23	6.23E-01	1.02E+02	1.23E-01	9.80E+01	6.00E+01	2.74E+01
39	7.77	5.90E-01	1.12E+02	1.45E-01	9.83E+01		3.05E+01
40	8.35	5.64E-01	1.24E+02	1.72E-01	9.85E+01		3.41E+01
41	8.97	5.47E-01	1.39E+02	2.07E-01	9.87E+01	6.84E+01	3.84E+01
42	9.64	5.19E-01	1.52E+02	2.44E-01	9.89E+01	7.18E+01	4.35E+01
43	10.3	4.78E-01	1.62E+02	2.79E-01	9.91E+01		4.94E+01
44	11.1	4.55E-01	1.02E+02 1.77E+02	3.29E-01	9.93E+01		5.63E+01
45	11.9	4.27E-01	1.92E+02	3.83E-01	9.95E+01	8.37E+01	6.44E+01
46	12.8	4.15E-01	2.16E+02	4.63E-01	9.95E+01	8.85E+01	7.41E+01
47	13.8	3.97E-01	2.16E+02 2.39E+02	5.50E-01	9.98E+01	9.38E+01	8.57E+01
48	14.8	3.98E-01	2.76E+02	6.83E-01	1.00E+02	1.00E+02	1.00E+02
<b>+0</b>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA			0.00E+00 1.47E+03 4.		1.006702	1.00E+02	1.UUETUZ
1014	ing.	4.44ETU6 4		702700			

FILE NAME: EPX2 7.006 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CHNL DIA							•	
CRINE   DIA   NUMBER   SURFACE   MASS   NUMBER   SURFACE   C.   A56   1.26E-01   7.86E-02   5.80E-06   1.69E-01   5.90E-03   4.36E-04   2.3EE-04   3.58E   1.60E-01   1.04E-01   9.41E-06   2.67E-01   1.80E-02   8.30E-04   4.62E   3.58E   1.60E-01   1.71E-01   1.65E-05   4.06E-01   1.81E-02   2.59E-03   4.36E-04   4.62E   3.67E-01   3.43E-01   2.46E-01   2.57E-05   5.80E-01   2.90E-02   2.59E-03   4.42E-03   6.773   3.43E-01   5.64E-01   6.80E-05   1.11E+00   7.13E-02   7.27E-03   6.777   5.28E-01   1.00E+00   1.30E-04   1.57E+00   1.85E-01   1.27E-02   8.835   1.03E+00   2.25E+00   3.13E-04   4.46E+00   2.16E-01   2.58E-02   9.897   2.42E+00   6.14E+00   9.19E-04   4.56E+00   2.16E-01   2.58E-02   1.09E+01   1.30E-04   1.57E+00   1.66E+00   1.51E-01   1.103E-04   1.51E-01   1.27E-02   1.11   7.84E+00   3.08E+01   3.07E-03   8.37E+00   4.88E-01   6.42E-02   1.20E-02   1.20E-02   1.20E-03   1.30E+01   1.03E-04   1.51E-01   1.30E-04   1.51E-01   1.30E-04   1.51E-01   1.30E-04   1.51E-01   1.30E-04   1.50E-04			CONCE	ENTRATIONS		CUMI	ULATIVE %	
4.86         1.26E-01         7.80E-02         5.80E-06         1.09E-01         3.48E-03         2.42E-04           2         .542         1.13E-01         1.04E-01         9.41E-06         2.67E-01         1.05E-02         8.30E-04           3         .581         1.60E-01         1.71E-01         1.65E-05         4.06E-01         1.05E-02         8.30E-04           4         .625         2.01E-01         2.46E-01         2.57E-05         5.80E-01         2.96E-02         2.59E-03           5         .673         3.43E-01         5.61E-01         6.80E-05         8.17E-01         4.63E-02         4.42E-03           6         .723         3.43E-01         5.61E-01         6.80E-05         1.11E+00         7.33E-02         2.42E-04           8         .835         1.03E-00         2.25E+00         3.13E-04         2.56E+00         2.13E-04         4.56E+00         4.88E-01         6.42E-02           9         .887         2.42E+00         6.14E+00         9.19E-04         4.56E+00         4.88E-01         6.12E-02           10         .964         4.49E+00         3.92E+01         3.75E-03         1.39E+01         2.02E+00         3.08E-01           11         1.03         6.4	CHNL	DIA						MASS
1								
1.08						1.69E-01		
4         .625         2.01E-01         2.46E-01         2.57E-05         5.80E-01         2.96E-02         2.59E-03           6         .723         3.43E-01         5.64E-01         6.80E-05         1.11E+00         7.13E-02         7.27E-03           7         .777         5.28E-01         1.00E+00         1.30E-04         1.57E+00         1.15E-01         1.2FE-02           8         .835         1.03E+00         2.25E+00         3.13E-04         2.46E+00         2.16E-01         2.58E-01         2.58E-02           9         .897         2.42E+00         6.14E+00         9.19E-04         4.56E+00         4.88E-01         6.42E-02           10         .964         4.40E+00         1.29E+01         3.75E-03         8.37E+00         1.06E+01         5.68E-03         2.07E+01         3.88E+00         5.36E+01         5.45E-01           11         1.03         6.43E+00         3.91E+01         7.81E-03         2.38E+01         5.71E+01         1.38E+00         5.45E-01           14         1.28         8.09E+00         3.91E+01         7.81E+03         2.62E+01         7.21E+00         1.46E+01           15         1.38         8.85E+00         5.32E+01         1.47E+02         5.83E+01								
4         .625         2.01E-01         2.46E-01         2.57E-05         5.80E-01         2.96E-02         2.59E-03           6         .723         3.43E-01         5.64E-01         6.80E-05         1.11E+00         7.13E-02         7.27E-03           7         .777         5.28E-01         1.00E+00         1.30E-04         1.57E+00         1.15E-01         1.2FE-02           8         .835         1.03E+00         2.25E+00         3.13E-04         2.46E+00         2.16E-01         2.58E-01         2.58E-02           9         .897         2.42E+00         6.14E+00         9.19E-04         4.56E+00         4.88E-01         6.42E-02           10         .964         4.40E+00         1.29E+01         3.75E-03         8.37E+00         1.06E+01         5.68E-03         2.07E+01         3.88E+00         5.36E+01         5.45E-01           11         1.03         6.43E+00         3.91E+01         7.81E-03         2.38E+01         5.71E+01         1.38E+00         5.45E-01           14         1.28         8.09E+00         3.91E+01         7.81E+03         2.62E+01         7.21E+00         1.46E+01           15         1.38         8.85E+00         5.32E+01         1.47E+02         5.83E+01	3							
6         6.73         2.74E-01         3.89E-01         4.37E-05         8.17E-01         1.63E-02         4.42E-03           6         6.723         3.43E-01         5.64E-01         6.80E-05         1.11E+00         7.13E-02         7.27E-03           7         7.77         5.28E-01         1.00E+00         1.30E-04         1.57E+00         1.15E-01         1.27E-02           8         .835         1.03E+00         2.25E+00         3.13E-04         4.36E+00         4.88E-01         6.42E-02           10         .964         4.40E+00         1.29E+01         2.07E+03         8.37E+00         1.06E+00         1.51E-01           11         1.03         6.43E+00         2.17E+01         3.75E+03         1.39E+01         2.0EE+00         3.6EE-01           13         1.19         8.69E+00         3.91E+01         7.81E+03         2.38E+01         5.75E+00         1.30E-04           14         1.28         9.99E+00         4.73E+01         1.01E+02         3.6EE+01         7.71E+01         8.83E+01         7.57E+00         1.30E-04           15         1.38         8.05E+00         5.32E+01         1.23E+02         4.33E+01         7.57E+00         7.3EE+01         7.2EE+03								
8         8.95         1.03E+00         2.25E+00         3.13E+04         2.46E+00         4.88E+01         6.42E-02           10         .964         4.40E+00         1.29E+01         2.07E+03         8.37E+00         1.06E+00         1.51E-01           11         1.03         6.43E+00         2.17E+01         3.75E+03         1.39E+01         2.02E+00         3.08E-01           12         1.11         7.84E+00         3.06E+01         7.81E+03         2.07E+01         2.38E+00         3.08E+01           13         1.19         8.69E+00         3.91E+01         7.81E+03         2.83E+01         5.11E+00         8.72E+01           14         1.28         9.09E+00         4.73E+01         1.01E+02         2.83E+01         5.7FE+00         1.30E+02           15         1.38         8.86E+00         5.32E+01         1.47E+02         5.13E+01         7.57E+00         1.30E+02           16         1.48         8.56E+00         5.32E+01         1.47E+02         5.13E+01         7.57E+00         1.41E+00           17         1.59         8.09E+00         6.74E+01         1.79E+02         5.13E+01         1.21E+01         3.41E+00           19         1.84         6.6E+00         7.11								
8         8.95         1.03E+00         2.25E+00         3.13E+04         2.46E+00         4.88E+01         6.42E-02           10         .964         4.40E+00         1.29E+01         2.07E+03         8.37E+00         1.06E+00         1.51E-01           11         1.03         6.43E+00         2.17E+01         3.75E+03         1.39E+01         2.02E+00         3.08E-01           12         1.11         7.84E+00         3.06E+01         7.81E+03         2.07E+01         2.38E+00         3.08E+01           13         1.19         8.69E+00         3.91E+01         7.81E+03         2.83E+01         5.11E+00         8.72E+01           14         1.28         9.09E+00         4.73E+01         1.01E+02         2.83E+01         5.7FE+00         1.30E+02           15         1.38         8.86E+00         5.32E+01         1.47E+02         5.13E+01         7.57E+00         1.30E+02           16         1.48         8.56E+00         5.32E+01         1.47E+02         5.13E+01         7.57E+00         1.41E+00           17         1.59         8.09E+00         6.74E+01         1.79E+02         5.13E+01         1.21E+01         3.41E+00           19         1.84         6.6E+00         7.11	6							
8         8.95         1.03E+00         2.25E+00         3.13E+04         2.46E+00         4.88E+01         6.42E-02           10         .964         4.40E+00         1.29E+01         2.07E+03         8.37E+00         1.06E+00         1.51E-01           11         1.03         6.43E+00         2.17E+01         3.75E+03         1.39E+01         2.02E+00         3.08E-01           12         1.11         7.84E+00         3.06E+01         7.81E+03         2.07E+01         2.38E+00         3.08E+01           13         1.19         8.69E+00         3.91E+01         7.81E+03         2.83E+01         5.11E+00         8.72E+01           14         1.28         9.09E+00         4.73E+01         1.01E+02         2.83E+01         5.7FE+00         1.30E+02           15         1.38         8.86E+00         5.32E+01         1.47E+02         5.13E+01         7.57E+00         1.30E+02           16         1.48         8.56E+00         5.32E+01         1.47E+02         5.13E+01         7.57E+00         1.41E+00           17         1.59         8.09E+00         6.74E+01         1.79E+02         5.13E+01         1.21E+01         3.41E+00           19         1.84         6.6E+00         7.11	7							
10	o Q							
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1								
1.11								
1.19								
14         1.28         9.09E+00         4.73E+01         1.01E-02         3.62E+01         7.21E+00         1.36E+00           15         1.38         8.86E+00         5.32E+01         1.23E-02         4.33E+01         9.57E+00         1.81E+00           16         1.48         8.56E+00         5.93E+01         1.47E-02         5.13E+01         1.22E+01         2.42E+00           17         1.59         6.09E+00         6.48E+01         1.72E-02         5.83E+01         1.51E+01         3.45E+00           19         1.84         6.66E+00         7.11E+01         2.18E-02         7.64E+01         2.12E+01         4.86E+00           20         1.98         5.79E+00         7.15E+01         2.36E-02         7.54E+01         2.44E+01         5.83E+00           21         2.12         5.14E+00         7.32E+01         2.66E-02         7.58E+01         2.45E+01         6.54E+00           22         2.23         4.33E+00         7.11E+01         2.77E-02         8.36E+01         3.38E+01         3.25E+01         3.38E+01         3.24E+01         3.25E+01         3.38E+01         3.25E+01         3.28E+01         3.4E+01         3.26E+01         3.28E+01         3.24E+01         3.24E+01         3.24E+01								
1.38								
16								
1.59								
18         1.71         7.292+00         6.74E+01         1.93E-C2         6.46E+01         1.81E+01         3.95E+00           19         1.84         6.66E+00         7.11E+01         2.18E-02         7.64E+01         2.12E+01         2.48E+02         5.85E+00         5.75E+00         7.32E+01         2.36E-02         7.54E+01         2.44E+01         5.85E+00         6.74E+01         2.36E-02         7.54E+01         2.76E+02         7.54E+01         2.76E+02         8.36E+01         2.76E+02         8.36E+01         3.08E+01         8.07E+00           22         2.23         4.33E+00         7.11E+01         2.71E-02         8.36E+01         3.08E+01         3.08E+01         3.08E+01         3.08E+01         3.08E+01         3.08E+01         3.65E+01         1.64E+01           25         2.83         2.10E+00         5.33E+01         2.52E-02         8.96E-01         3.65E+01         1.14E+01           26         3.05         1.60E+00         4.69E+01         2.38E-02         9.33E+01         4.28E+01         1.4E+01           29         3.78         7.12E+01         3.21E+01         2.02E-02         9.42E+01         4.44E+01         1.42E+01           29         3.78         7.12E+01         3.21E+01         2.02			· · · · · · · · · · · · · · · · · · ·					
1.84								
1.98								
21         2.12         5.14E+00         7.32E+01         2.60E-02         7.98E+Q1         2.76E+01         6.94E+00           22         2.28         4.33E+00         7.11E+01         2.71E-02         8.36E+01         3.08E+01         8.07E+00           2.45         3.57E+00         6.78E+01         2.78E+02         8.67E+01         3.38E+01         9.24E-06           24         2.64         2.77E+00         6.08E+01         2.67E-02         8.91E-01         3.65E+01         1.04E+61           25         2.83         2.10E+00         5.33E+01         2.52E-02         9.09E+01         3.89E+01         1.14E+01           26         3.65         1.60E+00         4.69E+01         2.38E-02         9.3E+01         4.09E+01         1.24E+01           27         3.27         1.23E+00         4.14E+01         2.26E-02         9.34E+01         4.28E+01         1.34E+01           29         3.78         7.12E-01         3.21E+01         2.02E-02         9.53E+01         4.58E+01         1.51E+01           30         4.06         5.74E-01         2.99E+01         2.02E-02         9.57E+01         4.58E+01         1.51E+01           31         4.37         4.76E-01         2.99E+01         <								
22         2.28         4.33E+00         7.11E+01         2.71E-02         8.36E+01         3.98E+01         8.07E+06           23         2.45         3.55E+00         6.78E+01         2.78E-02         8.67E+01         3.35E-01         9.24E-06           24         2.64         2.77E+00         6.08E+61         2.67E-02         8.91E-01         3.65E+61         1.04E+61           25         2.83         2.10E+60         5.33E+01         2.52E-02         9.09E+01         3.89E+01         1.14E+01           26         3.65         1.60E+00         4.69E+01         2.38E-02         9.23E+01         4.09E+01         1.24E+01           27         3.27         1.23E+00         4.14E+01         2.26E-02         9.34E+01         4.28E+01         1.4E+01           29         3.78         7.12E-01         3.21E+01         2.02E-02         9.42E+01         4.44E+01         1.51E+01           30         4.06         5.74E-01         2.99E+01         2.02E-02         9.53E+01         4.71E+01         1.59E+01           31         4.37         4.76E-01         2.99E+01         2.02E-02         9.57E+01         4.84E+01         1.68E+01           31         4.37         4.76E-01         3.0								
23						•		
24         2.64         2.77E+00         6.08E+C1         2.67E-02         8.91E-01         3.65E+C1         1.04E+01           25         2.83         2.10E+00         5.33E+01         2.52E-02         9.09E-01         3.89E+01         1.14E+01           26         3.05         1.60E+00         4.69E+01         2.38E-02         9.23E+01         4.03E+01         1.24E+01           27         3.27         1.23E+00         4.14E+01         2.26E-02         9.34E+01         4.28E+01         1.34E-01           29         3.78         7.12E-01         3.63E+01         2.03E-02         9.48E+01         4.58E+01         1.51E+01           30         4.06         5.74E-01         2.99E+01         2.02E-02         9.57E+01         4.58E+01         1.51E+01           31         4.37         4.76E-01         2.98E+01         2.03E-02         9.57E+01         4.54E+01         1.69E+01           31         4.37         4.76E-01         2.86E+01         2.07E-02         9.51E+01         4.54E+01         1.78E+01           32         4.69         4.32E-01         3.00E+01         2.35E-02         9.61E+01         5.1E+01         1.78E+01           34         5.42         3.87E-01         3.8	0.0							
25 2.83 2.10E+00 5.33E+01 2.52E-02 9.09E-01 3.89E+01 1.14E+01 2.6E-02 9.23E+01 4.09E+01 1.24E+01 1.24E+01 2.36E-02 9.34E+01 4.09E+01 1.24E+01 2.36E-02 9.34E+01 4.23E+01 1.34E+01 2.93E+01 3.52E-01 3.63E+01 2.13E-02 9.34E+01 4.43E+01 1.42E+01 2.93E-01 3.63E+01 2.02E-02 9.48E+01 4.58E+01 1.51E+01 2.93E+01 2.02E-02 9.48E+01 4.58E+01 1.51E+01 3.04E+01 3.21E+01 2.02E-02 9.53E+01 4.71E+01 1.59E+01 3.04E+01 3.21E+01 2.08E-02 9.57E+01 4.44E+01 1.68E+01 3.24E+01 3.21E+01 2.08E-02 9.57E+01 4.97E+01 1.68E+01 3.24E+01 3.00E+01 2.35E-02 9.61E+01 4.97E+01 1.78E+01 3.35E+01 3.17E+01 2.67E-02 9.64E+01 5.11E+01 1.89E+01 3.45E+01 3.58E+01 3.23E-02 9.64E+01 5.11E+01 1.89E+01 3.45E+01 3.55E+01 3.23E-02 9.68E+01 5.27E+01 2.03E+01 3.55E+01 3.55E+01 3.55E+01 5.64E+01 5.44E+01 2.18E+01 3.55E+01 3.57E+01 4.40E+01 4.60E-02 9.71E+01 5.44E+01 2.37E+01 3.66E+01 3.57E+01 4.92E+01 5.52E-02 9.77E+01 5.86E+01 2.37E+01 3.83E+01 3.52E+01 6.36E+01 2.87E+01 3.83E+01 5.27E+01 6.98E+01 6.98E+01 3.16E+01 4.92E+01 5.52E-02 9.77E+01 6.89E+01 3.16E+01 4.89E+01 3.23E+01 6.98E+01 6.98E+01 3.16E+01 4.89E+01 6.98E+01 6.98E+01 6.98E+01 6.98E+01 6.98E+01 6.98E+01 6.98E+01 6.98E+01 3.16E+01 4.89E+01 6.98E+01 6.98E								
26         3.65         1.60E+00         4.69E+01         2.38E-02         9.23E+01         4.09E+01         1.24E+01           27         3.27         1.23E+00         4.14E+01         2.26E-02         9.34E+01         4.28E+01         1.34E+01           28         3.52         9.31E-01         3.63E+01         2.13E-02         9.42E+01         4.44E+01         1.42E+01           29         3.78         7.12E-01         3.21E+01         2.02E-02         9.48E+01         4.58E+01         1.51E+01           30         4.06         5.74E-01         2.99E+01         2.02E-02         9.53E+01         4.71E+01         1.59E+01           31         4.37         4.76E-01         2.86E+01         2.08E-02         9.57E+01         4.84E+01         1.68E+01           32         4.69         4.32E-01         3.00E+01         2.35E-02         9.61E+01         4.97E+01         1.78E+01           34         5.42         3.87E-01         3.58E+01         3.23E-02         9.64E+01         5.11E+01         1.89E+01           35         5.82         3.59E-01         3.83E+01         3.72E-02         9.71E+01         5.44E+01         2.18E+01           36         6.26         3.57E-01         4.								
27         3.27         1.23E+00         4.14E+01         2.26E-02         9.34E+01         4.28E+01         1.34E+01           28         3.52         9.31E-01         3.63E+01         2.13E-02         9.42E+01         4.44E+01         1.42E+01           29         3.78         7.12E-01         3.21E+01         2.02E-02         9.48E+01         4.58E+01         1.51E+01           30         4.06         5.74E-01         2.99E+01         2.02E-02         9.53E+01         4.71E+01         1.59E+01           31         4.37         4.76E-01         2.86E+01         2.08E-02         9.57E+01         4.71E+01         1.69E+01           31         4.37         4.76E-01         3.00E+01         2.35E-02         9.61E+01         4.97E+01         1.78E+01           32         4.69         4.32E-01         3.00E+01         2.35E-02         9.61E+01         4.97E+01         1.78E+01           34         5.42         3.87E-01         3.58E+01         3.23E-02         9.68E+01         5.27E+01         2.03E+01           35         5.82         3.59E-01         3.83E+01         3.72E-02         9.71E+01         5.64E+01         2.18E+01           36         6.26         3.57E-01         4.							•	
28 3.52 9.31E-01 3.63E+01 2.13E-02 9.42E+01 4.44E+01 1.42E+01 2.9 3.78 7.12E-01 3.21E+01 2.02E-02 9.48E+01 4.58E+01 1.51E+01 3.0 4.06 5.74E-01 2.99E+01 2.02E-02 9.53E+01 4.71E+01 1.59E+01 3.2 4.69 4.32E-01 3.00E+01 2.35E-02 9.61E+01 4.97E+01 1.78E+01 3.3 5.04 3.96E-01 3.17E+01 2.67E-02 9.64E+01 5.11E+01 1.89E+01 3.4 5.42 3.87E-01 3.58E+01 3.23E-02 9.64E+01 5.11E+01 1.89E+01 3.5 5.82 3.59E-01 3.83E+01 3.72E-02 9.71E+01 5.44E+01 2.18E+01 3.6 6.26 3.57E-01 4.40E+01 4.60E-02 9.74E+01 5.64E+01 2.37E+01 3.7 6.73 3.46E-01 4.92E+01 5.52E-02 9.77E+01 5.86E+01 2.61E+01 3.9 7.23 3.21E-01 5.27E+01 6.36E-02 9.80E+01 6.09E+01 2.87E+01 4.0 8.35 2.70E-01 5.92E+01 6.93E-02 9.80E+01 6.39E+01 3.16E+01 4.89F+01 5.92E+01 6.93E-02 9.84E+01 6.59E+01 3.51E+01 4.897 2.71E-01 6.87E+01 1.03E-01 9.87E+01 6.89E+01 3.51E+01 4.2 9.64 2.56E-01 7.47E+01 1.03E-01 9.87E+01 6.89E+01 3.94E+01 4.44E+01 4.1.1 2.15E-01 8.37E+01 1.55E-01 9.93E+01 7.23E+01 4.44E+01 4.44E+01 4.50E+01 4.44E+01 4.50E+01 4.50E+01 4.50E+01 5.04E+01 4.50E+01 7.53E+01 4.44E+01 4.50E+01 4.50E+01 7.53E+01 7.53E+01 4.50E+01 7.53E+01 7.53E+01 4.50E+01 7.53E+01 7								
29       3.78       7.12E-01       3.21E+01       2.02E-02       9.48E+01       4.58E+01       1.51E+01         30       4.06       5.74E-01       2.99E+01       2.02E-02       9.53E+01       4.71E+01       1.59E+01         31       4.37       4.76E-01       2.86E+01       2.08E-02       9.57E+01       4.64E+01       1.68E+01         32       4.69       4.32E-01       3.00E+01       2.35E-02       9.61E+01       4.97E+01       1.78E+01         34       5.04       3.96E-01       3.17E+01       2.67E-02       9.64E+01       5.11E+01       1.89E+01         34       5.42       3.87E-01       3.58E+01       3.23E-02       9.68E+01       5.27E+01       2.03E+01         35       5.82       3.59E-01       3.83E+01       3.72E-02       9.71E+01       5.44E+01       2.03E+01         35       5.82       3.57E-01       4.40E+01       4.60E-02       9.74E+01       5.44E+01       2.18E+01         36       6.26       3.57E-01       4.492E+01       5.52E-02       9.77E+01       5.86E+01       2.61E+01         37       6.73       3.46E-01       5.27E+01       6.36E-02       9.80E+01       6.09E+01       2.87E+01         39 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
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31       4.37       4.76E-01       2.86E+01       2.08E-02       9.57E+01       4.84E+01       1.68E+01         32       4.69       4.32E-01       3.00E+01       2.35E-02       9.61E+01       4.97E+01       1.78E+01         33       5.04       3.96E-01       3.17E+01       2.67E-02       9.64E+01       5.11E+01       1.89E+01         34       5.42       3.87E-01       3.58E+01       3.23E-02       9.68E+01       5.27E+01       2.03E+01         35       5.82       3.59E-01       3.83E+01       3.72E-02       9.71E+01       5.44E+01       2.18E+01         36       6.26       3.57E-01       4.40E+01       4.60E-02       9.74E+01       5.64E+01       2.37E+01         37       6.73       3.46E-01       4.92E+01       5.52E-02       9.77E+01       5.86E+01       2.61E+01         38       7.23       3.21E-01       5.27E+01       6.36E-02       9.80E+01       6.09E+01       2.87E+01         39       7.77       2.82E-01       5.35E+01       6.93E-02       9.82E+01       6.59E+01       3.16E+01         40       8.35       2.70E-01       5.92E+01       8.24E-02       9.84E+01       6.59E+01       3.94E+01         42 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
32       4.69       4.32E-01       3.00E+01       2.35E-02       9.61E+01       4.97E+01       1.78E+01         33       5.04       3.96E-01       3.17E+01       2.67E-02       9.64E+01       5.11E+01       1.89E+01         34       5.42       3.87E-01       3.58E+01       3.23E-02       9.68E+01       5.27E+01       2.03E+01         35       5.82       3.59E-01       3.83E+01       3.72E-02       9.71E+01       5.44E+01       2.18E+01         36       6.26       3.57E-01       4.40E+01       4.60E-02       9.74E+01       5.64E+01       2.37E+01         37       6.73       3.46E-01       4.92E+01       5.52E-02       9.77E+01       5.86E+01       2.61E+01         38       7.23       3.21E-01       5.27E+01       6.36E-02       9.80E+01       6.09E+01       2.87E+01         40       8.35       2.70E-01       5.92E+01       8.24E-02       9.84E+01       6.59E+01       3.51E+01         41       8.97       2.71E-01       6.87E+01       1.03E-01       9.87E+01       6.89E+01       3.94E+01         42       9.64       2.56E-01       7.47E+01       1.20E-01       9.89E+01       7.23E+01       4.44E+01         43 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td>							•	
33       5.04       3.96E-01       3.17E+01       2.67E-02       9.64E+01       5.11E+01       1.89E+01         34       5.42       3.87E-01       3.58E+01       3.23E-02       9.68E+01       5.27E+01       2.03E+01         35       5.82       3.59E-01       3.83E+01       3.72E-02       9.71E+01       5.44E+01       2.18E+01         36       6.26       3.57E-01       4.40E+01       4.60E-02       9.74E+01       5.64E+01       2.37E+01         37       6.73       3.46E-01       4.92E+01       5.52E-02       9.77E+01       5.86E+01       2.61E+01         38       7.23       3.21E-01       5.27E+01       6.36E-02       9.80E+01       6.09E+01       2.87E+01         39       7.77       2.82E-01       5.35E+01       6.93E-02       9.82E+01       6.33E+01       3.16E+01         40       8.35       2.70E-01       5.92E+01       8.24E-02       9.84E+01       6.59E+01       3.51E+01         41       8.97       2.71E-01       6.87E+01       1.03E-01       9.87E+01       6.89E+01       3.94E+01         42       9.64       2.56E-01       7.47E+01       1.20E-01       9.89E+01       7.23E+01       4.44E+01         43 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
34       5.42       3.87E-01       3.58E+01       3.23E-02       9.68E+01       5.27E+01       2.03E+01         35       5.82       3.59E-01       3.83E+01       3.72E-02       9.71E+01       5.44E+01       2.18E+01         36       6.26       3.57E-01       4.40E+01       4.60E-02       9.74E+01       5.64E+01       2.37E+01         37       6.73       3.46E-01       4.92E+01       5.52E-02       9.77E+01       5.86E+01       2.61E+01         38       7.23       3.21E-01       5.27E+01       6.36E-02       9.80E+01       6.09E+01       2.87E+01         39       7.77       2.82E-01       5.35E+01       6.93E-02       9.82E+01       6.33E+01       3.16E+01         40       8.35       2.70E-01       5.92E+01       8.24E-02       9.84E+01       6.59E+01       3.51E+01         41       8.97       2.71E-01       6.87E+01       1.03E-01       9.87E+01       6.89E+01       3.94E+01         42       9.64       2.56E-01       7.47E+01       1.20E-01       9.89E+01       7.23E+01       4.44E+01         43       10.3       2.47E-01       8.37E+01       1.55E-01       9.93E+01       7.97E+01       5.69E+01         44 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
35 5.82 3.59E-01 3.83E+01 3.72E-02 9.71E+01 5.44E+01 2.18E+01 36 6.26 3.57E-01 4.40E+01 4.60E-02 9.74E+01 5.64E+01 2.37E+01 37 6.73 3.46E-01 4.92E+01 5.52E-02 9.77E+01 5.86E+01 2.61E+01 38 7.23 3.21E-01 5.27E+01 6.36E-02 9.80E+01 6.09E+01 2.87E+01 39 7.77 2.82E-01 5.35E+01 6.93E-02 9.82E+01 6.33E+01 3.16E+01 40 8.35 2.70E-01 5.92E+01 8.24E-02 9.84E+01 6.59E+01 3.51E+01 41 8.97 2.71E-01 6.87E+01 1.03E-01 9.87E+01 6.89E+01 3.94E+01 42 9.64 2.56E-01 7.47E+01 1.20E-01 9.89E+01 7.23E+01 4.44E+01 43 10.3 2.47E-01 8.33E+01 1.44E-01 9.91E+01 7.60E+01 5.04E+01 44 11.1 2.15E-01 8.37E+01 1.55E-01 9.93E+01 7.97E+01 5.69E+01 4.51E+01 4.53E+01 4.51E+01 6.53E+01 6.53								
36 6.26 3.57E-01 4.40E+01 4.60E-02 9.74E+01 5.64E+01 2.37E+01 3.6 6.73 3.46E-01 4.92E+01 5.52E-02 9.77E+01 5.86E+01 2.61E+01 3.8 7.23 3.21E-01 5.27E+01 6.36E-02 9.80E+01 6.09E+01 2.87E+01 3.9 7.77 2.82E-01 5.35E+01 6.93E-02 9.82E+01 6.33E+01 3.16E+01 40 8.35 2.70E-01 5.92E+01 8.24E-02 9.84E+01 6.59E+01 3.51E+01 41 8.97 2.71E-01 6.87E+01 1.03E-01 9.87E+01 6.89E+01 3.94E+01 42 9.64 2.56E-01 7.47E+01 1.20E-01 9.89E+01 7.23E+01 4.44E+01 4.3 10.3 2.47E-01 8.33E+01 1.44E-01 9.91E+01 7.60E+01 5.04E+01 4.4 11.1 2.15E-01 8.37E+01 1.55E-01 9.93E+01 7.97E+01 5.69E+01 4.5 11.9 2.22E-01 1.00E+02 2.00E-01 9.95E+01 8.41E+01 6.53E+01 4.6 12.8 2.14E-01 1.12E+02 2.39E-01 9.97E+01 8.90E+01 7.53E+01 4.8 14.8 1.90E-01 1.31E+02 3.25E-01 1.00E+02 1.00E+0								
37 6.73 3.46E-01 4.92E+01 5.52E-02 9.77E+01 5.86E+01 2.61E+01 38 7.23 3.21E-01 5.27E+01 6.36E-02 9.80E+01 6.09E+01 2.87E+01 39 7.77 2.82E-01 5.35E+01 6.93E-02 9.82E+01 6.33E+01 3.16E+01 40 8.35 2.70E-01 5.92E+01 8.24E-02 9.84E+01 6.59E+01 3.51E+01 41 8.97 2.71E-01 6.87E+01 1.03E-01 9.87E+01 6.89E+01 3.94E+01 42 9.64 2.56E-01 7.47E+01 1.20E-01 9.89E+01 7.23E+01 4.44E+01 43 10.3 2.47E-01 8.33E+01 1.44E-01 9.91E+01 7.60E+01 5.04E+01 44 11.1 2.15E-01 8.37E+01 1.55E-01 9.93E+01 7.97E+01 5.69E+01 45 11.9 2.22E-01 1.00E+02 2.00E-01 9.95E+01 8.41E+01 6.53E+01 46 12.8 2.14E-01 1.12E+02 2.39E-01 9.97E+01 8.90E+01 7.53E+01 47 13.8 1.92E-01 1.15E+02 2.66E-01 9.98E+01 9.42E+01 8.64E+01 48 14.8 1.90E-01 1.31E+02 3.25E-01 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02								
38       7.23       3.21E-01       5.27E+01       6.36E-02       9.80E+01       6.09E+01       2.87E+01         39       7.77       2.82E-01       5.35E+01       6.93E-02       9.82E+01       6.33E+01       3.16E+01         40       8.35       2.70E-01       5.92E+01       8.24E-02       9.84E+01       6.59E+01       3.51E+01         41       8.97       2.71E-01       6.87E+01       1.03E-01       9.67E+01       6.89E+01       3.94E+01         42       9.64       2.56E-01       7.47E+01       1.20E-01       9.89E+01       7.23E+01       4.44E+01         43       10.3       2.47E-01       8.33E+01       1.44E-01       9.91E+01       7.60E+01       5.04E+01         44       11.1       2.15E-01       8.37E+01       1.55E-01       9.93E+01       7.97E+01       5.69E+01         45       11.9       2.22E-01       1.00E+02       2.00E-01       9.95E+01       8.41E+01       6.53E+01         46       12.8       2.14E-01       1.12E+02       2.39E-01       9.97E+01       8.90E+01       7.53E+01         47       13.8       1.92E-01       1.15E+02       2.66E-01       9.98E+01       9.42E+01       8.64E+01         48 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
39       7.77       2.82E-01       5.35E+01       6.93E-02       9.82E+01       6.33E+01       3.16E+01         40       8.35       2.70E-01       5.92E+01       8.24E-02       9.84E+01       6.59E+01       3.51E+01         41       8.97       2.71E-01       6.87E+01       1.03E-01       9.87E+01       6.89E+01       3.94E+01         42       9.64       2.56E-01       7.47E+01       1.20E-01       9.89E+01       7.23E+01       4.44E+01         43       10.3       2.47E-01       8.33E+01       1.44E-01       9.91E+01       7.60E+01       5.04E+01         44       11.1       2.15E-01       8.37E+01       1.55E-01       9.93E+01       7.97E+01       5.69E+01         45       11.9       2.22E-01       1.00E+02       2.00E-01       9.95E+01       8.41E+01       6.53E+01         46       12.8       2.14E-01       1.12E+02       2.39E-01       9.97E+01       8.90E+01       7.53E+01         47       13.8       1.92E-01       1.15E+02       2.66E-01       9.98E+01       9.42E+01       8.64E+01         48       14.8       1.90E-01       1.31E+02       3.25E-01       1.00E+02       1.00E+02       1.00E+02         > <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
40       8.35       2.70E-01       5.92E+01       8.24E-02       9.84E+01       6.59E+01       3.51E+01         41       8.97       2.71E-01       6.87E+01       1.03E-01       9.87E+01       6.89E+01       3.94E+01         42       9.64       2.56E-01       7.47E+01       1.20E-01       9.89E+01       7.23E+01       4.44E+01         43       10.3       2.47E-01       8.33E+01       1.44E-01       9.91E+01       7.60E+01       5.04E+01         44       11.1       2.15E-01       8.37E+01       1.55E-01       9.93E+01       7.97E+01       5.69E+01         45       11.9       2.22E-01       1.00E+02       2.00E-01       9.95E+01       8.41E+01       6.53E+01         46       12.8       2.14E-01       1.12E+02       2.39E-01       9.97E+01       8.90E+01       7.53E+01         47       13.8       1.92E-01       1.15E+02       2.66E-01       9.98E+01       9.42E+01       8.64E+01         48       14.8       1.90E-01       1.31E+02       3.25E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
41 8.97 2.71E-01 6.87E+01 1.03E-01 9.87E+01 6.89E+01 3.94E+01 42 9.64 2.56E-01 7.47E+01 1.20E-01 9.89E+01 7.23E+01 4.44E+01 43 10.3 2.47E-01 8.33E+01 1.44E-01 9.91E+01 7.60E+01 5.04E+01 44 11.1 2.15E-01 8.37E+01 1.55E-01 9.93E+01 7.97E+01 5.69E+01 45 11.9 2.22E-01 1.00E+02 2.00E-01 9.95E+01 8.41E+01 6.53E+01 46 12.8 2.14E-01 1.12E+02 2.39E-01 9.97E+01 8.90E+01 7.53E+01 47 13.8 1.92E-01 1.15E+02 2.66E-01 9.98E+01 9.42E+01 8.64E+01 48 14.8 1.90E-01 1.31E+02 3.25E-01 1.00E+02 1.00E+02 1.00E+02 1.00E+02								
42       9.64       2.56E-01       7.47E+01       1.20E-01       9.89E+01       7.23E+01       4.44E+01         43       10.3       2.47E-01       8.33E+01       1.44E-01       9.91E+01       7.60E+01       5.04E+01         44       11.1       2.15E-01       8.37E+01       1.55E-01       9.93E+01       7.97E+01       5.69E+01         45       11.9       2.22E-01       1.00E+02       2.00E-01       9.95E+01       8.41E+01       6.53E+01         46       12.8       2.14E-01       1.12E+02       2.39E-01       9.97E+01       8.90E+01       7.53E+01         47       13.8       1.92E-01       1.15E+02       2.66E-01       9.98E+01       9.42E+01       8.64E+01         48       14.8       1.90E-01       1.31E+02       3.25E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
10.3 2.47E-01 8.33E+01 1.44E-01 9.91E+01 7.60E+01 5.04E+01 44 11.1 2.15E-01 8.37E+01 1.55E-01 9.93E+01 7.97E+01 5.69E+01 45 11.9 2.22E-01 1.00E+02 2.00E-01 9.95E+01 8.41E+01 6.53E+01 46 12.8 2.14E-01 1.12E+02 2.39E-01 9.97E+01 8.90E+01 7.53E+01 47 13.8 1.92E-01 1.15E+02 2.66E-01 9.98E+01 9.42E+01 8.64E+01 48 14.8 1.90E-01 1.31E+02 3.25E-01 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
44       11.1       2.15E-01       8.37E+01       1.55E-01       9.93E+01       7.97E+01       5.69E+01         45       11.9       2.22E-01       1.00E+02       2.00E-01       9.95E+01       8.41E+01       6.53E+01         46       12.8       2.14E-01       1.12E+02       2.39E-01       9.97E+01       8.90E+01       7.53E+01         47       13.8       1.92E-01       1.15E+02       2.66E-01       9.98E+01       9.42E+01       8.64E+01         48       14.8       1.90E-01       1.31E+02       3.25E-01       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
45 11.9 2.22E-01 1.00E+02 2.00E-01 9.95E+01 8.41E+01 6.53E+01 46 12.8 2.14E-01 1.12E+02 2.39E-01 9.97E+01 8.90E+01 7.53E+01 47 13.8 1.92E-01 1.15E+02 2.66E-01 9.98E+01 9.42E+01 8.64E+01 48 14.8 1.90E-01 1.31E+02 3.25E-01 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
46 12.8 2.14E-01 1.12E+02 2.39E-01 9.97E+01 8.90E+01 7.53E+01 47 13.8 1.92E-01 1.15E+02 2.66E-01 9.98E+01 9.42E+01 8.64E+01 48 14.8 1.90E-01 1.31E+02 3.25E-01 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
47 13.8 1.92E-01 1.15E+02 2.66E-01 9.98E+01 9.42E+01 8.64E+01 48 14.8 1.90E-01 1.31E+02 3.25E-01 1.00E+02 1.00E+02 1.00E+02  > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02								
48 14.8 1.90E-01 1.31E+02 3.25E-01 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02								
								-
TOTALS: 1.15E+02 2.25E+03 2.39E+00						1.00E+02	1.00E+02	1.00E+02
	TOTAL	S:	1.15E+02 2	2.25E+03 2.	39E+00			

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#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 7.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		DIL. KATI		erric. c			
		CONC	ENTRATIONS		CI.MI	JLATIVE %	
CIIV.I	D.T.		SURFACE	MASS	NUMBER	SURFACE	MASS
CHNL		NUMBER		2.40E-06	1.17E-01	3.50E-03	
<	. 185	5.16E-02	3.21E-02				2.35E-04
1	.504	3.30E-02	2.64E-02	2.22E-06	1.925-01	6.332-03	4.53E-04
$\frac{2}{3}$	.542	1.362-02	1.195-02	4.05E-03	3.025-01	1.13E-02	8.505-04
	.581	6.785-02	7.21E-02	6.995-06	4.56E-01	1.91E-02	1.542-03
4	.625	9.12E-02	1.12E-01	1.17E-05	6.62E-01	3.13E-02	2.68E-03
5	.673	1.21E-01	1.72E-01	1.93E-05	9.37E-01	5.01E-02	4.582-03
б	.723	1.55E-01	2.55E-01	3.07E-05	1.29E+00	7.795-02	7.59E-03
7	.777	2.21E-01	4.20E-01	5.44E-05	1.79E+00	1.245-01	1.29E-02
3	. 335	4.825-01	1.06E+00	1.47E-04	2.88E+00	2.39E-01	2.745-02
9	.837	1.07E+00	2.715+00	4.05E-04	5.30E+00	5.34E-01	6.71E-02
10	.931	1.83E+00	5.35E+00	8.605-01	9.15E+00	1.12E-00	1.515-01
11	1.)3	2.63E+00	S.38E+00	1.53E-03	1.515+01	2.08E+00	3.022-01
12	1.11	3.12E+00	1.225+01	2.26E-03	2.25E+01	3.41E+0')	
13	1.19	3.11E+00	1.53E+01	3.06E-03	3.025+31	5.085+00	8.235-01
		3.51E+00	1.83E+01	3.92E-03	3.815+71	7.07E+00	1.21E+00
1 4	1.23		2.03E+01	4.67E-03	4.585+01	9.28E+00	1.67E+0)
1.5	1.33	3.375+00			5.30E+01	1.17E+01	2.20E+00
16	1.18	3.20E+00	2.222+01	5.19E-03			2.825+30
17	1.59	2.93E+00	2.35E+01	6.24E-03	5.97E+)1		3.51E-00
13	1.71	2.635+00	2.47E+01	7.07E-03	6.5TE+01	1.705+01	
: 9	1.31	2.375+00	2.53E+01	7.795-03	7.11E+01	1.97E+01	4.27E+00
20	1.98	2.03E+00	2.51E+)i	8.28E-00	7.57E+01		5.032-00
21	2.12	1.73E+00	2.532+01	8.98E-03	7.93E+01	2.52E+01	5.378+30
.) ()	2.23	1.432-00	2.13E+01	9.26E-03	3.01E-01	2.79E+01	n.87E+00
23	2.45	1.235+00	2.34E+01	9.37E-03	3.592-):	3.042-01	7.81E+00
21	2.64	1.00E+00	2.25E+01	9.89E-03	8.32E-01		8.73E-00
25	2.33	7.362-01	1.995+01	9.42E-03	9.00E-01	3.50E+01	9.71E+00
2.3	3.05	6.37E-01	1.86E+01	9.47E-03	9.14E+01	3.71E+01	1.03E+01
2.7	3.27	1.37E-01	1.645+01	8.983-03	9.285+01	3.885+01	1.15E+01
28	3.52	3.61E-01	1.42E+01	3.32E-03	9.31E+01	1.045+01	1.23E+31
29	3.73	2.95E-01	1.33E+01	8.39E-73	9.40E-01	4.13E+01	1.32E+01
30	1.06	2.43E-01	1.26E+01	8.56E-03	9.46E+01	4.32E+01	1.40E+01
31	4.37	2.15 =-1) [	1.29E+01	9.42E-03	9.515+01	4.43E+31	1.49E+01
32	1.63	1.85E-01	1.28E+01	1.00E-02	9.55E+01	4.60E+01	1.59E+01
33	5.04	1.75E-01	1.40E+01	1.18E-02	9.595+01	4.75E+01	1.712+01
	5.12	1.77E-01	1.64E+01	1.48E-02	9.635+01	4.93E+01	1.85E+01
3 4		1.66E-01	1.78E+01	1.73E-02	9.67E+01		2.02E+01
35	5.82		1.75E+01	1.82E-02	9.70E+01	5.32E+01	2.20E+01
36	6.26	1.42E-01		2.30E-02	9.73E+01	5.54E+01	2.42E+01
37	6.73	1.44E-01	2.05E+01	_	9.76E+01	5.78E+01	2.68E+01
38	7.23	1.32E-01	2.17E+01	2.62E-02		6.06E+01	3.01E+01
39	7.77	1.36E-01	2.59E+01	3.35E-02			
40	8.35	1.28E-01	2.81E+01	3.91E-02	9.82E+01	6.36E+01	3.86E+01
41	8.97	1.27E-01	3.21E+01	4.80E-02	9.85E+01	6.71E+01	<del>-</del>
42	9.64	1.10E-01	3.23E+01	5.19E-02	9.88E+01	7.07E+01	4.37E+01
43	10.3	9.54E-02	3.22E+01	5.56E-02		7.42E+01	4.92E+01
41	11.1	9.78E-02	3.81E+01	7.08E-02	9.92E+01	7.83E+01	5.61E+01
45	11.9	9.60E-02	4.32E+01	8.62E-02	9.94E+01	8.30E+01	6.46E+01
46	12.8	8.40E-02	4.37E+01	9.36E-02	9.96E+01	8.78E+01	7.38E+01
47	13.8	9.15E-02		1.27E-01	9.98E+01	9.38E+01	8.62E+01
48	14.8	8.22E-02		1.41E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00		0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA			9.17E+02 1.				
1013		1111111	~ · · · · · · · · · · · · · · ·				

FILE NAME: EPX2 7.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: DI

					•	
	CONCE	NTRATIONS		CUM	ULATIVE %	
CHNL DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< .186	7.17E-02	4.14E-02	3.30E-06	1.06E-01	3.67E-03	2.40E-04
1 .50 +	1.02E-02	3.22E-02	2.71E-06	1.65E-01	6.33E-03	4.36E-04
2 .542	5.79E-02	5.35E-02	4.83E-06	2.51E-01	1.08E-02	7.86E-04
3 .531	8.34E-02	8.85E-02	8.59E-06	3.74E-01	1.81E-02	1.41E-03
4 .625	1.10E-01	1.36E-01	1.41E-05	5.372-01	2.93E-02	2.43E-03
5 .673	1.62E-01	2.31E-01	2.59E-05			4.31E-03
6 .723	2.36E-01	3.885-01	4.63E-05	1.125+00	8.05E-02	7.71E-03
7 .777	4.51E-01	8.57E-01	1.11E-04	1.795-00		1.58E-02
8 .835	1.26E+00	2.75E+00	3.83E-01			4.36E-02
9 .897	2.91E+00	7.38E+00	1.10E-03			1.24E-01
10 .964	4.56E+00	1.33E+01	2.15E-03	1.47E-01		2.79E-01
11 1.03	5.79E+00	1.96E+01	3.33E-03	2.32E+01	3.71E+00	5.25E-01
12 1.11	6.29E+00	2.45E+01	4.56E-03	3.25E+01	5.7 LE+00	8.55E-01
13 1.19	6.13E+00	2.76E+01	5.51E-03			1.252+00
11 1.28	6.00E+00	3.12E+01	6.70E-03		1.06E+01	1.745+00
15 1.38	5.36E+00	3.22E+01	7.415-03	5.83E+01	1.33E+01	2.285+00
16 1.48	4.65E+00	3.23E+01	7.995-03		1.595+01	2.965+00
17 1.59	4.07E+00	3.26E+01	8.66E-03			3.49E+0)
13 1.71	3.39E+00	3.13E+01	8.95E-03	7.825+01	2.12E+01	4.14E+00
	2.802+00	2.99E+01	9.175-03	8.03E+01	2.3 E+01	1.80E+0)
0.3 1 0.9			9.032-03			5.48E+00
<b></b>	2.23E+00	2.75E+01		6.36E+01	2.6)E+01	
21 2.12	1.795+00	2.55E+01	9.062-03		2.911+01	6.123+00
22 2.23	1.42E+00	2.34E+01	3.91E-03		3.005+01	6.75E+00
23 2.45	1.16E+00	2.20E+01	9.013-03	9.01E+01	3.13T+01	7.421+30
24 2.64	9.02E-01	1.93E+01	3.70E-03	9.14E+01		8.05E+00
23 2.83	6.80E-01	1.72E+01	8.14E-03	9.24E-01	•	
26 3.05	5.49E-01	1.60E+01	8.16E-03	9.325+01	3.62E÷01	9.23E+00
27 3.27	1.18E-01	1.51E+01	8.25E-03	9.39E+01	3.75E+01	9.835+00
28 3.52	3.65E-01	1.42E+01	8.35E-03		3.56E+01	1.045+01
29 3.78	3.28E-01	1.48E+01	9.325-03		3.99E+01	1.11E+01
30- 4.06	2.77E-01	1.44E+01	9.775-03	9.53E+01	4.10E+01	1.18E+01
31 4.37	2.53E-01	1.52E+01	1.11E-02	9.57E+01	4.23E+01	1.26E+01
32 4.69	2.44E-01	1.69E+01	1.32E-02	9.61E+01	4.37E+01	1.36E+01
33 5.04	2.28E-01	1.82E+01	1.53E-02	9.64E+01	4.525+01	1.47E+01
34 5.42	2.18E-01	2.02E+01	1.82E-02	9.67E+01	1.69E+01.	1.60E+01
35 5.82	2.11E-01	2.26E+01	2.19E-02	9.70E+01	4.87E+01	1.76E+01
36 6.26	1.97E-01	2.43E+01	2.53E-02	9.73E+01	5.07E+01	1.94E+01
37 6.73	1.93E-01	2.75E+01	3.08E-02	9.76E+01	5.30E+01	2.17E+01
38 7.23	1.84E-01	3.02E+01	3.64E-02	9.79E+01	5.55E+01	2.43E+01
39 7.77	1.69E-01	3.20E+01	4.15E-02	9.81E+01	5.82E+01	2.73E+01
40 8.35	1.66E-01	3.64E+01	5.07E-02	9.84E+01	6.12E+01	3.10E+01
41 8.97	1.65E-01	4.19E+01	6.26E-02	9.86E+01	6.46E+01	3.56E+01
42 9.64	1.53E-01	4.47E+01	7.19E-02	9.89E+01	6.83E+01	4.08E+01
43 10.3	1.43E-01	4.83E+01	8.35E-02	9.91E+01	7.23E+01	4.68E+01
44 11.1	1.28E-01	4.98E+01	9.25E-02	9.93E+01	7.64E+01	5.35E+01
45 11.9	1.33E-01	5.97E+01	1.19E-01	9.94E+01	8.14E+01	6.22E+01
46 12.8	1.37E-01	7.11E+01	1.52E-01	9.96E+01	8.73E+01	7.32E+01
47 13.8	1.22E-01	7.31E+01	1.68E-01	9.98E+01	9.33E+01	8.55E+01
48 14.8	1.17E-01	8.09E+01	2.00E-01	1.00E+02	1.00E+02	1.00E+02
> 15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTALS:	6.77E+01 1	.21E+03 1.	38E+00			

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 7.009 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		aavas			ar:vi	:	
~	<b>.</b>		ENTRATIONS	W . 22		CLATIVE %	V . C 2
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<b>&lt;</b>	136	1.64E-01	1.02E-01	7.59E-06	9.27E-02	3.33E-03	2.30E-04
1	.501	9.57E-02	7.66E-02	6.44E-06	1.47E-01	5.81E-03	4.25E-04
2	.512	1.44E-01	1.33E-01	1.20E-05	2.29E-01	1.02E-02	7.88E-04
3	.531	2.17E-01	2.31E-01	2.24E-05	3.50E-01	1.77E-02	1.47E-03
1	.625	2.73E-01	3.35E-01	3.19E-05	5.04E-01	2.87E-02	2.52E-03
5	.673	3.67E-01	5.23E-01	5.85E-95	7.11E-01	4.53E-02	4.30E-03
6 7	.723	5.02E-01	8.25E-01	9.95E-05	9.91E-01	7.27E-02	7.31E-03
	.777	9.33E-01	1.77E+00	2.30E-04	1.52E+00	1.31E-01	1.43E-02
8	.835	2.45E+00	5.37E+00	7.485-04	2.90E+00	3.06E-01	3.69E-02
9	.997	5.94E+00	1.50E+01	2.25E-03	6.25E+00	7.935-01	1.05E-01
10	.96!	9.81E+00	2.87E+01	1.61E-03	1.18E+01	1.74E+0C	2.45E-01
11	1.03	1.29E+C1	4.37E+01	7.55E-03	1.91E+01	3.16E+00	4.73E-01
12	1.11	1.48E÷01	5.735+01	1.07E-02	2.745+01	5.05E+00	7.93E-01
13	1.19	1.575+01	7.08E+01	1.412-02	3.635+01	7.36E+00	1.23E+00
1 +	1.23	1.56E+01	8.09E+01	1.745-02	4.51E+01	1.0)E+01	1.752+00
15	1.33	1.46E+01	3.77E+01	2.02E-02	5.335+01	1.295+01	2.36E+00
16	1.13	1.315-01	9.32E+01	2.315-02	6.09E+01	1.59E+01	3.06E+00
17	1.53	1.132+01	9.535+01	2.545-01	6.73E+01	1.902+01	3.835+00
. 5	1.71	1.01E+01	9.33E+01	2.68E-02	7.03E+01	2.212+01	4.845+00
1 )	1.3 +	3.38E+();)	9.25E+91	2.SIE-02	7.325+01	2.51E+01	5.50E+00
20	1.93	7.095+00	3.74E+01	2.332-32	3.22E+01	2.80E+01	6.335+00
2 i	2.12	5.84E+00	3.32E+01	2.453-02	3.33E+01	3.07E+91	7.27E÷06
) _	:	1.67E+00	7.872+01	2.93E-01	3.81E+01	3.32E-01	3.13E+00
1	1.17	3.71E+09	7.03E+01	2.842-02	9.025+01	3.55E+01	9.00E+0 \
2 1	2.34	2.74E+00	6.JiE+01	2.63E-02	9.18E+01	3.75E-01	9.83E+00
9.5	2.33	2.025+00	5.12E+ )1	2.425-02	9.29E+01	3.925+01	1.)65+)1
25	3.45	1.53E÷00	4.63E+01	2.3JE-01	9.385+01	4.07E+01	1.13E+)1
2	3.2-	1.17E+00	3.962+01	2.162-02	9.43E+01	1.202+01	1.195+)1
28	3.52	9.662-01	3.77E+01	2.21E-02	9.50E+01	4.32E+01	1.26E+01
29	3.78	7.31E-01	3.53E+01	2.23E-02	9.55E+01	4.44E+01	1.33E+01
30	1.06	6.56E-01	3.11E+01	2.31E-02	3.58E+01	4.55E+01	1.40E+01
31	1.3	5.93E-01	3.56E+01	2.60E-02	9.62E+01	4.63E+01	1.48E+01
32	1.59	5.57E-01	3.85E+01	3.02E-02	9.65E+01	4.79E+01	1.57E+01
33	5.04	5.38E-01	4.31E+01	3.632-02	9.68E+01	4.93E+01	1.68E+01
34	5.42	1.95E-01	4.58E+01	4.14E-02	9.71E+01	5.08E+01	1.80E+01
35	5.82	4.76E-01	5.08E+01	4.93E-02	9.73E+01	5.25E+01	1.95E+01
36	6.26	4.66E-01	5.75E+01	6.00E-02	9.76E+01	5.43E+01	2.13E+01
37	6.73	4.61E-01	6.56E+01	7.36E-02		5.65E+01	2.36E+01
38	7.23	4.30E-01	7.06E+01	8.51E-02	9.81E+01	5.88E+01	2.61E+01
39	7.77	3.93E-01	7.46E+01	9.67E-02	9.83E+01	6.12E+01	2.91E+01
40	8.35	3.94E-01	8.64E+01	1.20E-01	9.85E+01	6.40E+01	3.27E+01
41	8.97	3.91E-01	9.90E+01	1.48E-01	9.88E+01	6.73E+01	3.72E+01
42	9.64	3.70E-01	1.08E+02	1.74E-01	9.90E+01	7.08E+01	4.25E+01
43	10.3	3.33E-01	1.12E+02	1.94E-01	9.92E+01	7.45E+01	4.84E+01
44	11.1	3.15E-01	1.23E+02	2.28E-01	9.93E+01	7.85E+01	5.53E+01
45	11.9	3.30E-01	1.49E+02	2.97E-01	9.95E+01	8.34E+01	6.42E+01
46	12.8	2.95E-01	1.53E+02	3.29E-01	9.97E+01	8.84E+01	7.42E+01
47	13.8	2.69E-01	1.62E+02	3.72E-01	9.98E+01	9.37E+01	8.55E+01
48	14.8	2.80E-01	1.94E+02	4.80E-01	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
ATOTA	LS:	1.77E+02	3.06E+03 3.	30E+00			

FILE NAME: EPX2 8.000 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: DI

#### CUMULATIVE % CONCENTRATIONS NUMBER SURFACE MASS NUMBER SURFACE CHNL DIA SZEK 1.56E-02 9.68E-03 7.20E-07 3.38E-01 5.00E-03 . 186 9.00E-03 7.20E-03 6.06E-07 5.32E-01 8.72E-03 .504 1.42E-02 1.31E-02 1.18E-06 8.39E-01 1.55E-02 .512 2.05E-02 2.18E-02 2.11E-06 1.23E+00 2.67E-02 2.89E-02 3.55E-02 3.70E-06 1.91E+00 4.51E-02 3.46E-02 4.92E-02 5.52E-06 2.66E+00 7.05E-02 .673 5.41E-03 4.99E-02 8.21E-02 9.90E-06 3.74E+00 1.13E-01 9.28E-03 .723 5.80E-02 1.10E-01 1.43E-05 4.99E+00 1.70E-01 1.49E-02 6.83E-02 1.50E-01 2.08E-05 6.47E+00 2.47E-01 .335 7.82E-C2 1.93E-O1 2.97E-O5 8.15E+O9 3.50E-O1 3.46E-O2 .897 9.24E-02 2.70E-01 4.35E-05 1.02E+01 4.89E-01 5.16E-02 .961 1.09E-01 3.70E-01 6.39E-05 1.25E+01 6.80E-01 7.66E-02 11 1.03 1.36E-01 5.29E-01 9.82E-05 1.55E+01 9.53E-01 1.11 1.38E-01 7.11E-01 1.42E-04 1.895+01 1.32E+00 1.19 1.87E-01 9.74E-01 2.09E-04 2.29E+01 1.82E+00 1.28 1 1 2.03E-01 1.25E+00 2.87E-01 2.74E+01 2.47E+00 15 1.33 2.22E-01 1.54E+00 3.81E-01 3.22E+01 3.26E+00 1.48 2.43E-01 1.95E+00 5.18E-04 3.75E+01 4.27E+00 17 2.19E-01 2.31E+00 6.59E-01 4.29E+01 5.46E+00 2.44E-01 2.61E+00 8.00E-04 4.82E+01 6.81E+00 13 1.81 2.39E-01 2.95E+00 9.75E-01 5.33E+01 8.33E+00 1.93 2.37E-01 3.38E+00 1.20E-03 7.85E+01 1.01E+01 2.122.19E-01 3.60E+00 1.37E-33 3.32E-01 1.19E+01 2.36E-01 2.90E+00 1.60E-03 6.77E+01 1.40E+01 1.84E-01 1.02E+00 1.77E-03 7.16E+01 1.60E+01 2.61 1.48E-01 3.75E+00 1.78E-03 7.49E+01 1.80E+01 1.34E-01 3.90E+00 1.99E-03 7.77E+01 2.00E+01 5.46E+00 3.051.135-01 4.00E+00 2.18E-03 8.03E+01 2.21E+01 1.00E-01 3.92E+00 2.30E-03 8.25E+01 2.41E+01 3.52 3.64E+00 2.29E-03 8.42E+01 2.60E+01 8.11E+00 8.085-02 3.78 7.46E-02 3.88E+00 2.63E-03 (8.58E+01) 2.80E+01 9.14E+00 .3() 6.07E-02 3.65E+00 2.66E-03 ,8.72E+01 2.98E+01 31 4.37 5.12E-02 3.55E+00 2.78E-03 8.83E+01 3.17E+01 1.13E+01 4.59 4.33E+00 3.65E-03 8.94E+01 3.39E+01 5.41E-02 33 5.04 4.78E-02 4.41E+00 3.99E-03 9.05E+01 3.62E+01 1.43E+01 3 1 4.18E-02 4.78E+00 4.64E-03 9.14E+01 3.87E+01 1.61E+01 5.82 4.52E-02 5.58E+00 5.82E-03 9.24E+01 4.16E+01 1.83E+01 3.98E-02 5.67E+00 6.36E-03 9.33E+01 4.45E+01 2.08E+01 6.73 3.90E-02 6.41E+00 7.73E-03 9.41E+01 4.78E+01 2.39E+01 7.23 3.25E-02 6.17E+00 8.00E-03 9.48E+01 5.10E+01 2.70E+01 7.77 3.26E-02 7.16E+00 9.96E-03 9.55E+01 5.47E+01 3.09E+01 8.35 2.78E-02 7.05E+00 1.05E-02 9.61E+01 5.83E+01 3.50E+01 8.97 41 3.17E-02 9.26E+00 1.49E-02 9.68E+01 6.31E+01 4.08E+01 2.87E-02 9.68E+00 1.67E-02 9.74E+01 6.81E+01 4.74E+01 2.64E-02 1.03E+01 1.91E-02 9.80E+01 7.34E+01 5.48E+01 11.1 2.46E-02 1.11E+01 2.21E-02 9.85E+01 7.92E+01 6.35E+01 11.9 2.36E-02 1.23E+01 2.63E-02 9.91E+01 8.55E+01 7.38E+01 12.8 2.32E-02 1.39E+01 3.20E-02 9.96E+01 9.27E+01 8.63E+01 13.8 47 2.04E-02 1.41E+01 3.50E-02 1.00E+02 1.00E+02 1.00E+02 14.8 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4 4.62E+00 1.94E+02 2.56E-01 TOTALS:

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 8.001 01-01-1930

LAST CALIBRATION: 01-01-1930 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		CONC	ENTRATIONS		CUMU	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 186	1.22E-02	7.56E-03	5.62E-07	6.07E-01	6.30E-03	3.21E-04
1	.501	6.36E-03	5.092-03	1.285-07	9.23E-01	1.05E-02	5.65E-04
2	.512	9.72E-03	8.93E-03	8.11E-07	1.10E+00	1.80E-02	1.03E-03
3	.581	1.55E-02	1.652-02	1.60E-08	2.17E+00	3.17E-02	1.94E-03
1	.625	2.04E-02	2.50E-02	2.61E-06	3.18E+00	5.26E-02	3.43E-03
5	.673	2.68E-02	3.81E-02	4.27E-06	4.51E+30	8.43E-02	5.85E-03
6	.723	3.36E-02	5.53E-02	6.665-05	6.13E+00	1.30E-01	9.67E-03
7	.777	4.43E-02	3.41E-C2	1.09E-05	8.37E+00	2.00E-01	1.59E-02
S	.835	5.10E-02	1.125-01	1.56E-05	1.09E+01	2.93E-01	2.48E-02
3	. 997	4.88E-02	1.24E-01	1.35E-05		3.95E-01	3.53E-02
10	.961	5.08E-02	1.482-01	2.39E-05	1.58E+01	5.205-01	4.90E-02
11	1.03	5.32E-02	1.80E-01	3.105-05	1.85E+01	6.69E-01	6.67E-02
1'_	1.11	5.41E-02	2.11E-01	3.92E-05	2.12E+01	8.45E-01	8.90E-02
13	1.19	6.31E-02	2.84E-01	5.67E-05	2.43E+01	1.085+00	1.21E-01
11	1.28	6.43E-02	3.35E-01	7.175-05	2.75E+01	1.355+00	1.62E-01
1.5	1.38	6.43E-02	3.865-01	8.90E-05	3.07E+31	1.68E+00	2.135-01
1 1	1.13	7.15E-02	4.98E-81	1.23E-01	3.12E+01	2.09E+00	2.83E-01
1 -	1.59	7.20E-02	5.778-)!	1.53E-04	3.73E+31	2.57E+00	3.71E-01
1 -	1.71	7.13E-02	6.87E-01	1.93E-01	1.15E+01	3.15E+00	1.50E-01
	1.51	6.993-02	7.452-):	2.238-34	4.495-1	3.772+00	8.13E-01
•	1.98	7.135-02	9.85E-11	2.325-34	4.85E-01	1.50E+00	7.80E-01
		7.023-02	1.305-33	3.538-01	5.2 E-)i	5.345+00	9.83E-01
-	1.71	7.275-02	1.20E+11	1.362-01	5.56E+01	6.335+00	1.04E+00
<b>-</b> *-	2.45	7.015-02	1.332-	3.45E-04	5.915+01	7.44E+00	1.55 = +00
- :	2.31	6.32E-02	1.392+11	6.10E-04	6.22E+01	8.89E+00	1.90E+00
	2.83	5.48E-02	1.332+16	6.5 \E-04	6.49E-01	9.74E+00	2.285+00
23	3.05 3.27	5.63E-02	1.63E+00 1.79E+00	S.42E-C1	6.77E+01 7.04E+01	1.115+01	2.78E+00 3.31E+00
<b>-</b> '		5.32E-02	1.93E-00	9.80E-04	7.045-01 7.28E+01	1.26E+01 1.42E+01	3.96E+00
28 29	$\frac{3.52}{3.73}$	4.94E-02 4.63E-02	2.09E-00	1.13E-03 1.32E-03	7.512-01	1.42E+01	4.71E+00
30	1.06	3.95E-02	2.05E+30	1.39E-03	7.71E+01	1.775+01	5.51E+00
31	1.37	3.64E-02	2.135+00	1.59E-03	7.898+01	1.95E+01	6.41E+00
32	1.69	3.98E-02	2.76E-00	2.16E-03	8.08E+01	2.18E+01	7.65E+CO
33	5.04	4.02E-02	3.22E+00	2.71E-03	8.28E+01	2.45E+01	9.19E+00
3.1	5.42	3.68E-02	3.41E+00	3.08E-03	8.47E+01	2.73E+01	1.09E+01
3.5	5.82	3.17E-02	3.38E+00	3.29E-03	8.62E+01	3.01E+01	1.23E+01
36	6.26	3.14E-02	3.88E+00	4.05E-03	8.78E+01	3.33E+01	1.51E+01
37	6.73	2.83E-02	4.03E+00	4.52E-03	8.92E+01	3.67E+01	1.77E+01
38	7.23	2.52E-02	4.14E+00	4.99E-03	9.05E+01	4.01E+01	2.06E+01
39	7.77	2.57E-02	4.87E+00	6.32E-03	9.17E+01	4.42E+01	2.42E+01
40	8.35	2.10E-02	4.60E+00	6.41E-03	9.28E+01	4.80E+01	2.78E+01
41	8.97	2.15E-02	5.44E+00	8.14E-03	9.38E+01	5.26E+01	3.25E+01
42	9.64	2.11E-02	6.17E+00	9.93E-03	9.49E+01	5.77E+01	3.81E+01
43	10.3	1.93E-02	6.52E+00	1.13E-02	9.58E+01	6.31E+01	4.46E+01
4.1	11.1	-1.67E-02	6.50E+00	1.21E-02	9.67E+01	6.86E+01	5.15E+01
45	11.9	1.85E-02	8.32E+00	1.66E-02	9.76E+01	7.55E+01	6.09E+01
46	12.8	1.73E-02	8.98E+00	1.93E-02	9.84E+01	8.30E+01	7.19E+01
47	13.8	1.43E-02	8.57E+00	1.98E-02	9.91E+01	9.01E+01	8.32E+01
48	14.8	1.72E-02	1.19E+01	2.95E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	2.02E+00	1.20E+02 1.	75E-01			

FILE NAME: EPX2 8.002 01-01-1930 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: DI

		CONC	ENTRATIONS		CUM	CLATIVE %	
CHNL	DIA	NUMBER		MASS	NUMBER	SURFACE	M 483
< · · · · · · · · · · · · · · · · · · ·	. 136	1.09E-02		5.02E-07		6.30E-03	3.19E-04
ì	.504	5.38E-03		3.96E-07	9.422-01	1.075-02	5.71E-04
2	.512	9.12E-03	8.42E-03	7.61E-07	1.45E+00	1.85E-02	1.05E-03
3	. 581	1.27E-02	1.35E-02	1.31E-06	2.17E+0C	•	1.895-03
<b>t</b>	.625	1.67E-02	2.05E-02	2.13E-06	3.10E+00		3.24E-03
5	.673	2.36E-02	3.36E-02	3.77E-06	4.43E+30		5.64E-03
		3.10E-02	5.09E-02	6.11E-06	6.17E+00	1.29E-01	9.54E-03
6 7	.723	3.98E-01	7.57E-02	9.80E-06	8.402+00		1.58E-02
		3.79E-02	8.31E-02	1.16E-05	1.05E+01	2.772-01	2.31E-02
8	.835		1.12E-01	1.67E-05	1.30E+01	3.312-01	3.37E-02
9	.837	1.10E-02	1.12E-01	2.17E-05	1.56E+01	5.07E-01	4.75E-02
10	.964	1.61E-02		2.17E-03 2.58E-05	1.81E+01	6.165-01	6.395-02
11	1.03	4.42E-02	1.49E-01	3.51E-05	2.08E+01	8.22E-01	8.62E-02
12	1.11	4.85E-02	1.39E-01		2.38E+01	1.052+00	1.17E-01
13	1.19	5.33E-02	2.40E-01	4.79E-05			
1	1.23	5.82E-02	3.03E-01	6.49E-05	2.70E+01	1.33E+00	1.58E-01
1.5	1.38	5.98E-02	3.59E-01	8.27E-05	3.04E+31	1.650+00	2.10E-01
1 n	1.18	6.42E-02	4.45E-01	1.10E-04	3.40E÷01	2.08E+00	2.30E-01
1.7	1.59	6.33E-02	5.23E-01	1.39E-04	3.76E+01		3.69E-01
13	1.71	6.58E-01	6.032-01	1.74E-04	1.13E+01		1.795-01
19	1.81	6.31E-02	6.715-01	2.078-01	1.19E+01	3.738+00	6.112-01
20	1.98	6.43E-02	7.93E-01	2.62E-04	1.85E+01	1.50E+00	7.77E-01
2:	2.12	6.14E-02	3.135-01	3.26∑-0↓	5.21E-01		9.348-01
2.2	2.28	6.19E-02	1.07E+00	4.07E-01	5.572-01	₫.05E+00	1.24E+00
2.3	2.45	5.402-02	1.12E-00	4.592-04	5.90E-01	7.40E+0)	1.53E+05
2 +	2.61	5.63E-02	1.23E+00	5.432-01	6.22E+31	3.55E+00	1.33E+00
2.5	2.83	5.41E-02	1.37E+00	6.133-31		9.525-00	2.295+00
25	3.05	5.095-02	1.19E+00	7.56E-01		(1.125+0)	2.77E+00
27	3.27	1.67E-02	1.335+00	8.61E-04	7.07E+01	1.275+01	3.32E+00
28	3.52	3.82E-02	1.49E+00	8.73E-04	7.282+01	1.41E+01	3.87E+00
29	3.78	4.01E-02	1.305+00	1.14E-03	7.312+01	1.57E+01	4.60E+00
30	1.06	3.72E-02	1.93E+00	1.31E-03	7:72E+01	1.762+01	5.43E-00
31	1.37	3.49E-02	2.10E+00	1.53E-03	71.91E+01	1.93E+01	6.402+00
32	4.69	2.90E-02	2.01E+00	1.58E-03	8.08E+01		7.40E+00
33	5.04	3.16E-02	2.53E+00	2.13E-03	8.252+01	2.375+01	8.75E+00
31	5.42	3.08E-02	2.85E+00	2.58E-03	8.43E+01		1.04E+01
35	5.82	2.84E-02	3.04E+00	2.95E-03	8.59E+01	2.92E+01	1.23E+01
36	6.26	2.92E-02	3.59E+00	3.75E-03	8.75E+01	3.26E+01	1.47E+01
37	6.73	2.82E-02	4.01E+00	4.50E-03	8.912-01	3.63E+01	1.75E+01
38	7.23	2.28E-02	3.75E+00	4.52E-03	9.042+01	3.93E+01	2.04E+01
39	7.77	2.35E-02		5.78E-03	9.17E+01	4.40E+01	2.41E+01
10	8.35	1.86E-02	4.08E+00	5.68E-03	9.27E+01	4.78E+01	2.77E+01
41	8.97	1.88E-02	1.77E+00	7.14E-03	9.38E+01	5.22E+01	3.22E+01
42	9.64	1.86E-02	5.44E+00	8.74E-03	9.48E+01	5.73E+01	3.78E+01
+3	10.3	1.36E-02		7.91E-03	9.56E+01	6.16E+01	4.28E+01
11	11.1	1.66E-02		1.20E-02			5.04E+01
15	11.9	1.79E-02		1.61E-02			6.06E+01
46	12.8	1.54E-02		1.71E-02	9.81E+01		7.15E+01
17	13.8	1.43E-02		1.98E-02	9.92E+01		8.40E+01
18	14.8	1.46E-02		2.51E-02			1.00E+02
19	15.4	0.00E+00	-	0.00E+00			1.00E+02
· TOTA			1.07E+02 1				
· IOIA	LJ.	11102100					

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 8.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1

	cov.c.	CNTDATIONS		CUM	11 AMTUD A	
CUNI DIA		ENTRATIONS	WACC		JLATIVE %	
CHNL DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< .486	8.88E-03		4.08E-07		6.46E-03	3.33E-04
1 .504	5.04E-03	4.03E-03	3.39E-07	9.19E-01		6.09E-04
2 .542	6.72E-03		5.61E-07	1.36E+00		1.07E-03
3 .581	8.52E-03		8.78E-07	1.92E+00		1.78E-03
4 .625	1.28E-02	1.58E-02	1.64E-06	2.77E+00	4.77E-02	3.12E-03
5 .673	1.67E-02	2.37E-02	2.66E-06	3.87E+00	7.56E-02	5.29E-03
6 .723	2.26E-02		4.47E-06	5.36E+00	1.19E-01	8.93E-03
7 .777	3.02E-02	5.74E-02	7.44E-06		1.87E-01	1.50E-02
8 .835	3.19E-02	7.00E-02	9.75E-06	9.47E+00	2.69E-01	2.29E-02
9 .897	3.65E-02	9.24E-02	1.38E-05	1.19E+01	3.78E-01	3.42E-02
10 .964	3.91E-02	1.14E-01	1.84E-05	1.45E+01	5.12E-01	4.92E-02
11 1.03	3.77E-02	1.27E-01	2.20E-05	1.69E+01	6.62E-01	6.71E-02
12 1.11	1.07E-02	1.59E-01	2.95E-05	1.96E+01	8.48E-01	9.11E-02
13 1.19	4.57E-02	2.06E-01	4.11E-05	2.26E+01	1.09E+00	1.25E-01
14 1.28	5.30E-02	2.76E-01	5.92E-05	2.61E+01	1.41E+00	1.73E-01
15 1.39	5.21E-02	3.13E-01	7.21E-05		1.78E+00	2.31E-01
16 1.18	5.99E-02	4.15E-01	1.03E-04		2.27E+00	3.15E-01
17 1.59	6.16E-02	4.93E-01	1.31E-04	3.76E+01	2.85E+00	4.22E-01
18 1.71	5.37E-02	5.42E-01	1.55E-01		3.19E+00	5.48E-01
19 1.84	6.13E-02	6.55E-01	2.01E-04	4.55E+01		7.11E-01
20 1.98	5.92E-02	7.30E-01	2.11E-C4	4.91E+01		9.08E-01
21 2.12	6.01E-02	3.56E-01	3.04E-04	5.34E+01	6.12E+00	1.10E+00
22 2.28	5.02E-02	9.23E-01	3.52E-01	5.71E+01	7.21E+00	1.44E+00
23 2.15	5.71E-02	1.08E+00	4.44E-04		8.48E+00	1.80E+00
24 2.64						2.17E+00
	1.61E-02	1.01E+00	4.48E-01	6.39E+01		
25 2.83	1.0KE-02	1.08E+00	5.13E-04	6.63E+01	1.10E+01	2.89E+00
26 2.05	1,21E-02	1.23E+00	6.26E-01	6.96E+01	1.24E+01	3.10E+00
27 3.27	3.90E-02	1.32E+00	7.19E-04	7.21E+01	1.39E+01	3.68E+00
28 3.52	3.66E-02	1.43E+30	8.38E-04	7.152+01	1.36E+31	4.37E+00
19 3.78	3.26E-02	1.47E+00	9.27E-04	7.67E+01	1.74E+01	5.12E+00
30 1.06	3.40E-02	1.77E+00	1.20E-03	7.89E+01	1.91E+01	6.16E+00
31 4.37	2.82E-02	1.69E+0)	1.23E-03	8.03E+01	2.14E+01	7.10E+00
32 4.69	2.05E-02	1.84E+00	1.44E-03	8.25E+01	2.36E+01	8.27E+00
33 5.04	2.71E-02	2.17E+00	1.83E-03	8.43E+01	2.51E+01	9.75E+00
34 5.12	2.32E-02	2.14E+00	1.94E-03	8.59E+01	2.86E+01	1.13E+01
35 5.82	2.28E-02	2.43E+00	2.36E-03	8.74E+01	3.15E+01	1.33E+01
36 6.26	2.06E-02	2.54E+00	2.66E-03	8.87E+01	3.45E+01	1.54E+01
37 6.73	2.03E-02	2.89E+00	3.24E-03	9.01E+01	3.79E+01	1.81E+01
38 7.23	1.79E-02	2.94E+00	3.54E-03	9.13E+01	4.13E+01	2.10E+01
39 7.77	1.62E-02	3.08E+00	3.98E-03	9.23E+01	4.50E+01	2.42E+01
10 8.35	1.55E-02	3.39E+00	4.72E-03	9.33E+01	4.90E+01	2.80E+01
41 8.97	1.52E-02	3.86E+00	5.77E-03	9.44E+01	5.35E+01	3.28E+01
42 9.64	1.44E-02	4.21E+00	6.77E-03	9.53E+01	5.81E+01	3.83E+01
43 10.3	1.27E-02	4.29E+00	7.42E-03	9.61E+01	6.35E+01	4.43E+01
44 11.1	1.08E-02	4.21E+00	7.82E-03	9.69E+01	6.84E+01	5.07E+01
45 11.9	1.32E-02	5.94E+00	1.19E-02	9.77E+01	7.54E+01	6.03E+01
46 12.8	1.07E-02	5.55E+00	1.19E-02	9.84E+01	8.19E+01	7.00E+01
47 13.8	1.20E-02	7.20E+00	1.66E-02	9.92E+01	9.04E+01	8.35E+01
48 14.8	1.18E-02	8.15E+00	2.02E-02	1.00E+02	1.00E+02	1.00E+02
> 15.1	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTALS:		3.51E+01 1.				

FILE NAME: EPX2 8.004 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC	ENTRATIONS		CUM	JLATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	7.56E-03	4.67E-03	3.47E-07	5.27E-01	6.29E-03	3.31E-04
1	.504	4.20E-03	3.36E-03	2.83E-07	8.19E-01	1.08E-02	6.01E-04
2	.542	6.00E-03	5.54E-03	5.01E-07	1.24E+00	1.83E-02	1.08E-03
3	.581	7.56E-03	8.04E-03	7.79E-07	1.76E+00	2.91E-02	1.82E-03
4	.625	1.08E-02	1.33E-02	1.38E-06	2.52E+00	4.69E-02	3.14E-03
5	.673	1.60E-02	2.27E-02	2.55E-06	3.63E+00	7.75E-02	5.57E-03
6	.723	1.87E-02	3.08E-02	3.71E-06	4.93E+00	1.19E-01	9.11E-03
7	.777	2.58E-02	4.90E-02	6.35E-06	6.73E+00	1.85E-01	1.52E-02
8	.835	2.92E-02	6.39E-02	8.90E-06	8.76E+00	2.71E-01	2.36E-02
9	.897	3.47E-02	8.78E-02	1.31E-05	1.12E+01	3.89E-01	3.62E-02
10	.964	3.38E-02	9.90E-02	1.59E-05	1.35E+01	5.22E-01	5.14E-02
11	1.03	3.64E-02	1.23E-01	2.12E-05	1.61E+01	6.87E-01	7.16E-02
12	1.11	4.04E-02	1.58E-01	2.93E-05	1.89E+01	9.00E-01	9.95E-02
13	1.19	1.78E-02	2.15E-01	4.29E-05	2.22E+01	1.19E+00	1.40E-01
14	1.28	5.18E-02	2.70E-01	5.78E-05	2.58E+01	1.55E+00	1.96E-01
15	1.38	5.47E-02	3.29E-01	7.57E-05	2.96E+01	1.99E+00	2.68E-01
16	1.18	5.84E-02	4.05E-01	1.00E-04	3.37E+01	2.54E+00	3.63E-01
17	1.39	5.95E-02	4.77E-01	1.27E-04	3.79E+01	3.18E+00	4.84E-01
13	1.71	6.23E-02	5.76E-01	1.65E-04	4.22E+01	3.95E+00	6.41E-01
19	1.44	6.31E-02	8.74E-01	2.07E-04	4.66E+01	1.86E+00	8.39E-01
20	1.93	6.18E-02	7.62E-01	2.52E-01	5.09E+01	5.89E+00	1.08E+00
21	2.12	5.59E-02	7.96E-01	2.83E-04	5.48E±01	6.96E+00	1.37E+00
22	2.22	5.60E-02	9.21E-01	0.51E-04	8.87 <b>E</b> +01	8.20E+00	1.63E+00
23	2.43	3.03E-02	1.02F+00	4.16E-04	6.24F+01	9.58E+00	2.08E+00
2 i	2.51	4.71E-02	1.04E+00	1.57E-01	6.37E+(1	1.10E+01	2.52F+00
2.5	2.83	4.57E-02	1.165-00	5.48E-04	6.89E+01	1,25E+01	3.0(E+0)
28	3.05	:.20E-02	1.23E+00	6.21E-01	7.18E+01	1.42E+01	3.63E+00
27	3.27	3.76E-02	1.27E+00	6.93E-04	7.45E+01	11.89E-01	1.19E+70
23	3.52	3.34E-02	1.30E+00	7.64E-01	7.68E+01	1.78E+01	5.00E+00
29	3.78	3.07E-02	1.382+00	8.73E-04	7.89E+01	1.95E+01	3.35E+00
30	1.06	2.63E-02	1.39E+00	9.43E-04	8.08E+01	2.11E+01	6.75E+00
31	4.37	2.46E-02	1.48E-00	1.08E-03	8.25E+01	2.33E+01	7.78E+00
. 35	1.69	2.66E-02	1.85E+00	1.45E-03	3.44E+01	2.59E+01	9.16E+00
33	5.04	2.18E-02	1.75E+00	1.47E-03	9.59E+01	2.s2E+01	1.06E+01
34	5.42	2.15E-02	1.99E+00	1.80E-03	8.74E+01	3.09E+01	1.23E+01
35	5.82	1.79E-02	1.91E+00	1.85E-03	8.86E+01	3.34E+01	1.40E+01
36	5.26	1.90E-02	2.34E+00	2.44E-03	8.99E+01	3.66E+01	1.61E+01
37	6.73	1.68E-02	2.39E+00	2.68E-03	9.11E+01	3.98E+01	1.89E+01
38	7.23	1.62E-02	2.66E+00	3.21E-03	9.22E+01	4.34E+01	2.20E+01
39	7.77	1.36E-02	2.57E+00	3.34E-03	9.32E+01	4.68E+01	2.5CE+01
40	8.35	1.36E-02	2.97E+00	4.14E-03	9.41E+01	5.03E+01	2.91E+01
41	8.97	1.18E-02	2.93E+00	4.45E-03	9.49E+01	5.48E+01	3.34E+01
42	9.64	9.72E-03	2.84E+00	4.57E-03	9.56E+01	5.87E+01	3.77E+01
43	10.3	1.21E-02	1.09E+00	7.07E-03	9.65E+01	6.42E+01	4.45E+01
14	11.1	1.03E-02	4.02E+00	7.47E-03	9.72E+01	6.96E+01	5.16E+01
45	11.9	1.16E-02	5.24E+00	1.05E-02	9.80E+01	7.66E+01	6.15E+01
46	12.8	9.60E-03	4.99E+00	1.07E-02	9.87E+01	8.33E+01	7.17E+01
47	13.8	9.96E-03	5.98E+00	1.38E-02	9.94E+01	9.14E+31	3.49E+01
48	14.8	9.24E-03	6.41E+00	1.59E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.0CE+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
LATOT	<i>.</i> S:	1.44E+00 7	.43E+01 1.	05E-01			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 8.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

				INTRATIONS			JLATIVE %	
	CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
	<	. 486	8.52E-03	5.31E-03	3.96E-07	3.85E-01	4.75E-03	2.52E-04
	1	.504	5.64E-03	4.51E-03	3.80E-07	6.40E-01	8.79E-03	4.93E-04
	2	.512	8.16E-03	7.53E-03	6.81E-07	1.01E+00	1.55E-02	9.27E-04
	3	.581	1.13E-02	1.20E-02	1.16E-06	1.52E+00	2.63E-02	1.67E-03
	-1	.625	1.48E-02	1.81E-02	1.89E-06	2.18E+00	4.25E-02	2.87E-03
	5	.673	2.48E-02	3.53E-02	3.97E-06	3.31E+00	7.41E-02	5.39E-03
	6	.723	3.05E-02	5.01E-02	6.04E-06	4.68E+00	1.19E-01	9.24E-03
	7	.777	3.48E-02	6.61E-02	8.56E-06	6.26E+00	1.78E-01	1.47E-02
	8	.835	4.08E-02	8.95E-02	1.25E-05	8.10E+00	2.58E-01	2.26E-02
	9	.897	4.50E-02	1.14E-01	1.71E-05	1.01E+01	3.60E-01	3.35E-02
	10	.964	4.74E-02	1.39E-01	2.23E-05	1.23E+01	1.84E-01	4.77E-02
	11	1.03	5.14E-02	1.73E-01	3.00E-05	1.46E+0!	6.39E-01	6.67E-02
	12	1.11	6.3SE-02	2.49E-01	4.62E-05	1.75E+01	8.62E-01	9.62E-02
	13	1.19	7.33E-02	3.30E-01	6.59E-05	2.08E+01	1.15E+00	1.38E-01
	1 4	1.28	8.50E-02	4.42E-01	9.48E-05	2.46E+01	1.55E+00	1.98E-01
	15	1.38	8.87E-02	5.33E-01	1.23E-04	2.86E+01	2.03E+00	2.76E-C1
	16	1.48	9.60E-02	6.56E-01	1.65E-04	3.30E+01	2.63E+00	3.81E-01
	1 -	1.59	9.89E-02	7.92E-01	2.11E-04	3.74E+01	3.33E+00	5.15E-01
	18	1.71	1.00E-01	9.25E-01	2.65E-04	4.20E+01	1.16E+00	6.84E-01
	19	1.34	1.07E-01	1.15E+00	3.52E-04	4.88E+01	5.19E+00	9.08E-01
	20	1.98	9.89E-02	1.22E+00	4.03E-C4	5.13E+01	6.18E+00	1.16F+00
	21	2.12	9.20E-02	1.31E+00	4.65E-04	5.50E+01	7.15E+00	1.18E+(0
	25	2.28	9.9SE-02	1.84E+00	6.16E-04	6.00E+01	2.91E+00	1.86E+00
	23	2.45	9.20E-02	1.78E-00	7.17E-04	6.40E+31	1.07E+01	2.31E+0/
	2:	2. 1	8.23E-02	1.80E+00	7.94E-04	0.T9E+01	1.21E+01	1.81E+00
	4.7	2.52	6.785-92	1.725-30	3.12E-04	7.09E+:i	1.00E+01	3.34E+01
	2:	3.75	5.36E-02	1.57E-00	7.97E-04	7.33E+01	1.70E+01	3.81E+00
	2.7	3.47	5.63E-02	1.30E+00	1.04E-03	7.59E+01	1.87E+01	4.51E+00
	23	3.52	1.93E-02	1.92E+00	1.13E-03	7.31E-01	1.85E+91	5.20E+00
•	9	3.78	4.0JE-02	1.82E+00	1.15E-33	7.99E+01	2.01E+01	8.98 <b>E+</b> 00
	3.3	1.06	3.62E-02	1.38E+00	1.28E-03	3.16E+01	1.15E+01	6.77E+00
	3.1	1.37	3.59E-01	1.15E+00	1.57E-03	3.32E-01	27E+01	7.76E+00
	32	4.69	3.42E-02	2.37E+00	1.85E-03	8.47E+01	2.58E+01	8.95E+00
	2.2	5.01	2.36E-02	2.29E-00	1.92E-03	8.60E+01	2.79E+01	1.02E+01
	24	5.12	2.92E-02	2.70E+00	2.44E-03	3.73E+01	3.03E+01	1.17E+01
	35	5.82	2.9 FE-02	3.14E+00	3.05E-03	8.87E+01	3.3i E+01	1.37E+01
	36	6.26	2.93E-02	3.61E+00	3.77E-03	9.00E+01	3.63E+01	1.61E+01
	3.7	6.73	2.68E-02	3.81E+00	4.27E-03	9.12E+01	3.97E+01	1.88E+01
	38	7.23	2.51E-02	4.12E+00	4.97E-03	9.23E+01	4.34E+01	2.19E+01
	39	7.77	2.47E-02	4.69E+00	6.08E-03	9.34E+01	4.76E+01	2.58E+01
	10	8.35	2.14E-02	4.68E+00	6.52E-03	9.44E+01	5.13E+01	3.00E+01
	11	8.97	1.84E-02	4.65E+00	6.95E-03	9.52E+01	5.60E+01	3.44E+01
	42	9.64	1.51E-02	4.42E+00	7.11E-03	9.59E+01	5.99E+01	3.89E+01
	13	10.3	1.69E-02	5.71E+00	9.87E-03	9.67E+01	6.50E+01	4.52E+01
	4.4	11.1	1.34E-02	5.24E+00	9.73E-03	9.73E+01	6.97E+01	5.14E+01
	15	11.9	1.50E-02	6.75E+00	1.35E-02	9.80E+01	7.58E+01	6.00E+01
	16	12.8	1.55E-02	9.05E+00	1.73E-02	9.87E+01	8.30E+01	7.09E+01
	47	13.8	1.44E-02	8.65E+00	1.99E-02	9.93E+01	9.07E+01	8.36E+01
	18	14.8	1.50E-02	1.04E+01	2.57E-02	1.00E+02	1.00E+02	1.00E+02
	>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+62
	TOTAL		2.21E+00 1	.12E+02 1.	57E-01			

FILE NAME: EPX2 8.006 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

					allul	// A TO T W TO A	
	<b>-</b> .		ENTRATIONS	MACC		JLATIVE %	MASS
CHNL D		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS 3.07E-04
	486	1.04E-02	6.46E-03	4.80E-07 3.80E-07	4.22E-01 6.50E-01	5.65E-03 9.60E-03	5.50E-04
	504	5.64E-03	4.51E-03			1.63E-02	
	542	8.28E-03	7.65E-03	6.91E-07	9.85E-01 1.51E+00	2.85E-02	9.93E-04 1.86E-03
-	581	1.31E-02	1.39E-02	1.35E-06 2.15E-06	2.19E+00	4.65E-02	3.23E-03
	625	1.68E-02 2.28E-02	2.06E-02	3.64E-06	3.11E+00	7.49E-02	5.56E-03
	673	• • • • • •	3.24E-02 4.38E-02	5.28E-06	4.19E+00	1.13E-01	8.95E-03
	723	2.66E-02 3.42E-02	6.49E-02	8.42E-06	5.57E+00	1.70E-01	1.43E-02
	777 925	4.02E-02	8.81E-02	1.23E-05	7.20E+00	2.47E-01	2.22E-02
	835 897	4.45E-02	1.13E-01	1.69E-05	9.00E+00	3.46E-01	3.30E-02
	964	5.03E-02	1.47E-01	2.36E-05	1.10E+01	1.75E-01	4.81E-02
-	.03	5.72E-02	1.93E-01	3.34E-05	1.33E+01	6.44E-01	6.95E-02
•	.11	7.30E-02	2.85E-01	5.29E-05	1.63E+01	8.93E-01	1.03E-01
	.19	8.23E-02	3.71E-01	7.40E-05	1.96E+01	1.22E+00	1.51E-01
	. 28	9.26E-02	4.82E-01	1.03E-04	2.34E+01	1.64E+00	2.17E-01
	.38	1.14E-01	6.82E-01	1.57E-04	2.8CE+01	2.24E+00	3.18E-01
	. 18	1.20E-01	8.30E-01	2.06E-04	3.28E+01	2.96E+00	4.49E-01
-	. 59	1.24E-01	9.96E-01	2.65E-04	3.78E+01	3.84E+00	6.19E-01
	.71	1.32E-01	1.22E+00	3.50E-01	4.32E+01	4.91E+00	8.43E-01
	.31	1.27E-01	1.36E+00	4.18E-04	4.87E+01	6.10E+00	1.11E+00
	.98	1.22E-01	1.51E+00	4.97E-04	5.33E+01	7.42E+00	1.43E+00
	.12	1.15E-01	1.63E+00	5.80E-04	5.79E+01	8.85E+00	1.80E+00
CO C	.28	1.02E-01	1.67E+00	6.36E-04	6.10E+01	1.03E+01	2.21E+00
	. 45	1.02E-01	1.94E+00	7.94E-04	6.61E+01	1.20E+01	2.72E+0.
	. ;;	9.19E-02	2.01E+00	8.87E-04	6.98E+01	1.38E+01	3.28E+00
	.33	7.24E-62	1.33E+00	8.67E-74	7.18E+01		3.84E+00
	.05	7.145-02	2.09E+00	1.06E-03	7.57E+01		4.52E+00
	.27	5.77E-02	1.95E+00	1.06E-03		1.89E+01	5.20E-00
	. 5 2	5.24E-02	2.04E+00	1.20E-03		2.07E+01	5.97E+00
	.78	1.38E-02	1.97E+00	1.24E-03		2.24E-01	6.77E+C.
	.06	3.79E-02	1.97E+00	1.34E-03		·2.41E+01	7.62E+00
	.37	3.71E-02	2.23E+00	1.62E-03	8.495+01	2.51E+01	8.66E+06
	.69	3.46E-02	2.40E-00	1.88E-03	8.63E+01	2.82E+01	9.86E+00
	.04	3.54E-02	2.83E-00	2.38E-03	8.77E+01	3.07E+01	1.14E+41
	.42	3.32E-02	3.07E+00	2.78E-03	8.91E+01	3.34E+01	1.32E+01
	.82	2.76E-02	2.95E+00	2.86E-03	9.02E+01	3.59E+01	1.50E+01
	.26	2.76E-02	3.40E+00	3.55E-03	9.13E+01	3.89E+01	1.73E+31
<b>3</b> 7 6	.73	2.66E-02	3.79E+00	4.25E-03			2.00E+61
38 7	.23	1.99E-02	3.27E+00	3.95E-03			2.25E+01
39 7	.77	2.09E-02	3.96E+00	5.14E-03	9.40E+01	4.86E+01	2.58E-01
40 8	.35	2.05E-02	4.50E+00	6.26E-03	9.49E+01	5.25E+01	2.98E+01
41 8	.97	1.70E-02	4.31E+00	6.45E-03			3.40E+01
12 9	.64	1.74E-02	5.09E+00	8.18E-03			3.92E+01
43 10	0.3	1.82E-02	6.16E+00	1.06E-02	9.70E+01	6.61E+01	4.60E+01
	1.1	1.54E-02	5.99E+00	1.11E-02	9.76E+01		5.31E+01
	1.9	1.72E-02	7.73E+00	1.54E-02			6.30E+C1
	2.8	1.56E-02	8.11E+00	1.74E-02	9.89E+01		7.41E+01
47 1	3.8	1.30E-02	7.78E+00	1.79E-02	9.95E+01	9.21E+01	8.56E+01
	4.8	1.31E-02	9.07E+00	2.25E-02	1.00E+02	1.00E+02	1.00E+02
	5.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTALS	:	2.47E+00 1	1.14E+02 1.	56E-01			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 8.007 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		CONC	CNTDATIONS		CUM	II ATTUE W	
OUNT	DTA		ENTRATIONS	MAGG		JLATIVE %	WA 6.6
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	9.84E-03	6.08E-03	4.52E-07	3.89E-01	5.58E-03	3.07E-04
1	.504	5.28E-03	4.22E-03	3.55E-07	5.97E-01		5.48E-04
2 3	.542	8.52E-03	7.87E-03	7.11E-07	9.34E-01	1.67E-02	1.03E-Q3
	.581	1.26E-02	1.34E-02	1.30E-06	1.43E+00	2.90E-02	1.91E-03
4	.625	1.70E-02	2.09E-02	2.18E-06	2.10E+00	4.82E-02	3.39E-03
5	.673	2.00E-02	2.85E-02	3.20E-06	2.90E+00	7.43E-02	5.56E-03
6	.723	2.77E-02	4.56E-02	5.50E-06		1.16E-01	9.29E-03
7	.777	3.24E-02	6.15E-02	7.97E-06	5.27E+00	1.73E-01	1.47E-02
8	.835	3.94E-02	8.63E-02	1.20E-05	6.83E+00	2.52E-01	2.29E-02
9	.897	3.85E-02	9.76E-02	1.46E-05	8.35E+00	3.41E-01	3.28E-02
10	.964	5.44E-02	1.59E-01	2.56E-05	1.05E+01	4.87E-01	5.01E-02
. 11	1.03	6.02E-02	2.03E-01	3.52E-05	1.29E+01		7.40E-02
12	1.11	7.24E-02	2.82E-01	5.24E-05	1.57E+01	9.33E-01	1.10E-01
13	1.19	8.63E-02	3.88E-01	7.75E-05	1.91E+01	1.29E+00	1.62E-01
1 4	1.28	1.10E-01	5.72E-01	1.23E-04	2.35E+01	1.81E+00	2.45E-01
15	1.38	1.20E-01	7.18E-01	1.66E-04	2.82E+01	2.47E+00	3.58E-01
16	1.48	1.17E-01	8.13E-01	2.01E-04	3.28E+01	3.22E+00	4.94E-01
17	1.59	1.36E-01	1.09E+00	2.89E-04	3.82E+01	4.22E+00	6.91E-01
13	1.71	1.37E-01	1.27E+00	3.63E-01	4.36E+01	5.38E+00	9.37E-01
19	1.51	1.37E-01	1.46E+00	4.48E-04	4.90E+01	6.72E+00	1.24E+00
20	1.93	1.34E-01	1.65E+00	5.16E-01	5.43E+01	8.24E+00	1.61E+90
21	2.12	1.23E-01	1.75E+00	6.21E-04	5.92E+01	9.85E+00	1.03E+00
22	2.28	1.20E-01	1.97E+00	7.51E-04	6.39E+01	1.17E+01	2.5 (E+00
23	2.15	1.13E-31	2.14E+00	8.78E-04	6.83E+01	1.1:3-01	0.145-00
21	<u> </u>	9.98E-02	1.97E+00	8.66E-01	7.16E+01	1.5 F+01	a.7aE+00
4.5	2.30	7.81E-62	1.90E+00	∄. ζ <b>Ξ-</b>	7 <del>.</del>	1.725-01	:.34E-0
20	₹. ₹	0.61E-00	1.90 E+ "	`. f. <b>E-</b> '.	~ . ~ ? E + ^ 1	1.345+11	₹.31E+00
4 =		6.185-12	1. 1 E-11	1.1.E-03	€E-: 1	2.(GE-01	3.75E+0.
_ '-		€.€&E+11	2.19E+00	1.26E-00	8.22E-01	1.19E+01	G.€55-00
2.9		:.:2E-72	1.61E+00	1.14E-03	S.37E+01	2.15E+01	7. 12F+06
	₹. €	3.17E-02	1.80E+00	1.12E-00	8.81E+01	2.62E+01	9.25 <b>E+</b> 00
3.1		J.7:E-02	2.25E-0J	1.54E-03	9.66E+01	2.822+01	3.36E+10
32	i. 33	3.00E-01	2.09E-00	1.63E-03	8.78E+01	3.01E+01	1.05E+01
33	5.11	0.20E-02	2.57E-00	2.16E-03	8.90E-01	3.25E+01	1.19E+01
3.4	5.12	2.70E-02	2.50E+00	2.18E-03	9.01E+01	3.48E+01	1.35E+01
25	5.82	2.78E-02	2.97E+00	2.89E-03	9.12E+01	3.75E+01	1.54E+01
<b>ti</b>	6.26	2.38E-02	2.93E+00	3.06E-03	9.21E+01	4.02E+01	1.75E+01
27	6.73	2.57E-02	3.66E+00	4.10E-03	9.32E+01	4.36E+01	2.03E+01
33	7.23	2.00E-02	3.29E+00	3.97E-03	9.40E+01	1.66E+01	2.30E+01
39	7.77	1.90E-02	3.60E+00	4.66E-03	9.47E+01	4.99E+01	2.61E+01
4.0	8.35	1.51E-02	3.31E+00	4.61E-03	9.53E+01	5.29E+01	2.93E+Q1
11	8.97	1.73E-02	4.37E+00	6.55E-03	9.60E+01	5.69E+01	3.37E+01
12	9.64	1.50E-02	4.39E÷00	7.05E-03	9.66E+01	6.10E+01	3.85E+01
13	10.3	1.57E-02	5.31E+00	9.17E-03	9.72E+01	6.53E+01	4.47E+01
4.4	11.1	1.44E-02	5.61E+00	1.04E-02	9.78E+01	7.10E+01	5.18E+01
45	11.9	1.73E-02	7.78E+00	1.55E-02	9.84E+01	7.81E+01	6.23E+01
46	12.8	1.25E-02	6.49E+00	1.39E-02	9.89E+01	8.41E+01	7.1SE+01
47	13.8	1.31E-02	7.85E+00	1.81E-02	9.95E+01	9.13E+01	8.41E+01
48	14.8	1.37E-02	9.48E+00	2.35E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	2.53E+00 1	1.09E+02 1.	47E-01			

FILE NAME: EPX2 8.008 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		cover	31:mn.m.c.				
~!!!!!	D.T.A		ENTRATIONS			ULATIVE %	
	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
·	. 186	6.36E-03	3.98E-03			5.57E-03	2.86E-04
1	.501	4.56E-03	3.65E-03		8.675-01	1.07E-02	5.82E-04
2	.542	6.72E-03	6.21E-03		1.40E+00		1.12E-03
3	.581	8.76E-03	9.31E-03		2.10E+00	3.24E-02	1.99E-03
1	.625	1.14E-02	1.40E-02		3.00E+00	5.19E-02	3.39E-03
5 6	.673	1.39E-02	1.98E-02		4.11E+00	7.96E-02	5.53E-03
6	.723	1.94E-02	3.20E-02		5.65E+00	1.21E-01	9.25E-03
7	.777	2.20E-02	4.17E-02		7.39E+00	1.83E-01	1.44E-02
8	.835	2.71E-02	5.95E-02	8.28E-06	9.55E+00	2.66E-01	2.24E-02
9	.897	2.99E-02	7.57E-02		1.19E+01	3.72E-01	3.33E-02
10	.961	2.81E-02	8.21E-02		1.41E+01	4.86E-01	4.60E-02
11	1.03	3.49E-02	1.18E-01	2.04E-05	1.69E±01	6.51E-01	6.57E-02
12	1.11	3.32E-02	1.30E-01	2.41E-05	1.96E+01	8.33E-01	8.88E-02
13	1.19	3.74E-02	1.69E-01	3.36E-05	2.25E+01	1.07E+00	1.21E-01
1	1.23	4.33E-02	2.25E-01	4.83E-05	2.60E+01	1.38E+00	1.68E-01
15	1.38	1.68E-02	2.81E-01	6.48E-05	2.97E+01	1.73E+00	2.30E-01
16	1.48	4.69E-02	3.25E-01	8.05E-05	3.34E+01	2.23E+00	3.08E-01
17	1.59	5.045-02	4.04E-01	1.07E-04	3.74E+01	2.80E+00	4.11E-01
1.7	1.71	5.17E-02	4.78E-01	1.37E-04	4.15E+01	3.48E-00	5.43E-01
19	1.84	5.27E-02	5.625-01	1.73E-04	4.57E+01	1.13E-00	7.095-01
20	1.08	1.72F-02	F.83E-01	1.90E-04	1.95E+01	5.07E+30	8.94E-01
21	2.12	1.31E-02	8.99E-01	2.48E-04	8.83E+01	E. TE+OC	1.13E+00
22	2.28	4.65E-01	7.65E-01	2.92E-04	5.70E+01	7.11E+00	1.41E+30
<u> </u>	2.45	4.58E-02	8.45E+01	3.55E-04	8,07F+01	8.00E+00	1.785-00
2 :	2.94	1.085-02	8.89E-01	3.91E-04	9.09E±01	8.87E+00	2.12E+21
	2.80	1.01E-02	11E-00	4.80E-04	6.71E+01	1.1'E+)1	1.89E-90
2.63	3.00	3.12E-02	1.00E+30	5.08E-01	6.98E+01	1.2:E+01	3.08E+00
	. 27	3.24E-02	1.09E-00	5.97E-04	7.24E-01	1.09E+01	3.66E-00
_ 3	3.52	3.01E-02	1.17E+00	6.39E-04	7.17E+01	1.545+01	4.81E+00
29	2.78	2.46E-02	1.11E+00	6.99E-04	7.87E÷01	1.71E+01	5.(0E+03
$\cdot$ $\cdot$	1.0€	2.44E-02	1.27E+00	3.59E-04	7.86E-01	1.89E+01	f.82E+00
31	1.27	2.48E-02	1.43E+00	1.09E-03	3.06E+01	2.10E-01	6.87E+00
32	1.69	2.46E-02	1.71E+00	1.34E-03	8.26E+31	2.33E+01	5.15E+00
3.3	5.04	1.99E-02	1.59E+00	1.34E-03	3.41E-01	2.56E+01	9.45E+00
3.4	5.42	1.69E-C2	1.55E+00	1.41E-03	8.5EE+01	2.78E+01	1.0SE+01
35	5.82	1.94E-02	2.08E+00	2.02E-03	3.70E+01	3.07E+01	1.27E+01
36	5.26	1.75E-02	2.16E+00	2.26E-03	8.84E+01	3.37E+01	1.49E+01
37	6.73	1.70E-02	2.43E+00	2.72E-03	8.98E+01	3.71E+01	1.75E+01
38	7.23	1.72E-02	2.82E+00	3.40E-03	9.11E+01	4.10E+01	2.08E+01
39	7.77	1.72E-02	3.26E+00	4.22E-03	9.25E+01	4.56E+01	2.49E+01
10	8.35	9.48E-03	2.03E+00	2.89E-03	9.32E+01	4.85E+01	2.77E+01
41	8.97	1.44E-02	3.55E+00	5.45E-03	9.44E+01	5.36E+01	3.29E+01
12	9.64	1.07E-02	3.12E+00	5.02E-03	9.52E+01	5.79E+01	3.77E+01
13	10.3	8.76E-03	2.96E+00	5.11E-03	9.59E+01	6.21E+01	4.27E+01
44	11.1	9.36E-03	3.65E+00	6.78E-03	9.67E+01	6.72E+01	4.92E+01
15	11.9	1.19E-02	5.35E+00	1.07E-02	9.76E+01	7.47E+01	5.95E+01
16	12.8	1.01E-02	5.24E+00	1.12E-02	9.81E+01	3.20E+01	7.03E+01
47	13.8	9.96E-03	5.98E+00	1.38E-02		3.03E+01	8.35E+01
48	14.8	9.96E-03	6.90E+00	1.71E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E±02	1.00E+02
TOTAL	.s:	1.26E+00 7	.15E+01 1.	04E-01	•		

### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 8.009 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		CONCE	NTRATIONS		CUMU	JLATIVE %	
CHNI	DIA		SURFACE	MASS	NUMBER	SURFACE	MASS
	. 186	8.16E-03	5.09E-03	3.80E-07	5.06E-01	6.11E-03	3.25E-04
<		5.40E-03	4.32E-03	3.63E-07	8.41E-01		6.37E-04
1	.504		6.98E-03	6.31E-07	1.31E+00	1.97E-02	1.18E-03
2	.542		1.11E-02	1.08E-06	1.96E+00	3.30E-02	2.10E-03
3	.581	1.04E-02		1.72E-06	2.79E+00	5.28E-02	3.57E-03
4	.625	1.34E-02	1.65E-02		4.03E+00	8.68E-02	6.30E-03
5	.673	1.99E-02		3.18E-06	5.55E+00	1.35E-91	1.05E-02
6	.723	2.46E-02	4.05E-02	4.88E-06	7.32E+00	2.01E-01	1.65E-02
7	.777	2.86E-02	5.42E-02	7.03E-C6		2.94E-01	2.58E-02
8	.835	3.55E-02	7.79E-02	1.08E-05	9.53E+00		3.72E-02
9	.897	3.52E-02	8.91E-02	1.33E-05	1.17E+01	4.01E-01	5.20E-02
10	.964	3.67E-02	1.07頁-01	1.73E-05	1.40E+01	5.30E-01	
11	1.03	1.45E-02	1.50E-01	2.60E-05	1.67E+01	7.10E-01	7.43E-02
12	1.11	1.51E-02	1.77E-01	3.29E-05	1.96E+01	9.23E-01	1.02E-01
13	1.19	1.90E-02	2.20E-01	4.40E-05	2.25E+01	1.19E+00	1.40E-01
1 ‡	1.28	5.46E-02	2.84E-01	6.09E-05			1.92E-01
15	1.38	6.01E-02	3.61E-01	8.325-05	2.97E+01	1.96E+00	2.64E-01
15	1.12	6.84E-02	4.71E-01	1.17E-04	2.39E+01	2.53E+00	3.64E-01
1 7	1.59	6.97E-02	5.38E-01	1.49E-04	3.83E+01	3.20E+00	4.92E-01
1 -	1.71	6.98E-02	6.06E-01	1.82E-04	4.25E+01	3.95E+00	6.47E-01
1.9	1.34	0.90E-02	7.87E-01	2.20E-04		4.85E+00	8.1E-01
20	1.29	7.00E-00	8.67E-01	2.36E-01	5.12F+01	5.39E+00	1.09E+00
21	2.14	0.36E=12	8.63E-01	3.065-34	7.49E+01	6.93E+00	1.07E-00
	2.24	0.31E-02	1.01E+00	3.96E-04	5.88E+01	9.17E+00	1.365+07
20		5,80E402	1.11E+00	4.38E-0-	6.23E-01	9.81E+00	1.03E+00
21	2.61	5.69E-02	1.25E+00	5.19E-01	6.60E+01	1.10E+01	1.835-60
ūá.	2.83	1.78E+01	1.21E+00	5.71E-04	6.9(E-)1	1.24E+01	∴ . U . <b>E</b> = `
2 %	3.05	4.75E-02	1.39E+00	7.06E-04	7.19E+01	1.41E+01	0.6 E-11
- 7	2.27	1.08E-02	1.37E-00	7.48E-04	7.14E+01	1.58E+0!	1.26E+06
29	3.52	3.82E-02	1.37E+00	8.05E-04	7.88E+01	1.74E-01	4.67E+00
29	3.78	3.30E-02	1.49E-00	9.37E-04		1.92E+01	5.7∂E+0∂
30	4.06	2.96E-02	1.54E+03	1.04E-03		2.10E+01	5.57E+00
	•	2.815-02	1.69E+00	1.23E-03	8.22E+01	2.31E+01	7.73E+00
31	1.37	2.77E-02	1.92E÷00	1.50E-33			9.02E+00
02	4.69		1.76E÷00	1.48E-03			1.03E+01
.; ;	5.04	2.20E-02	2.32E+00	2.10E-03			1.21E+01
34	5.42	2.51E-02	2.37E+00	2.30E-03			1.41E+01
35	5.82	2.22E-02		2.35E-03			1.66E+31
36	6.26	2.29E-02	2.83E+00				1.96E+01
37	6.73	2.20E-02	3.13E+00	3.51E-03	-		2.27E+01
38	7.23	1.32E-02	3.00E+00	3.62E-03			2.64E+01
3.3	7.77	1.76E-02	3.35E+00	4.34E-03			3.03E+01
40	8.35	1.49E-C2	3.26E+00	4.54E-03		•	3.53E+01
41	8.97	1.34E-02	3.89E+00	5.82E-03		=	4.11E+01
12	9.64	1.14E-02	4.21E+00	6.77E-03			4.58E+01
13	10.3	9.36E-03	3.16E+00	5.46E-03			5.19E+01
4.4	11.1	9.96E-03	3.88E+00	7.21E-03			6.12E+01
15	11.9	1.20E-02	5.40E+00	1.08E-02			7.31E+01
46	12.8	1.25E-02	6.49E+00	1.39E-02			8.61E+01
47	13.3	1.09E-02	6.56E+00				1.00E+C2
18	14.3	9.48E-03	6.57E+00	1.63E-02			1.00E+02
>	15.4		.0.00E+00	0.00E+00	1.00E+02	1.005+02	1.002-02
TOT	ALS:	1.61E+00 8	3.33E+01 1	.17E-01		•	

FILE NAME: EPX2 9.000 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

C117.1	D.T. 1		ENTRATIONS			ULATIVE %	
	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.186	4.73E-01	2.95E-01		1.03E-01		2.67E-04
1	.504	3.10E-01	2.48E-01		1.71E-01		5.19E-04
2 3	.542	5.45E-01	5.03E-01		2.90E-01		1.07E-03
	.581	9.34E-01	9.93E-01		4.94E-01	2.88E-02	2.24E-03
4	.625	1.85E+00	2.28E+00		9.00E-01	6.10E-02	5.11E-03
5	.673	4.22E+00	6.00E+00			1.46E-01	1.33E-02
6 7	.723	9.62E+00	1.58E+01		3.92E+00	3.69E-01	3.64E-02
	.777	1.94E+01	3.68E+01	4.77E-03	8.16E+00	8.90E-01	9.42E-02
8	.835	2.93E+01	6.43E+01	8.95E-03	1.462+01	1.80E+00	2.03E-01
9	.897	3.59E+01	9.09E+01	1.36E-02	2.24E+01	3.08E+00	3.68E-01
10	.964	3.79E+01	1.11E+02		3.07E+01	4.65E+00	5.84E-01
11	1.03	3.84E+01	1.30E+02	2.24E-02	3.91E÷01	6.48E+00	8.55E-01
12	1.11	3.70E+01	1.44E+02	2.68E-02	4.72E+01	8.53E+00	1.18E+00
13	1.19	3.49E+01	1.57E÷02	3.13E-02	5.48E+01	1.07E+01	1.56E+00
1 !	1.28	3.26E+01	1.70E+02	3.64E-02	6.19E+01	1.31E+01	2.00E+00
15	1.38	2.90E+01	1.76E+02	4.06E-02	6.84E-01	1.56E±01	2.19E+(·0
16	1.18	2.55E+01	1.77E+02	4.37E-02	7.09E-01	1.81E÷01	3.02E+00
17	1.59	2.13E+01	1.73E+02	4.59E-02	7.85E-01	2.08E+01	3.58£+00
; ō	1.71	1.76E+01	1.63E+02	4.64E-02	8.25E-01	2.19E+01	4.14E+00
<b>1</b> G	1.84	1.41E+01	1.505+02	4.62E-02	3.5°E+01	2.50E+01	1.70E+00
- '	1.98	1.09E+01	1.35E+02	4.46E-02	8.78E+11	2.89E+01	0.14E+00
21	1.12	8.45E+90	1.20E+02	4.27E-02	8.985-01	2.80E+01	a.⊺es+00
	2.23	<b>5.09E+0</b> (	1.67E-02	1.06E-02	9.12E-01	0.01E+01	6.25E+03
'	2.:3	5.01 <b>5</b> +90	9.52E-01	3.90E-02	9.0%E-%1	0.185+01	6.715-
_ ;	2.43	3.82E+00	:.08E+01	3.69E-32	9.015-01	0.16E+01	7.17E+.0
28		2.975+00	7.525+01	3.56E-02	9.08E-01	3.27E+01	7.60E+00
·, <del>-</del>	3.05 3.27	2.19E+00 2.11E+00	7.28E+01	3.70E-02	9.40E-01	3.47E+01	8.08E-00
2.5 2.5	3.52	1.86E+00	7.11E+01 7.24E+01	3.39E-02	9.485-01	3.37E+01	8.51E+00
29	3.79	1.88E+00	7.34E+01		9.51E-01 9.58E-01	2.68E-01	9.04E+00
90	1.06	1.53E+00	7.34E+01	5.38E-02	9.59E-01	3.73E+01 3.89E+01	
31	1.37	1.45E+00	3.69E+01	6.33E-02	9.52E+01	4.77E+01	1.03E+01 1.13E+01
22	1.63	1.37E+00	9.49E+01	7.43E-02	9.65E-01	4.15E+01	1.19E+01
33	5.04	1.31E+00	1.05E+02	8.82E-02	9.68E+01	4.30E+01	1.19E+01
34	5.42	1.27E+00	1.1SE+02	1.06E-01	9.71E+01	4.45E+01	1.43E+01
35	5.82	1.27E+00	1.35E+02	1.32E-01	9.73E+01	4.65E+01	1.59E+01
36	6.26	1.14E+00	1.40E+02	1.47E-01	9.76E+01	1.85E+01	1.76E+01
37	6.73	1.13E+00	1.60E+02	1.30E-01	9.78E+01	5.08E+01	1.98E+01
38	7.23	1.11E+00	1.83E+02	2.21E-01	9.81E+01	5.34E+01	2.25E+01
39	7.77	1.03E+00	1.95E+02	2.53E-01	9.83E+01	5.51E+01	2.56E+01
40	8.35	1.02E+00	2.23E+02	3.10E-01	9.85E+01	5.93E+01	2.93E+01
41	8.97	1.02E+00	2.58E+02	3.85E-01	9.88E÷01	6.29E+01	3.10E+01
42	9.64	9.48E-01	2.77E+02	4.46E-01	9.90E+01	6.69E+01	
13	10.3	8.78E-01	2.96E+02	5.12E-01	9.92E+01	7.11E+01	•
4.1	11.1	8.23E-01	3.21E+02	5.96E-01	9.93E+01	7.56E+01	5.28E+01
45	11.9	8.00E-01	3.50E+02	7.18E-01	9.95E+01	8.07E+01	6.13E+01
16	12.8	7.75E-01	4.03E+02	8.64E-01	9.97E+01	8.61E+01	7.20E+31
17	13.8	7.39E-01	4.44E+02	1.02E+00	9.982+01	9.27E+01	8.44E+01
18	11.8	7.49E-01	5.20E+02	1.29E+00		1.00E+02	1.00E+02
> ************************************	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	.5:	4.57E+02 7	.U/E+03 8.	25E+00			

### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 9.001 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

			•				•
		CONCENTR	RATIONS		CUMU	LATIVE %	;
CHNI.	DIA .		FACE	MASS	NUMBER	SURFACE	MASS
< <	. 186		67E-01	1.99E-05	9.85E-02	3.91E-03	2.48E-04
	.501		36E-01	1.98E-05	1.66E-01		4.95E-04
1		•	73E-01	4.28E-05	2.85E-01	1.43E-02	1.03E-03
2	.542			9.25E-05	4.91E-01	2.82E-02	2.18E-03
3	.581	A	54E-01		9.01E-01	6.01E-02	5.01E-03
4	.625	1.78E+00 2.		2.27E-04	1.84E+00	1.45E-01	1.31E-02
5	.673		78E+00	6.48E-04			3.63E-02
6	.723	•	55E+01	1.87E-03	4.01E+00	-	
7	.777		55E+01	4.60E-03	8.32E+00	8.91E-01	9.37E-02
8	.835	• • • • • • • • • • • • • • • • • • • •	21E+01	8.65E-03	1.48E+01	1.80E+00	2.01E-01
9	.897	• • • • • • • • • • • • • • • • • • • •	77E+01	1.31E-02	2.28E+01	3.08E+00	3.65E-01
10	.964	0.100	06E+02	1.70E-02	3.12E+01	4.63E+00	5.77E-01
11	1.03	7	21E+02	2.09E-02	3.94E+01	6.40E+00	9.37E-01
12	1.11	3.12E+014 1.	34E+02	2.48E-02	4.73E+01	8.36E+00	1.15E+00
13	1.19	3.19E+01 1.	44E+02	2.85E-02	5.47E+01	1.05E+01	1.50E+00
1 1	1.28		56E+02	3.35E-02	6.16E+01		1.92E+00
15	1.38	2.66E+01 1	60E+02	3.58E-02	6.77E+01	1.51E+01	2.38E+00
16	1.18	2.33E+01 1	62E+02	4.00E-02	7.31E+01	1.74E+01	2.88E+00
17	1.59		61E+02	4.28E-02	7.77E+01	1.98E+01	3.41E+00
13	1.71		.53E+02	4.38E-02	8.15E+01	2.20E+01	3.9FE+00
13	1.34	-	.46E+02	4.48E-02	8.47E+01	2.42E+01	1.51E+30
20	1.98		31E+02	1.13E-92	8.72E+01	2.61E+01	7.07E+00
21	2.12		2   E + 02	4.405-02	8.92E+01	2.805+01	5.61E-10
	2.29		.12E+02	1.20E-02		2.88E+01	0.15E+30
22	2.17		.025-32	1.19E-12	2.10E4)1	0.11E+01	6.87E+90
22		•	.9"E+01	2.87E-02	8.10E+01	2.21E+01	T.145+0″
21	2.6		.31F+01	0.09E-02	9.37F+01	3.03E+01	7.82E- 8
23	2.80			3.74E-00		0.46E+01	4.08E-00
24	3.05		.06E+01	0.855-02	3.47E+01	0.545+01	8.88E+03
2.7	3.27		.08E+01			3.67E+01	9.07E+00
2 4	3.52		.92E-01	4.06E-02			9.6.E+00
29	3.78	•	.23E+01			3.88E+61	1.00E+01
30	1.06		.45E+01	5.08E-02		4.00E+01	1.105+01
31	4,37	• • • • •	.3 +E+01	6.08E-02			1.18E+01
3.2	1.89		.87E÷01	6.95E-02			1.29E-01
33	5.04		.94E+01	8.36E-02			
31	5.12		.12E+02	1.01E-01			1.425+01
3.5	5.82	• • • • •	.24E+02	1.21E-01			1.575+01
36	6.26		.35E+02	1.41E-31			1.745+01
37	6.73	1.10E÷00 1	.56E÷02	1.75E-01			1.96E+01
33	7.23	1.07E+00 1	.76E+02	2.12E-01			2.13E+01
39	7.77	3.81E-01 1	.36E+02	2.41E-01			2.53E+01
10	8.35	9.77E-01 2	.14E+32	2.98E-01	9.35E+01		2.90E+01
41	8.97	9.40E-01 2	.38E+02	3.56E-01			3.34E+01
42	9.54		.67E+02	4.29E-01	9.89E+01		3.88E+01
40	10.3		.88E+02	4.97E-01			4.50E+01
11	11.1		.06E+02	5.68E-01	9.93E+01		5.20E+01
1.5	11.9		.58E+02	7.14E-01			6.09E+01
16	12.8		.96E+02	8.49E-01			7.15E+01
17	13.8		.43E+02	1.02E+00		9.25E+01	8.42E±01
18	11.9		.11E+02	1.27E+00			1.00E+02
+5	15.1		.00E+00	0.0CE+00			:.00E+02
TOT	_	4.34E+02 6.8			_		
101:	いいい・	T - O T W T V W O O + O					

FILE NAME: EPX2 9.002 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		201121			<b>~</b> !!!!		
~····	221		ENTRATIONS	WA 66		ULATIVE %	W 1 6 6
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	1.32E+00	8.22E-01	6.13E-05	1.18E-01	3.69E-03	2.12E-04
1	.504	8.36E-01	6.69E-01	5.63E-05 1.23E-04	1.92E-01	6.70E-03	4.07E-04
2 3	.542	1.48E+00 2.52E+00	1.36E+00	2.60E-04	3.24E-01 5.49E-01	1.28E-02 2.49E-02	8.34E-04 1.73E-03
.1	.581 .625	1.75E+00	2.68E+00 5.83E+00	6.08E-04	9.73E-01	5.11E-02	3.84E-03
5 5	.673	1.02E+01	1.45E+01	1.62E-03	1.88E+00	1.16E-01	9.46E-03
6	.723	2.23E+01	3.67E+01	4.43E-03	3.87E+00	2.81E-01	2.48E-02
7	.777	1.40E+01	8.35E+01	1.08E-02	7.80E+00	6.57E-01	6.23E-02
8	835	6.66E+01	1.46E+02	2.03E-02	1.37E+01	1.31E+00	1.33E-01
9	297	8.18E+01	2.07E+02	3.10E-02	2.10E+01	2.24E+00	2.40E-01
10	561	8.66E+01	2.53E+02	4.08E-02	2.88E+01	3.38E+00	3.81E-01
11	1.03	8.75E+01	2.95E+02	5.10E-02	3.66E+01	1.71E+00	5.58E-01
12	1.11	8.53E÷01	3.33E+02	6.18E-02	4.42E+01	6.21E+00	7.72E-01
13	1.19	8.05E+01	3.62E+02	7.23E-02	5.11E+01	7.84E+00	1.02E+00
11	1.28	7.65E+01	3.98E+02	8.54E-02	5.92E+01	9.62E+00	1.325+00
15	1.38	6.93E+01	4.16E+02	9.59E-02	6.44E+01	1.15E+01	1.65E+00
16	1.48	6.17E+01	4.2SE+02	1.06E-01	6.99E+01	1.34E+01	2.02E+00
17	1.39	5.05E+01	4.29E+02	1.14E-01	7.47E+01	1.53E+01	2.41E+00
1.9	1.71	4.49E+01	4.15E-02	1.19E-01	7.87E+01	1.70E+01	2.82E+00
1.3	1.54	3.74E+01	3.295+02	1.23E-01	8.20E+01	1.90E+01	3.25E+00
20	:.98	3.03E+01	3.73E+02	1.23E-01	8.17E+01	2.07E+01	3.67E+00
<u>::</u> !	2.12	2.45E+01	3.48E+02	1.24E-01	8.69E+01	2.22E+01	1.10E+00
2.2	2.23	1.36E+01	3.22E+02	1.23E-01	3.86E+01	2.37E+11	4.53E+00
2.4		1.33E+01	2.93E+02	1.20E-01	9.00E+01	2.80E+01	1.94E+60
24	2.5	1.20E+01	2.60E-02	1.16E-01	9.11E+C1	2.02E+01	5.31E+00
25	2.53	3.03E+00	2.37E+02	1.12E-01	9.19E-01	2.7.5+01	7.78E-00
26	3.35	7.60E-00	2.23E-02	1.13E-01	9.26E+01	2.80E+01	4.10E-00
2.7	3.27	6.41E+00	2.17E+02	1.19E-01	9.32E+01	2.92E+01	6.53E+00
28	3.52	5.65E+00	2.20E+02	1.29E-01	9.37E+01	3.02E+01	6.98E+00
23	0.78	5.96E+90	2.28E+02	1.44E-01	9.41E+01	3.12E-01	7.18E+00
30	4.05	4.58E+00	2.38E+02	1.61E-01	9.45E+01	3.23E+01	8.04E+00
21	4.37	4.28E+00	2.57E+02	1.87E-01	9.19E+01	3.3FE+01	3.69E+0)
32	1.69	4.05E+00	2.81E+02	2.20E-01	9.53E+01	3.47E+01	9.45E-00
33	5.04	3.96E+00	3.17E+02	2.67E-01	9.56E+01	3.62E+01	1.04E+01
3.1	5.42	3.76E+00	3.48E+02	3.14E-01	9.60E+01	3.77E+01	1.15E+01
35	5.82	3.73E+00	3.98E+02	3.36E-01	9.63E+01	3.95E+01	1.28E+01
36	6.26	3.53E+00	4.47E+02	4.67E-01	9.66E+01	4.15E+01	1.14E+01
37	6.73	3.54E+00	5.04E+02	5.65E-01	9.63E+01	4.38E+01	1.64E+01
38	7.23	3.47E+00	5.70E+02	6.87E-01	9.72E+01	4.63E+01	1.88E+01
39	7.77	3.31E+00	6.28E+02	8.14E-01	9.75E+01	4.92E+01	2.16E+01
40	8.35	3.26E+00	7.16E+02	9.96E-01	9.78E+01	5.21E+01	2,50E+01
11	8.97	3.39E+00	8.58E+02	1.28E+00	9.81E+01	5.62E+01	2.95E+01
12	9.61	3.13E+00	9.16E+02	1.47E+00	9.84E+01	6.04E+01	3.16E+01
13	10.3	3.04E+00	1.03E+03	1.78E+00	9.87E+01	6.50E+01	1.07E+01
4.4	11.1	2.98E+00	1.16E+03	2.16E+00	9.90E+01	7.02E+01	4.82E+01
15	11.9	2.96E+00	1.33E+03	2.66E+00	9.92E+01	7.62E+01	5.71E+01
16	12.8	2.92E+00	1.52E+03	3.26E+00	9.95E+01	8.30E+01	6.87E+01
47	13.8	2.92E+00	1.75E+03	4.04E+00	9.97E+01	9.09E+01	8.27E+01
48	11.3	2.92E+00	2.02E+03	5.01E+00	1.00E+02	1.00E+02	1.00E+02
> TOT.	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTA	LS:	1.12E+03 2	2.22E+04 2.	89E+01		1	

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 9.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		CONC	ENTRATIONS		CUM	ULATIVE %	
CHNL	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	2.64E+00	1.64E+00	1.23E-04	1.35E-01	3.75E-03	2.06E-04
1	.504	1.72E+00	1.37E+00	1.15E-04	2.22E-01	6.88E-03	3.99E-04
2	.542	2.92E+00	2.70E+00	2.41E-01	3.71E-01	1.30E-02	8.08E-04
3	.581	1.95E+00	5.√26E+00	5.10E-04	6.24E-01	2.51E-02	1.66E-03
	.625	9.15E+00	1.12E+01	1.17E-03	1.09E+00	5.07E-02	3.63E-03
5	.673	1.95E+01	2.77E+01	3.11E-03	2.08E+00	1.14E-01	8.84E-03
6	.723	4.08E+01	6.71E+01	8.10E-03	4.17E+00	2.67E-01	2.24E-02
6 7	.777	7.79E+01	1.48E+02	1.92E-02	8.14E+00	6.04E-01	5.46E-02
8	.835	1.16E+02	2.54E+02	3.54E-02	1.41E+01	1.13E+00	1.14E-01
3	.897	1.40E+02	3.56E+02	5.32E-02	2.12E+01	2.00E+00	2.03E-01
10	. 951	1.48E+02	4.33E+02	6.96E-02	2.88E+01	2.9SE+00	3.20E-01
11	1.03	1.49E+02	5 <b>∤</b> 02E+02	8.68E-02	3.64E+01	4.13E+00	1.66E-01
12	1.11	1.45E+02	5.61E+02	1.05E-01	4.38E+01	5.12E+00	6.41E-01
13	1.19	1.37E+02	6.17E+02	1.23E-01	5.08E+01	6.82E+00	8.48E-01
1 ;	1.28	1.30E+02	6.76E+02	1.45E-01	5.74E+01	3.37E+00	1.09E+00
1.5	1.38	1.18E+02	7.08E+02	1.63E-01	6.34E+01	9.93E+00	1.36E+00
16	1.45	1.05E+02	7.19E+01	1.80E-01	6.88E+01	1.16E+01	1.67E+00
17	1.59	9.19E+0:	7.36E+02	1.96E-01	7.35E-01	1.33E+01	2.00E+00
13	1.71	7.77E+01	7.:9E+02	2.05E-01	7.74E+01	1.50E+01	2.34E+00
: 9	1.91	6.17E+01	6.91E+02	2.12E-01	8.07E+01	1.65E+01	2.70E+00
20	;.03	5.23E+01	5.50E+02	2.15E-01	3.21E-01	1.80E+01	3.08E+00
2:	2.12	4.30E+01	6.12E+02	2.17E-01	8.58E+01		3.42E+00
22	2.28	3.15E+01	5.67E+02	2.16E-01	8.74E+01		3.79E+00
2.2	2.45	2.78E+01	5.28E+02	2.16E-01	8.88E+01	2.19E+01	4.15E+00
2	2.01	2.17E-01	1.76E-02	2.10E-01	8.99E+01	2.20E+01	4.50E+03
2.5	2.83	1.70E+01	1.01E+02	2.04E-01		2.40E+01	4.84E+00
26	3.05	1.40E-01	4.19E-01	2.13E-01	9.15E+01	2.fCE+01	5.20E-00
· -	3.27	1.23E-01	4.15E+02	2.27E-01	9.22F+31	2.59E+01	5.58E+00
28	2.52	1.10E+01	4.29E+02	2.52E-01	9.27E+01	2.59E+01	6.00E+00
2.3	€.78	9.88E+00	4.45E+02	2.81E-01	9.32E+01	2.79E+01	8.47E-00
<i>:</i> 0	1.06	8.92E+00	4.64E+02	3.14E-01	9.37E+01	2.90E+01	7.00E+00
31	4.37	3.45E+00	5.07E+02	3.70E-01	9.41E+01	2.01E+01	7.62E+00
32	1.69	7.99E+00	5.54E+02	4.34E-01	9.45E+01	3.14E+01	8.35E÷00
3.3	5.04	7.69E+00	5.15E+02	5.18E-01	9.49E+01	3.235+01	9.22E+00
3 1	5.42	7.49E+00	6.93E+02	6.26E-01	9.53E+01	3.44E+01	1.03E+01
35	5.82	7.36E+00	7.86E+02	7.63E-01	9.57E-01	3.62E+01	1.15E÷01
36	6.26	7.13E+00	8.79E+02	9.18E-01	9.60E+01	3.82E+01	1.31E+01
37	6.73	7.01E+00	9.97E+02	1.12E+00	9.642+01	4.0;E+01	1.50E+C1
38	7.23	6.78E+00	1.11E÷03	1.34E+00	9.67E+01	4.30E+01	1.72E+01
39	7.77	6.68E+00	1.27E+03	1.54E+00	9.71E+01	4.59E+01	2.00E+01
10	8.35	6.66E+00	1.46E+03	2.03E+00	9.71E+01	4.92E+01	2.34E+01
11	8.97	6.79E+00	1.72E+03	2.57E+00	9.78E+01	5.31E+01	2.77E+01
42	9.64	6.45E+00	1.89E+03	3.03E+00	9.815+01	5.74E+01	3.28E+01
13	10.3	6.27E+00	2.12E+03	3.65E+00	9.84E+01	6.23E+01	3.89E+01
1.1	11.1	6.22E÷00	2.43E+03	1.51E+00	9.87E+01	6.78E+01	4.65E+01
15	11.9	6.12E+00	2.75E+03	5.50E+00	9.90E+01	7.11E+01	5.57E+01
16	12.8	5.21E+00	3.23E+03	6.92E+00	9.91E+01	S.11E+01	6.73E+01
4.7	13.8	6.21E+00	3.73E+03	8.59E+00	9.97E+01	9.00E+01	8.17E+01
18	14.8	6.35E+00	1.40E+03	1.09E+01	1.00E+02	1.00E+02	1.00E+02
>	15.4	3.00E-04	2.40E-01	6.39E-04	1.00E+02	1.00E+02	1.00E+02
ATOT	LS:	1.96E+03.	1.38E+04 5.	96E+01			

FILE NAME: EPX2 9.004 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CHNL DIA  ( .486			CONCE	'N'TDATIONS		CIIMI	HATTUR W	
1	CHAIL E	<b></b>			MASS			W165
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1.625								
4         .625         4.47E+00         5.48E+00         1.57E-03         1.90E+00         1.02E-02           6         .673         2.14E+01         3.52E+01         1.57E-03         1.90E+00         1.23E-01         1.02E-02           7         .777         4.19E+01         3.52E+01         1.23E-02         7.88E+00         2.98E-01         2.69E-02           8         .835         6.35E+01         1.39E+02         2.98E-01         1.39E+00         1.43E-01           9         .897         7.80E+01         1.98E+02         2.96E-02         2.12E+01         2.37E+00         4.12E-01           10         .961         8.26E+01         2.42E+02         3.88E-02         2.90E+01         4.97E+00         6.03E-01           11         1.03         8.37E+01         2.82E+02         4.88E-02         3.66E+01         4.97E+00         6.03E-01           12         1.11         8.04E+01         3.48E+02         3.68E+01         4.97E+00         6.03E-01           13         1.12         7.66E+01         3.89E+02         9.17E-02         6.50E+01         1.92E+01           14         1.12         3.60E+01         3.98E+02         1.60E+01         1.61E+01         1.78E+01								
5								
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10		.835	6.35E+01					
1	9.	.897	7.80E+01	1.98E+02	2.96E-02		2.37E+00	2.59E-01
1.11	10 .	.961	8.26E+01	2.42E+02	3.88E-02	2.90E+01	3.57E+00	4.12E-01
1.19	11 1	1.03	8.37E+01	2.82E+02	4.88E-02	3.69E+01	4.97E+00	6.03E-01
1.0.28	12 1	1.11	8.14E+01	3.17E + 02	5.90E-02	4.46E+01	6.55E+00	8.345-01
1.	13 1	1.19	7.66E+01	3.45E+02	6.83E-02	5.18E+01	8.27E+00	1.10E+00
1.	1 1 1	1.28	7.26E+01	3.78E+02	8.10E-02	5.37E+01	1.01E+01	1.42E+00
16 1.48			6.63E+01	3.93E+02	9.17E-02	6.50E+01	1.21E+01	1.78E+00
1.6			5.84E+01	1.05E+02	1.00E-01	7.05E+01	1.11E+01	1.17E+00
18 1.71			5.04F+01	1.04E+02		7.32E+01	1.61E+01	2.59E+36
1.84					1.12E-01	7.92E+01	1.81E-01	
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21 2.12							2.17E+01	3.83 <b>E+</b> 00
C2								
23								
24         2.47         1.16E+31         2.10E+02         1.06E+01         9.14E+01         2.73E+01         5.70E+01           25         2.80         8.43E+30         2.15E+02         1.02E-01         9.24E+01         2.90E+01         6.8E+00           23         3.35         7.04E+03         2.06E+02         1.02E-01         9.24E+01         2.90E+01         1.17E+13           27         2.27         5.31E+00         2.07E+02         1.11E-01         3.34E-01         3.4E+01         8.1E+01         7.02E+13           28         3.73         4.74E+00         2.13E+02         1.35E-01         9.43E+01         3.24E+01         7.91E+03           30         4.36         4.25E+00         2.21E+02         1.50E-01         9.47E+01         3.35E+01         8.50E+03           31         4.37         3.97E+00         2.38E+02         1.74E-01         9.51E+01         3.47E+01         9.18E+03           32         1.69         3.78E+00         2.62E+02         2.05E-01         9.53E+01         3.47E+01         9.18E+03           33         5.04         3.70E+00         2.62E+02         2.05E-01         9.53E+01         3.75E+01         1.16E-01           34         5.12         3.57E								
1.80								
CS         3.05         7.04E+00         2.06E+02         1.03E+01         9.25E+01         1.2.43E+01         1.17E+00           17         2.27         5.99E+00         2.02E+02         1.11E-01         3.34E+01         (3.04E+01         6.91E+00           23         0.52         5.31E+00         2.07E+02         1.42E+01         9.39E+01         3.14E+01         7.06E+00           29         3.73         4.74E+00         2.13E+02         1.35E+01         9.49E+01         3.24E+01         7.91E+00           30         4.36         4.25E+00         2.21E+02         1.50E+01         9.47E+01         3.37E+01         8.50E+00           31         4.37         3.97E+00         2.38E+02         1.74E+01         9.51E+01         3.47E+01         9.18E+00           32         4.69         3.78E+00         2.62E+02         2.05E+01         9.58E+01         3.60E+01         9.58E+00           33         5.04         3.70E+00         2.96E+02         2.49E+01         9.58E+01         3.77E+01         1.16E+01           34         5.12         3.56E+00         3.30E+02         3.69E+01         9.62E+01         3.71E+01         1.21E+01           35         5.82         3.56E+00 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
27								
28								
29							•	
30       4.36       4.25E+60       2.21E+02       1.50E+01       9.47E+01       3.35E+01       8.50E+00         31       4.37       3.97E+30       2.38E+02       1.74E+01       9.51E+01       3.47E+01       9.16E+00         32       4.69       3.78E+00       2.62E+02       2.05E+01       9.58E+01       3.60E+01       9.58E+00         33       5.04       3.70E+00       2.96E+02       2.49E+01       9.58E+01       3.75E+01       1.16E+01         34       5.12       3.57E+00       3.30E+02       2.99E+01       9.62E+01       3.91E+01       1.21E+01         35       5.82       3.56E+00       3.80E+02       3.69E+01       9.65E+01       4.10E+01       1.36E+01         36       6.26       3.34E+00       3.22E+02       4.30E+01       9.68E+01       4.31E+01       1.73E+01         37       6.73       3.30E+00       4.69E+02       5.27E+01       9.71E+01       4.54E+01       1.73E+01         38       7.23       3.18E+00       5.22E+02       6.29E+01       9.74E+01       4.50E+01       1.73E+01         39       7.77       3.02E+00       5.73E+02       7.42E+01       9.77E+01       5.09E+01       2.27E+01         40 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
31       4.37       3.97E+30       2.38E+02       1.74E-01       9.61E+01       3.47E+01       9.18E+70         32       4.69       3.78E+00       2.62E+02       2.05E-01       9.55E+01       3.60E+01       9.58E+00         33       5.04       3.70E+00       2.96E+02       2.49E-01       9.58E+01       3.75E+01       1.10E-01         34       5.12       3.57E+00       3.30E+02       2.99E-01       9.62E+01       3.91E+01       1.21E+01         35       5.82       3.56E+00       3.80E+02       3.69E-01       9.65E+01       4.10E+01       1.36E-01         36       6.26       3.34E+00       1.12E+02       4.30E+01       9.68E+01       4.31E+01       1.73E+01         37       6.73       3.30E+00       4.69E+02       5.27E+01       9.71E+01       4.54E+01       1.73E+01         38       7.23       3.18E+00       5.22E+02       6.29E+01       9.74E+01       4.50E+01       1.98E+01         39       7.77       3.02E+00       5.73E+02       7.42E+01       9.77E+01       5.09E+01       2.27E+01         40       8.35       2.97E+00       6.51E+02       9.07E+01       9.83E+01       5.80E+01       2.63E+01         42 <td></td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td></td>						•		
32						•		
33 5.04 3.70E+00 2.96E+02 2.49E-01 9.58E+01 3.75E+01 1.10E+01 3.4 5.12 3.57E+00 3.30E+02 2.99E-01 9.62E+01 3.91E+01 1.21E+01 3.5 5.82 3.56E+00 3.80E+02 3.69E-01 9.65E+01 4.10E+01 1.36E-01 3.6 6.26 3.34E+00 1.12E+02 4.30E-01 9.68E+01 4.31E+01 1.53E+01 3.7 6.73 3.30E+00 4.69E+02 5.27E-01 9.71E+01 4.54E+01 1.73E+01 3.8 7.23 3.18E+00 5.22E+02 6.29E-01 9.74E+01 4.80E+01 1.98E+01 3.9 7.77 3.02E+00 5.73E+02 7.42E-01 9.77E+01 5.09E+01 2.27E+01 4.0 8.35 2.97E+00 6.51E+02 9.07E-01 9.80E+01 5.41E+01 2.63E+01 4.1 8.97 3.09E+00 7.82E+02 1.17E+00 9.83E+01 5.80E+01 3.08E-01 4.2 9.64 2.81E+00 8.21E+02 1.32E+00 9.85E+01 6.21E+01 3.60E+01 4.3 10.3 2.59E+00 9.07E-02 1.57E+00 9.88E+01 6.66E+01 4.22E+01 4.1 11.1 2.62E+00 1.02E+03 1.89E+00 9.90E+01 7.17E+01 1.96E+01 15 11.9 2.55E+00 1.34E+03 2.29E+00 9.93E+01 7.74E+01 5.86E+01 4.22E+01 4.1 13.8 2.50E+00 1.34E+03 2.87E+00 9.93E+01 9.15E+01 8.34E+01 4.8 14.8 2.47E+00 1.71E+03 4.23E+00 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.50E+02 1.50E+02 1.50E+03 1.00E+02 1.00E+02 1.00E+02 1.50E+02 1.50E+02 1.50E+03 1.00E+02 1.00E+02 1.00E+02 1.50E+02 1.50E+02 1.50E+03 1.00E+02 1.00E+02 1.50E+02 1.50E								
31 5.12 3.57E+00 3.30E+02 2.99E-01 9.62E+01 3.91E+01 1.21E+01 35 5.82 3.56E+00 3.80E+02 3.69E-01 9.65E+01 4.10E+01 1.36E-01 36 6.26 3.34E+00 1.12E+02 4.30E-01 9.68E+01 4.31E+01 1.53E+01 37 6.73 3.30E+00 4.69E+02 5.27E-01 9.71E+01 4.54E+01 1.73E+01 38 7.23 3.18E+00 5.22E+02 6.29E-01 9.74E+01 4.80E+01 1.98E+01 39 7.77 3.02E+00 5.73E+02 7.42E-01 9.77E+01 5.09E+01 2.27E+01 40 8.35 2.97E+00 6.51E+02 9.07E-01 9.80E+01 5.41E+01 2.63E+01 41 8.97 3.09E+00 7.82E+02 1.17E+00 9.83E+01 5.80E+01 3.08E-01 42 9.64 2.81E+00 8.21E+02 1.32E+00 9.85E+01 6.21E+01 3.60E+01 43 10.3 2.69E+00 9.07E-02 1.57E+00 9.88E+01 6.66E+01 4.22E+01 41 11.1 2.62E+00 1.02E+03 1.89E+00 9.90E+01 7.17E+01 1.96E+01 15 11.9 2.55E+00 1.15E+03 2.29E+00 9.93E+01 7.74E+01 5.86E+01 46 12.8 2.58E+00 1.34E+03 2.87E+00 9.93E+01 9.15E+01 8.34E+01 43 14.8 2.47E+00 1.71E+03 4.23E+00 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.50E+02 5.41E+01 9.15E+01 8.34E+01 4.8 2.47E+00 1.71E+03 4.23E+00 1.00E+02								
35 5.82 3.56E+00 3.80E+02 3.69E-01 9.65E+01 4.10E+01 1.36E-01 36 6.26 3.34E+00 1.12E+02 4.30E-01 9.68E+01 4.31E+01 1.53E+01 37 6.73 3.30E+00 4.69E+02 5.27E-01 9.71E+01 4.54E+01 1.73E+01 38 7.23 3.18E+00 5.22E+02 6.29E-01 9.74E+01 1.80E+01 1.98E+01 39 7.77 3.02E+00 5.73E+02 7.42E-01 9.77E+01 5.09E+01 2.27E+01 40 8.35 2.97E+00 6.51E+02 9.07E-01 9.80E+01 5.41E+01 2.63E+01 41 8.97 3.09E+00 7.82E+02 1.17E+00 9.83E+01 5.80E+01 3.08E-01 42 9.64 2.81E+00 8.21E+02 1.32E+00 9.85E+01 6.21E+01 3.60E+01 43 10.3 2.59E+00 9.07E+02 1.57E+00 9.88E+01 6.66E+01 4.22E+01 41 11.1 2.62E+00 1.02E+03 1.89E+00 9.90E+01 7.17E+01 4.96E+01 15 11.9 2.55E+00 1.15E+03 2.29E+00 9.93E+01 7.74E+01 5.86E+01 46 12.8 2.52E+00 1.34E+03 2.87E+00 9.93E+01 7.774E+01 5.86E+01 4.22E+01 13.3 2.50E+00 1.50E+03 3.46E+00 9.93E+01 9.15E+01 8.34E+01 48 14.8 2.47E+00 1.71E+03 4.23E+00 1.00E+02 1								•
36       6.26       3.34E+00       1.12E+02       4.30E-01       9.68E+01       4.31E+01       1.53E+01         37       6.73       3.30E+00       4.69E+02       5.27E-01       9.71E+01       4.54E+01       1.73E+01         38       7.23       3.18E+00       5.22E+02       6.29E-01       9.74E+01       1.80E+01       1.98E+01         39       7.77       3.02E+00       5.73E+02       7.42E-01       9.77E+01       5.09E+01       2.27E+01         40       8.35       2.97E+00       6.51E+02       9.07E-01       9.80E+01       5.41E+01       2.63E+01         41       8.97       3.09E+00       7.82E+02       1.17E+00       9.83E+01       5.80E+01       3.60E+01         42       9.64       2.81E+00       8.21E+02       1.32E+00       9.85E+01       6.21E+01       3.60E+01         43       10.3       2.69E+00       9.07E+02       1.57E+00       9.88E+01       6.66E+01       4.22E+01         44       11.1       2.62E+00       1.02E+03       1.89E+00       9.90E+01       7.17E+01       4.96E+01         45       11.9       2.55E+00       1.15E+03       2.29E+00       9.93E+01       7.74E+01       5.86E+01         46 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
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39       7.77       3.02E+00       5.73E+02       7.42E-01       9.77E+01       5.09E+01       2.27E+01         40       8.35       2.97E+00       6.51E+02       9.07E-01       9.80E+01       5.41E+01       2.63E+01         41       8.97       3.09E+00       7.82E+02       1.17E+00       9.83E+01       5.80E+01       3.08E-01         42       9.64       2.81E+00       8.21E+02       1.32E+00       9.85E+01       6.21E+01       3.60E+01         43       10.3       2.59E+00       9.07E+02       1.57E+00       9.88E+01       6.66E+01       4.22E+01         44       11.1       2.62E+00       1.02E+03       1.89E+00       9.90E+01       7.17E+01       1.96E+01         45       11.9       2.55E+00       1.15E+03       2.29E+00       9.93E+01       7.74E+01       5.86E+01         46       12.8       2.52E+00       1.34E+03       2.87E+00       9.93E+01       9.15E+01       8.34E+01         47       13.3       2.56E+00       1.50E+03       3.46E+00       9.93E+01       9.15E+01       8.34E+01         48       14.8       2.47E+00       1.71E+03       4.23E+00       1.00E+02       1.00E+02       1.50E+02         > <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
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42       9.64       2.81E+00       8.21E+02       1.32E+00       9.85E+01       6.21E+01       3.60E+01         43       10.3       2.69E+00       9.07E+02       1.57E+00       9.88E+01       6.66E+01       4.22E+01         44       11.1       2.62E+00       1.02E+03       1.89E+00       9.90E+01       7.17E+01       1.96E+01         45       11.9       2.55E+00       1.15E+03       2.29E+00       9.93E+01       7.74E+01       5.86E+01         46       12.8       2.52E+00       1.34E+03       2.87E+00       9.95E+01       8.10E+01       6.98E+31         47       13.3       2.5CE+00       1.50E+03       3.46E+00       9.93E+01       9.15E+01       8.34E+01         48       14.8       2.47E+00       1.71E+03       4.23E+00       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02								
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TOTALS: 1.06E+03 2.01E+04 2.55E+01						1.00E+02	1.00E+02	1.00E+02
	TOTALS	5:	1.36E+03 2	.01E+04 2.	55E+01			

### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 9.005 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

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35   5.82   2.16E+00   2.30E+02   2.24E-01   9.68E+01   4.43E+01   1.52E+01   3.66E+02   2.68E+01   9.71E+01   4.60E+01   1.76E+01   3.76E+01			•		• • • • •		
06       6.26       2.08E+00       2.56E+02       2.68E-01       9.71E+01       4.60E-01       1.70E+01         37       6.73       2.01E+00       2.87E+02       3.22E-01       9.74E+01       4.87E+01       1.91E+01         38       7.23       1.95E+00       3.20E+02       3.86E-01       9.77E+01       5.12E+01       2.17E+01         39       7.77       1.88E+00       3.57E+02       4.63E-01       9.80E+01       5.41E+01       2.48E+01         40       8.35       1.84E+00       4.04E+02       5.62E-01       9.82E+01       5.74E+01       2.35E+01         41       8.97       1.83E+00       4.65E+02       6.95E-01       9.85E+01       6.11E+01       3.22E+01         42       9.64       1.64E+00       4.80E+02       7.72E-01       9.87E+01       6.50E+01       3.83E+01         43       10.3       1.58E+00       5.33E+02       9.20E-01       9.90E+01       6.91E+01       4.45E+31         41       11.1       1.51E+00       5.37E+02       1.09E+00       9.92E+01       7.41E+01       5.17E+01         45       11.9       1.44E+00       6.50E+02       1.30E+00       9.94E+01       7.93E+01       6.94E+01         46 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
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38 7.23 1.95E+00 3.20E+02 3.86E-01 9.77E+01 5.12E+01 2.17E+01 39 7.77 1.88E+00 3.57E+02 4.63E-01 9.80E+01 5.41E+01 2.48E+01 40 8.35 1.84E+00 4.04E+02 5.62E-01 9.82E+01 5.74E+01 2.35E+01 41 8.97 1.83E+00 4.65E+02 6.95E-01 9.85E+01 6.11E+01 3.32E+01 42 9.64 1.64E+00 4.80E+02 7.72E-01 9.87E+01 6.50E+01 3.83E+01 4.30E+02 7.72E-01 9.87E+01 6.50E+01 3.83E+01 4.11.1 1.51E+00 5.33E+02 9.20E-01 9.90E+01 6.90E+01 4.45E+31 41.1 1.51E+00 5.87E+02 1.09E+00 9.92E+01 7.41E+01 5.17E+01 4.50E+01 4.45E+01 4.45E							_
39 7.77 1.88E+00 3.57E+02 4.63E-01 9.80E+01 5.41E+01 2.48E+01 40 8.35 1.84E+00 4.04E+02 5.62E-01 9.82E+01 5.74E+01 2.35E+01 41 8.97 1.83E+00 4.65E+02 6.95E-01 9.85E+01 6.11E+01 3.22E+01 42 9.64 1.64E+00 4.80E+02 7.72E-01 9.87E+01 6.50E+01 3.83E+01 43 10.3 1.58E+00 5.33E+02 9.20E+01 9.90E+01 6.90E+01 4.45E+01 4.11.1 1.51E+00 5.87E+02 1.09E+00 9.92E+01 7.41E+01 5.17E+01 4.50E+01 4.45E+01 4.45E+01 4.45E+01 4.45E+01 4.45E+01 5.17E+01 5.17E+01 5.17E+01 5.17E+01 5.17E+01 5.17E+01 5.32E+00 9.94E+01 7.93E+01 6.94E+01 5.32E+01 5.32E+01 6.94E+01 5.32E+01 6.94E+01 6			-				
10 8.35 1.84E+00 4.04E+02 5.62E-01 9.82E+01 5.74E+01 2.35E+01 4.897 1.83E+00 4.65E+02 6.95E-01 9.85E+01 6.11E+01 3.22E+01 4.9.64 1.64E+00 4.80E+02 7.72E-01 9.87E+01 6.50E+01 3.83E+01 4.30E+00 5.33E+02 9.20E-01 9.90E+01 6.90E+01 4.45E+01 4.45E+01 4.1.1 1.51E+00 5.87E+02 1.09E+00 9.92E+01 7.41E+01 5.17E+01 4.50E+01 4.40E+01 4.50E+01 4.40E+01 4.50E+01 4.5							
41       8.97       1.83E+00       4.65E+02       6.95E-01       9.85E+01       6.11E+01       3.22E+01         12       9.64       1.64E+00       4.80E+02       7.72E-01       9.87E+01       6.50E+01       3.83E+01         13       10.3       1.58E+00       5.33E+02       9.20E-01       9.90E+01       6.91E+01       4.45E+01         14       11.1       1.51E+00       5.87E+02       1.09E+00       9.92E+01       7.41E+01       5.17E+01         15       11.9       1.44E+00       6.50E+02       1.30E+00       9.94E+01       7.93E+01       6.04E+01         46       12.3       1.45E+00       7.51E+02       1.62E+00       9.96E+01       8.54E+01       7.12E+01         47       13.8       1.43E+00       8.60E+02       1.93E+00       9.98E+01       9.24E+01       8.44E+01         43       14.8       1.36E+00       9.45E+02       2.34E+00       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02							
12 9.61 1.64E+00 4.80E+02 7.72E-01 9.87E+01 6.50E+01 3.83E+01 10.3 1.58E+00 5.33E+02 9.20E-01 9.90E+01 6.91E+01 4.45E+01 11.1 1.51E+00 5.87E+02 1.09E+00 9.92E+01 7.41E+01 5.17E+01 15 11.9 1.44E+00 6.50E+02 1.30E+00 9.94E+01 7.93E+01 6.04E+01 46 12.3 1.45E+00 7.51E+02 1.62E+00 9.96E+01 9.54E+01 7.12E+01 17.12E+01 18.8 1.43E+00 8.60E+02 1.93E+00 9.98E+01 9.24E-01 8.44E+01 18.8 1.36E+00 9.45E+02 2.34E+00 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02							
13 10.3 1.58E+00 5.33E+02 9.20E-01 9.90E+01 6.91E+01 4.45E+01 11.1 1.51E+00 5.97E+02 1.09E+00 9.92E+01 7.41E+01 5.17E+01 15 11.9 1.44E+00 6.50E+02 1.30E+00 9.94E+01 7.93E+01 6.04E+01 46 12.3 1.45E+00 7.54E+02 1.62E+00 9.96E+01 8.54E+01 7.12E+01 17 13.8 1.43E+00 8.60E+02 1.93E+00 9.98E+01 9.24E+01 8.44E+01 18 14.8 1.36E+00 9.45E+02 2.34E+00 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02							
11 11.1 1.51E+00 5.87E+02 1.09E+00 9.92E+01 7.41E+01 5.17E+01 15 11.9 1.44E+00 6.50E+02 1.30E+00 9.94E+01 7.93E+01 6.04E+01 46 12.3 1.45E+00 7.51E+02 1.62E+00 9.96E+01 8.54E+01 7.12E+01 17 13.8 1.43E+00 8.60E+02 1.98E+00 9.98E+01 9.24E-01 8.44E+01 14.8 1.36E+00 9.45E+02 2.34E+00 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02 1.00E+02			•				
15 11.9 1.44E+00 6.50E+02 1.30E+00 9.94E+01 7.93E+01 6.04E+01 46 12.3 1.45E+00 7.54E+02 1.62E+00 9.96E+01 8.54E+01 7.12E+01 17 13.8 1.43E+00 8.60E+02 1.93E+00 9.98E+01 9.24E+01 8.44E+01 43 14.8 1.36E+00 9.45E+02 2.34E+00 1.00E+02 1.30E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02			-		<del>-</del>		
46       12.3       1.45E+00       7.51E+02       1.62E+00       9.96E+01       8.54E+01       7.12E+01         47       13.8       1.43E+00       8.60E+02       1.98E+00       9.98E+01       9.24E-01       8.44E+01         43       14.8       1.36E+00       9.45E+02       2.34E+00       1.00E+02       1.00E+02       1.00E+02         >       15.4       0.00E+00       0.00E+00       1.00E+02       1.00E+02       1.00E+02				_			
17 13.8 1.43E+00 8.60E+02 1.98E+00 9.98E+01 9.24E-01 8.44E+01 43 14.8 1.36E+00 9.45E+02 2.34E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02							
13 14.8 1.36E+00 9.45E+02 2.34E+00 1.00E+02 1.00E+02 1.00E+02 > 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02							
> 15.4 0.00E+00 0.00E+00 0.00E+00 1.00E+02 1.00E+02 1.00E+02							
75.4 0.002.00 0.002.00							-
TOTALS: 6.88E+02 1.24E+04 1.50E+01				•	1.00E+02	1.006+02	1.006+02
	TOTALS:	6.88E+02 1	.24E+04 1.	: UE+UI			

900

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 9.006 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

	401:41			<b></b>		
CHAIL DIA		ENTRATIONS			CLATIVE %	VACC
CHNL DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< .486 1 .504	2.12E+00	1.32E+00	9.84E-05 9.22E-05	1.28E-01 2.11E-01	3.69E-03	2.05E-04 3.97E-04
1 .504 2 .542	1.37E+00 2.36E+00	1.10E+00 2.18E+00	1.97E-04	3.53E-01	6.76E-03 1.29E-02	8.06E-04
3 .581	4.01E+00	4.26E+00	4.13E-04	5.96E-01	2.48E-02	1.67E-03
1 .625	7.27E+00	8.93E+00	9.30E-04	1.04E+00	4.98E-02	3.60E-03
5 .673	1.55E+01	2.21E+01	2.48E-03	1.97E+00	1.12E-01	8.75E-03
6 .723	3.35E+01	5.50E+01	6.64E-03	4.00E+00	2.66E-01	2.26E-02
7 .777	6.62E+01	1.26E+02	1.63E-02	8.00E+00	6.17E-01	5.65E-02
8 .835	1.00E+02	2.20E+02	3.06E-02	1.41E+01	1.23E+00	1.20E-01
9 .897	1.23E+02	3.11E+02	4.65E-02	2.15E+01	2.10E+00	2.17E-01
10 .964	1.29E+02	3.79E+02	6.09E-02	2.93E+01	3.16E+00	3.44E-01
11 1.03	1.30E+02	4.39E+02	7.59E-02	3.72E+01	4.39E+00	5.02E-01
12 1.11	1.26E+02	4.90E+02	9.10E-02	1.18E+01	5.77E+00	6.91E-01
13 1.19	1.18E+02	5.33E+02	1.06E-01	5.195+01	7.26E+00	9.13E-01
11 1.28	1.11E+02	5.78E+02	1.24E-01	5.86E+01	S.88E+00	1.17E+00
15 1.08	1.00E+02	6.01E+02	1.38E-01	6.47E+01	1.06E+01	1.46E+C)
16 1.18	8.84E+01	6.13E+02	1.52E-01	7.00E+01	1.23E+01	1.77E+00
17 1.59	7.58E-01	6.07E+02	1.61E-01	7.15E+01	1.40E+01	2.11E+00
18 1.71	5.35E-01	5.88E÷02	1.63E-01	7.85E+01	1.55E+01	2.46E+00
19 1.84	₹.23F+01	5.59E+02	1.72E-01	9.16F+01	1.72E-01	2.81E+00
10 1.33	1.01E+01	5.:9E-02	1.71E-01	8.42E+01	1.66E+01	3.17E-00
21 2.12	3.39E±31	4.80E+02	1.72E-01	8.62E÷01	2.00E-01	2.302+00
21 2.28	2.73E-01	1.18E-02	1.71E-01	3.792-01	2.12F+01	3.59F+60
1.3 2.43	1.195-01	4.18E+02	1.70E-01	3.00E-01	0.04E+01	4.2:E+7)
21 2.69	1.73E-01	0.78E-01	1.67E-01	9.00E-01	0.08E+01	4.77E-37
23 2.80	1.36F+0!	3.445-72	1.605-11	9.11F-31	1.1:E-01	1.90E÷0
2° 3.68	1.1fE+01	3.39E-01	1.71E-01	P.18F+01	1.3 (E+01	
2.7	3.92E-00	0.082+02	1.83E-(1	9.24E+01	2.50E+01	5.86E+00
28 0.32	9.10E-00	3.55E-92	2.08E-01	9.29E-01	2.72E+61	9.10 <b>E</b> +0.
23 2.78	8.205-00	0.69E+02	2.335-01	9.34E-01	2.83E-31	5.38E+00
30 1.06	7.06E+00	3.83E-02	2.59E-01	9.08E+01	2.9;E+01	7.12E-00
31 1.37	7.01E-00	4.21E+02	3.07E-01	9.40E+01	3.06E+01	7.76E+00
32 1.69	6.57E+00	4.56E+02	3.57E-01	9.47E÷01	3.19E+01	8.50E+00
23 5.04	6.42E-00	5.14E+02	4.33E-01	9.51E÷01	3.33E±01	9.10E+00
31 5.12 35 5.82	6.23E+00 6.16E+00	5.76E+02	5.21E-01	9.54E+01	3.19E+01	1.08E+01 1.18E+01
35 5.82 36 6.25	5.94E+00	6.58E+02 7.33E+02	6.39E-01 7.65E-01	9.58E+01 9.62E+01	3.67E+01 3.88E+01	1.3 IE+01
37 6.73	5.94E-00 5.96E+00	8.39E+02	9.42E-01	9.65E+01	4.11E+01	1.54E+01
38 7.23	5.71E+00	9.44E-02	1.14E+00	9.69E+01	4.08E+01	1.77E+01
39 7.77	5.58E-00	1.06E+03	1.37E+00	9.72E+01	4.68E+01	2.06E+01
40 8.35	5.55E+00	1.22E+03	1.69E+00	9.75E+01	5.02E+01	2,41E+01
41 8.97	5.56E+00	1.41E+03	2.10E+00	9.79E+01	5.41E+01	2,95E+01
12 9.61	5.16E+00	1.51E+03	2.12E÷00	9.82E+01	5.83E+01	3.35E+01
43 10.3	5.12E+00	1.73E+03	2.99E+00	9.85E+01	6.32E+01	3.93E+01
41 11.1	1.99E+00	1.94E+03	3.61E+00	9.88E+01	6.85E+01	4.73E+01
45 11.9	5.01E+00	2.26E+03	4.50E+00	9.91E+01	7.49E+01	5.66E+01
46 12.8	4.91E+00	2.55E+03	5.48E+00	9.91E+01	3.21E+01	5.80E+01
47 13.8	4.91E+00	2.94E+03	6.79E+00	9.97E+01	9.03E+01	8.22E+01
48 11.8	4.99E+00	3.46E÷03	8.57E+00	1.00E+02	1.00E+02	1.00E+02
> 15.4						
TOTALS:	0.00E+00	0.00E+00 0.57E+04 4.	0.00E+00	1.00E+02	1.00E+02	1.00E+02

#### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 9.007 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

		GONGE	NTDATIONS		CI:MI	ULATIVE %	•;
CHNL DI	T		NTRATIONS SURFACE	MASS	NUMBER	SURFACE	MASS
	186	NUMBER 3.23E÷00	2.01E+00	1.50E-04	1.45E-01	3.72E-03	2.00E-04
	504	2.01E+0Q	1.61E+00	1.35E-04	2.35E-01	6.70E-03	3.80E-04
	542	3.45E+00	3.19E#00	2.88E-04	3.90E-01	1.26E-02	7.64E-04
	581	5.63E+00	5.99E+00	5.80E-04	6.43E-01	2.37E-02	1.54E-03
	625	9.96E+00	1.22E+01	1.27E-03	1.09E+00	4.64E-02	3.24E-03
	673	2.06E+01	2.94E+01	3.30E-03	2.02E+00	1.01E-01	7.64E-03
	723	1.30E+01	=	8.52E-03	3.95E+00	2.32E-01	1.90E-02
	777	8.31E+01	1.58E+02	2.05E-02	7.68E+00	5.25E-01	4.63E-02
	835	1.25E+02	2.75E+02	3.83E-02	1.33E+01	1.03E+00	9.74E-02
	897	1.55E+02	3.92E+02	5.86E-02	2.03E+01	1.76E+00	1.76E-01
	964	1.64E+02	4.81E+02	7.73E-02	2.76E+01	2.65E+00	2.79E-01
	.03	1.63E+92	5.66E+02	9.78E-02	3.52E+01	3.70E+00	4.09E-01
	.11	1.65E+02	6.42E-02	1.19E-01	4.26E+01	4.89E+00	5.69E-01
	.19	1.57E+02	7.06E+02	1.41E-01	4.96E+01	6.20E+00	7.57E-01
	. 28	1.49E+02	7.75E+02	1.66E-01	5.63E÷01	7.61E+00	9.78E-01
	.38	1.36E÷02	8.16E+02	1.38E-01	6.24E+01	9.15E÷00	1.23E+00
	. 18	1.21E+02	9.42E+02	2.08E-01	6.78E+01	1.07E+01	1.51E+00
-	. 59	1.05E-02	8.44E-02	2.25E-01	7.26E+01	1.23E+01	1.31E+00
	.71	9.88E+01	8.21E-02	2.35E-01	7.65E-01	1.78E+01	2.12E+00
	.81	7.31E+01	7.84E-02	2.41E-01	7.93E+01	1.535+01	1.13E-90
	20	5.97E+71	7.36E-01	2.435-01	8.25E+01	1.60E+01	C.TTE+Oh
	.12	1.80E-01	0.88E+02	2.44E-01	3.47E-01	1.795+01	3.09E-0D
22 2	. 2 -	3.91E-01	6.10E+02	2.48E-01	8.65E+01	1.91E+01	3.40 <b>E-</b> 00
20 2.		3.17E-01	0.31E+62	2.46E-01	8.79E-11	2.02E+()	₹.३३ <b>೯</b> +३%
21 2.		2.31E-01	5.48E+02	2.11E-01	8.90E-01	2.12E+01	:.07E+00
		2.	5.)5E-02	2.09E-01	8.995-01	2.225+);	1.:6E-10
	. 1 5	1.71E+01	5.00E-02	2.54E-01	9.07E+01	2.31E-01	4.7(2-6)
	. <u>a</u> 7	1.95+01	5.04E-02	2.75E-01	9.13E÷01	2.40E-01	3.10E+q0
		1.08E+01	5.27E+02	3.09E-01	9.19E+01	2.80E+01	5.51E+Q
	. 73	1,14E+91		3.52E-01	9.25E-01	2.50E+01	5.98 <b>E-</b> 49
	.00	1.10E+01	5.87E+02	3.98E-01	9.30E+01		0.51E+10
	.37	1.00E+31	€.39E÷02	4.65E-01	3.35E÷01	2.83E+01	7.135+70
	.69	9.98E+00	6.92E+02	5.42E-01	9.39E+01	2.98E+01	7.85E+00
	.01	3.57E+00	7.66E-02	6.45E-31	9.44E+01	3.10E+01	8.71E+90
	. 12	9.29E+00	8.59E-02	7.76E-01	9.48E+01		9.75E+00
	.32	9.10E+00	9.71E+02	9.44E-01	9.52E+01	3.44E±01	1.10E+01
	.25	8.91E+00	1.10E+03	1.15E-00	9.56E+01		1.25E+01
	.73	3.30E+00	1.25E+03	1.41E+90	9.60E+01	3.88E+01	1.4 i E+01
38 7	.23	8.56E+00	1.41E+03	1:70E+00			1.67E+31
39 7	.77	8.40E+00	1.59E+03	2.07E÷00	9.67E+01	4.43E+01	1.94E+0;
10 3	.35	3.34E+00	1.83E+03	2.55E-00			2.28E+01
11 3	.97	8.61E+00	2.13E+03	3.25E-00			2.72E+01
42 9	.61	8.19E+00	2.39E+03	3.85E-00			2.03E+01
	0.3	8.04E+00	2.71E-03	1.63E-00			3.50E-01
14 1	1.1	7.80E+00	3.07E + 03	5.69E-00			4.82E+01
15 11	1.9	7.80E+00	3.52E-03	7.00E-00			8.80E-01
	2.8	7.82E+00	4.05E-03	8.71E-00			6.72E+01
	0.8	7.30 <b>F</b> +00	4.68E+13	1.08E-01	9.95E-01		8.16E+C1
48 1	; . <del>;</del>	9.0'E-00	5.57E+03	1.38E-01	1.00E+02		1.00E+02
> 1.	. i	6. W E-04	4.30E-01	1.29E-03	1.00E-02	1.00E+02	1.00E-02
TOTALS	:	2.20E+03 5	.39E+01 7.	49E+01		,	

FILE NAME: EPX2 9.008 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

	DIL. RATIO: I :I	EFFIC. CORRE	sci.: Di	
	CONCENTRATIONS		CUMULATIVE %	
CUNI DIN		MASS NUME		MASS
CHNL DIA			57E-01 3.61E-03	
< .180				1.90E-04
1 .50			55E-01 6.54E-03	3.63E-04
2 .543			19E-01 1.21E-02	
3 .581			33E-01 2.25E-02	1.43E-03
4 .623		-	14E+00 4.34E-02	2.96E-03
5 .673 6 .723 7 .773			05E+00 9.10E-02	6.72E-03
6 .723			38E+00 2.03E-01	
			35E+00 4.47E-01	
8 .83:			26E+01 9.71E-01	
9 .831			90E+01 1.47E+00	1.44E-01
10 .98			59E+01 2.22E+00	2.29E-01
11 1.00	2.02E+02 6.81E+02	1.18E-01 3.3	30E+01 3.11E+00	
12 1.11		1.44E-01 4.0	00E+01 4.12E+00	
13 1.19	1.93E+02 8.68E+02	1.73E-01 4.6	38E+01 5.26E+00	6.28E-01
14 1.28	1.87E+02 9.71E+02	2.08E-01 5.3	ME+01 6.52E+00	8.20E-01
15 1.38	1.72E+02 1.03E+03	2.38E-01 5.9	04E+01 7.87E+00	1.01E+00
16 1.45	1.56E+02 1.08E+03	2.68E-01 6.1	19E+01 9.28E+00	1.28E+00
17 1.75	1.08E+02 1.10E+03	2.93E-01 6.9	38E+01 1.37E+01	1.33E+00
19 1.71		3.11E-01 7.3	9E+01 1.01E+01	1.81E+00
13 1.4			4E+01 1.03E+01	1.14E+00
20 :.29		3.0fE-01 8.0	)3E+01 1.45E+(1	2.43E+00
21 2.12	8.77E+01 9.65E+02		75+01 115+11	2.76E+00
no contract to the contract to			7E+01 1.70E+01	3.78E+66
				3.40E+00
21	0.89E-01 7.86E-02	3.46E-11 8.7		1 = -
	1.88E-01 7.00E-12			1.0.F=0.1
28 0.08	2.18E+01 7.17E-02		11E+01 1.1 E+01	1.0 E+30
			12E-11 2.10E-01	. 7: ET
	1.96E+01 7.66E+02		9E+01) 0.80E+01	5.15E+60
29 2.7			.5E+01 23E+01	
30 4.00			11E+01 2.54E+01	3.15E+00
01 1.37		•	6E+01 2.68E+01	6.TTE-00
02 4.69		,	1E+01 '2.7aE+01	7.18E+00
			66E+01 2.94E+U1	8.3(E+30
		-	11E+01 3.16E+01	9.37E+00
34				1.08E+01
			5E+01   3.29E+01	
36 5.26				1.21E+01
37 6.70			34E+01 3.71E+01	1.40E+C1
38 7.23			9E+01 3.59E+01	1.63E+01
39 7.77			32E+01 1.29E+01	1.90E+01
40 9.35			STE+01 1.61E+01	2.24E+01
11 8.97			1E÷31 5.04E-01	2.67E+01
42 9.64			6E+01 5.49E+01	3.17E+01
43 10.3			30E+01 6.30E+01	3.79E+01
44 11.1			4E+01 6.88E+01	1.55E+01
45 11.9			88E+01 7.25E+01	5.50E+01
46 12.8			32E+01 8.03E+01	6.67E+01
47 12.8			06E+01 8.90E+01	8.14E+01
48 14.8		2.02E+01 1.0	00E+02 1.00E+02	1.00E+02
> 1ē.	6.00E-04 4.80E-01	1.28E-03 1.0	00E+02 1.00E+02	1.00E+01
TOTALS:	2.84E+03 7.66E+04 1	.09E+02		

### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 9.009 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 200 SEC

DENSITY: 1

	DIL. RATIO: 1:1	EFFIC. C	CORRECT.: 1	) [	
	CONCENTRACIONS		CUMI	JLATIVE %	
	CONCENTRATIONS		NUMBER	SURFACE	MASS
CHNL DIA	NUMBER SURFACE 3.57E+00 2.22E+00	MASS 1.65E-04	1.56E-01	3.89E-03	2.10E-04
< .486			2.55E-01	7.03E-03	4.02E-04
1 .504			4.21E-01	1.32E-02	8.03E-04
2 .542			6.89E-01	2.46E-02	1.61E-03
3 .581	6.13E+00 6.52E+00		1.16E+00	4.77E-02	3.35E-03
4 .625	1.07E+01 1.32E+01		2.09E+00	1.01E-01	7.67E-03
5 .673	2.13E+01 3.03E+01		3.98E+00	2.25E-01	1.85E-02
6 .723	4.30E+01 7.07E+01		7.52E+00	4.93E-01	4.37E-02
7 .777	8.06E+01 1.53E+02		1.28E+01	9.55E-01	9.03E-02
8 .835	1.20E+02 2.63E+02		1.92E+01	1.61E+00	1.61E-01
9 .897	1.47E+02 3.73E+02		2.61E+01	2.41E+00	2.55E-01
10 .964	1.57E+02 4.60E+02		3.32E+01	3.37E+00	3.75E-01
11 1.03	1.62E+02 5.47E+02		4.03E+01	4.47E+00	5.23E-01
12 1.11	1.61E+02 6.28E+02		4.71E+01	5.70E+00	7.01E-01
13 1.19	1.56E+02 7.00E+02		5.37E+01	7.0EE+00	9.14E-01
14 1.28	1.51E+02 7.84E+02		5.98E+01	8.55E+00	1.16E+00
15 1.38	1.40E+02 8.39E+02			1.01E+01	1.44E+00
16 1.48	1.27E+02 8.77E+02		6.51E+01	1.17E+01	1.74E+00
17 1.59	1.12F+02 8.98F+02		7.03E+01	1.32E+01	2.06E+00
18 1.71	9.64E+01 2.91E+02		7.45E+01		2.40E+00
19 1.84	8.14E+01 8.69E+02		7.81E+01	3.47E+01	2.755+60
1.98	6.73E+01 8.80E+02		6.16E+01	1.62E+01	3.10E+00
21 2.12	5.83E+01 7.87E+02		8.35E-01	1.76E+01	3.48E+60
22 2.28	4.81F+01 7.41F+02			1.885+01	
20 2.45	2.64E+01 6.92E+02		8.7(E-01	2.01F+01	1.81E+ 0
14 2.04	2.89E+01 0.34E+01			2.11E+61	1.15E+
25 2.83	2.28E+01 5.78E+01		3.5(E+01	2.24F+01	in English
26 (.05	1.95E+01 5.71E+01		9.00E-01	2.02E+01	3.89E+30 5.19E+30
27 3.27	1.69E+01 5.89E+01		9.(9E+01	2.41E-01	5.75 <u>E</u> +3
18 3.52	1.81E+01 8.89E+02				
29 3.78	1.16E+01 6.14E+01				6.22E-00
÷0 4.56	1.23E+01 6.41E+03			2.75E+01	(,77E-0)
.1 4.37	1.17E+01 7.02E+01		9.01E-01		7.42E+00 8.18E+00
32 4.69	1.10E+01 7.62E+01				5.08E+00
33 5.04	1.05E+01 8.42E-01				1.01E-01
34 5.42	1.01E+01 9.36E+01				1.15E+01
35 5.82	9.96E+00 1.06E+03				
<b>6.26</b>	9.60E+00 1.18E+03				1.00E+01
37 6.73	9.35E+00 1.33E+03				1.49E+01 1.72E+01
38 7.23	9.20E+00 1.51E+03				
39 7.77	8.93E+00 1.70E+03				2.00E+01 2.35E+01
40 8.35	8.90E+00 1.95E+0				
41 8.97	9.04E+00 2.29E+03				2.78E+61
42 9.64	8.56E+00 2.50E+03				3.30E+01
43 10.3	8.4(E+00 2.83E+0				3.92E-(1
44 11.1	8.22E+00 3.20E+03			6.74E+01	4.67E+01
15 11.9	8.20E+00 3.69E+00				5.61E+(1
46 12.8	8.22E+00 4.27E+03				6.77 <b>E-</b> 01
17 13.8	8.18E+00 4.91E+03				8.21E+01
48 14.8	8.21E+00 5.69E+03				1.00E+02
> 15.4	6.00E-04 4.80E-01	-	1.00E+02	1.00E+02	1.00E+02
TOTALS:	2.18E+03 5.70E+04	7.87E+01			

FILE NAME: EPX2 10.000 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

	001/051/55 / 7701/	_			
1	CONCENTRATIONS			ULATIVE %	
CHNL DIA		MASS	NUMBER	SURFACE	MASS
< .186		-		5.33E-03	2.90E-04
1 .501	3.67E-02 2.94E-03				5.41E-C4
2 .512					9.82E-04
3 .581	7.72E-02 8.20E-03			2.7€E-02	1.795-03
4, .625	1.01E-01 1.24E-01	1.29E-05	2.07E+00	1.49E-C2	3.11E-03
5 .673	1.31E-01 1.91E-01		2.91E+00	7.15E-02	5.29E-03
6 .723	1.80E-01 2.95E-01	3.56E-05		1.13E-01	8.91F-03
7 .777	2.69E-01 5.10E-01	6.61E-05	5.74E+00	1.81E-01	1.56E-02
8 .835	3.59E-01 7.88E-01		8.00E+00	2.91E-01	2.68E-02
9 .397	4.19E-01 1.06E+00		1.08E-01	4.12E-C1	4.30E-02
10 .964	4.51E-01 1.33E+00	2.14E-C4	1.35E+01	6.28E-01	6.47E-02
11 1.03	5.15E-01 1.74E+90		1.67E-01	8.70E-01	9.53E-02
12 :.11	5.68E-01 2.22E+00	1.12E-01	2.00E-01	1.18E+00	1.37E-01
13 1.19	6.08E-01 2.74E+00	5.16E-C4	2.41E+01	1.58E+00	1.902-01
11 1.28	6.60E-01 3.14E+00	7.37E-01	1.90E+01	2.01E+00	2.68E-01
13 . 1.39	6.95E-01 1.17E-00	9.61E-04	3.27E+01	2.62E+00	3.65E-11
15 1.43	7.35E-01 5.10E+00	1.26E-03	3.73E+01	3.30E+00	4.91E-01
17. 1.39	7.12E-01	1.59E-03	1.20E+01	4.16E+00	6.55E-01
19 1.71	7.18E-0! 6.61E-00	1.90E-03	4.65E+01	5.09E+00	8.48E-01
19 1.84	7.09E-01 7.67E+00	2.325-03	5.10E+01	6.155+00	1.045-00
1.48	6.88E-01 8.11E+00	2.79E-03	5.80E-01	7.02E+00	1.07E+0.
2.12	6.387-01 3.84E+00	3.825-08	₹.94E+91	8.835+00	1.715+00
22 2.23	6.01E-01 1.01E+01		0.0:E+01	1.61F+61	2.115-00
20 2.45	7.91E-01 1.12E-01		3.715+01	1.168-(1	1.395+
21 2.61	F.12E-01 1.19E+01		7. NE-01	1.30E+11	3.112+00
2.50	1.728-01 1.208+01		7.035+01	1.5QE+01	3.862+ 1
26 3.05	1.11E-01 1.20E-01		7.61E+01	1.67E+01	4.31E+10
27 2.27	J.51E-01 1.19E+01		7.8/2-0:	1.83E+61	1.5°E+30
28 3.52	3.27E-01 1.28E+01			2.0/1E+01	5.73E+11
2, 2.78	2.91E-01 1.31E+01		8.11E+01	2.19E+01	6.37E+
30 4.06	2.52E-01 1.31E+01		8.08E+01	.2.38E+01	7.18E+07
31 1.37	2.30E-01 1.39E+01	1.01E-02	8.52E+01	2.57E+01	8.50E+30
32 : 4.69	2.10E-01 1.45E+01	1.14E-02	8.68E+01	2.77E+01	9.66E+00
33 5.04	2.03E-01 1.62E+01	1.37E-02	8.78E+01	3.00E+01	1.10E+01
34 5.42	1.96E-01 1.81E+01	1.63E-02	8.91E+01	3.25E+01	1.27E+01
35 5.82	1.81E-01 1.93E+01	1.88E-02	9.02E+01	3.52E+01.	1.462+01
36 6.26	1.66E-01 2.04E+01	2.13E-02	9.13E+01	3.80E+01	1.68E+01
37 6.73	1.62E-01 2.31E+01	2.59E-02	9.23E+01	4.13E+61	1.94E+01
38 7.23	1.53E-01 2.52E+01	3.04E-02	9.32E+01	4.48E+01	2.25E+01
39 7.77	1.40E-01 2.66E+01	3.44E-02	9.41E+01	4.85E+01	2.60E+01
40 8.35	1.29E-01 2.82E+01	3.93E-02	9.49E+01	5.24E+01	3.00E+01
41 8.97	1.29E-01 3.26E+01	4.88E-02	9.58E+01	5.70E+01	3.50E+01
42 9.64	1.13E-01 3.29E+01	5.30E-02	9.65E+01	6.16E+01	4.04E+01
43 10.3	1.05E-01 3.54E+01		9.71E+01	6.65E+01	4.66E+01
44 11.1	9.98E-02 3.89E+01		9.77E+01	7.19E+01	5.39E+01
45 11.9	9.65E-02 4.34E+01		9.84E+01	7.80E+01	6.28E+01
46 12.8	9.13E-02 4.75E+01	_	9.89E+01	8.46E+01	7.31E+01
47 13.8	8.23E-02 4.94E+01		9.94E+01	9.15E+01	8.47E+01
48 14.8	8.75E-02 6.06E+01		1.00E+02	1.00E+02	1.00E+02
> 15.4	1.20E-04 9.61E-02		1.00E+02	1.00E+02	1.00E+02
TOTALS:	1.59E+01 7.17E+02 9	.83E-01			_

### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 10.001 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

					•	
	CONC	ENTRATIONS		CUM	ULATIVE %	
CHNL DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< .186		2.68E-02	1.99E-06	4.00E-01	5.15E-03	2.74E-04
1 .504	2.35E-02	1.88E-02	1.58E-06	6.17E-01	8.76E-03	4.92E-04
2 .512	3.85E-02	3.56E-02	3.21E-06	9.72E-01	1.56E-02	9.35E-04
3 .581		5.80E-02	5.63E-06	1.48E+00		1.71E-03
1 .625		8.93E-02	9.30E-06	2.15E+00		2.99E-03
5 .673		1.44E-01	1.61E-05	3.08E+00		5.21E-03
6 .723		2.16E-01	2.60E-05	4.29E+00	1.13E-01	8.80E-03
7 .777	1.82E-01	3.46E-C1	4.49E-05	5.97E+00	1.79E-01	1.50E-02
8 .835		5.31E-01	7.39E-05	8.21E+00	2.81E-01	2.52E-02
9 .837		7.19E-C1	1.08E-04	1.085+01	4.19E-01	1.00E-02
10 .961	3.00E-01	8.73E-01	1.41E-04	1.36E+01	5.88E-01	5.94E-02
11 1.02		1.19E+00	2.05E-04	1.68E+01	8.16E-01	8.77E-02
	3.73E-01	1.45E+00	2.70E-01	2.03E-01	1.10E-00	1.25E-01
12 1.11		1.93E+00	3.66E-04	2.40F-01	1.152+00	1.75E-01
13 1.19		2.31E+00	5.03E-01	2.82E+01	1.90E+00	2.44E-01
11 1.28						
13 1.08		2.85E+00	6.561-04	3.26E+01	2.44E-00	3.35E-01
16 1.15		3.34E+00	8.27E-01		3.19E+00	4.49E-01
17 1.13		3.81E+00	1.01E-03		3.825+00	5.88E-01
1 1 1 71		4.08E+00	1.25E-03	1.58E+01	4.60E+00	7.61E-01
19 1.54		4.90E+00	1.51E-03	5.00E+01	5.60E+01	9.68E-01
200 1.93		5.13E-0°	1.79E-00	5.11E-01	0.84F+00	1.22E+00
2.12		€.215+00	2.20E-03	5.815-01	7.305+00	1.50E+00
21 0.19		6.87 <b>E-</b> 00	2.622-00	6.19E-01	9.15 <b>E+</b> 00	1.83E+00
22 2.43	0.88E-01	7.38E-00	3.02E-03	8.55E+01	1.33E+01	2.29E+00
21 2.81	3.51E-01	7.70E+00	3.392-03	6.88E+01	1.20E+01	2.76E+00
23 2.33	3.21E-01	8.12E+00	3.84E-03	7.17E+01	1.38E+01	J.29E+00
28 3.05		S.59E+01	4.37E-03	7.44E-01	1.53E+01	3.89E+00
27 3.27	2.62E-01	8.83E+00	4.82E-03	7.68E+01	1.69E÷01	4.56E+00
28 3.82		8.75E+00	5.14E-03	7.89E-01	1.86E+01	5.26E+00
28 3.78	2.01E-01	9.04E+00	5.71E-03	8.03E+01	2.04E+01	6.05E+00
30 1.06	1.82E-01	9.47E+00	6.42E-03	8.24E+01	2.22E+01	6.93E+00
31 4.37		1.03E+01	7.49E-03	8.405-01	2.42E+01	7.96E+00
32 1.69	1.50E-01	1.04E+01	8.14E-03	8.54E+01	2.62E+01	9.08E+00
33 5.04	1.53E-01	1.22E+01	1.03E-02	8.68E+01	2.85E+01	1.05E+01
31 5.42	1.46E-01	1.35E+01	1.22E-02	8.82E+01	3.11E+01	1.22E+01
35 5.82		1.40E+01	1.36E-02	8.94E+01	3.38E+01	1.41E+01
36 6.26		1.59E+01	1.66E-02	9.06E+01	3.68E+01	1.63E+01
37 6.73		1.66E+01	1.86E-02	9.16E+01	4.00E+01	1.89E+01
38 7.23		1.86E+01	2.24E-02	9.27E+01	4.36E+01	2.20E+01
39 7.77		1.94E+01	2.51E-02	9.36E+01	4.73E+01	2.54E+01
40 8.35		2.20E+01	3.06E-02	9.45E+01	5.15E+01	2.97E+01
41 8.97		2.33E+01	3.49E-02	9.54E+01	5.60E+01	3.45E+01
42 9.64		2.36E+01	3.80E-02	9.61E+01	6.05E+01	3.97E+01
43 10.3		2.60E+01	4.49E-02	9.68E+01	6.55E+01	4.59E+01
44 11.1		2.96E+01	5.49E-02	9.75E+01	7.12E+01	5.34E+01
		3.00E+01	5.98E-02	9.82E+01	7.70E+01	6.17E+01
		3.58E+01	7.68E-02	9.88E+01	8.38E+01	7.23E+01
46 12.8		4.00E+01	9.21E-02	9.94E+01	9.15E+01	8.49E+01
47 13.8		4.42E+01	1.09E-01	1.00E+02	1.00E+02	1.00E+02
48 14.8			0.00E+00	1.00E+02		1.00E+02
> 15.4		0.00E+00		1.002702	1.006402	LIVETUE
TOTALS:	1.081+01	5.21E+02 7.	70F-01			

FILE NAME: EPX2 10.002 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: DI

			ENTRATIONS			L'LATIVE %	
	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<b>&lt;</b>	.485	3.14E-02	1.95E-02	1.45E-06	4.33E-01	5.59E-03	2.97E-04
1	.301	1.72E-02	1.37E-02	1.15E+06	6.69E-01		5.35E-04
2	.512	2.775-02	2.56E-02	2.31E-06	1.05E+00	1.69E-02	1.01E-03
3	.581	3.835-02	4.07E-02 5.91E-02	3.94E-06 6.15E-06	1.53E+00 2.24E+00	2.86E-02 4.55E-02	1.82E-03
1 5	.625 .673	4.81E-02 6.50E-02	9.26E-02	1.04E-05	3.13E+00	7.21E-02	3.09E-03 5.22E-03
5 6	.723	9.06E-02	1.49E-01	1.80E-05	4.38E+00	1.15E-01	8.92E-03
7	.777	1.27E-01	2.42E-01	3.13E-05	6.13E+00	1.84E-01	1.54E-02
8	.835	1.64E-01	3.60E-01	5.01E-05	8.39E+00	2.88E-01	2.57E-02
9	.897	1.99E-01	5.05E-01	7.56E-05	1.11E+01	4.33E-01	4.12E-02
10	.954	2.05E-01	6.02E-01	9.67E-05	1.10E+01	6.05E-01	6.11E-02
11	1.03	2.36E-01	7.95E-01	1.37E-04	1.72E+01	8.33E-01	8.94E-02
12	1.11	2.55E-01	9.97E-01	1.85E-04	2.07E+01	1.12E+00	1.27E-01
13	1.19	2.79E-01	1.26E+00	2.51E-04	2.46E+01	1.48E+00	1.79E-01
1 1	1.28	3.02E-01	1.57E+00	3.37E-04	2.87E+01	1.93E+00	2.48E-01
13	1.38	3.18E-01	1.89E-00	4.36E-04	3.30E+01	2.47E+00	3.38E-C1
16	1.19	3.29E-01	2.282+00	5.64E-01	3.76E+01	3.13E+00	4.51E-01
17	1.59	1.16E-01	2.53E+00	6.735-04	1.19E+01	3.85E+00	5.92E-01
18	: - :	0.20E-01	2.98E+00	8.53E-01	1.64E+01	4.71E+00	F.69E-01
23	1.54	2.435-01	0.18E+00	9.785-14	5.03E+01	5.625+00	9.69E-01
20	1.98	0.08E-01	3.77E+00	1.25E-00	5.47E+01	6.71E+00	1.20E-01
21	C	2.TTF-01	3.95E-00	1.10E-03	5.85F+01	7.84E+00	1.51E-00
2.4	2.28	1.781-01	1.57E-00	1.71E-00	6.23E+01	9.15 <b>E-</b> 00	1.:TF+07
23	2.47	2.01F-01	4.98E+00	2.038-00	8.79F-01	1.05E+01	1:295+00
24	1.51	2.25E-01	5.02E+00	2.01E-03	6.91E+01	1.20E+01	1.74E+00
2.5	2.83	2.07E+01	5.12E+00	2.42E-03	7.18E+01	1.35E+01	0.24E+00
26	3.0€	1.81E-01	f.29E+00	2.69E-00	7.43E÷01	1.50E+01	8.79E+00
27	3.27	1.735-01	5.84E+00	3.19E-03	7.67E+01	1.67E+01	4.45E-00
28	3.52	1.38E-01	6.17E+00	3.62E-03	7.89E+01	1.85E+01	5.19E+00
29	3.78	1.06E-01	5.10E+00	3.85E-03	8.08E+01	2.025+01	5.99E+00
30	1.06	1.18E-01	6.14E+00	4.16E-03	8.21E+01	2.20E+01	6.81E+00
31	4.37	1.17E-01	7.02E+00	5.12E-03	8.40E+01	2.40E+01	7.89E+00
32	1.69	1.02E-01 1.01E-01	7.08E+00 8.09E+00	5.54E-03 6.81E-03	8.54E+01 8.68E+01	2.60E+01 2.83E+01	9.03E+00 1.04E+01
33 34	5.04 5.42	9.64E-02	8.91E+0C	8.05E-03	8.81E+01	3.09E+01	1.04E+01.
35	5.82	8.52E-02	9.09E+00	8.84E-03	8.93E+01	3.35E+01	1.39E+01
36	6.26	9.06E-02	1.12E+01	1.17E-02	9.05E+01	3.67E+01	1.63E+01
37	6.73	8.42E-02	1.20E+01	1.35E-02	9.17E+01	4.01E+01	1.91E÷01
38	7.23	7.62E-02	1.25E+01	1.51E-02	9.27E+01	4.37E+01	2.22E+01
39	7.77	7.08E-02	1.34E+01	1.74E-02	9.37E+01	4.76E+01	2.58E+01
40	8.35	5.93E-02	1.30E+01	1.81E-02	9.45E+01	5.13E+01	2.95E+01
41	8.97	6.52E-02	1.65E+01	2.47E-02	9.54E+01	5.61E+01	3.46E+01
42	9.64	5.57E-02	1.63E+01	2.62E-02	9.62E+01	6.07E+01	3.99E+01
43	10.3	4.82E-02	1.63E+01	2.81E-02	9.69E+01	6.54E+01	4.57E+01
44	11.1	4.66E-02	1.82E+01	3.37E-02	9.75E+01	7.06E+01	5.26E+01
45	11.9	4.92E-02	2.21E+01	4.42E-02	9.82E+01	7.70E+01	6.17E+01
46	12.8	4.58E-02	2.38E+01	5.11E-02	9.88E+01	8.38E+01	7.22E+01
47	13.8	4.42E-02	2.65E+01	6.11E-02	9.94E+01	9.14E+01	8.48E+01
48	14.8	4.31E-02	2.99E+01	7.39E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
ATOT	LS:	7.27E+00 3	1.48E+02 4.	86E-01	•		

#### TSI AERODYNAMIC FARTICLE SIZER

FILE NAME: EPX2 10.003 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

			ENTRATIONS			LATIVE %	
CHNL	F.I.d	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	. 186	3.36E-02	2.08E-02	1.54E-06	3.25E-01	5.03E-03	2.78E-04
1	.504	1.76E-02	1.41E-02	1.19E-06	4.96E-01	8.44E-03	4.91E-04
2	.542	2.93E-02	2.70E-02	2.44E-06	7.80E-01	1.50E-02	9.31E-04
3	.581	4.28E-02	4.55E-02	4.41E-06	1.19E+00	2.60E-02	1.73E-03
1	.625	5.92E-02	7.26E-02	7.56E-06	1.77E+00	4.36E-02	3.09E-03
ō	.673	8.47E-02	1.21E-01	1.35E-05	2.59E+00	7.27E-02	5.52E-03
б	.723	1.13E-01	1.86E-01	2.24E-05	3.68E+00	1.18E-01	9.55E-03
7	.777	1.61E-01	3.06E-01	3.96E-05	5.24E+00	1.92E-01	1.67E-02
8	.835	2.25E-01	4.93E-01	6.87E-05	7.42E+00	3.11E-01	2.90E-02
9	.897	2.79E-01	7.07E-01	1.06E-04	1.01E+01	4.825-01	4.81E-02
10	.964	3.13E-01	9.16E-01	1.47E-04	1.32E+01	7.04E-01	7.46E-02
11	1.03	3.60E-01	1.22E+00	2.10E-04	1.66E+C1	9.98E-01	1.12E-01
12	1.11	4.05E-01	1.58E+00	2.93E-04	2.06E+01	1.38E+00	1.65E-01
13	1.19	1.54E-01	2.04E+00	4.08E-04	2.50E+01	1.87E+00	2.23E-01
		4.8SE-01	2.54E+00	5.44E-04	2.97E+01	2.49E+00	3.36E-01
11	1.28	5.22E-01	3.14E+00	7.23E-04	3.17E+01	3.25E+00	4.66E-01
1.5	1.38			9.00E-04	3.98E-01	1.13E+00	6.29E-01
16	1.43	5.2 E-01	3.63E+00				
1 -	1.39	5.16F-01	1.135+00	1.10E-03	4.485-01	5.132+00	8.283-01
<u>: 0</u>	1.71	7.00E-01	1.89E-00	1.40E-08	1.935-01	6.01E+00	1.02E+00
1.5	1.54	1.995-01	5.32E-00	1.60F-03	₹ • 47E - DI	7.595+00	1.075+00
<b>-</b> :	1.99	1.53E-01	5.68E-00	1.67E-00	5.925+01	8.80E+00	1.712-
	2.12		8.29E-10	2.20E-00	0.373-01	1.03E+ 1	1.11E+01
<u> </u>	1,23	0.328-01	0.15E+00	2.40E-03	W. TGE-11		2.85E+00
-		3.6. <b>2-</b> 0:	- 1, 1, 1, <b>2, −</b> 1, 2	1.57E-00	7.759-01	1.378-01	
1	2.31	1.27E-1	7.13 <b>E-</b> 00	0.11E-03	7.40E+01	1.55E+01	3.83 <b>E+</b> 36
·: :	1. E.	2.578-01	1.00E+00	3.47E-03	7.62E+01	1.725+)1	4.26E-0.
-3		2.82E-01	7.38E+00	3.71E-03	7.92E+01	1.90E+01	4.90E-00
: -	3.2-	2.19E-01	7.38E+30	4.03E-03	S.13E+ 11	2.03E+01	5.65E-00
2.3	0.82	1.90E-01	7.11E+00	4.05E-00	8.32E-01	2.28E+01	3.44E+50
29	1.78	1.58E-01	7.13E+00	4.50E-03	8.47E-01	2.43E+01	7.25E+00
20	1.0€	1.45E-01	7.54E+00	5.11E-03	8.£1E-01	2.61E+01	S.17E+00
31	1.07	1.34E-01	8.04E+00	5.86F-03	8.74E-01	2.81E+01	9.22E+00
32	1.69	1.21E-01	8.38E+00	6.55E-03		3.01E+01	1.04E+61
33	3.04	1.07E-01	3.60E+00	7.23E-03		3.22E+01	1.17E+01
34	5.12	1.01E-C1	9.32E+00	8.42E-03		3.45E+01	1.32E+01
3.5	5.82	1.01E-01	1.08E+01	1.05E-02		3.71E+01	1.51E+01
36	6.26	9.82E-02	1.21E-01	1.26E-02			1.71E+C1
37	6.73	8.99E-02	1.28E+01	1.44E-02			2.00E+01
38	7.23	8.30E-02	1.37E+01	1.65E-02		4.64E+01	2.29E+01
39	7.77	8.20E-02	1.56E+01	2.02E-02		5.02E+01	2.66E+01
-10	8.35	7.68E-02	1.68E+01	2.34E-02		5.42E+01	3.08E+01
	8.97	6.65E-02	1.68E+01	2.52E-02		5.83E+01	3.53E+01
+11		6.06E-02	1.77E+01	2.85E-02		6.26E+01	4.04E+01
12	9.64			3.24E-02		6.71E+01	4.63E+01
43	10.3	5.56E-02	1.88E+01	3.77E-02		7.20E+01	5.30E+01
44	11.1	5.21E-02	2.03E+01			7.77E+01	6.14E+01
45	11.9	5.16E-02	2.32E+01	4.63E-02		8.43E+01	7.19E+01
16	12.8	5.26E-02	2.73E+01	5.86E-02			8.38E+01
47	13.8	4.78E-02	2.87E+01	6.61E-02		9.12E+01	
48	14.8	5.24E-02	3.64E+01	9.00E-02		1.00E+02	1.00E+02
> .	15.4.	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	1.03E+01	4.13E+02 5.	30E-01			

FILE NAME: EPX2 10.004 01-01-1980 LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

		CONC	ENTRATIONS		CIMI	JLATIVE %	
CHNL	DTA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
< ·	.486	4.72E-02		2.19E-06	1.90E-01	4.19E-03	2.57E-04
1	.504	3.08E-02	2.47E-02	2.08E-06	3.14E-01	7.71E-03	5.01E-04
2	.542	4.49E-02		3.74E-06		1.36E-02	9.40E-04
3	.581	6.59E-02	7.00E-02	6.79E-06		2.36E-02	1.74E-03
4	.625	8.56E-02	1.05E-01	1.09E-05	1.10E+00	3.86E-02	3.02E-03
5	.673	1.27E-01	1.80E-01	2.02E-05	1.61E+00	6.43E-02	5.39E-03
6	.723	2.01E-01	3.31E-01	3.99E-05	2.42E+00	1.11E-01	1.01E-02
7	.777	3.42E-01	6.50E-01	8.42E-05	3.80E+00	2.04E-01	1.99E-02
8 .	.835	5.44E-01	1.19E+00	1.66E-04	5.99E+00	3.74E-01	3.94E-02
9	.897	7.49E-01	1.90E+00	2.84E-04	9.01E+00	6.44E-01	7.27E-02
10	.961	8.86E-01	2.59E+00	4.17E-04	1.26E+01	1.01E+00	1.22E-01
11	1.03	1.09E+00	3.67E+00	6.34E-04	1.70E+01	1.54E+00	1.96E-01
12	1.11	1.20E+00	4.67E+00	S.68E-04	2.18E+01	2.20E+00	2.98E-01
13	1.19	1.32E+00	5.97E+00	1.19E-03	2.71E+01	3.05E+00	1.37E-01
14	1.28	1.44E+00	7.50E+00	1.61E-03	3.29E+01	4.12E+00	6.26E-01
15	1.38	1.50E+00	9.01E+00	2.08E-03	3.90E+01	5.41E+00	8.7CE-01
16	1.48	1.53E+00	1.06E+01	2.63E-03	4.51E+01	6.92E+00	1.18E+00
: 7	1.59	1.51E+00	1.21E+01	3.21E-03	5.12E+01	8.64E+00	1.55E+00
18	1.71	1.42E+00	1.32E+01	3.76E-03	5.69E+01	1.05E+01	1.99E+00
19	1.84	1.31E+00	1.39E+01	4.28E-03	6.22E÷01	1.25E+01	2.50E+00
20	1.98	1.19E+00 1.59E-00	1.47E+01 1.56E+01	4.85E-03 5.53E-03	6.70E+01 7.14E+01	1.00E+01 1.08E+01	3.07E+00
21	2.28	9.73E-01	1.60E+01	C.10E-03	7.14E+01	1.81E+01	41E+00
23		8.02E-01	1.04E+01	6.70E-03	7.98E-01	2.14E-01	7.21E+00
23	2.74	7.81F-01	1.8(E+01	T.06E-03	8.17E+01	2.(TE-11	7.17E+05
	1.8	0.09E-01	1.54E+01	7.29E-03	8.42E-01	2.891+61	A.30E+00
_(	2.08	5.15E-01	1.51E+01	7.66E-03	8.01E+01	2.37E+01	7.90E+00
	2 - 2 -	4.23F-01	1.42E+01	7.74E-08	S.79E+01	3.31E+61	TOE+60
26	3.72	3.45E-01	1.34E+01	7.90E-03	8.93E+01	3.4CE+01	9.60E+00
19	2.78	1.81E-01	1.27E+01	8.02E-03	9.05E+01	3.38E+01	1.00E+01
: 0	4.00	2.41E-01	1.25E+01	8.48E-03		0.7(E+01	1.1(F+01
31	4.37	2.04E-01	1.23E-01	9.93E-03	9.22E-01	3.73E+01	1.26F+01
32	1.69	1.89E-01	1.31E+01	1.03E-02	9.30E+01	3.52E+01	1.08E+01
33	5.04	1.64E-01	1.31E+01	1.11E-02	9.37E+01	4.11F+01	1.51E+01
34	F. 42	1.50E-01	1.38E+01	1.25E-02	9.43E+01	4.31E+01	1.80E+C1
25	5.82	1.51E-01	1.61E+01	1.50E-02	9.49E+01	4.84E+01/	1.84E+01
36	6.26	1.30E-01	1.60E+01	1.67E-02	9.54E+01	4.76E+01	2.04E÷01
37	5.73	1.31E-01	1.86E+01	2.09E-02	9.59E+01	5.08E+01	2.28E+01
38	7.23	1.22E-01	2.00E+01	2.41E-02	9.64E+01	5.01E+(1	1.57E+01
39	7.77	1.18E-01	2.24E+01	2.91E-02	9.69E+01	5.63E+01	2.91E+01
. 40	9.35	1.05E-01	2.30E+01	3.20E-02	9.73E+01	5.96E+01	3.18E+01
41	8.97	1.08E-01	2.73E+01	4.08E-02	9.78E+01	6.35E+01	3.76E+01
42	9.64	9.29E-02	2.72E+01	4.37E-02	9.81E+01	6.74E+01	1.27E+01
43	10.3	8.47E-02	2.86E+01	4.94E-02	9.85E+01	7.15E+01	4.85E+01
14	11.1	7.97E-02	3.11E+01	5.77E-02	9.88E+01	7.89E+01	5.53E+01
13	11.9	7.75E-02	3.49E+01	6.96E-02	9.91E+01	8.09E+01	6.35E+01
46 47	12.8	7.70E-02	4.01E+01	8.59E-02	9.94E+01	8.06E+01	7.35E+01
48	13.8	7.24E-02 7.32E-02	4.34E+01 5.07E+01	1.00E-01 1.26E-01	9.97E+01 1.00E+02	9.28E+01 1.00E+02	5.88E+01
10 >	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02 1.00E+02	1.00E+02 1.00E+02
TOTAL			0.00E+00 0.01E+02 8.		1.002-02	1.OUETUL	1.00 2702
1 4 7 1		5 1 3 U D T U 1	OILTUL D.	OCE OI			

# TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 10.005 01-01-1980
LAST CALIBRATION: 01-01-1930 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

		<i>5121</i> 10						
		coxci	ENTRATIONS		CUM	ULATIVE %		
CHZI	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS	
ζ	. 136	2.93E-02		1.36E-06	2.62E-01	1.74E-03		
ì	.504	1.81E-02		1.22E-06		8.51E-03	5.18E-04	
2	.542	2.74E-02	2.53E-02	2.28E-06	6.70E-01	1.51E-02	9.76E-04	
2 3	.581	3.90E-02	4.15E-02	4.02E-06	1.02E+00		1.78E-03	
1	.625	5.80E-02	7.11E-02	7.11E-06	1.54E+00		3.27E-03	
5	.673	7.01E-02	9.97E-02	1.12E-05	2.17E+00		5.52E-03	
6	.723	1.09E-01	1.78E-01	2.15E-05	3.14E+00		9.84E-03	
7	.777	1.81E-01	3.44E-01	4.46E-05	4.76E+00	2.06E-01	1.885-02	
ئ	.835	2.49E-01	5.46E-01	7.60E-05	6.99E+00		3.41E-02	
9		3.19E-01	8.03E-01	1.21E-04	9.85E+00		5.84E-02	
	.997	3.90E-01	1.14E+00	1.83E-0:	1.33E+01	8.55E-01	9.52E-02	
10	.961	•			1.73E+01			
11	1.03	4.47E-01	1.51E+03	2.61E-04		1.25E+00	1.48E-01	
12	i.1i	5.03E-01	1.96E+00	3.64E-01	2.18E+0!	1.73E÷30	2.21E-01	
13	1.19	5.65E-01	2.54E+00	5.08E-04	2.69E+01	2.42E+CO	3.23E-01	
1 1	1.29	5.91E-01	3.085+00	£.59E-04	3.22E-01	3.22E+00	4.55E-C1	
1 7	1.38	6.11E-01	3.672+00	8.45E-04	3.77E+01	4.175+30	6.25E-01	
13	1.18	6.23E-01	1.32F+00	1.07E-03	1.33E+01	5.30E+00	8.40E-01	
. 7	1.79	5.992-01	4.80E+00	1.28E-03	4.85E-01	6.83E+00		
1 =	1.71	5.89E-01	5.41E-00	1.56E-03		7.93 <b>E-</b> 0)	1. [1E+00	
<u>:</u>	1.31	5.34E-01	5.70E+00	1.75E-03	5.87E+01	9.45E-00	1.76E+60	
2.7	1.98	5.08E-01	6.23E+00	2.06F-03	6.02E-01	1.11E+01	1.17E+00	
4; • - •		4.82E-01	8.575-00	2.225-00	6.74F <b>-</b> 01	1,235+01	1.84E-90	
·` <i>:</i>	2.29	1.22E-01	6.93 <b>E-</b> 00	2.64E-03	7.115+01	1.10E+01	3.17E+00	
-	2.15	3.93E-01	7.435-0.	0.055-03	7.475-01	1.85E+01	3.79 <b>E-</b> 00	
2 !	2.64	3.36E-01	7.38E+03	3.24E-03	7.77E-01	1.845+01	4.41E+00	
2.5	1.43	2.91E-01	7.36E-30	3.48E-03	8.03E+01	2.04E+01	5.14E+00	
2:1	# <b>.</b> € 3	2.51E-01	7.34E+00	3.73E-03	8.25E+01	2.13E+01	5.89E+00	
., -	2-	2.09F-01	7.05E+00	3.86E-03	8.44E+01	2.41E+01	8.68E+00	
is:	3.52	1.80E-01	7.01E+00	4.11E-03	8.60E+01	2.88E+01	7.19E+00	
29	3.76	1.50E-01	6.75E+00	4.26E-03	8.73E-01	2.77E+01	8.33E+00	
3.5	1.06	1.32E-01	6.86E+00	4.65E-C3	8.85E+01	2.95E+01	9.28E+00	
31	4.37	1.23E-01	7.41E+00	5.40E-03	8.96E+01	3.145+01	1.04E+01	
32	1.69	1.09E-01	7.56E+00	5.92E-03	9.06E+01	3.34E+01	1.16E+01	
33	5.04	9.80E-02	7.85E+00	6.60E-03	9.15E+01	3.54E+01	1.29E+01	
34	5.42	9.22E-02	8.52E+00	7.70E-03	9.23E+01	3.76E+01	1.44E+01	
35	5.82	8.95E-02	9.56E+00	9.28E-03	9.31E+01	4.01E+01	1.63E+01	
		8.60E-02	1.06E+01	1.11E-02	9.39E+01	4.012+01 4.29E+01	1.85E+01	
36	6.26			1.11E-02 1.26E-02	9.46E+01	4.58E+01	2.11E+01	
37	6.73	7.92E-02	1.13E+01		9.53E+01	4.92E+01	2.42E+01	
38	7.23	7.86E-02	1.29E+01	1.56E-02	-		2.75E+01	
39	7.77	6.61E-02	1.26E+01	1.63E-02	9.59E+01	5.24E+01		
40	8.35	5.87E-02	1.29E+01	1.79E-02	9.64E+01	5.58E+01	3.11E+01	
41	8.97	6.25E-02	1.58E+01	2.37E-02	9.70E+01	5.99E+01	3.58E+01	
12	9.64	5.65E-02	1.65E+01	2.66E-02	9.75E+01	6.42E+01	4.11E+01	
43	10.3	5.11E-02	1.73E+01	2.98E-02	9.79E+01	6.87E+01	4.71E+01	
44	11.1	4.85E-02	1.89E+01	3.51E-02	9.84E+01	7.36E+01	5.42E+01	
45	11.9	4.88E-02	2.20E+01	4.39E-02	9.88E+01	7.93E+01	6.30E+01	
46	12.8	4.34E-02	2.26E+01	4.84E-02	9.92E+01	8.52E+01	7.27E+01	
47	13.8	4.75E-02	2.85E+01	6.57E-02	9.96E+01	9.26E+01	8.59E+01	
48	14.8	4.08E-02	2.83E+01	7.00E-02	1.00E+02	1.00E+02	1.00E+02	
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02	
TOTA	ALS:	1.12E+01	3.84E+02 4.	98E-01				

FILE NAME: EPX2 10.006 01-01-1980

LAST CALIERATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

CIII:I	<b>D.F.</b> 1		ENTRATIONS	<b>41.66</b>		CLATIVE %	W. C.C.
	DIA	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
•	. 196	1.56E-02	9.75E-03	7.29E-07	5.59E-01	5.42E-03	2.75E-04
1	.501	1.13E-02	9.03E-03	7.59E-07	9.64E-01	1.04E-02	5.61E-0+
2	.512	1.64E-02	1.52E-02	1.37E-05	1.55E÷00	•	1.08E-03
3	.531	2.30E-02	2.45E-02	2.37E-06	2.38E÷00	3.25E-02	1.97E-03
1	.625	2.74E-02	3.36E-02	3.50E-06	3.36E+00	5.11E-02	3.29E-03
5	.673	3.38E-02	4.82E-02	5.40E-05	4.57E+00	7.785-02	5.33E-C3
ę T	.723	1.13E-02	7.28E-02	8.78E-06	6.16E+00	1.18E-01	8.64E-03
	.777	5.99E-02	1.14E-01	1.47E-05	8.31E+00	1.812-01	1.42E-02
8	.835	6.90E-02	1.51E-01	2.11E-05	1.08E+01	2.65E-01	2.21E-02
3	.397	7.51E-02	1.90E-01	2.85E-05	1.35E+01	3.71E-01	3.29E-02
10	.961	7.18E-02	2.19E-01	3.52E-05	1.62E+01	1.93E-01	4.61E-02
11	1.03	7.545-02	2.54E-01	4.40E-05	1.89E÷01	6.345-01	6.27E-02
	1.11	5.21E-02	3.20E-01	5.95E-C5	2.18E+01	8.125-01	8.f1E-01
13	1.19	7.695-02	3.42E-01	6.828-03	2.43E+01	1.00F+00	1.115-01
1 1	1.28	S.32E-02	4.33E-01	9.29E-05	2.75E+01	1.24E+00	1.46F-01
<b>!</b>	1.39	9.14E-02	5.49E-01	1.27E-04	3.08E+31	1.55E+00	1.93E-01
16	1.18	8.51E-02	5.92E-01	1.47E-01	3.38E+0:	1.88E+00	2.48E-01
. c	1.59	8.095-02	6.72E-01	1.795-04	3.69E+01	2.05E+00	3.18E-01
: C	1.71	9.12E-02	7.69E-01	2.202-0:	3.985+01	2.69E+00	0.99E-01
1. 1. 11. 12.	1.81	9.637-32 8.74 <b>5-</b> 32	9.28E-01 1.05E+00	2.83E-01 2.18E-01	4.29E÷01 4.60E÷01	2.195+00 2.785+0	5.085-01 6.07E-01
11	2.12	- 212-02	1.179+00	1.15E=14	1.30F+01	4.428+03	7.342-01
r ')		9.03E-02	1.52E-00	5.81E-01	5.20E+01	3.27 <b>E</b> +00	1.01E+00
0.0	1.15	9.198-02	1.74F÷00	7.148-04	5.53E+01	8.245433	1.012400
21	2.61	6.63E-02	1.89E-00	8.32E-01	5.87E+01	7.19E+06	1.605+00
- : -: 5	2.83	7.322-02	1.80E+00	9.01E-04	6.145+01	9.05E+07	1.945+00
_ <b>.</b>	2.05	8.12E-02	2.37E+00	1.21E-03	6.13E+01	9.67E+00	2.79E+00
	2.27	7.825-02	2.64E+00	1.442-03	6.71E+01	1.11E+01	2.93E-00
28	3.52	7.19E-02	2.80E+00	1.64E-03	6.96E-01	1.27E÷01	3.55E+00
29	3.78	6.705-02	3.01E+00	1.90E-03	7.20E+01	1.448+01	1.17E+00
30	1.06	6.52E-02	3.39E+00	2.30E-03	7.41E+01	1.02E+01	5.14E+00
31	1.37	6.59E-02	3.96E+00	2.88E-03	7.67E+01	1.84E+01	6.22E÷00
32	1.69	6.07E-02	4.21E+00	3.30E-03	7.89E+01	2.08E+01	7.4FE+00
33	5.04	5.28E-02	4.23E+00	3.56E-03	8.08E+01	2.31E+01	8.80E+00
31	5.42	5.16E-02	4.77E+00	4.31E-03	8.27E+01	2.58E+01	1.01E+01
35	5.82	5.76E-02	6.15E+00	5.97E-03	8.47E+01	2.92E+01	1.27E+01
36	6.26	5.29E-02	6.52E+00	6.81E-03	8.66E+01	3.28E+01	1.52E+01
37	6.73	4.51E-02	6.42E+00	7.21E-03	8.82E+01	3.64E+01	1.805+01
38	7.23	1.32E-02	7.10E+00	8.56E-03	8.98E+01	4.03E+01	2.12E+01
39	7.77	3.86E-02	7.34E+00	9.50E-03	9.12E+01	4.44E+01	2.48E+01
40	8.35	3.02E-02	6.63E+00	9.23E-03	9.23E+01	4.81E+01	2.82E+01
41	8.97	3.28E-02	8.29E+00	1.24E-02	9.34E+01	5.27E+01	3.29E+01
42	9.64	2.74E-02	8.00E+00	1.29E-02	9.44E+01	5.71E+01	3.78E+01
43	10.3	2.65E-02	8.95E+00	1.55E-02	9.54E+01	6.21E+01	4.36E+01
44	11.1	2.35E-02	9.17E+00	1.70E-02	9.62E+01	6.72E+01	5.00E+01
45	11.9	3.00E-02	1.35E+01	2.69E-02	9.73E+01	7.47E+01	6.02E+01
46	12.8	2.47E-02	1.29E+01	2.76E-02	9.82E+01	8.18E+01	7.06E+01
47	13.8	2.82E-02	1.69E+01	3.90E-02	9.92E+01	9.12E+01	8.53E+01
48	14.8	2.28E-02	1.58E+01	3.91E-02	1.00E+02	1.00E+02	1.00E+02
>	15.4	0.00E+00	0.00E+00	0.00E+00	1.00E+02	1.00E+02	1.00E+02
TOTAL	LS:	2.79E+00 1	.80E+02 2.	65E-01			

### TSI AERODYNAMIC PARTICLE SIZER

FILE NAME: EPX2 10.007 01-01-1980

LAST CALIBRATION: 01-01-1980 SN 149 SAMPLE TIME: 500 SEC

DENSITY: 1

i		DIL. KAI	10. 1 .1	EFFIC. (	CORRECT I	) <u>1</u>	
		CONCI	ENTRATIONS		CIIMI	JLATIVE %	
CUNI	DTA .	NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
( CHND	.486	1.58E-02	9.78E-03	7.26E-07	5.76E-01	5.80E-03	
1	.504	8.16E-03		5.49E-07	8.73E-01		5.22E-04
	.542	1.26E-02	1.16E-02	1.05E-06	1.33E+00	1.66E-02	9.51E-04
2 3	.581	2.04E-02	2.17E-02	2.10E-06			1.81E-03
		2.68E-02	3.28E-02	3.42E-06			
	.625	3.42E-02	4.87E-02	5.46E-06	4.29E+00		
5	.673			8.81E-06	5.91E+00	1.21E-01	9.04E-03
6 7	.723	4.44E-02 6.11E-02	7.30E-02 1.16E-01	1.50E-05		1.90E-01	1.52E-02
	.777			1.97E-05		2.74E-01	
8	.835	6.44E-02	1.41E-01 1.78E-01	2.66E-05	1.30E+01	3.79E-01	3.41E-02
9	.897	7.01E-02		3.43E-05	1.57E+01	5.05E-01	4.81E-02
10	.964	7.28E-02	2.13E-01	4.47E-05		6.59E-01	6.64E-02
11	1.03	7.67E-02	2.59E-01			8.35E-01	
12	1.11	7.61E-02		5.51E-05		1.05E+00	1.18E-01
13	1.19	7.98E-02	3.59E-01	7.17E-05		1.30E+00	1.55E-01
11	1.28	8.16E-02	4.24E-01	9.10E-05	2.71E+01		
15	1.38	9.14E-02	5.49E-01	1.27E-04		1.63E+00	2.07E-01
16	1.48	9.14E-02		1.57E-04			
17	1.59	9.88F-02	7.91E-01	2.10E-04	3.74E-01	2.47E+00	
18	1.71	9.55E-02	8.83E-01	2.52E-04		2.99E+00	7.61E-01
19	1.84	9.26F-02	3.99E-01	3.04E-04	4.42E-01	2.58E+00	F.85E-(1
20	1.88	E.88E-01	1.10E+00	3.62E-0;	4.74E-01		
21	2.12	9.87E-02	1.20E-00	4.48E-(4		4.99E+00	
12	2.28	9.90E-02	1.46E+00	5.58E-04	E.09E+01	5.85E+00	1.14E+60
23	2	9.:cF-62	1.74E+00	7.15E-04	5.70E-01	6.3°E+0°	1.44E+60
24	2.0)	8.08E-00	1.88E+00		6.00E-01		1.77 <b>E</b> -00
25	2.83	7.88E-02	1.92E+00	9.08F-04			
26	3.(5	7.70E-02	2.25E+0C	1.15E-03		1.04E+01	1.61E+00
- 7	2.27	7.08E-02	2.37E÷00	1.30E-03	E.84I-01	1.19E+01	
28	3.52	6.82E-02	2.66E÷00	1.56E-03	7.09E-01	1.84E+(1	
1.9	3.78	0.89E-02	3.16E-00	1.96E-08	7.34E-01	1.53E+(1	4.57E-00
:0	4.05	6.31E-02	3.28E-00	2.22E-03	7.57E+01	•	6.48E-00
::1	4.37	0.10E-02	3.86E÷00	2.67E-03	7.79E-01	1.94E+01	
32	4.09	E.27E-02	2.65E+00	2.86E-03	7.98E-01	2.10E+01	
23	5.04	5.17E-02	4.14E+00	3.48E-03	8.17E÷01	2.40E+01	9.17E+00
. 34	5.12	E.60E-02	5.18E+00	4.68E-03	8.38E-01	2.71E+01	1.11E+01
3.5	5.82	4.86E-02	5.26E+00	5.11E-03	8.56E-01	3.02E+01	1.32E+01
. 35	6.26	4.81E-02	5.93E+00	6.19E-03	8.78E+01	3.37E+01	1.57E+01
37	6.73	4.28E-02	6.06E+00	6.80E-03	E.89E-01	3.73E+01	1.85E÷01
38	7.23	4.00E-02	6.07E+00	8.04E-03	9.03E-01	4.13E+01	2.18E+01
39	7,77	3.69E-02	6.95E+00	9.00E-03	9.17E÷01	4.54E-01	2.55E+01
40	8.35	2.98E-02	6.52E-00	9.08E-03	9.25E+01	1.93E+01	2.92E+01
41	8.97	2.94E-02	7.44E+00	1.11E-02	9.38E+01	5.37E÷01	2.27E+61
42	9.61	2.41E-02	7.05E+00	1.13E-02		E.79E+01	3.84E+01
43	10.3	2.65E-02	8.95E+00	1.55E-02	9.57E+01	6.32E+01	4.47E+01
1.1	11.1	2.39E-02	9.31E+00	1.73E-02		6.87E+01	5.17E+01
45	11.9	2,84E-02	1.28E+01	2.55E-02		7.63E+01	6.22E+01
16	12.8	2.54E-02	1.32E+01	2.84E-02		8.41E+01	7.88E+01
47	13.8	2.10E-02	1.26E+01	2.90E-02		9.16E+01	8.57E+01
18	14.8	2.03E-02	1.41E+01	3.48E-02			8.68E+01
>	15.4	1.20E-04	9.61E-02	2.56E-04			1.00E+02
TOTA			1.69E+02 2.	_		<del>-</del>	
1 (-1			2100L:06 6				

. - : 1

DENSITY: 1
DIL. RATIO: 1:1 EFFIC. CORRECT.: D1

				•			
		CONCE	ENTRATIONS			ULATIVE %	
CHNL		NUMBER	SURFACE	MASS	NUMBER	SURFACE	MASS
<	.486	1.49E-02	9.22E-03	6.86E-07	5.56E-01	6.16E-03	3.21E-04
1	.504	8.52E-03	6.82E-03	5.73E-07	8.75E-01	1.07E-02	5.89E-04
2	.542	1.16E-02	1.07E-02	9.71E-07	1.31E+00	1.79E-02	1.04E-03
<sup>†</sup> 3	.581	1.56E-02	1.66E-02	1.61E-06	1.89E+00	2.90E-02	1.79E-03
. 4	.625	2.04E-02	2.50E-02	2.61E-06	2.65E+00	4.57E-02	3.01E-03
5	.673	2.93E-02	4.17E-02	4.67E-06	3.75E+00	7.35E-02	5.20E-03
. <b>6</b>	.723	3.84E-02	6.32E-02	7.62E-06	5.18E+00	1.16E-01	8.75E-03
7	.777	5.23E-02	9.94E-02	1.29E-05	7.14E+00	1.82E-01	1.48E-02
8	.835	7.03E-02	1.54E-01	2.15E-05	9.77E+00	2.85E-01	2.48E-02
9	.897	7.39E-02	1.87E-01	2.80E-05	1.25E+01	4.10E-01	3.79E-02
10	.964	7.62E-02	2.23E-01	3.58E-05	1.54E+01	5.59E-01	5.46E-02
11	1.03	8.34E-02	2.82E-01	4.87E-05	1.85E+01	7.47E-01	7.74E-02
12	1.11	8.53E-02	3.33E-01	6.18E-05	2.17E+01	9.69E-01	1.00F-01
13	1.19	8.6SE-02	3.90E-01	7.78E-05	2.49E-01	1.23E+00	1.43E-01
1 4	1.28	9.92E-02	5.16E-01	1.11E-04	2.86E+01	1.57E+00	1.91F-01
15	1.38	9.40E-02	5.68E-01	1.31E-04	3.22E-01	1.9EE+00	2.55E-01
.16	1.48	9.67E-02	6.71E-01	1.66E-04	3.58E+01	2.40E+00	3.33E-01
117	1.39	1.05E-01	8.39E-01	2.23E-04	3.97E+01	2.96E+00	4.37E-01
13	1.73	9.05E-02	8.06E-01	1.39E-04	4.31E+01	3.F1E+00	f.49F-(1
	1.84	9.46E-02	1.01E-00	3.10E-04	4.66E-01	1.19F+00	6.9.E-()
(23	1.88	9.1:E-02	1.13E-00	3.72E-04	5.0(E+01	4.951+00	8.09E-01
	2.12	9.08E-02	1.00E-00	4.7CE-04	5.08E-03	5.84F+00	:.( %E+.(
00	2.28	9.06E-02	1.497-00	5.68E-04	5.095-01	6.8851+60	1.25F-01
(25	2.45	8.80E-02	1.68E-00	5.89E-04	5.(2F+31	7.56F+00	E - E -
	2.04	8.81E-01	1.91E-00	8.811-04		9.2FE+90	77.
	1.52	7.20E-02	1.84E-00	8.7(E-04	0.021-01	1.0(E+0)	1.152-
Ξ6	.05	f.ffE-('1	1.0(E+00	1.(1E-03	: . : ::-::	1.155-01	
•, <del>-</del>		7.26E-12	2.40E-07	.: (E-03			( <del>.</del>
- 9	1.52			1.51E-03			
	8	8.7-E-01	2.31E-00	1.68E-03	•		€. €F+ C
30	4.06	E.38E-02	2.79E-00	1.89E-03	7.81E+01		
31	4.57	5.90E-01	3.54E+00	2.58E-03	8.0.E-01	2.11E+-1	7.14E-01
32	1.69	1.88E-02	0.43E+00	2.70E-03			1.4(E-()
. 23	5.64	5.02E-02	4.02E-00	3.38E-03	8.41E-01		9.685+00
34	5.42	4.01E-02	0.71E+00	3.35E-03	2.86E+01	2.80E+01	1.15E+(:
	5.82	4.00E-02	4.27E+00	4.14E-03	8.71E+01	3.14E+01	1.35E+01
; 36	6.26	3.83E-02	4.72E+00	4.93E-03		•	1.08E+01
37	6.73	3.90E-02	5.55E+00	6.23E-03		3.33E÷01	1.87E+(1
38	7.23	3.58E-02	5.88E+00	7.09E-03	9.13E+01	4.11E+01	2.2(E+()
, 39	7.77	3.29E-02	6.24E+00	8.09E-03	9.25E+01	4.64E+01	2.76E+01
40	8.35	2.90E-02	6.37E+00	3.86E-03	9.36E+01	5.60E+01	2.99E+(I
( 41	8.97	2.45E-02	6.20E+00	9.27E-03		5.48E+01	3.43E+61
42	9.64	2.21E-02	6.46E+00	1.04E-02	9.83E+01	5.91E-01	3.91E+11
43	10.3	2.23E-02	7.53E+00	1.30E-02	9.62E+01	6.41E+01	4.02E-01
44	11.1	2.10E-02	8.19E+00	1.52E-02	9.7CE+01	6.90E+01	5.20E+(1
45	11.9	2.23E-02	1.00E+01	2.00E-02	9.78E+01	7.63E+01	8.17E+01
46	12.8	2.21E-02	1.15E+01	2.46E-02	9.8CE+01	£.40E+(1	7.02E+01
47	13.8	1.91E-02	1.15E+01	2.66E-02	9.93E+01	9.17E+01	8.30F-01
18	14.8	1.80E-02	1.25E+01	3.09E-02	1.0(E+02	1.60E-02	1.00F-01
, ,	15.4	0.00E+00	0.00E+00	0.00E+C0	1.00E+02	=	1.06E-02
TOTA			.50E+02 2.			- · · · - · · -	
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