EXHIBIT
A

In Re: Pall Corporation
30 Sea Clift Avenue
Glen Cove, New York
DEC. Site No. 13053B

AFFIDAVIT OF KURT J. OLSON

KURT J. OLSON, duly sworn, deposes and says:

1. My name is Kurt J. Olson. I am an attorney with the law firm of Maupin Taylor Ellis & Adams, P.A., in Raleigh, North Carolina. I represent the Pall Corporation in the above-referenced proceeding and have first-hand personal knowledge of the matters set forth below.

2. Pall Corporation's facility at 30 Sea Cliff Avenue in Glen Cove, New York has been listed as a Class 2 site on New York's Registry of Inactive Hazardous Waste Disposal Sites. New York's Environmental Conservation Law and the regulations thereunder permit Pall Corporation to petition for a change in the site's classification including removal of the site from the registry.

3. In August 1996 John F. Byrne, Esq., Division of Environmental Enforcement, New York Department of Environmental Conservation, sent me a document entitled "Petition Information Suggestions" which describes the information needed to file a complete petition.

4. Since August 1996, I have worked diligently with Mary Ann Bartlett, Assistant General Counsel at Pall Corporation and others at the company to collect information in support of Pall Corporation's petition. I have visited Pall Corporation's 30 Sea Cliff Avenue site on multiple occasions, interviewed Pall Corporation's consultants numerous times, reviewed all known site investigations and reports, reviewed company annual reports from 1958 to the

present and interviewed numerous employees who worked at the 30 Sea Cliff Avenue site at some point from the time Pall Corporation initially occupied it to the present.

5. During this investigation, it became apparent that large scale manufacturing at the 30 Sea Cliff Avenue site occurred from the late 1950s until 1971. Accordingly, I asked Pall Corporation employees to review their files for pertinent records from this time period, including invoices, receipts and inventory records that would document chemical usage and disposal. Due to the length of time that has transpired, however, and the transfer of large segments of the corporation to other locations, such documentation does not appear to exist. In addition, several former employees of Pall Corporation who may have had knowledge related to this matter are deceased. This includes Mr. Sidney Krakauer who allegedly spoke with Nassau County officials in 1977, and whose comments have been used to assert Pall Corporation's complicity in this matter.

6. The information in Pall Corporation's petition is based on information I collected from reviewing available documents and files and in interviews with Pall Corporation employees. It is accurate and correct to the best of my knowledge.

7. To generate current data for its petition, Pall Corporation retained Fluor Daniel GTI, Inc. to install a new shallow monitoring well and to sample all of the monitoring wells at the 30 Sea Cliff Avenue site. The new well was installed on November 18, 1996. On November 26, 1996, Fluor Daniel GTI collected water level measurements and samples from each monitoring well. The results of this investigation are set forth in a report entitled "Groundwater Sampling and Analysis Report, Pall Corporation, 30 Sea Cliff Avenue, Glen Cove, New York" which Fluor Daniels GTI prepared at my direction. I am submitting a true and accurate copy of

this report to the Department of Environmental Conservation as Exhibit Z to the petition.

Kurt J. Olson

Kurt J. Olson

NORTH CAROLINA

WAKE COUNTY

I, the undersigned, a Notary Public in and for the said State and County, do hereby certify that Kurt J. Olson personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal this the 14th day of January, 1997.

Beverly A. Kirkman

Notary Public

My Commission Expires:

My Commission Expires 4-13-2000

(NOTARIAL SEAL OR STAMP)

EXHIBIT

B

In re: Pall Corporation
30 Sea Cliff Avenue
Glen Cove, NY
DEC Site No. 13053B

AFFIDAVIT OF HENRY PETRONIS

Henry Petronis, being duly sworn, deposes and says:

1. My name is Henry Petronis. I currently reside at 6561 Hopkins Neck Road, Easton, Maryland 21601.

2. I am a retired officer of Pall Corporation, having worked for that company for over 30 years. Pall Corporation manufactures filtration and clarification systems including filter media and component parts. During my time with Pall Corporation I held several positions in the management of the company and at one point was responsible for all of the company's manufacturing operations at 30 Sea Cliff Avenue. Initially, I was the President and General Manager of Glen Components Corporation ("Glen Components"), a subsidiary of Pall Corporation that manufactured metal parts used to make filtration systems. Later, I became Vice President of Manufacturing at Pall Corporation. I have firsthand, personal knowledge of the matters set forth below.

3. In 1957, I started a company in Glen Cove, New York called Glen Components. Prior to that time I had been a Warrant Officer in the U.S. Army stationed in Europe from 1942

to 1945 and, after the War, I held several jobs with manufacturing companies on Long Island, New York while attending night school at Columbia University in New York City.

4. In the mid-1950s, I went to work for Airtransport Equipment, a precision machining operation. I was the manager of Airtransport Equipment's plant in Amityville, New York. That facility machined and produced parts and fittings for various companies, including Pall Corporation. It was in this position that I became familiar with Pall Corporation, then known as Micro Metallic Corporation, and it became familiar with me.

5. At first, Glen Components was a joint venture between Pall Corporation and me. It was formed to provide all or most of the precision machined parts needed by Aircraft Porous Media, Inc. ("Aircraft Porous Media"). Aircraft Porous Media was a wholly owned subsidiary of Pall Corporation that made filters and filtration systems used in the aerospace industry. In 1957, Aircraft Porous Media was located in the large building (the "Pall Building") located at 30 Sea Cliff Avenue, Glen Cove, New York.

6. Glen Components did not begin operations until August 1958. By that time it was a wholly owned subsidiary of Pall Corporation and occupied a new 6000 square foot building also located on Pall Corporation's 30 Sea Cliff Avenue property in Glen Cove, New York (the "Glen Components Building"). The mailing address for the Glen Components Building was 36 Sea Cliff Avenue, Glen Cove. Glen Components remained in that building from 1958 until 1971 when it moved to St. Petersburg, Florida and the building was sold to August Thomsen.

7. In 1958, when I began to work at the Sea Cliff Avenue site, the Pall Building was roughly 29,000 square feet. As I understand it, the Pall Building was constructed in 1918 and was designed as a cork insulated ice house. Apparently, the building remained an ice house until

the time Pall Corporation acquired it. It was surrounded by paved parking areas and paved or dirt roadways for deliveries and shipments. Unpaved areas existed on the east and west perimeters of the property and in the location where the Glen Components building was being constructed. The Pall Building was connected to the municipal sewer system by the time I arrived.

8. The Pall Building housed Pall Corporation's sintering furnaces. Sintering is the process of heating metals to just below their melting points so that adjacent strands or particles are bonded together, but do not melt. Using this process, Pall Corporation manufactured its "basic materials," items that had independent utility themselves but which were generally combined with other items to make a finished product. The principal basic materials Pall Corporation produced in its sintering operation were porous metals, such as porous stainless steel and sintered woven wire cloth. Porous metals were used as filter media or in the transpiration cooling systems of jet and rocket engines. Sintered woven wire cloth typically was combined in a variety of weaves, layers and thicknesses to produce filter media.

9. The Pall Building also was the location of Aircraft Porous Media's product assembly and final testing operations and the assembly and final testing operations of the Micro Metallic Division, a division of Pall Corporation that produced filters and filtration systems for the industrial market and later the fluid processing and fluid power markets.

10. At first, the product lines of Aircraft Porous Media and the Micro Metallic Division were dominated by systems using metal filtration media. Over time, however, Pall Corporation also developed and produced filters from porous papers, and these filters and systems eventually became the dominate product lines. Porous papers are any one of a number

of sheet materials made from natural and synthetic organic fibers, inorganic fibers and synthetic resin binders. Typically, a paper cartridge or filter element is interchangeable and disposable.

11. In 1958, the Pall Building also was the location of Porous Plastic Filter Co., Inc. a subsidiary of Pall Corporation that produced plastic filter media and filtration systems on a relatively small scale. The basic material used by this group was a porous inert filter media referred to as porous Teflon and Kel-F. The customers for these products were entities processing or using very strong acids, alkalies and oxidants. Porous Plastic Filter Co. did not grow like other ventures undertaken by Pall Corporation and was never a significant part of our business.

12. The Pall Building also housed Pall Corporation's laboratories and research and development ("R&D) facilities, its engineering department and its headquarters office, including its administrative, sales and accounting offices.

13. In 1963 the Micro Metallic Division and Porous Plastic Filter Co. moved their operations from the Pall Building to Cortland, New York and formed Pall Trinity Micro Corporation with Trinity Equipment Corporation, a company acquired by Pall Corporation several years earlier.

14. In 1971, Aircraft Porous Media moved its operations from the Pall Building to St. Petersburg, Florida. Glen Components moved to St. Petersburg at the same time.

15. No new operation, production line or function was brought to the Pall Building to replace the Micro Metallic Division or Aircraft Porous Media at the time they left. Consequently, no manufacturing or large scale assembly or testing of final products was conducted in the Pall Building after 1971.

16. To the best of my knowledge, chlorinated solvents were used in the operations conducted in the Pall Building on a limited scale. One way they may have been used was following final testing. Each filtration system or unit manufactured at Pall Corporation was tested before being shipped to our customers. Following this testing the system or unit would have to be cleaned before shipping and it is possible that solvents could have been used for this purpose. The activity would have involved re-cleaning a virtually clean system, part or unit and very little contamination would have resulted.

17. To the best on my knowledge, the solvents used by Pall Corporation were mainly used by Glen Components. Glen Components made precision metal parts for filter assemblies. The operation consisted of a wide range of precision machining using a variety of equipment including multiple drill presses, screw machines, lathes, spindles, deburrers, grinders, an anodizer and two vapor degreasers.

18. The two vapor degreasers were used to remove traces of cutting and lubrication oils from machined parts. They were located in the northwest corner of the Glen Components building, the end of the building furthest away from Sea Cliff Avenue. Basically, parts at room temperature were placed in a basket and then into the degreaser. Solvents in a boiling reservoir within the degreaser were heated and vaporized creating a vapor zone through which the conveyor moved. Hot vapor condensed on the cooler parts, formed a liquid and drained back to reservoir by gravity removing oils and greases. The parts were held in the vapor zone until they reach vapor temperature at which time condensation stopped and the articles, which dried immediately within the machine, were withdrawn. Vapor not coming into contact with parts would contact a condensing mechanism, would condense and return to the reservoir.

19. Cutting and lubrication oils removed from the parts during degreasing would sink to the bottom of the reservoir. Periodically, the degreasers would be boiled down and the residues drained into drums. The drums were stored behind the Glen Components building, on the north end, and taken off-site for disposal by an outside vendor.

20. The solvents Glen Components used in its degreasers were perchloroethylene (PCE) and trichloroethane (TCE) . One of these solvents was used initially, for a short period of time only, and was eventually replaced by the other. At this time I cannot remember the sequence. I do know that PCE and TCE were used sequentially and there was never a time when Glen Components used both. Also, although I do not remember the precise volume we used, based on the nature of our system I would estimate that it was no more than ten 55 gallon drums of virgin or reclaimed material per month.

21. Virgin or reclaimed solvents being delivered to Glen Components were brought to the loading dock on the south end of the building, the end closest to Sea Cliff Avenue. They would be moved from the dock into storage in the south and west corner of the building unless there was no room in storage, in which case they would be temporarily stored on the dock.

22. Chips, turnings or filings generated during the machining operations at Glen Components were collected and placed in a centrifuge to recover the cutting and lubrication oils. The oil was reused. The scrap metal was placed in drums, stored at the north end of the building and sold or removed by scrap dealers.

23. The Glen Components building was connected to the municipal sewer system when it was constructed. Floor drains in the work area were connected to the sewer and spills or wash down fluids went to the sewer. Although not condoned in the case of certain liquids, the

dumping of any materials into the sinks went to the sewer. In fact, I vividly recall two occasions when Nassau County sewer officials contacted us about the level of cutting oil or lubrication oil coming from Glen Components. Because no similar complaints were raised with respect to solvents, I believe I am correct in assuming that detectable amounts of solvents were not disposed of in the sinks or floor drains at Glen Components.

24. I have read the written statement dated 2/17/78 which purports to record comments by "S. Krakauer," an employee of Pall Corporation. This statement, which I refer to hereafter as the "2/17/78 statement" was given to me by counsel for Pall Corporation and I have attached it to this Affidavit for reference.

25. Sid Krakauer worked for Pall Corporation for over twenty years and I knew him quite well. At various times he was the Technical Director, Vice President for Fibrous Glass and Porous Plastic, President of Fibrous Glass Products, Inc., a subsidiary located in Pennsylvania, Vice-President- New Products and Senior Vice-President of Pall Corporation. For a period of several years, his office was located in Pennsylvania and while I do not remember the exact dates, I know it was before Glen Components moved in 1971.

26. Sid Krakauer was a Physical Chemist by training and had a broad background in research and development. He was not a chemical engineer as reported in the 2/17/78 statement. As far as I know, he was not responsible for the disposal or management of chemical wastes generated in the Pall Building. Sid Krakauer died in the late 1980s.

27. For the following reasons, the comments attributed to Sid Krakauer in the 2/17/78 statement are surprising to me.

a. First, I have never known Sid Krakauer to say that something may have occurred without also saying in the same sentence that it may not have occurred. Thus, the line attributed to him in the 2/17/78 statement that it was possible that a "reservoir of these chemicals from past discharge practices could be in the ground and could be leaking at a slow rate" seems completely out of character unless it was followed by the additional observation that it was possible that this was not occurring. That was Sid Krakauer's nature and training. If Sid Krakauer speculated about possibilities, as the 2/17/78 statement reports he did, he also always covered all possibilities.

b. Second, Glen Components was a large user of chlorinated solvents at Pall Corporation's Sea Cliff Avenue facility. I was in charge of Glen Components, and I never saw or knew of any solvents being dumped down drains or into yards. Our practice was to drum wastes and ship them off-site for disposal. If this practice were not being followed, I would have been in the position to know. Thus the observation attributed to Sid Krakauer in the 2/17/78 statement that "his own industry would dump these chemicals down drains and into yards" is truthful only if view in its generality, *i.e.*, the industry as a whole may have engaged in this activity, but otherwise is simply contrary to my experience at Pall Corporation. Since I was in a position to know, I have to question the veracity of that statement.

c. Third, even if solvents were dumped down drains at Glen Components or in the Pall Building, something that based on my experience did not happen, the solvents would have gone into the municipal sewer system since both the Glen Components building and the Pall Building were connected to the sewer no later than 1958. Again, we never got a complaint from the Nassau County about solvents, but we certainly did get complaints on two occasions regarding cutting and lubrication oils. This leads me to believe that solvents were not dumped down drains. Certainly, I never saw this happen.

d. Fourth, by 1958 there simply was no place to dump any waste solvent in the "yard" around the Pall Building. Large parts of the area around the Pall Building were paved or high traffic areas for employees, deliveries and customers. It is simply inconceivable that dumping could have occurred in this area or that if it did, complaints would not have been raised by employees and others using this area. I would have been one person who heard about such complaints.

e. Fifth, dumping waste solvents into the yard would have been completely inconsistent with the corporate image Pall Corporation was attempting to foster at the time. Pall Corporation manufactured filter media, filters and filtration and clarification systems. These products remove sub-micron levels of contamination from various streams. Our clients included persons from the bio-medical profession, the aerospace industry, water purifiers, environmental treatment companies and others interested in removing contamination from processes and environments. It was our philosophy not to contribute to contamination and to maintain our office and the surrounding area as clean as possible to convey an image that would assure our customers of the quality of our product. Dumping waste solvents in or around the Pall Building would have been completely inconsistent with this philosophy and did not happen.

Henry Petronis

Attachment

Sworn and subscribed to before me this
4th day of December, 1996

Jane E. Meyers
Notary Public
My Commission expires:

NOTARY PUBLIC STATE OF FLORIDA

JANE E MEYERS
My Commission CC377836
Expires Jun. 02, 1998
Bonded by HAI
800-422-1555

EXHIBIT
C

In re: Pall Corporation)
30 Sea Cliff Avenue)
Glen Cove, NY)
DEC Site No. 13053B)

AFFIDAVIT OF CHESTERFIELD F. SEIBERT, SR.

Chesterfield F. Seibert, Sr., being duly sworn, deposes and says:

1. My name is Chet Seibert. I presently reside at 4483 Cosmos Hill Road in Cortland, NY 13405. I am a retired Executive Vice President of Pall Corporation; however, I remain on its Board of Directors. I am also a retired Chairman and Chief Executive Officer of Marietta Corporation in Cortland, New York . I was a sergeant in the Infantry during World War II and have a degree in Chemical Engineering from Columbia University in New York which I obtained in 1949. I have first hand, personal knowledge of the matters discussed below.

2. I went to work for Pall Corporation in 1951. The company was known as Micro Metallic Corporation and had just moved to 30 Sea Cliff Avenue, Glen Cove, New York earlier that year or late in the year before, 1950. Prior to moving to the Sea Cliff Avenue site, the company operated out of a store front in Brooklyn, New York. At that time, there were six employees, including Dr. Pall, the founder of Pall Corporation and inventor of its principal product, porous stainless steel (PSS).

3. When I was hired by Pall Corporation I was the only engineer at the Sea Cliff Avenue facility. In 1953, I was promoted to Chief Engineer and by 1958, I was Vice President of Engineering. In 1961, I was asked to take over the management of Trinity Equipment

Corporation in Cortland, New York. Trinity Equipment Corporation was a subsidiary of Pall Corporation acquired in May 1961. In 1963, we consolidated Pall Corporation's Micro Metallic Division with Trinity Equipment Corporation to form Pall Trinity Micro Corporation which also was in Cortland, New York.

4. At the time Pall Corporation moved from Brooklyn to Sea Cliff Avenue in late 1950 or early 1951, there were 20 employees, 6 in the office doing administrative, marketing and sales work and 14 in the shop working on the production of PSS. It was a small operation.

5. The building at 30 Sea Cliff Avenue was an old cork lined Knickerbocker ice plant. To the best of my knowledge it was vacant when Pall Corporation bought it and had never been used for anything prior to that time except an ice house. Part of the building had been destroyed in a fire before Pall Corporation occupied it and one of the first things we did was to renovate the building including removing the cork walls.

6. As the sole engineer at the facility and later as Chief Engineer, I did a little bit of everything including design, shop work and supervising. I was principally responsible for the production of the PSS.

7. PSS is a porous stainless steel which we used as a filter media. It can withstand high temperatures, extremely high pressure and very corrosive conditions. It is made from sintered metal powder which is spread on ceramic trays that have been coated with aluminum oxide and water. This coating prevents the metal powder and porous metals from adhering to the ceramic trays during sintering. The trays were roughly 9" by 27". They were stacked on top of each other with separator sheets between the trays and then placed into a sintering furnace. The furnaces were hydrogen furnaces reaching temperatures in excess of 2000° Fahrenheit. We

designed and made the furnaces.

8. Sintering is a process of heating metals in a very narrow temperature range in a closely controlled environment to just below their melting point so that adjacent strands or particles are bonded together but do not melt. The end product of our process was a 9" by 27" porous metal sheet. These sheets were sheared to size, bent, stamped, rolled, shaped and welded into filter elements. End caps and rings were attached to form filter elements.

9. Solvents were not used in the production of PSS. Sintering is a reducing process employing extremely high temperatures. The only thing coming out of that furnace that occasionally needed cleaning was ceramic that adhered to the porous metal sheet. This was done with precision sand blasters.

10. The fabrication step, cutting a blank out of the sheet, shaping it and making it into a cylinder was a dry operation in which no solvents were used.

11. In 1961 I moved to Cortland, New York to run Trinity Equipment Company. In 1963, all of the sintering furnaces at 30 Sea Cliff Avenue were move to Cortland.

12. During the time I was at the 30 Sea Cliff Avenue facility, 10 years, I never saw anyone dump chlorinated solvents into a sink or in the yard. I never heard of anyone doing this nor did I ever see any evidence that this had been done. In fact, it would surprise me to learn that solvents were dumped into sinks or the yard because that behavior would be antithetical to our company policy. Dr. Pall was a physical chemist and the other managers in the company all had degrees in chemistry or engineering. There was an awareness at the company about the proper way to handle the materials that were being used and it is inconceivable to me that routine or even sporadic dumping occurred. As I said above, if it did, I did not see it or hear about it,

and I would have been in a position to do so.

13. I understand from counsel for Pall Corporation, that there is a written statement purporting to record a conversation with Sidney Krakauer in which he is alleged to have said something about waste solvents being dumped down the drains or in the yard. I knew Sidney Krakauer and find it hard to imagine that he would make such a statement unless he was talking about a general industrial practice and not a specific activity engaged in by Pall Corporation at 30 Sea Cliff Avenue. Moreover, for part of the time, Sid was not a the Sea Cliff Avenue site. He was located at Pall Corporation's facility in Mountaintop, Pennsylvania.

Chesterfield F. Seibert Sr.

Chesterfield F. Seibert, Sr.

STATE OF NEW YORK

COUNTY OF Cortland

I, the undersigned, a Notary Public in and for the said State and County, do hereby certify that personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal this the 17th day of December 1996.

Carol L. Folmer

Notary Public

My Commission Expires:

CAROL L. FOLMER
Notary Public, State of New York
Qualified in Cortland County No. 12-6813835
My Commission Expires May 31, 1998

EXHIBIT

D

In re: Pall Corporation
30 Sea Cliff Avenue
Glen Cove, NY
DEC Site No. 13053B

AFFIDAVIT OF SHIRLEY E. FAECHER

SHIRLEY E. FAECHER, being duly sworn, deposes and says:

1. My name is Shirley E. Faecher. I presently reside at 4372 46th Ave. So., St. Petersburg, Florida 33711. I am a retired employee of Pall Corporation having worked there for 29 years. I have first-hand, personal knowledge of the matters discussed below.

2. In 1958 I went to work for Glen Components Corporation ("Glen Components"), a subsidiary of Pall Corporation. At the time, Glen Components was located in a new building adjacent to Pall Corporation's main building, the Pall Building, at 30 Sea Cliff Avenue in Glen Cove, New York. As I understand it, the Glen Components building is now owned by August Thomsen.

3. Glen Components was a precision machine shop. We had a variety of machines including multiple lathes, drills, spindles, deburrers and an anodizer to coat parts. We produced precision parts that were used by Aircraft Porous Media, Inc. to make filters and filter assemblies for the aerospace industry. Aircraft Porous Media was a subsidiary of Pall Corporation and was located in Pall Building.

4. My first position at Glen Components was as an assistant to the President, Henry

Petronis. In this position I was involved in all aspects of the company's operations and specifically responsible for matters such as purchasing, scheduling and bookkeeping.

5. My office was in the Glen Components building. I worked there five days a week from 9:00 a.m. until 5:00 p.m., excluding vacations, holidays and sick days. Overtime was not uncommon.

6. In 1971, Glen Components moved to St. Petersburg, Florida and I moved there to continue working for the company. In 1986, I retired. By that time my title was Vice President of Operations.

7. Because of the nature of my responsibilities, it was common for me to walk the shop floor and to observe operations. I did this daily. At no point during the time I worked for Glen Components did I see anyone pour chemical wastes down a sink or dump chemical wastes anywhere around the property. Nor did I ever see any evidence that would suggest that someone had done these things. I never saw any areas in or around the buildings that looked like wastes had been dumped there nor did I ever experience or hear of any incidents involving an odor or sensory irritation which I assume would follow dumping of chemical wastes in an area like Pall Corporation's 30 Sea Cliff Avenue facility.

Shirley E. Faecher

Shirley E. Faecher

Sworn and subscribed to before me this
22 day of Octobert, 1996

Sharon Shilanski

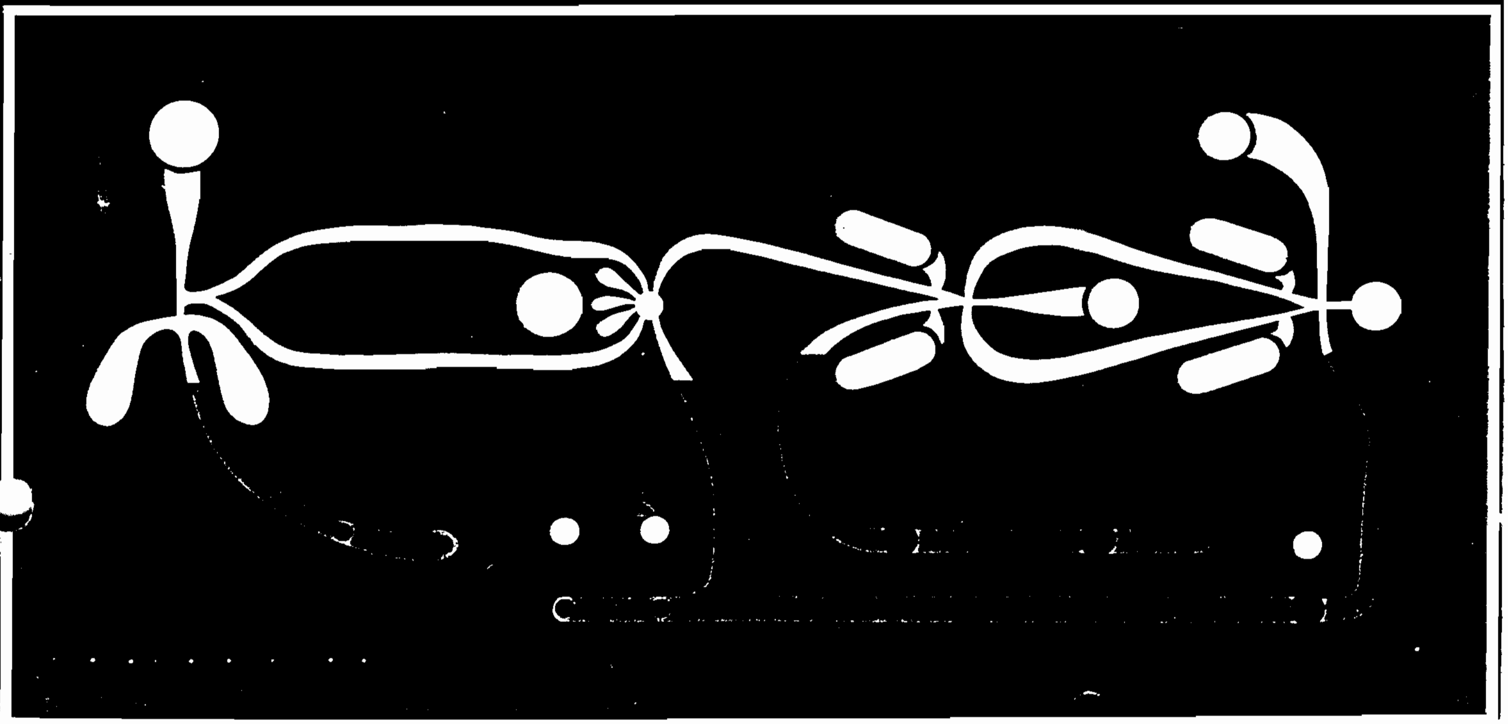
Notary Public Sharon Shilanski
My Commission expires:

SHARON SHILANSKI
MY COMMISSION # CC 468335
EXPIRES: August 1, 1999
Bonded Thru Notary Public Underwriters

EXHIBIT
E

Pall Corporation

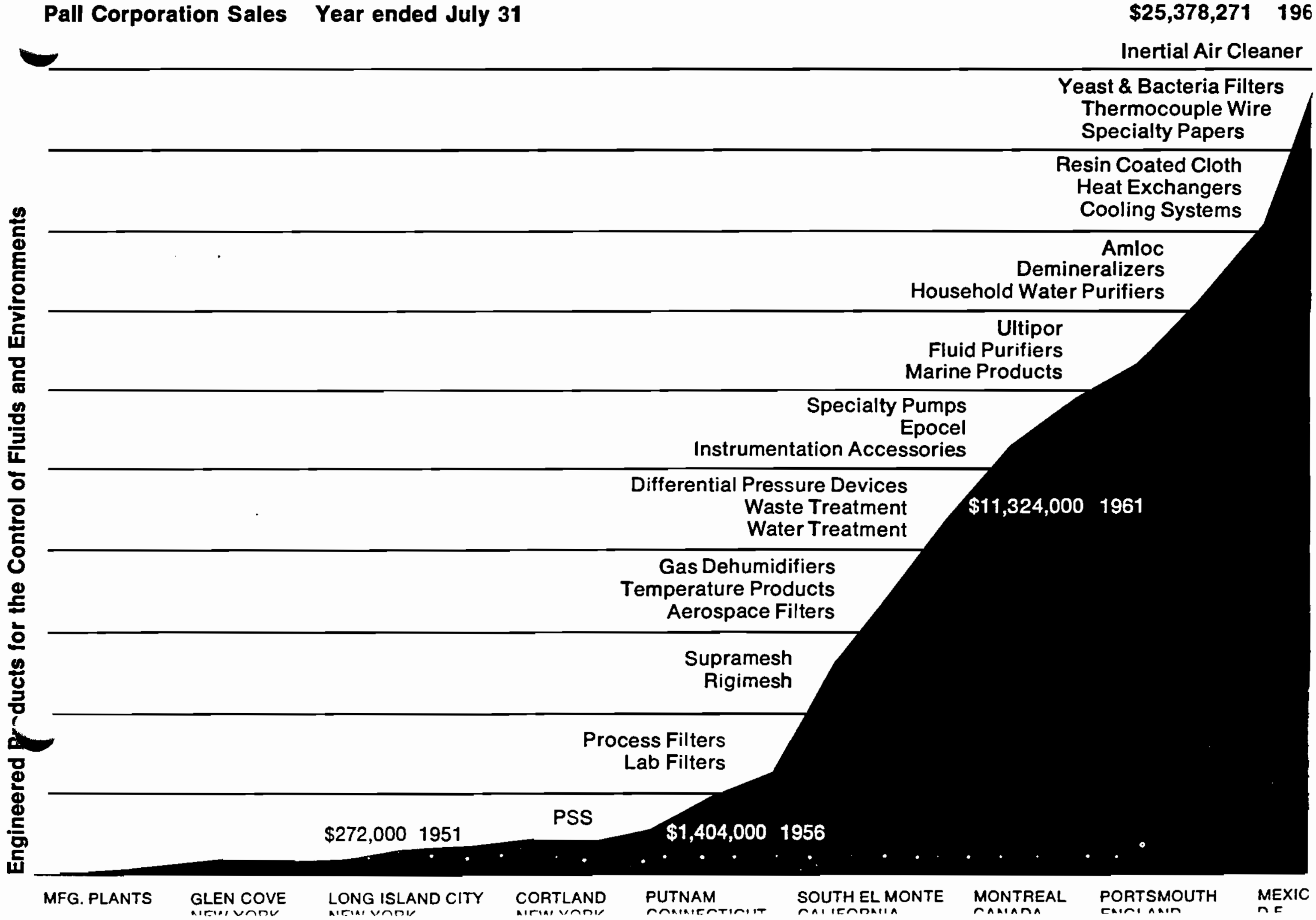
Our first 20 years



In the cover design Pall salutes a lusty new infant, Fluidics. This pneumatic amplifier circuit is shown to direct attention to the company's growing contribution to the performance of fluidic systems.

Fluidics (the technology of fluid amplifiers) stands today where transistor technology did a decade ago and appears ready to cross the dividing line between R&D and broad commercial application in the near future. Pall's filtration systems, as well as our dehumidifiers, are widely used in the clarification and dehydration of pneumatic systems for both Fluidics and fluid power applications.

Pall Corporation Sales Year ended July 31



ABOUT THIS BOOKLET

Except for the covers, this booklet is a reprint of the Facilities-Product booklet entitled *Pall Corporation 1946-1966* that we issued with last year's annual report.

Why reprint it?

Because this last year has seen the adding of many new stockholders who may not have received the booklet last year...because the booklet was so well received by our customers and prospects in Industry and Government that our supply is almost exhausted ...and because there has been little change in our operations.

Of course, product development has continued to go forward full blast, as it must in a technologically advanced Company like ours.

New products and new services to old and new customers continue to grow and will, before not too long, make this booklet obsolete. But, for the present, it still serves to present a good picture of Pall Corporation.

TABLE OF CONTENTS

OUR FIRST 20 YEARS

From a single product for a single market, Pall Corporation has grown to serve an ever-increasing number of industries, governments and individuals on a world-wide basis. A dynamic organization with versatile capabilities has evolved from the Company which was founded in 1946.

The Company (originally named Micro Metallic Corporation) was founded to exploit Dr. David B. Pall's invention of sintered porous stainless steel. As sometimes happens with new engineering materials, obvious users—in this case existing filter manufacturers—shunned the product. This (in retrospect) good fortune forced Pall to develop a new line of filters to exploit the novel medium. It also led to the development of a large library of filter designs, concepts and new knowledge, and to our leadership in the invention and production of new kinds of filter media as well as other engineered products for the control of fluids and environments.

As the Company developed and saw new opportunities, it formed or acquired new subsidiaries and divisions. Each new addition had a direct relationship to some aspect of the existing business in either marketing, engineering or manufacturing. At the same time, each enlarged the Company's range of products and technologies serving industrial, aerospace and marine, municipal, commercial and consumer markets in many countries.

Aircraft Porous Media, Inc., organized in 1951, is now the free world's leading supplier of aerospace filters.

Glen Components Corporation, organized in 1958, is now a large precision machining operation which has greatly increased the company's flexibility and self-sufficiency.

In 1960 we acquired Hollinger Machine Co., Ltd. (now named Pall (Canada) Ltd.) a water treatment business serving the consumer market in Canada. As a subsidiary of Pall Corporation, Pall (Canada) Ltd., is developing a broad line of sewage and water treatment products for sale in the United States, Canada and Mexico to homeowners, municipalities, shipyards, motels, restaurants, industrial plants and institutions.

In May 1961, Trinity Equipment Corporation (now named Pall Trinity Micro Corporation) and its sales subsidiary were acquired. Trinity, a leader in the manufacture of gas drying equipment, thermocouples and thermowells (temperature sensing devices), brought the company its first well developed industrial sales organization. Subsequently the Micro Metallic Division (our manufacturer of porous metal filters) was consolidated with Trinity. Our fast growing process industry filter line is now largely produced and sold by Pall Trinity Micro.

Lloyd & Hillman, Ltd., London, England, with a line of flow and temperature instrumentation accessories closely related to part of the Trinity line and a well-established marketing organization in the United Kingdom, was acquired in 1962 and expanded with the formation of Pall (U.K.) Ltd., to engage in the manufacture and sale to the European market of the Pall Trinity Micro product line as well as the original Lloyd & Hillman line.

In this connection, Pall (U.K.) recently opened a new, modern plant at Portsmouth, England to meet the increasing demand for Pall products in both British and Continental markets.

Mectron Industries Inc. at South El Monte, California was acquired in 1963, adding a unique line of miniature and other special filters for the aerospace and industrial hydraulics market.

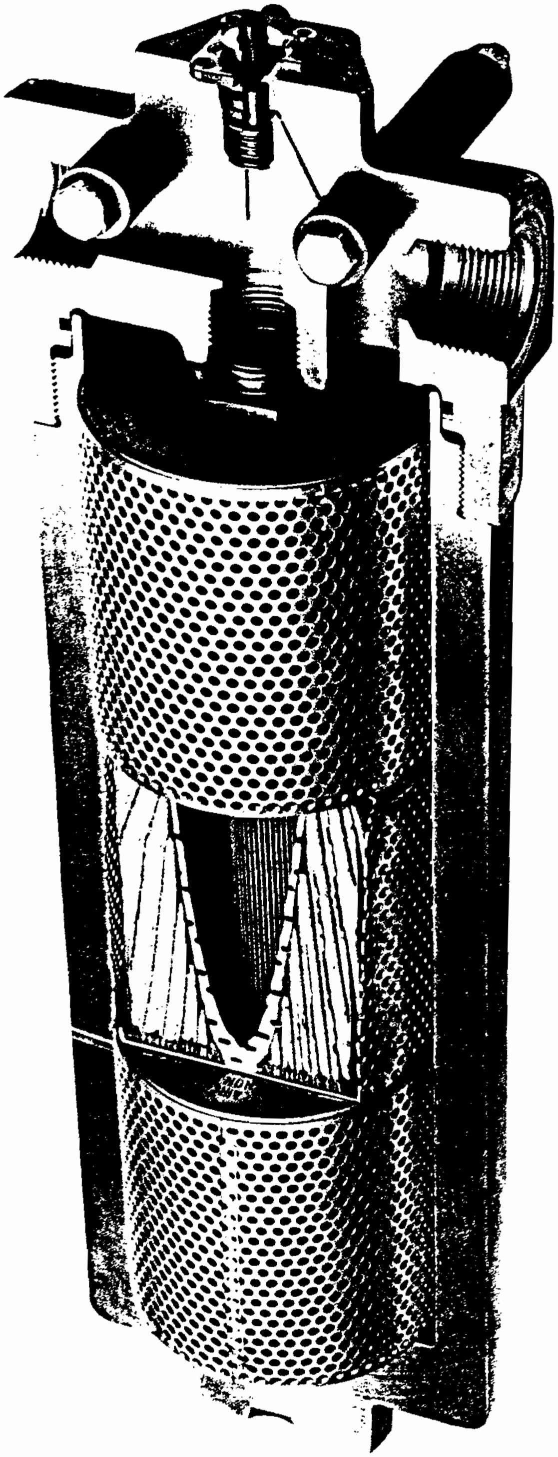
Integral Motor Pump Division, manufacturers of zero-leakage pumps was acquired in 1963 to expand our line of specialty pumps.

Later, in the same year, the Amflex Department of American Machine and Foundry Company was acquired and renamed Pallflex Products Corporation. This business was purchased principally to give us our own paper making facility for the production and further development of our line of ultrafine disposable filter media. It has been notably successful in this regard.

To develop the Latin American market for our process industry and water treatment products, Pall S.A., our Mexican subsidiary was organized in 1964.

We also acquired the Environmental Control Systems Department of Budd Electronics, a division of the Budd Company, in 1964. This formed the basis of our newly-

A demonstration of the amazing permeability of Pall's Porous Stainless Steel, the original product of the company. This material is still widely used in industrial processing.



organized Environmental Control Systems Division and added sophisticated refrigeration and air-conditioning systems, heat exchangers and gas purification equipment to our line. This division has also considerably increased our capabilities in engineering and selling systems incorporating a number of Pall products.

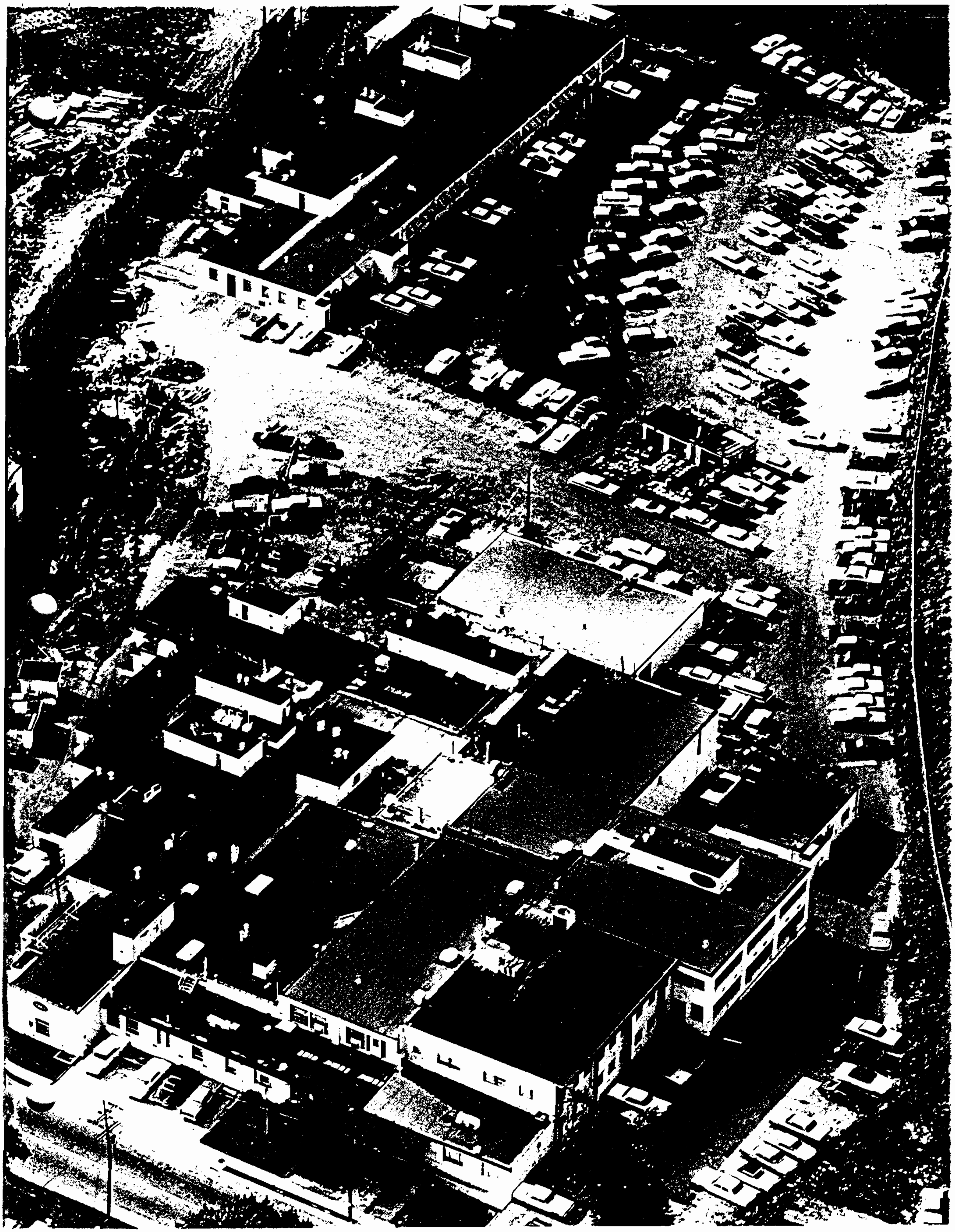
Our products are sold in many areas in the United States and other countries by technically qualified, factory trained manufacturers' representatives, but we also have four thriving sales subsidiaries. These are: Pall Trincor Corporation, which handles our industrial products in the New York Metropolitan area and which was acquired with Trinity Equipment Corporation in 1961; Pall Western Corporation, organized in 1964 which handles most of our products in Southern California and Arizona; Pall GmbH, organized in 1962 in Frankfurt, which now sells our industrial products in Germany; and Pall (U.K.) Sales Ltd., organized in 1965, which markets our industrial products in Britain and most of Europe.

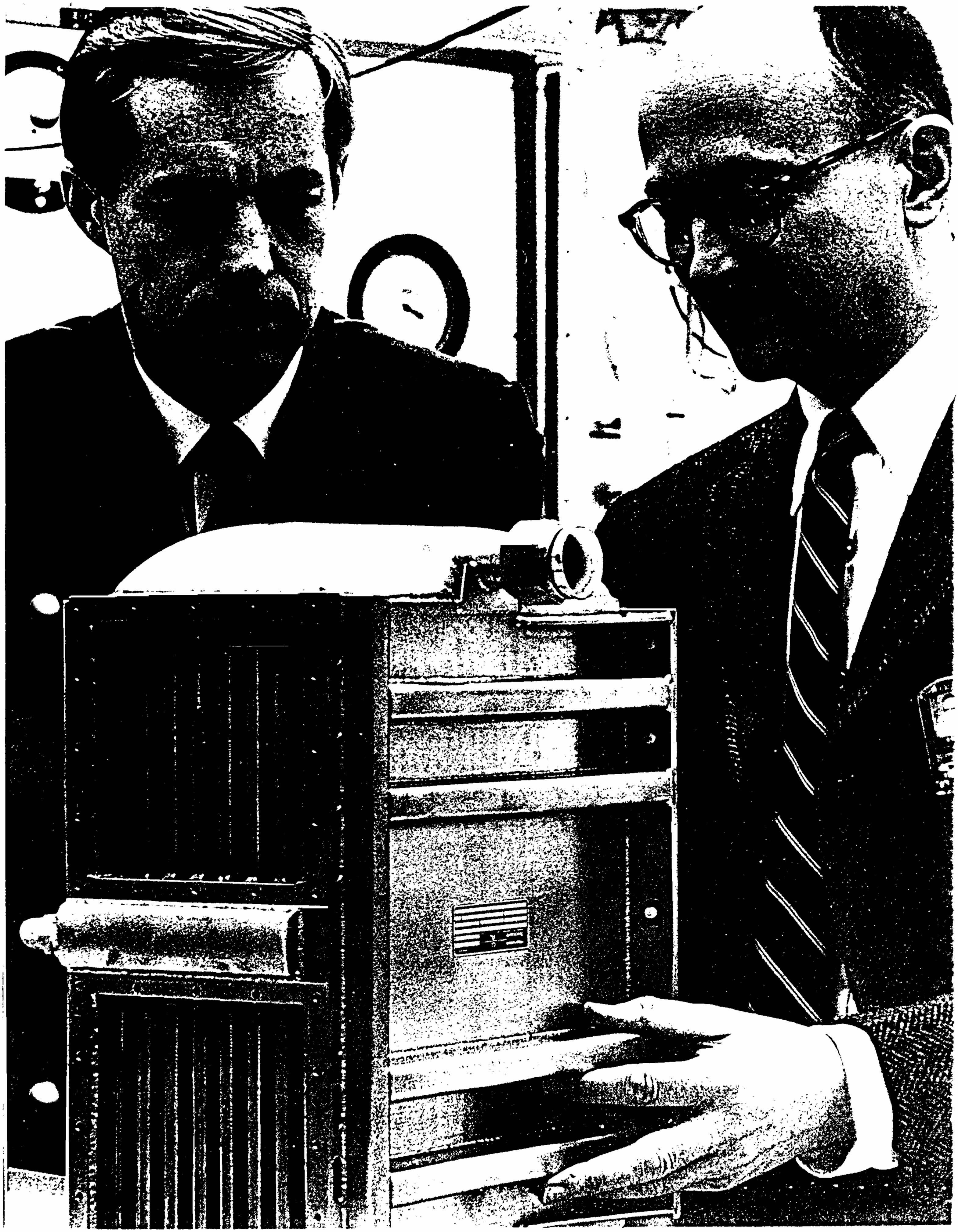
Thus, by means of internal development as well as by acquisition, a well integrated organization has been formed serving broad markets with a diverse line of technically-oriented products. These products are related either by common engineering, production or marketing.

This brief history is intended to give you a picture of Pall Corporation as it exists in mid-1966. Omitted from the discussion above is reference to our entry into and later disposition of operations in the manufacture of glass fibers and wire cloth.

< A cutaway of the Ultipor. 9 Triphane filter with Deltadyne Differential Pressure Indicator. This exclusive ultrafine filter is widely used in aerospace and industrial fluid clarification.

> Aerial view of Pall's headquarters plant and office at Glen Cove, Long Island, New York.





OUR CAPABILITIES, FACILITIES AND PERSONNEL

Introduction

In our age technology advances and changes at a hitherto undreamt of rate — ever demanding the use of higher temperatures, higher pressures, and extreme purification of fluids for use in close tolerance devices and automated systems.

Mankind comes more and more to grips with the environment of outer space and also with his own polluted environment on earth.

Pall Corporation is both a product of this condition of mankind and a very real contributor to its evolution. Our new market developments come from the stimuli inherent in this condition — from both internal observation and external demand, as shown in the following examples:

Another company's well conceived and much needed invention of equipment to give vital cooling to astronauts and to space borne instruments could not be built until Pall developed the special porous metal which was needed.

Our established reputation as a developer and producer of porous metals brought this customer to us with a very difficult problem. We provided the only successful solution and as a result ended up with a new product and a new market.

* * *

Synthetic fibers and films now in wide use were held up in development until Pall engineering provided a number of large chemical companies with a new generation of filters to meet their very difficult operating conditions.

Our field sales organization and technical personnel are in close contact with major process industry companies and are expert in their processes — often anticipating new equipment needs for the solution of upcoming problems.

* * *

< Hamilton Standard Division of United Aircraft Corp. uses a very special Pall porous metal sheet material in this sublimator on the Saturn 1B rocket. The sublimator, a sophisticated heat exchanger, is the heart of the instrument compartment's environmental control system. Both the sublimator and the porous stainless steel developed for it represent advances in the State-of-the-Art.

Because Pall introduced an economical water treatment system to a small Canadian town, its people are now enjoying a safe water supply after years of exposure to the dangers of pollution.

This is an example of one of the ways in which the very large water and sewage treatment market offers possibilities. In this case it was a matter of applying techniques proven in one country to another where they had not been tried.

* * *

A major equipment manufacturer had to cope with unhappy customers and serious service problems because of hydraulic system failures. A Pall field sales engineer walked in and surprised the manufacturer's engineers by his awareness of their problems and his ability to provide a ready solution.

Major advances made by the aircraft industry in its hydraulic, fuel and other systems are rapidly being adopted by the machine tool, earth moving and other equipment industries. Concepts of equipment wear and its relationship to contamination control which are completely new to these industries are just being learned. Anticipating this need, Pall is now presenting training programs, testing methods and tools, and specially designed products to these industries to solve their problems.

* * *

A large beverage manufacturer and a large pharmaceutical house (in each case the first in its industry with which Pall engaged in an extensive test program) chose our newly developed Pallflex Ultipor® yeast and bacteria removal filter materials for cold sterilization. The Pall product was chosen after careful tests, instead of the less economical, less positive or more difficult to use membranes, asbestos pads and porous porcelain products previously available and still in wide and growing use.

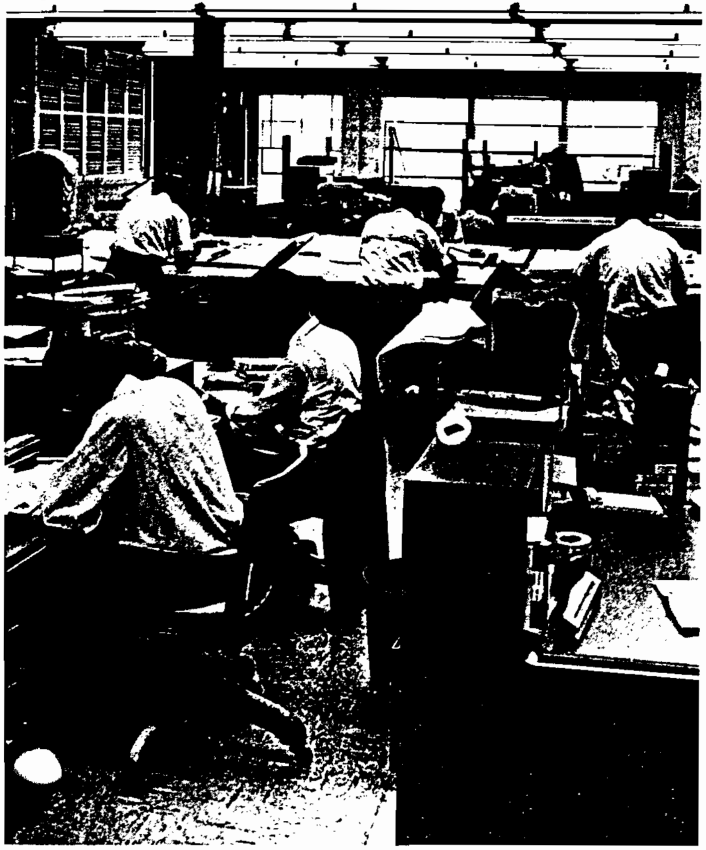
This is an example of observation of large markets and the tailoring of development programs to produce a product better than those being used and likely to be better than the competition will be able to produce for a long period of time.

* * *

A major international company advised its European subsidiaries to standardize on Pall filters for critical process water since we are able to supply the product to the same quality standards both in the United States

^ Research and Development at Pall Corporation is guided by Dr. David B. Pall shown here with Sidney Krakauer, Vice President New Products and Corporate Engineering Consultants David J. Rosenberg and Roydon B. Cooper.

v A portion of the Glen Cove engineering department which is engaged primarily in aerospace and industrial h[illegible]aulic equipment design.



and in Britain.

The knowledge that we can service them on the scene through our own facilities in Canada, Mexico, Britain and Germany and through licensees and representatives in other areas encourages international companies to specify our products to the exclusion of local competition.

* * *

To produce the necessary materials, components and systems to serve our customers and to perform the marketing services in which we are now engaged and those in the future, we maintain outstanding research and development, diverse engineering and manufacturing facilities, and a technically trained sales organization.

Much of our manufacturing equipment is designed and built by the company, giving us facilities unavailable to our competitors. This is particularly true in the manufacture of filter media and the fabrication of filter elements.

Our success has been largely due to our ability to continually advance the State-of-the-Art in both new products and production techniques, and thus retain technological leadership in the areas in which we compete.

Research and Development

Pall Research and Development is oriented toward advancing the State-of-the-Art in the fields of fluid purification and environmental control — with a view toward developing proprietary products in large markets. Control of a large R & D program to keep it profit oriented is difficult — in many organizations substantial efforts in this direction yield small benefit.

In Pall Corporation, R & D is strictly controlled and coordinated by top management. As a result the accumulated talents and efforts of a group of highly imaginative inventors working hand in hand with thoroughly trained scientists and engineers regularly create growth and profit producing developments.

As a general rule, Pall R & D is company financed and aimed at generating our own products and processes. However in some areas of activity, notably water and waste treatment for space applications, we are engaged in important, although not large, Government sponsored contracts.

Complementing the company's various clean room facilities are new laminar flow benches such as this one recently installed in one of the Glen Cove laboratories.

Engineering

We have always made it a policy to seek, attract and hold scientists and engineers of high competence. Our personnel are qualified in physics, organic chemistry, physical chemistry, biology, microbiology, metallurgy, chemical engineering, mechanical engineering, electrical engineering and aeronautical engineering. The Company maintains mechanical, metallurgical, chemical, biological, electronic and environmental test facilities and laboratories.

Engineering excellence is basic to all of our operations. Our staff of some 150 scientists and engineers is organized to solve difficult engineering problems as a matter of routine.

Product and process improvement are continuing functions of our engineering departments with the achievement of optimum reliability and maximum economy constant goals.

Whether our ultimate customer is a homeowner seeking protection of his water supply, a process plant operator who needs assured clarity of his product, or an astronaut whose systems must be protected from contamination, our engineering orientation assures him that the latest State-of-the-Art is embodied in the Pall products he uses.

In addition to internal activities Pall engineering serves our customers in a variety of ways:

Application Engineering, through which we are able to recommend the proper product for a specific situation in short order. Our vast library of proven designs has gained us international repute — but we always stand ready to develop a new design if the customer's parameters so indicate.

Systems Analysis enables us, through close contact with the customer's engineers, to spot and diagnose the system problems which often otherwise elude solution. Our engineering specialists and our laboratory facilities are frequently called upon in such cases, saving customers considerable expenditures of time and money.

Specification writing by our engineering organization provides model specifications or tailors them to individual needs of our customers. The critical needs and demands of modern systems and the difficulty in keeping abreast of the latest technology in many fields, make it almost impossible for the individual company, no matter how large, to have enough capabilities in each specialty area to write specifications that will assure it optimum results.

Customer Personnel Orientation programs, either through visits to our plants and laboratories, or through seminars held at customer's facilities, enable us to help keep customer purchasing and engineering departments abreast of current developments in fluid clarification and environmental control.

Facilities and Personnel

The company has approximately 1100 employees operating in 340,000 square feet of well equipped plants and engineering offices in 14 locations in the United States, Canada, Mexico, Great Britain and Germany.

Headquarters are at Glen Cove, Long Island, New York. Here also are located the principal research and development facilities as well as the main manufacturing facilities for aerospace filters and precision machined parts.

At nearby Long Island City is Pall's Environmental Control Systems Division which manufactures liquid and gas purification systems, heat exchangers and other environmental equipment and systems.

Pall's principal industrial and consumer products are produced in plants at Cortland, New York and Portsmouth, England. Additional industrial products are made in Putnam, Connecticut.

An engineering and sales office serving the metropolitan New York and Philadelphia area is located at [illegible]elle Park, New Jersey.

To serve its west coast customers, Pall maintains manufacturing facilities at South El Monte, California and provides sales and engineering services from its Downey, California offices.

In Montreal, Pall (Canada) Ltd. is the headquarters for Canadian operations in water treatment and sewage disposal equipment as well as our other industrial and consumer product lines. Engineering services are also provided from a Canadian branch office at Belleville, Ontario.

Manufacturing and engineering facilities were recently established by Pall S.A. in Mexico City to serve the Latin American market.

In Great Britain, in addition to the Portsmouth plant, engineering and sales facilities are maintained in London. Pall (U.K.) Ltd. also maintains engineering offices on the continent at Frankfurt, West Germany and in a number of locations in the United Kingdom.

Sales representatives and/or licensees are located in all important trade centers throughout the free world. Principal among these is The Fairey Company Ltd. which, through its subsidiaries Fairey Hydraulics Limited, Hes-[illegible] England and Fairey, S.A., Gosselies, Belgium is our European representative-licensee for airborne and industrial hydraulic filters.

1. Henry Petronis, Corporate Vice President Manufacturing, meeting with APM Vice Presidents Jupiter, Schmidt and Kurz, Chief Engineer Silverwater and Assistant to President Gross.

2. Robert Hueffed, Sales Manager, Bernard Grill, General Manager and David Weinman, Manufacturing Manager being briefed on controlled air source equipment used for space suits, by Charles Roach, Chief Engineer of Pall Environmental Control Systems Division.

3. Guillermo Cortes, General Manager of Pall S.A. discussing dryer assembly with Carl Neiderstrasser, Plant Manager of recently established Mexican facility.

4. Maurice MacDonald, General Manager of the Pall (Canada) plant with Jean DesChatelets, Industrial Director.

5. Mectron's President Bennett Krakauer (seated) with Roy Murray, Sales Manager, Gerald Green, Plant Manager, Paul Jaffe, President, Pall Western Corporation, and Robert Mason, Mectron Chief Engineer at the California plant.

6. Dr. Joseph G. Adiletta, President of Pallflex Products Corporation and General Manager of Integral Motor Pump Division discussing Tape-O-Matic machine tool with Putnam Plant Chief Engineer Joseph Campolong. At right, Charles Hacker, Pallflex Vice President Marketing.

7. Chesterfield F. Seibert, Pall Vice President of Engineering and President of Pall Trinity Micro Corporation with Marcel Verrando, Vice President Engineering, Harry Cordes, Engineering Assistant to President, Arnold Weiner, Manager of Manufacturing and Nicholas Nickolaus, Vice President Sales, Pall Trinity Micro Corporation.

8. Director of European Operations, Maurice G. Hardy meeting with Pall U. K. Directors Stanley Dickins, Donald Nichols, Len Bennet and Leslie Seawert.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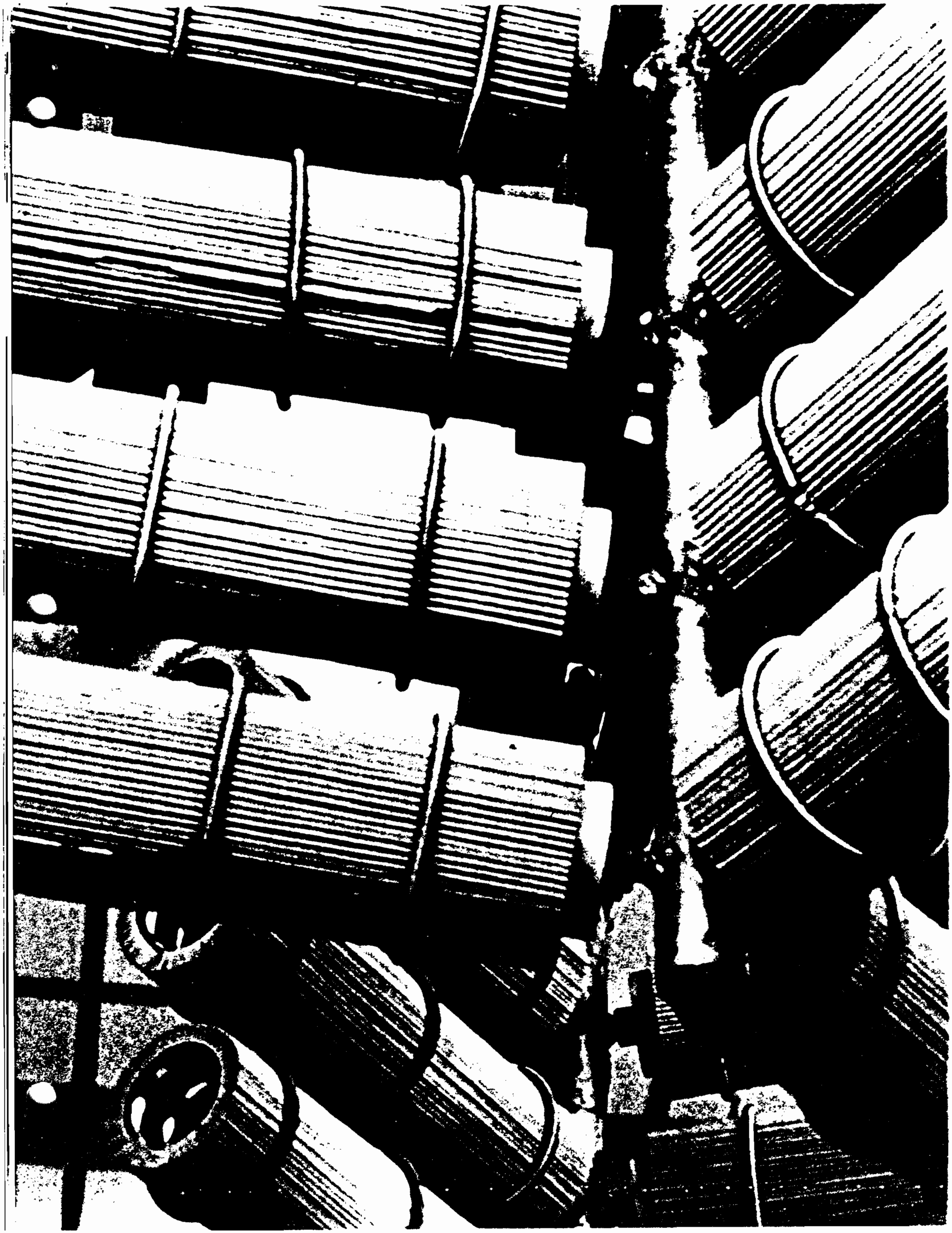
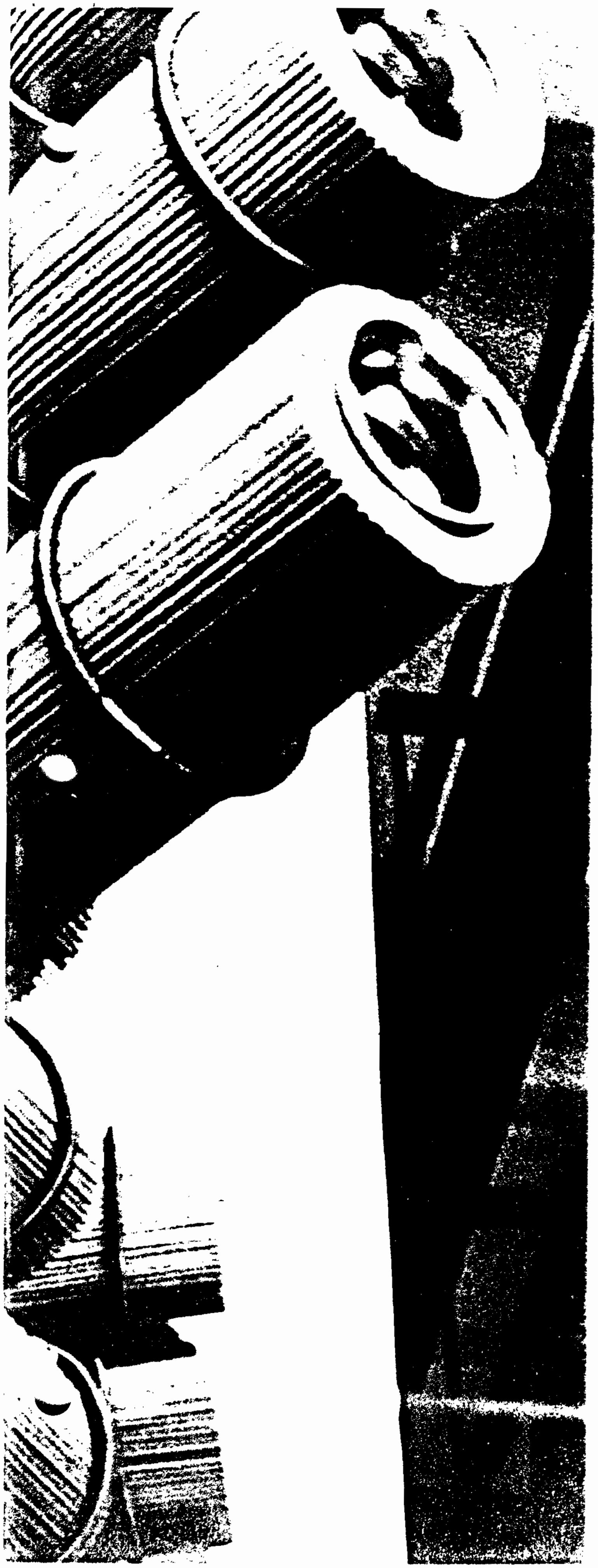




PRODUCTS

To meet the growing demand of our markets, Pall produces a wide range of products which are categorized in this presentation as basic materials, components and systems.

Basic Materials — Items which, although they may perform a function by themselves, are generally combined with other items in a finished product.

Components — Complete articles which perform one or a limited number of functions and are generally used in combination with other components in an operating system.

Systems — Combinations of components which perform a series of functions or a complete operation. They may be sub-systems which are in turn components of larger systems.

< Filter elements in curing racks, a stage in the manufacture of the fast growing disposable cartridge product line.

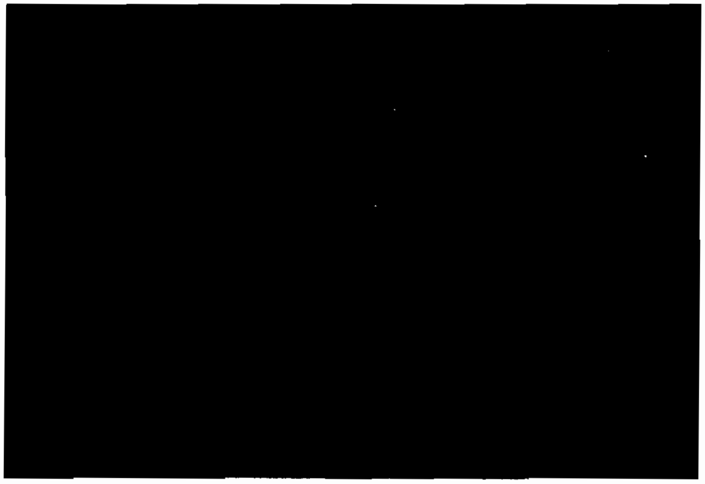
Basic Materials

Our basic materials include Porous Metals, Porous Papers, Porous Plastics and Special Thin Films and Laminates.

Porous Metals

The Porous Metals produced consist of a variety of sheet materials used primarily as filter media, but also for other purposes outside of the filtration field such as transpiration cooling of jet and rocket engines. These include:

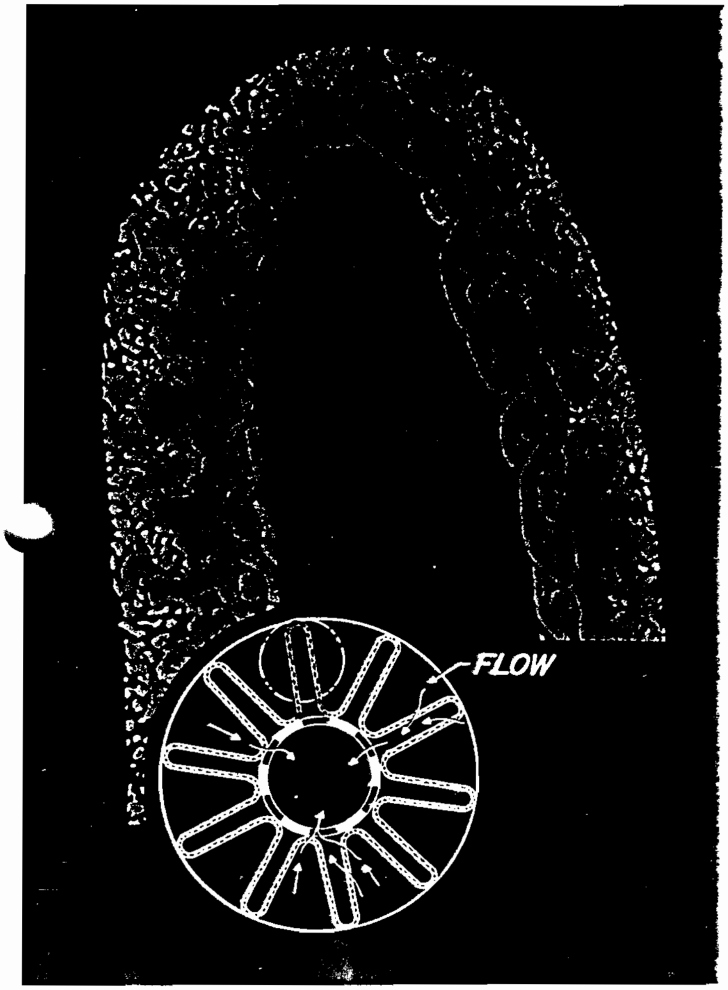
Rigimesh® Porous metal made from sintered woven wire cloth in a variety of high alloys and in many combinations of weaves, layers and thicknesses. (Sintering is the process of heating a metal in a very narrow temperature range near its melting point and in a closely controlled atmosphere so that adjacent strands or particles of the metal fuse together, but do not melt. Pall is world renowned for its superior abilities in the design and sintering of porous metals.)



^ Magnification of a section of Rigimesh material shows completeness of bond at all wire junction points resulting from the sintering process.

PSS® Porous metals in sheet form made of sintered metal powders. This material is formed, welded and machined (within certain limitations) like sheet metal and is most commonly used as a filter medium. It is produced mainly in stainless steel, nickel and monel. Other high alloys and noble metals are also made in porous form.

Supramesh® This finest grade of 100% stainless steel filter medium is made by combining PSS and Rigimesh media, thereby obtaining the benefits of both the woven and sintered powder materials.



^ Photomicrograph of a section through the tip of a Supramesh element, also showing element enlarged. The outside surface is stainless steel powder which is sinter bonded to the upstream side of Rigimesh material.

Porous Papers

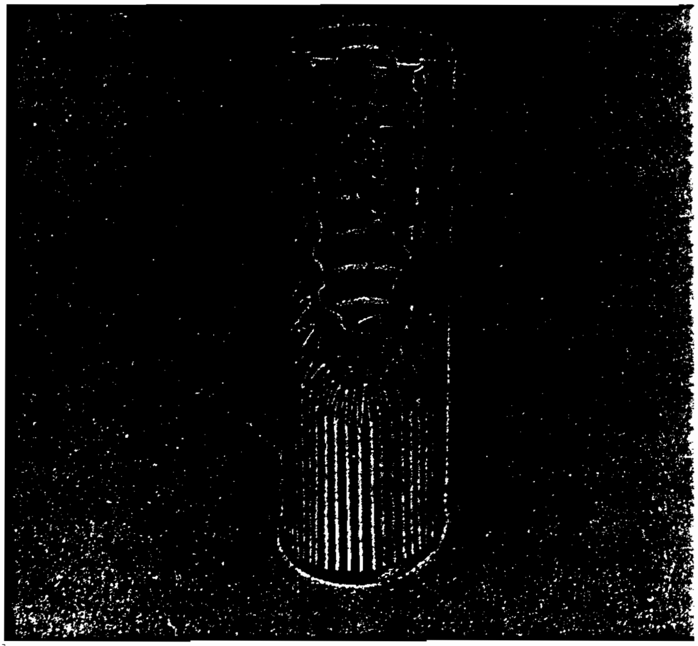
The Porous Papers produced consist of a variety of sheet materials made from natural and synthetic organic fibers, inorganic fibers, and a variety of synthetic resin binders, used primarily as filter media but also for other purposes outside the filtration field such as for electrical and thermal insulation and for electroluminescent media.

Ultipor® Our unique and revolutionary extremely fine epoxy resin bonded inorganic fiber filter medium which economically provides absolute removal of submicroscopic particles, including bacteria, fungi and even viruses. The combination of ultrafine uniform pore openings with approximately [illegible]% voids makes Ultipor material well suited to handle critical applications where absolute removal of sub-micronic particulate matter is required.

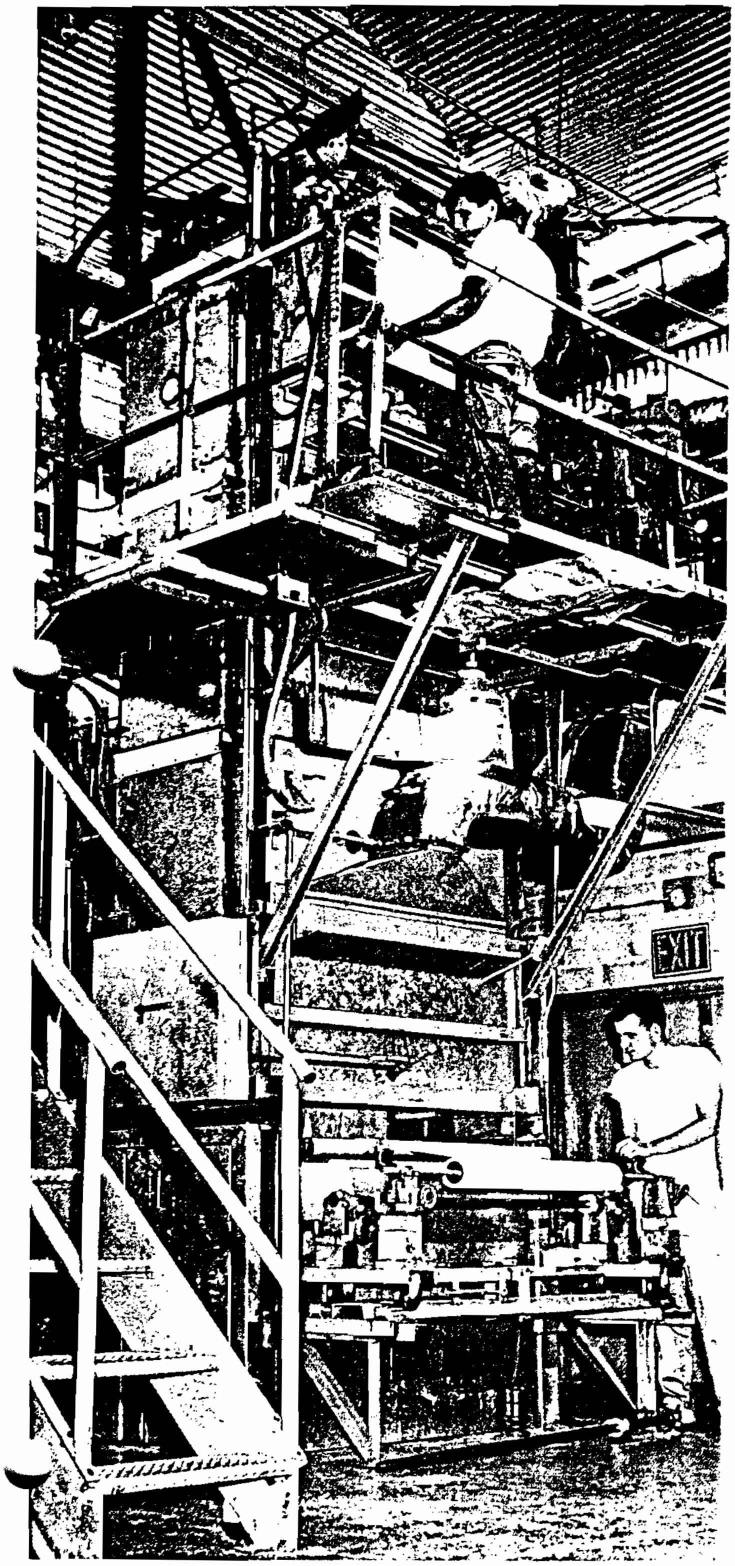
Epocel High grade disposable filter media composed of epoxy resin impregnated cellulose. Developed by Pall as the first high area disposable cellulose based filter medium suitable for general application in the process industries, and for water and other potable and parenteral fluids.

Melacel™ A melamine resin impregnated cellulose fiber material with an all white appearance, consisting of FDA approved materials for food use.

Tissuglas™ A sheet material made of borosilicate glass fibers has unusual properties as a filtration and insulating material.



^ Cutaway showing how Pall porous papers are used in high area disposable filter elements.



Porous Plastics

To serve the requirements of those industries processing and using strong acids, alkalies, oxidants and organic solvents not compatible with our other media, we also manufacture chemically inert filter media of porous Teflon* and Kel-F**.

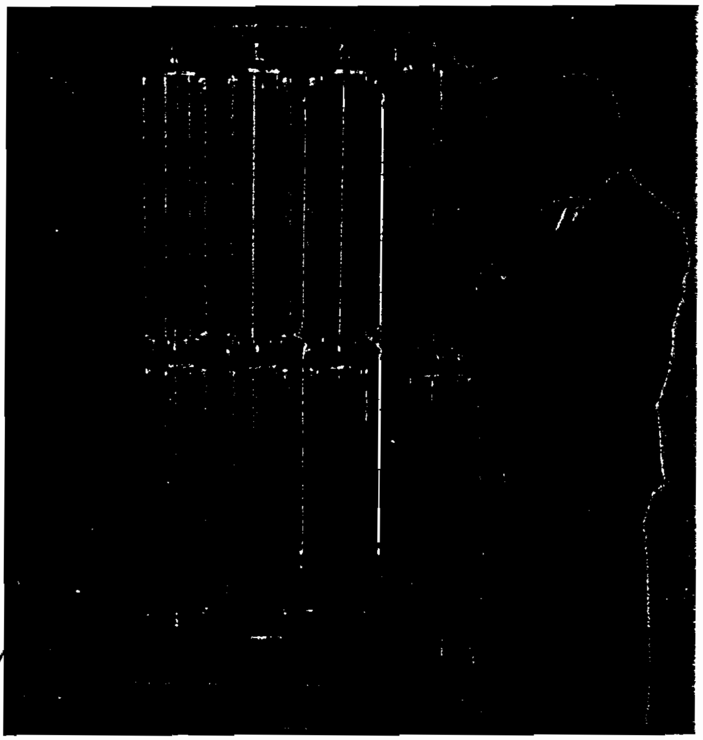
*Teflon is a trademark of DuPont.
**Kel-F is a trademark of 3M Company.

Plastic Coatings and Laminates

Combinations of sheet materials coated with protective films of Teflon, Silicone, Melamine and other resins complete the line of basic materials produced. These are marketed under the tradenames of Fiberfilm, Emfab, Emflon and Emfoil for printed circuit boards, very high quality electrical insulation, electroluminescent media, filters, non-stick belting and other uses.

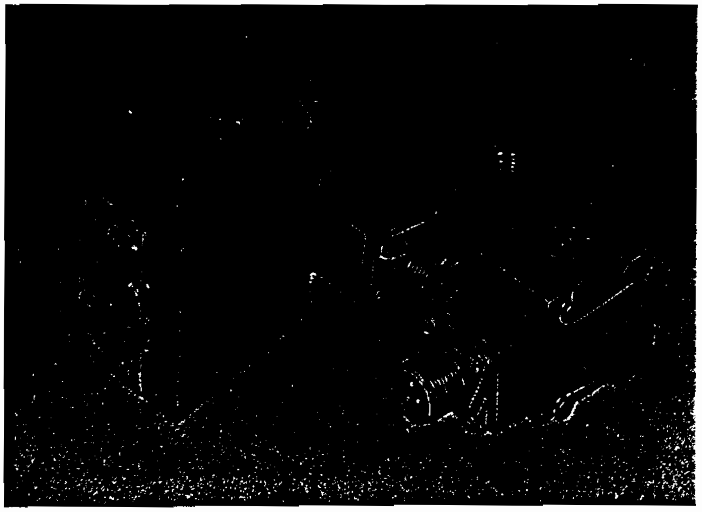
< Drying tower at Putnam, Connecticut, our integrated disposable filter media production facility.

Components



^ Porous Stainless Steel material is fabricated into filter elements such as this cluster of bayonets, used for large volume chemical processing.

v Deltadyne Differential Pressure Devices in the form of indicators, gauges and switches signal the need for cartridge change in filters and perform numerous other sophisticated differential pressure functions.



A major part of the Company's business is the manufacture and sale of a variety of products used as components in fluid processing equipment, fluid power systems and in environmental control.

Filters Our most important product and the foundation on which our overall capability in the field of fluid purification has been built. Hundreds of types comprise the broadest line of filter elements in industry. Applications range from the clarification of molten metals to the purification of water, and from sterilization of air to the removal of contamination from liquid oxygen. Most are made with the proprietary filter media previously described.

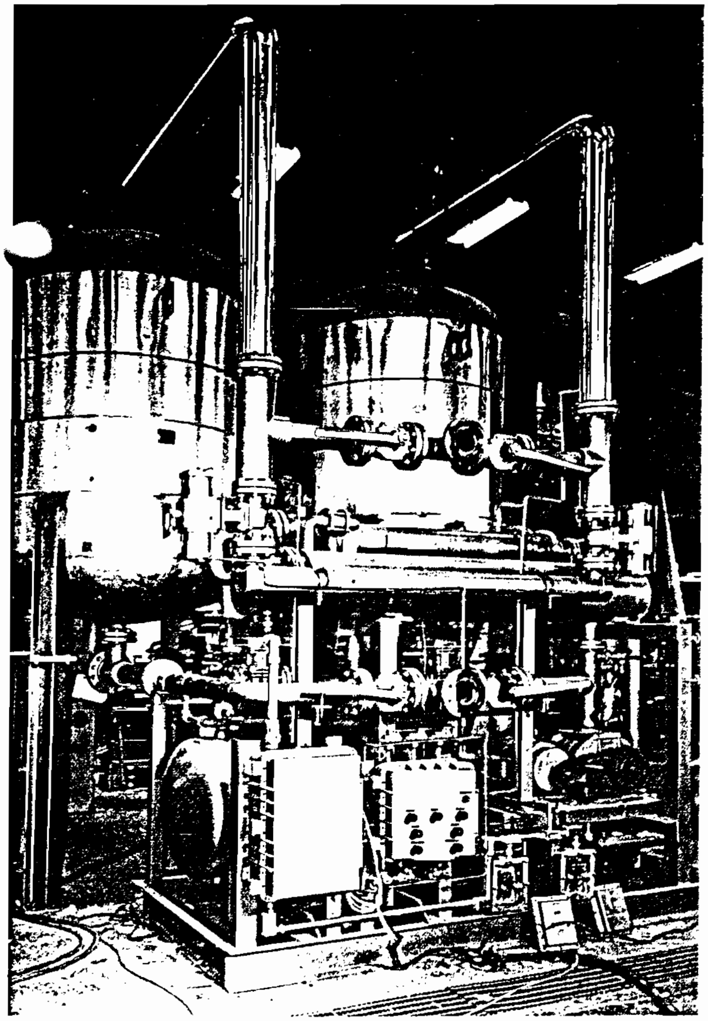
Permanent element filters utilize our porous metal media and are cleanable by chemical, ultrasonic and sometimes mechanical means. These models are widely used in the fluid processing industries, and on aircraft, marine and aerospace vehicles and ground support equipment. They are furnished in a broad line of housings for very low and very high flow rates, pressures, and temperatures, and with many adjunct devices based on unique proprietary designs such as Deltadyne® differential pressure devices and Belvalve® relief valves.

More recently introduced disposable element filters utilizing our Epocel, Ultipor and other proprietary media have greatly broadened the scope of our filtration capabilities. Our corrugated cylindrical cartridges provide higher surface area and resultant longer service intervals as well as absolute particle size control, without the shortcomings of contamination unloading and media migration often present in competitive products. New filter media introduced during the year have provided more improvements with respect to life in service and effluent clarity.

Deltadyne® Differential pressure indicators, gauges and switches were originally developed as optional equipment on our filters to indicate the pressure drop across the filter element, to signal the need for its being cleaned or replaced. Additional uses for these devices were developed and they are now offered as a separate product line for a variety of pressure and differential pressure measurement and control applications.

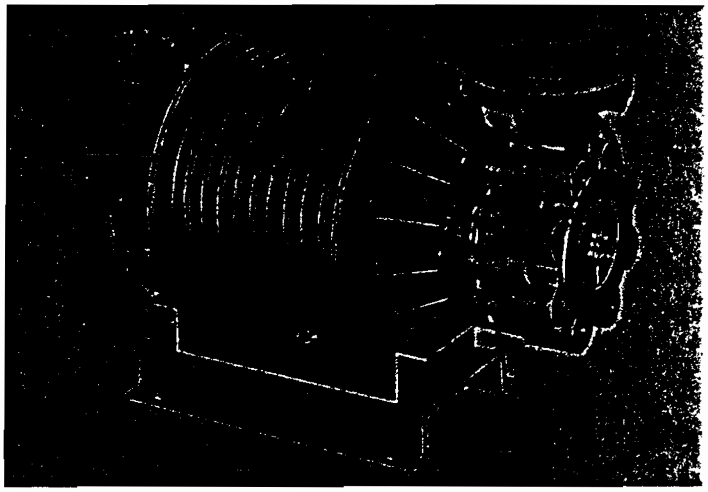
Air and Gas Dehumidifiers We produce a broad line of automatic desiccant (adsorbent) drying equipment to remove moisture from compressed air and gas systems. These include many Pall innovations such as the Amloc® automatic moisture load control which by relating (for the first time) the frequency of desiccant regeneration to volume of moisture present greatly reduces the power requirement and operating cost. As with filters, Pall provides industry's broadest line of desiccant dryers.

For air and gas drying applications not requiring the extreme degrees of gas dryness provided by the desiccant type dryers, Pall also manufactures refrigeration type dryers which remove moisture from the air or gas stream by means of condensation.



Xylene dryer produced for Mobil Chemica Italiano, a petrochemical plant constructed in Naples by Foster Wheeler Corporation.

Pumps The movement of liquids is a primary function in practically all fluid processes. Pall makes a line of "zero leakage" pumps for transfer of radioactive, noxious or high temperature liquids, as well as chemical feed pumps for introducing accurately controlled volumes of chemicals and other process additives into a system.



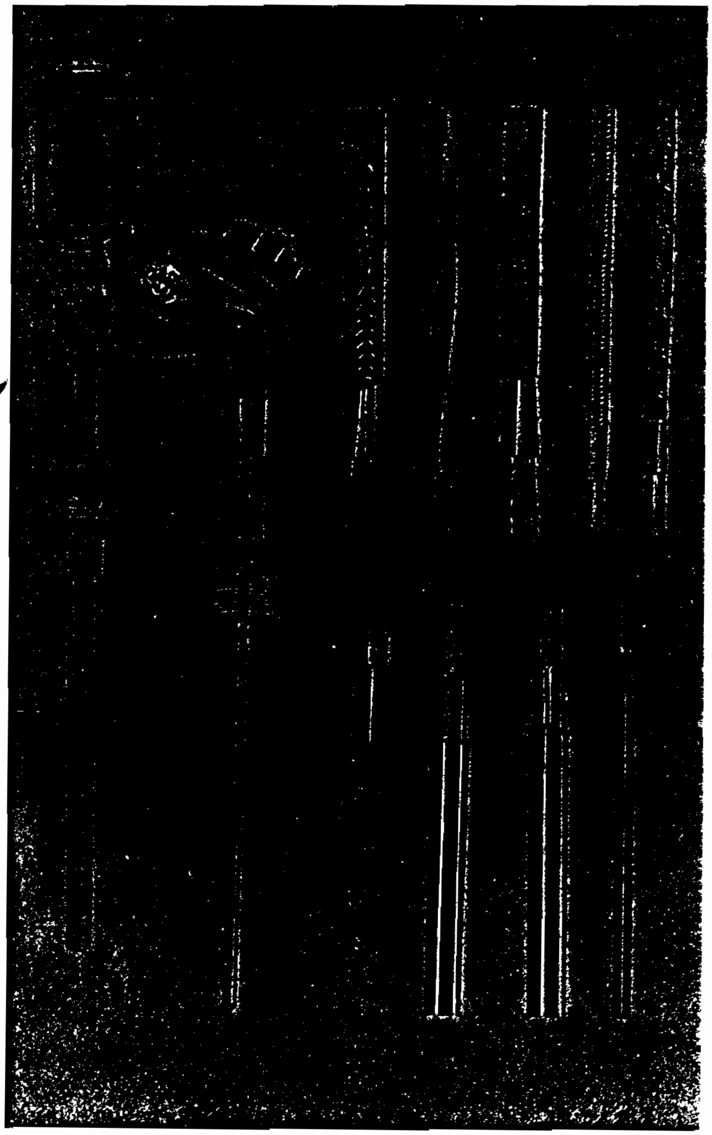
^ This Integral Pump is used in handling radioactive, noxious, expensive or high temperature fluids in processes where leakage cannot be tolerated.

Water Purity Meters By measuring the conductivity of water, its purity may be determined. These new proprietary Pall instruments appear to be superior to others on the market. In combination with our *conductivity cells,* they become an important part of water demineralization systems.

^ Pall Resistivity Meter is used to test the purity of water by measuring its electrical conductivity. Such meters are also components of our Environmental Control Systems Division's highly regarded Demineralization Systems.

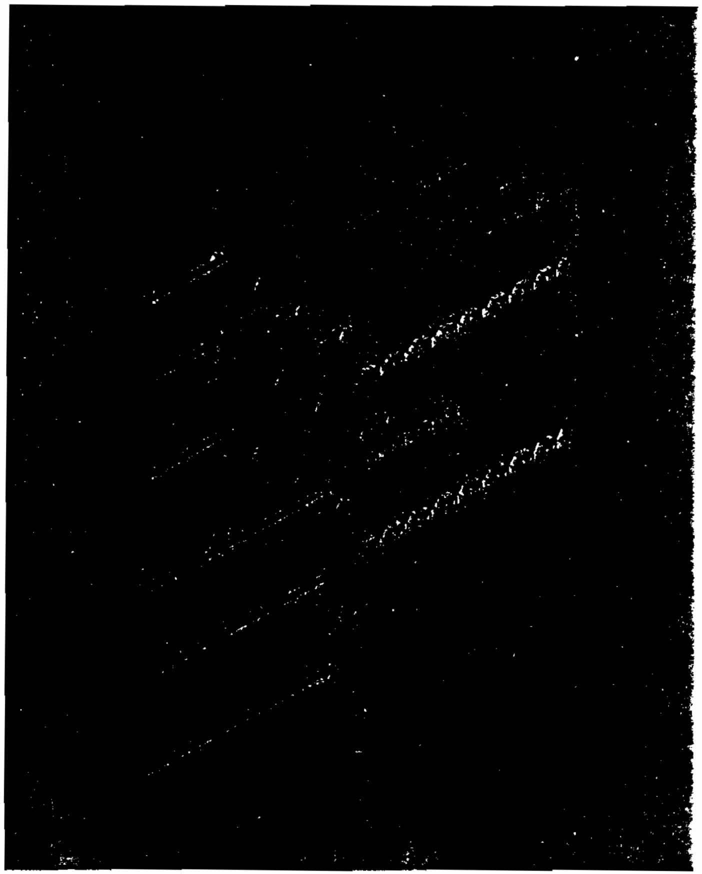
Flow Sensing Devices In the U.K. and Europe we also offer a line of precision made, computer calculated orifice plates and flanges for flow measurement.

Temperature Sensing Devices Pall is well known for its broad and growing line of thermocouples, thermowells, thermocouple lead wire and other devices for sensing of temperatures in a process.



^ Pall's growing line of temperature sensing devices such as these thermocouple assemblies and thermocouple lead wire are basic components in industrial temperature measurement and control systems.

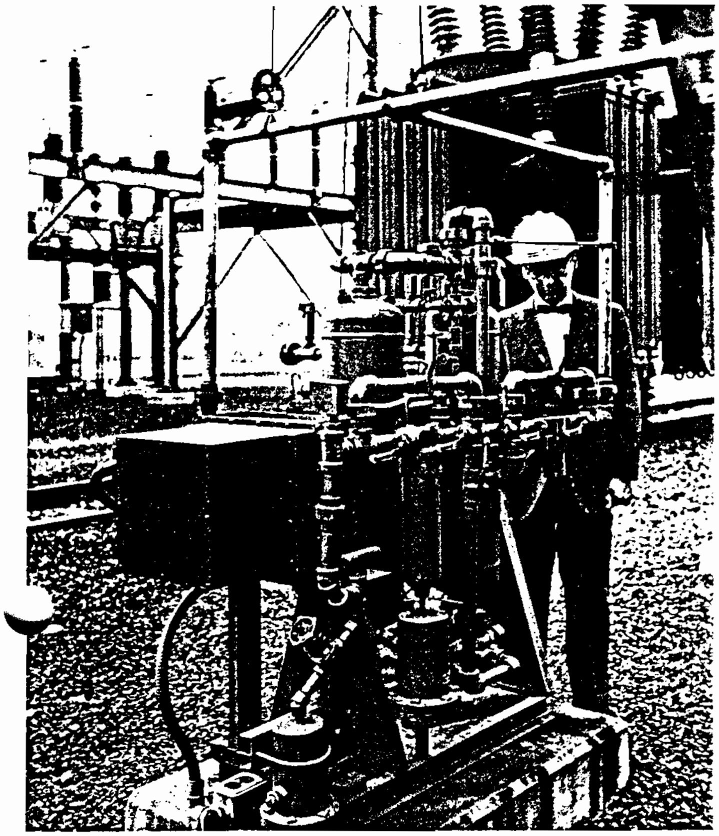
Heat Exchangers For efficient heat transfer in a variety of applications. Pall plate-fin and our new Corru-tube^{tm} units produce optimum ratio of heat transfer to size and weight of equipment. Corru-tube is a unique Pall invention which uses proprietary techniques of two of our divisions and promises a step forward in heat exchange technology.



^ Typical segment of a Corru-Tube Heat Exchanger shows how this new proprietary design provides optimum ratio of heat transfer surface to size and weight.

Systems

Pall produces a variety of systems combining many of our proprietary basic materials and components.

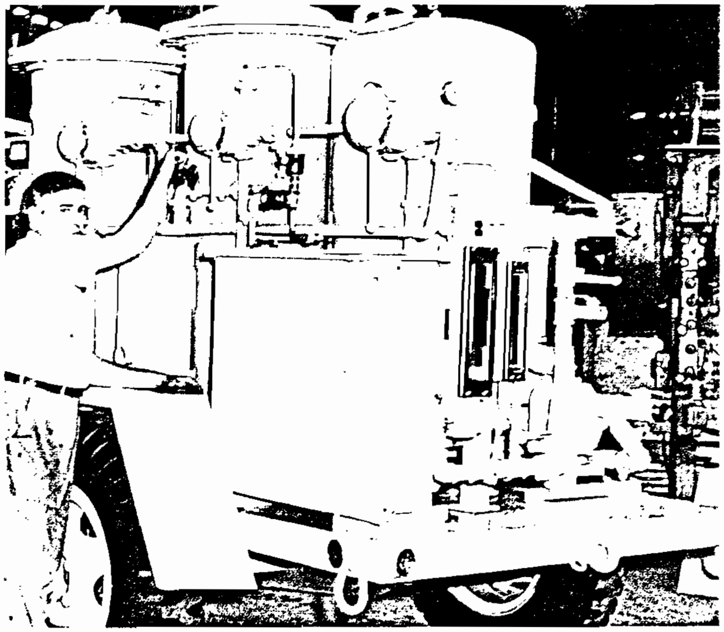


^ Pall dry air system at the Bergen Switching Station of Public Service Electric and Gas Company of New Jersey processes high pressure air used to operate high voltage circuit breakers.

Dry Air and Gas Systems Incorporating our dehumidifiers into a complete process to produce specified volumes of high purity compressed air or gas, these unitized systems include compressor, accumulator, filters and controls.

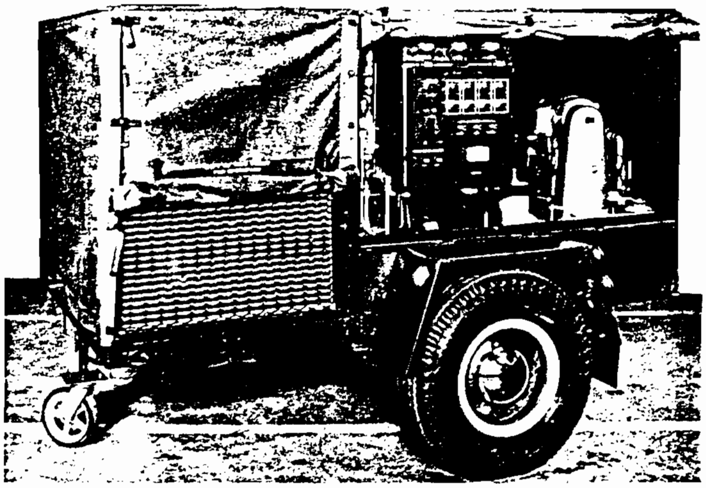
Waste Treatment Plants Our systems for the treatment of sanitary waste by municipalities, industrial and commercial establishments have gained wide acceptance in Canada and are now being marketed in the United States and other countries. Considerable progress has also been made in the U.S. on shipboard systems and on highly sophisticated systems for space vehicles.

Water Treatment Systems Extensive work in the field of fluid purification has substantially contributed to our success in the water treatment field. Our projects range from municipal water treatment plants to demineralization systems used in maintaining high level water purity in electronic equipment cooling systems, and to purification of fuel cell produced water in space vehicles.



^ This mobile demineralizer is typical of water treatment systems produced by Pall in Canada.

Gas Purification and Transfer Systems Sulphur Hexafluoride (SF_6), a highly efficient dielectric gas, is in rapidly growing use in high voltage circuit breakers and transformers in the electric power field. Our SF_6 gas purification and transfer systems are used to store and purify the gas during equipment inspection and maintenance procedures, and to our knowledge are the only such successful systems in use.

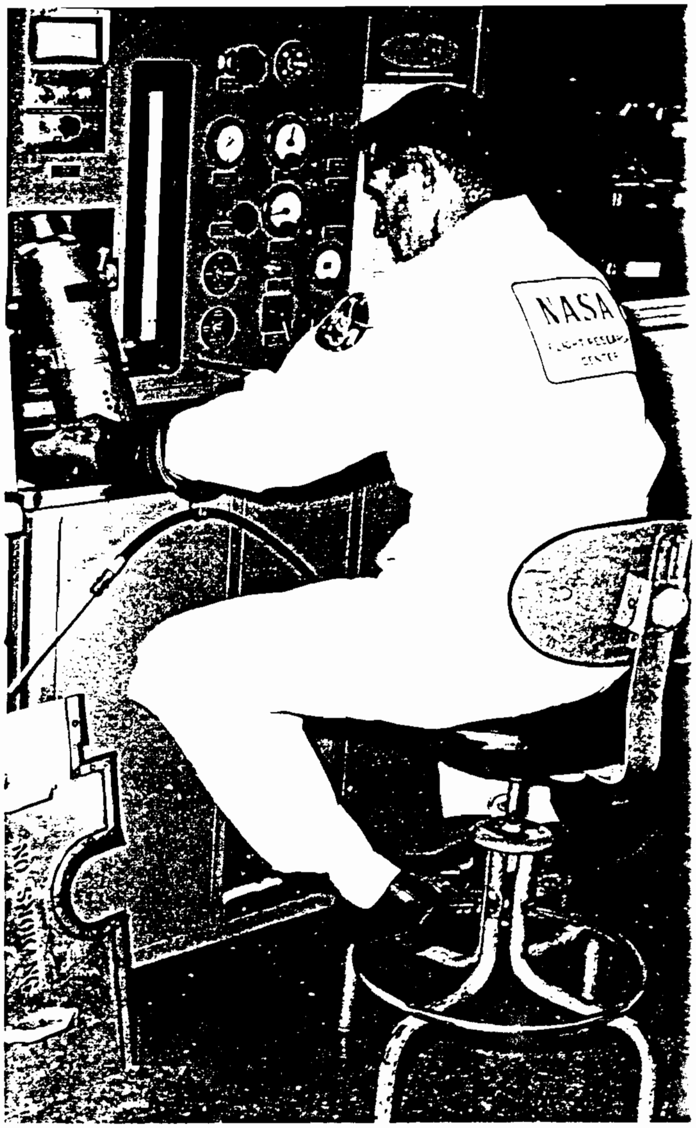


^ This portable SF_6 (Sulphur Hexafluoride) gas purification and transfer system is used during inspection and maintenance of high voltage circuit breakers and transformers.

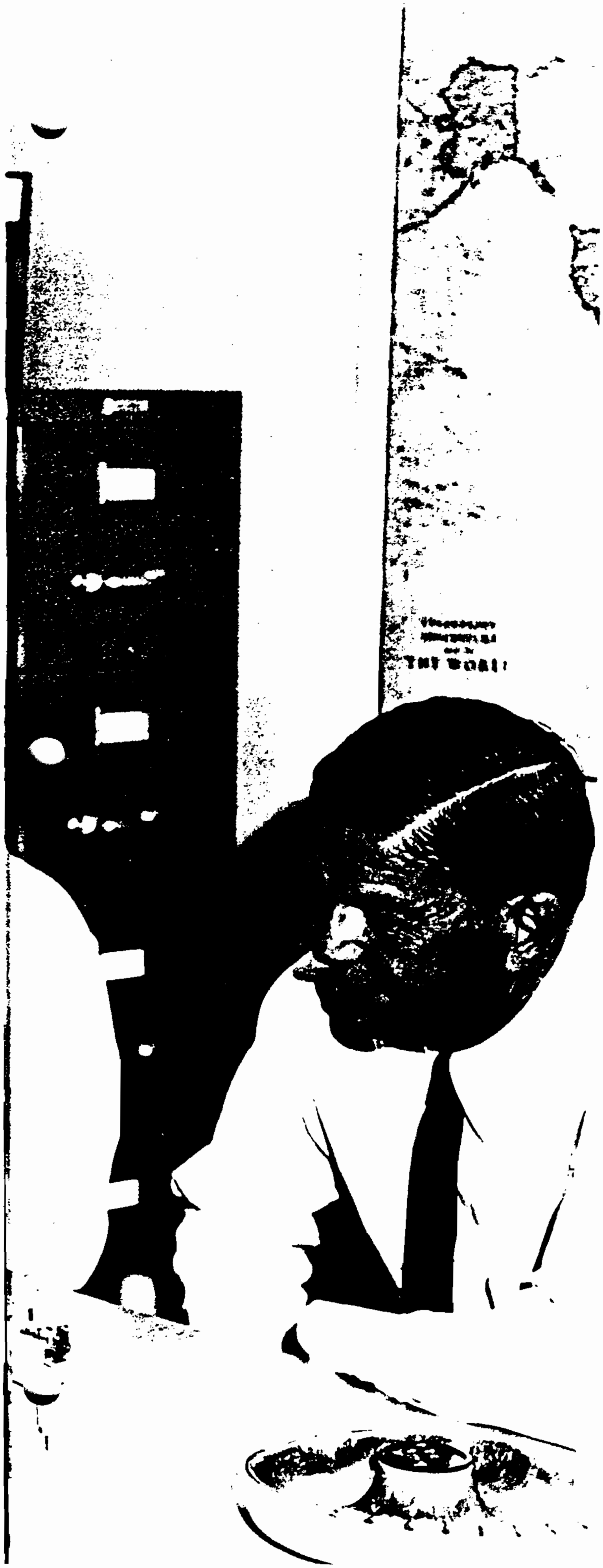
Liquid Purification Systems Hydraulic fluids, dielectric oils and other similar liquids require the periodic removal of both free and dissolved water, air, suspended solids and other dissolved contaminants. Pall systems are gaining increased acceptance in this field providing levels of purity heretofore unavailable.

Heat Exchange Systems To insure the high level performance and reliability required of electronic equipment in military, aerospace and marine applications, Pall heat exchange systems and ultra-lightweight air conditioning systems are increasingly specified.

Filter Maintenance Systems These systems include the unique HIPS® Hyperintense Proximal Scanning Ultrasonic Filter Cleaner developed in cooperation with Cavitron Ultrasonics, Inc. and other Pall developed devices such as the bubble point test stand, for filter maintenance and test activities.



^ Technician at NASA Flight Research Center cleaning a filter element on the Pall-Cavitron HIPS Ultrasonic Cleaner.



MARKETS

From a marketing point of view our Basic Materials, Components and Systems fall into three major groups — Industrial, Water & Waste Treatment and Aerospace & Marine.

Developments in one market often redound to the benefit of another. For example:

Revolutionary Ultipor filters first designed for commercial air transports are now solving problems on road building equipment.

Unique Pallflex filter medium developed for yeast removal in the beverage industry is being applied to purification and reuse of waste fluids in space missions.

Fluid purification systems developed for dockside flushing of submarines are now being applied to machine tool manufacture.

In the succeeding pages we report on some of the aspects of each of our markets, on our present position and on our prospects for the future.

< Aircraft Porous Media, Inc. Vice President John A. Farris pointing out product features to George R. Feeley, Corporate Vice President Marketing, Edmond R. Baisley, APM Sales Manager and Stephen B. Doss, Consumer Products Marketing Manager at Glen Cove.

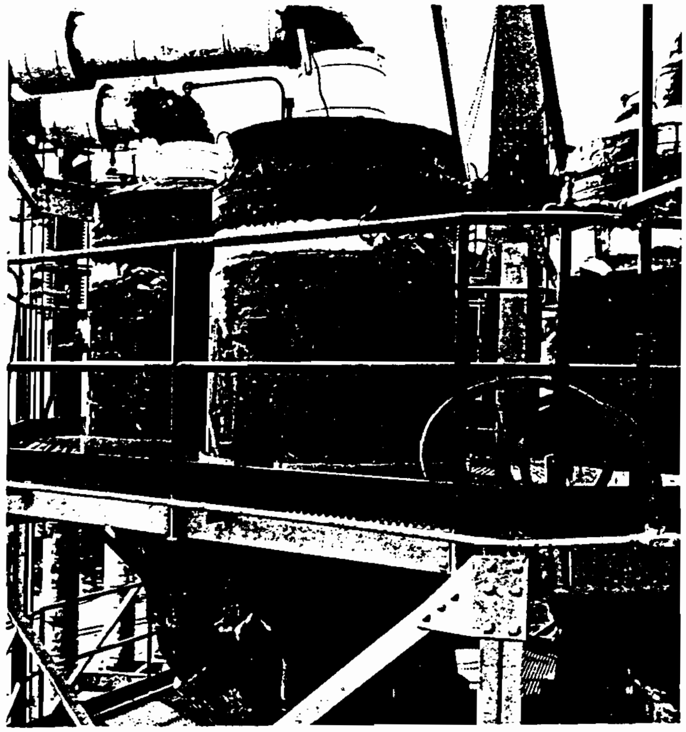
Industrial

During the period of our corporate existence, technological advances and increased automation in the fluid processing (chemical, petrochemical, petroleum, pharmaceutical, beverage, etc.) and the fluid power (earth moving equipment, machine tool, etc.) industries as well as the electric power, atomic energy, metallurgical and electronic industries have increasingly brought about the need for higher degrees of fluid purity and the use of new extremes of temperature and pressure. Pall engineered products for the control of fluids and environments are aimed at meeting these needs.

Also as the pace of world-wide industrialization has quickened, many corporations — ours included — regard the world as their market. Our marketing activities in the Americas, Europe and the Far East have been based on this premise and have already reached substantial proportions.

For many years we have been the principal supplier of permanent clarification filters and a leader in the field of air and gas dehumidification. Our development of disposable filter media, coupled with the acquisition of related product lines and the intensification and expansion of our marketing organization has considerably broadened the scope of our services to industry.

^ Atomic Submarines use this recently developed Pall Fluid Purification System for dockside flushing of their hydraulic systems at the Electric Boat Division of General Dynamics Corp., Groton, Conn. Other applications of this proprietary system are gaining acceptance in the industrial field.



^ Koppers Company uses these large Pall Porous Stainless Steel Filters to increase their output of phthalic-anhydride at their Bridgeville, Pa. plant.

We now offer the most comprehensive line of clarification filters in industry. Our Epocel, Ultipor and other cartridges introduced starting about three years ago, continue to make major inroads into virtually every market for clarification filters. The Epocel cartridges provide a low cost means to remove fine contaminants quantitatively from liquids and gases at high flow rates and with 100% reliability. Ultipor cartridges and sheet materials have made available, for the first time, a revolutionary and economic means of cold sterilization of process and parenteral fluids and beverages.

Filling another technological gap, the superiority of our compressed dry air and gas systems has been substantially advanced by the inclusion of the Reverse Ultipor models for the removal of oil mist (droplets as small as 0.1 microns), the Petrosorb-Ultipor models for the removal of lower molecular weight hydrocarbons from the air or gas stream, and by Amloc$^{\text{tm}}$ automatic moisture load control which, by relating the dryer desiccant regeneration to the varying volume of moisture present, greatly reduces the power requirements and hence the operating cost. Our dehumidifiers and the dry air systems of which they become a part are widely used by a broad spectrum of industry in pneumatic control systems, in material handling, and in a variety of moisture removal processes.

Pall temperature sensing devices and flow control accessories are regularly "called out" by industry which frequently looks to Pall engineering to provide answers to temperature and flow problems. As automated systems and computerized control grow, so does the demand for these products.

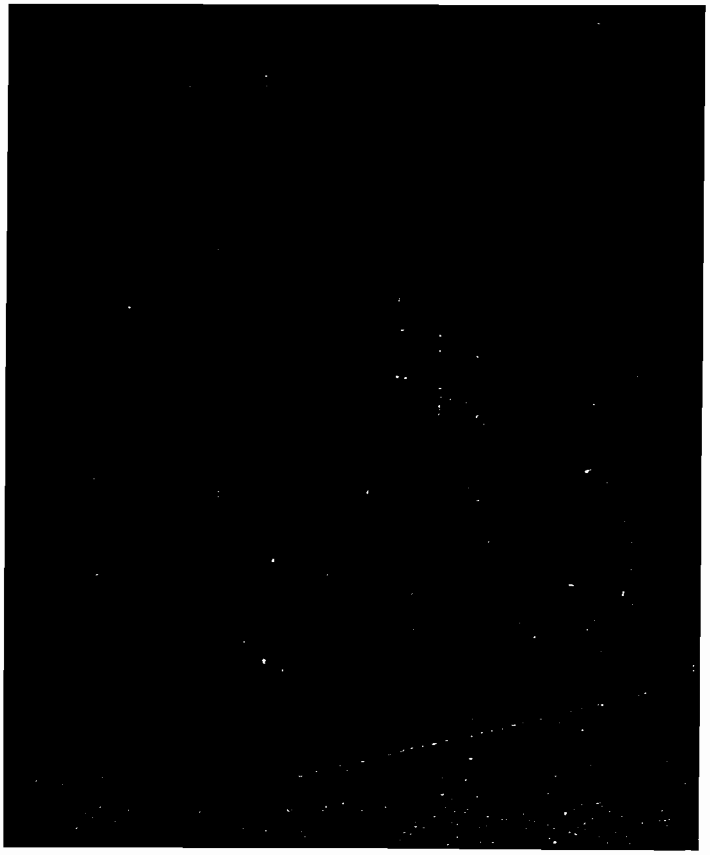
Every major synthetic fiber and film manufacturer and petroleum company in the U.S. and Britain, many large U.S. electric power companies, most large U.S. and European pharmaceutical manufacturers, all of the large U.S. and British international engineering-construction companies, and hundreds of other companies large and small are regular customers for Pall filters, gas dryers and temperature pressure and flow controlling devices.

Our position in these markets is well established and is expected to grow faster than the industries we supply as we introduce more products to serve them in ways we could not serve before, and as we improve our competitive position by the straightforward means of doing a better sales and service job than the competition.

Manufacturers of beverages, cleaning solutions and other packaged consumer fluids are joining the ranks of customers for our new Ultipor and Epocel filter media. For these industries and for others such as manufacturers of certain electronic components, we have only recently been able to provide the proper product. In due course, we expect to become a major supplier in these large markets.

Another industrial market of considerable interest is the clarification of hydraulic fluids. As happened in the aircraft industry several years ago, the hydraulic systems on machine tools, construction and earthmoving machinery, and the like are now becoming more sophiscated, requiring higher levels of purity of the hydraulic fluids for reliable operation. Our filters are attracting much attention as a part of the operating system, and our purification systems are already used as support equipment by several major manufacturers. The knowledge and experience gained over the years in our aircraft hydraulic activities put us in an excellent position to serve the burgeoning industrial hydraulics market. Initial efforts indicate a promising future for us in this field.

Equipment for the elimination of contamination from dielectric fluids is a growing activity of our Environmental Control Systems Division. Our systems are used for the removal of free and dissolved water, air and other contaminants from transformer oil as new high voltage requirements prove older means inadequate. The dielectric gas, sulphur hexafluoride (SF_6) which has been growing rapidly in use is very expensive and requires purification and reuse. Our SF_6 transfer and purification systems are bought and recommended to power companies by the principal manufacturer of the equipment which uses the gas.

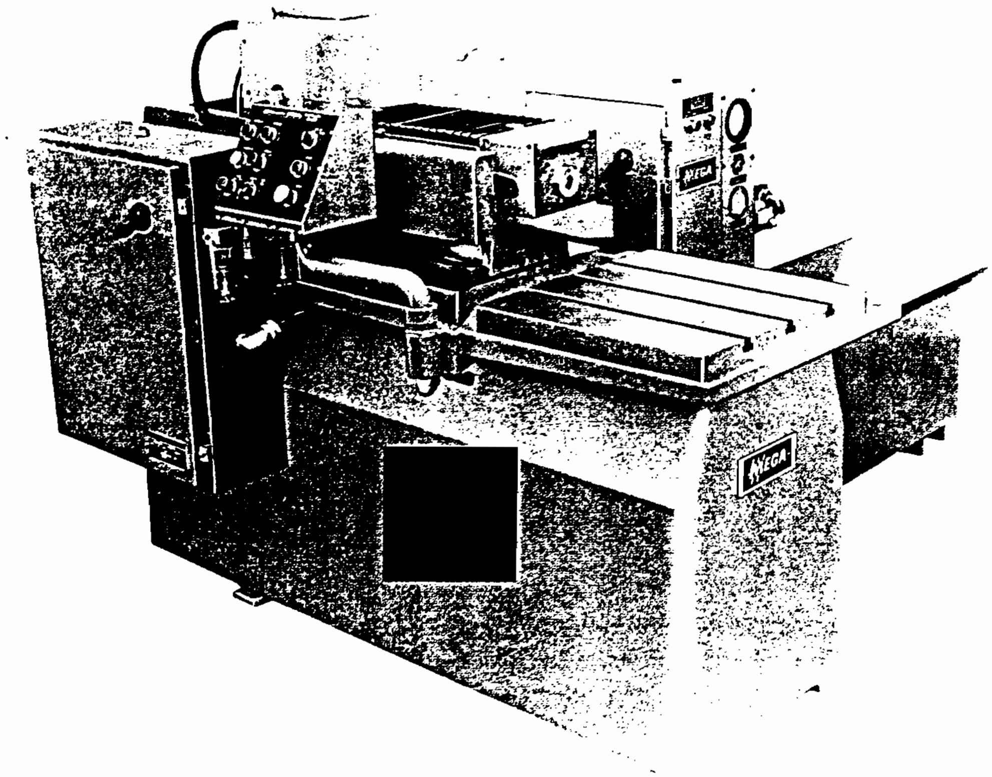


^ Indicative of our systems capability in the United Kingdom is this dry air system produced by Pall (U.K.) for Imperial Chemical Industries.

In the relatively short space of time that we have been in the pump business, we have gained a good technological foothold with our line of zero-leakage pumps. These are used in many rapidly growing applications such as the transfer of radioactive, highly corrosive, very valuable or very hot liquids.

Our industrial sales organizations are being continually expanded and strengthened, as are our sales promotional activities. Our people contribute to many technical society activities (and benefit as well) by presenting articles and papers in those disciplines in which they are expert, and otherwise furthering the objectives of the organizations. We consider these activities of much importance in maintaining our position of technological leadership.

Pall filter (right) on a Mega high precision deep hole drilling machine (below), made by Eldorado Tool & Manufacturing Corporation. This is one of the exciting new industrial hydraulic system uses for our products.



Water and Waste Treatment

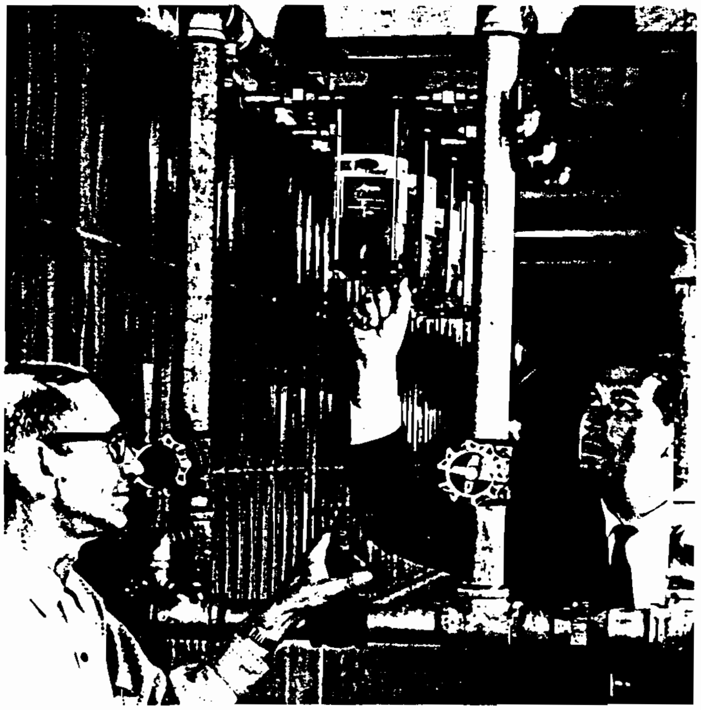
The preservation of water resources by reducing and largely eliminating contamination of rivers, lakes and harbors as well as of underground water reserves has become a critical international problem. Various governments have already enacted legislation aimed at solving this problem and major expenditures will be made during the next decade. Extensive coverage in the general press, and by radio and television is evidence of the general awareness and gravity of the problem.

In the expectation that these activities would bring about a receptiveness to technical innovation by an industry that had been notable for its resistance to change, Pall entered the field by purchasing a small water treatment company in Montreal in 1960. The orientation of this business has been changed from the production of domestic and commercial water softening equipment to the engineering and construction of water treatment systems for commercial, industrial, military and municipal use, and waste disposal plants for institutions, housing developments, industrial plants, ships and small municipalities.

During the course of this transition, it became obvious to us that a need existed for the solution of many water problems at the point of use in the home. Problems in home water supplies with dirt, bad taste and odor, iron, acid, mineral and dangerous bacterial contamination needed to be solved. Pall's Ultipor filter media proved, after exhaustive testing, to be an ideal solution to the bacteria removal problem and the Pall Guard line of water purifiers emerged after an extensive period of market and product testing throughout the country. Additions to this line to substantially increase its potential markets are in advanced stages of development.

At the same time a need appears to exist for portable units to provide safe drinking water for travelers, campers, sportsmen and military personnel in the field. Units made for this purpose are undergoing field testing.

Entry into the water and waste treatment business is not easy, but the stakes are high and the rewards potentially great. At this writing, we are pleased to be able to report substantial progress. More than one hundred Pall sewage disposal plants are now in operation ranging



^ Pall Guard Water Purifiers installed in a multi-unit residence in Long Beach, California.

^ Pall portable water purifier is undergoing extensive field testing by U.S. Armed Forces in Viet Nam.

^ The sewage disposal plant designed for the dredge "Collins" is typical of several installed and under construction on various types of ships as part of the government program to combat pollution of rivers, harbors and inland waters. Control panel is shown in inset.

from the 1000 gallon per day plants at the toll booths along a part of the Trans-Canada Highway, to plants handling over 1,000,000 gallons per day in municipalities such as Bois des Filions, Quebec, and shipboard installations such as the U.S. Corps of Engineers dredge "Collins."

These activities are centered at our Canadian plant, and are supplemented by a U.S. organization which has now been set up at our Glen Cove facility to handle marine equipment and to build towards industrial and municipal applications in the U.S.

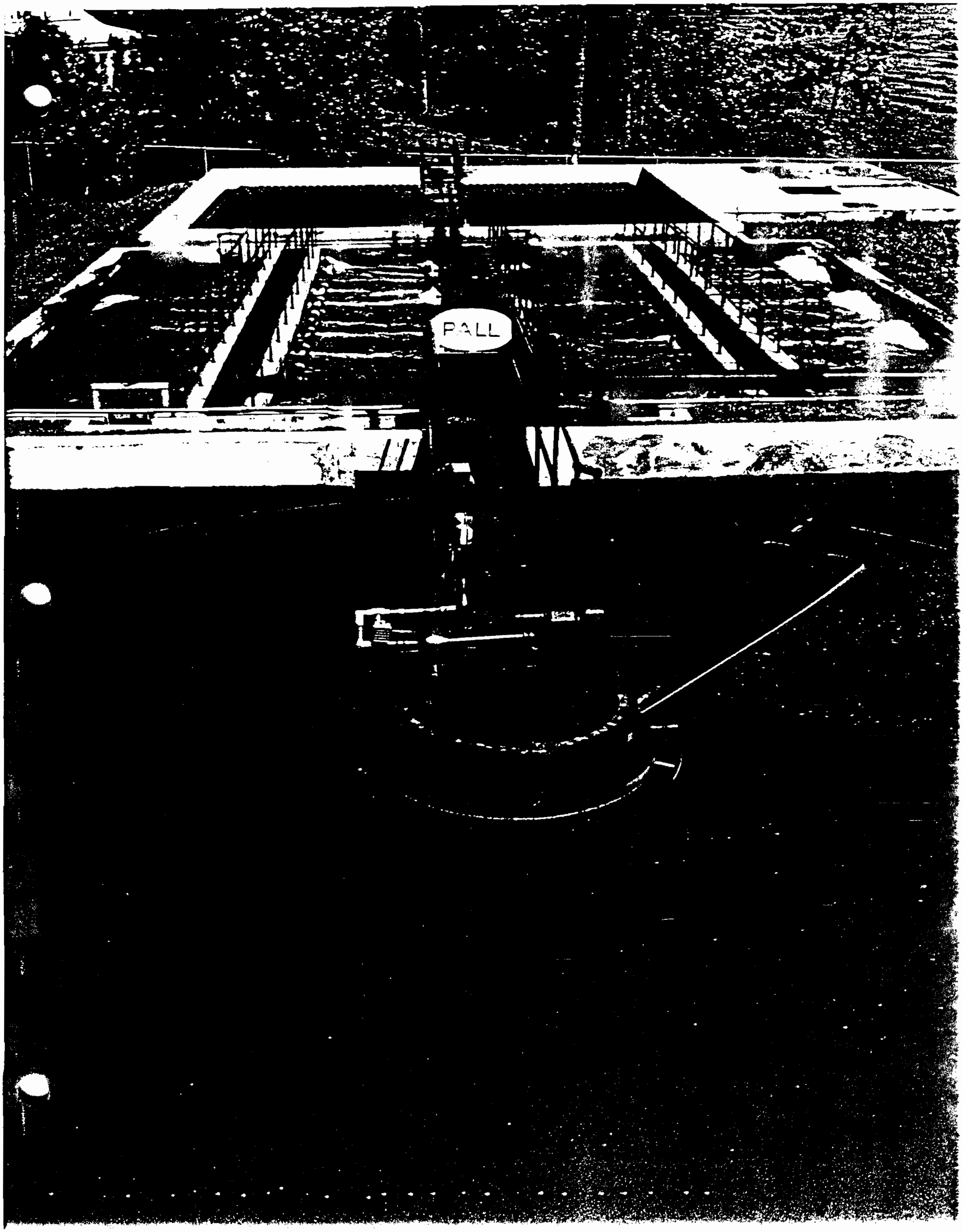
A number of sophisticated projects for equipment for use in space vehicles and lunar environment, such as the purification of fuel cell water by the removal of dissolved materials, and the treatment of a mixture of urine, condensate and wash water to make a sterile effluent which is suitable for drinking are in progress in Glen Cove. The combination of our capabilities in water purification and in designing and manufacturing light and compact airborne systems has greatly contributed to our success in these latter waste management projects.

While much of our past work in this field has utilized known processes and techniques, we believe that our future success lies in the development of proprietary methods and processes and we are making progress in this direction.

Our Aqua Pulse^{tm} system for improved efficiency of water clarification and our OxyPall^{tm} process designed to reduce the size and cost of sewage disposal plants by increasing the efficiency of biological degradation are examples of these activities. To augment our internal research and development capabilities, we are sponsoring projects at Laval and Rutgers Universities.

The extent of our ultimate success in this market area is not yet clear, but our progress to date has been encouraging.

> Pall Sewage Treatment Plant in operation at Bois de Filions serves the Canadian community of over 20,000 population.


PALL

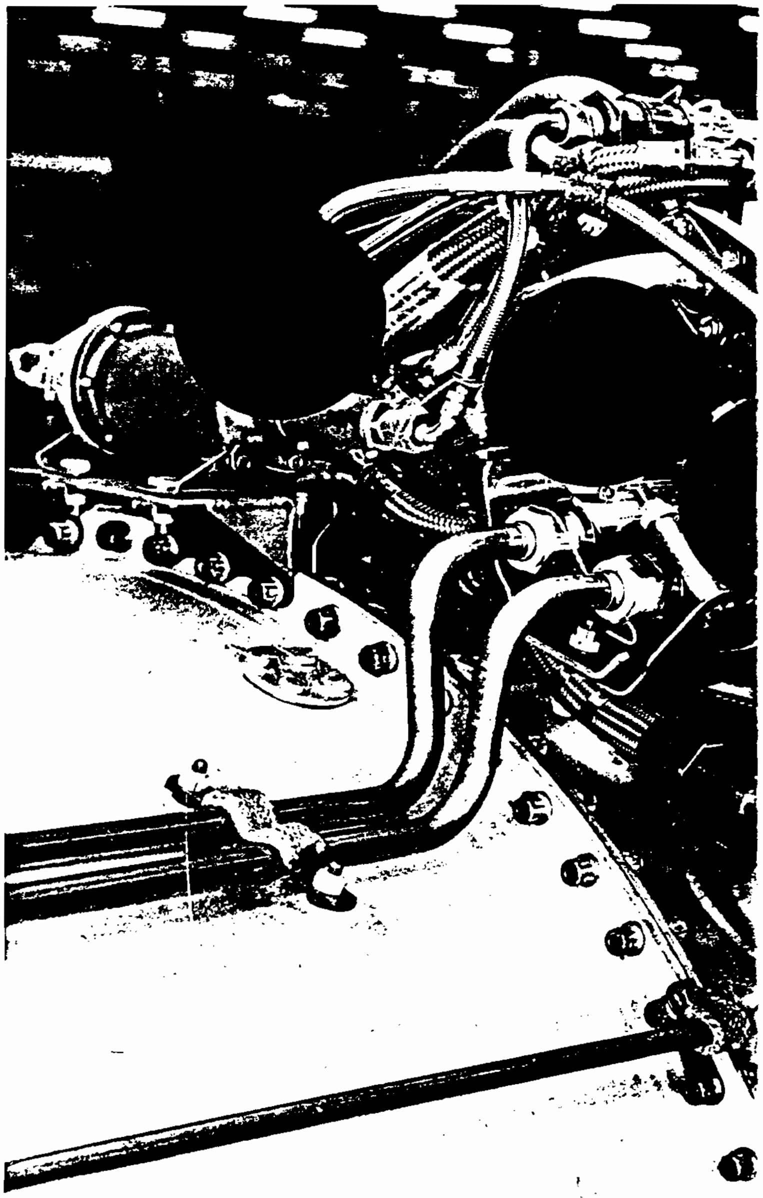
Aerospace and Marine

We seriously entered the airborne filter business in 1954 when the failure of traditional filter suppliers to stay abreast of the needs of sophisticated hydraulic systems was delaying the commissioning of new aircraft. We solved the problem and in the relatively short period since, we have become the free world's leading producer of sophisticated airborne and on-board submarine filters and an important factor in the ground support and dockside equipment filter business. Our regular customers include virtually all of the airframe, aircraft engine, ship, missile, space vehicle, rocket engine and constant speed drive manufacturers, as well as the major valve, pump and test stand producers, and the civilian and military users of jet aircraft and their maintenance and ground support facilities in many countries.

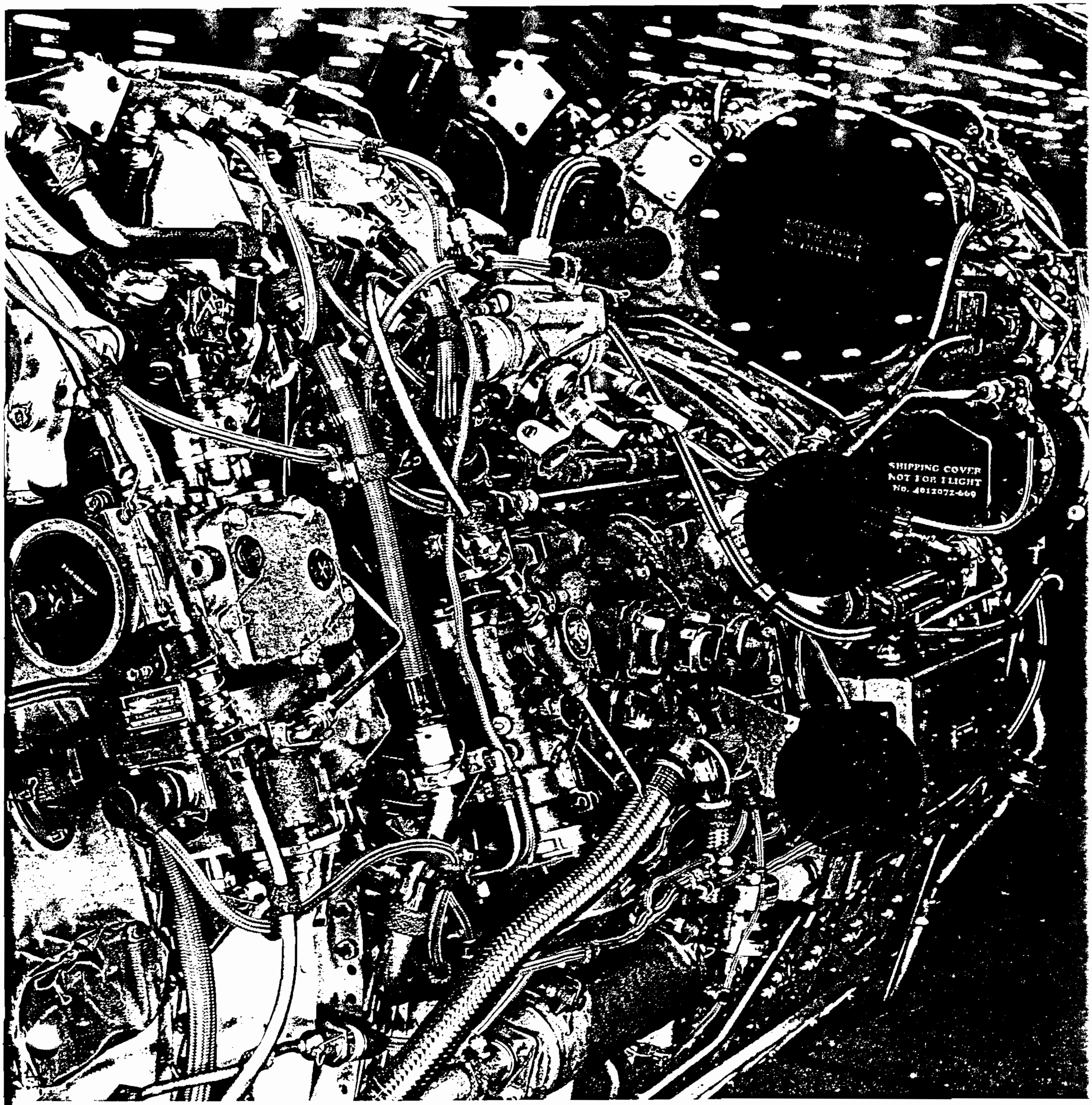
Our porous metals are used in many important aerospace projects as a transpiration cooling and sublimation medium. Our Deltadyne differential pressure instruments are standard on a great many airborne fluid systems.

The extent of our penetration of the aerospace and marine market can best be described by indicating projects on which our filtration and allied products have been and are being used.

As you will see from the following list most modern aircraft and space vehicles use Pall filters. It should be noted that the value of Pall filters on individual vehicles may run to thousands of dollars while on others the amounts may be very small. Numerous aerospace vehicles are omitted from this list because of their classified nature.



Some of the Pall fuel and hydraulic filters on the General Electric J-79 jet engine can be seen in the portion of the engine shown here.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NOT FOR FLIGHT
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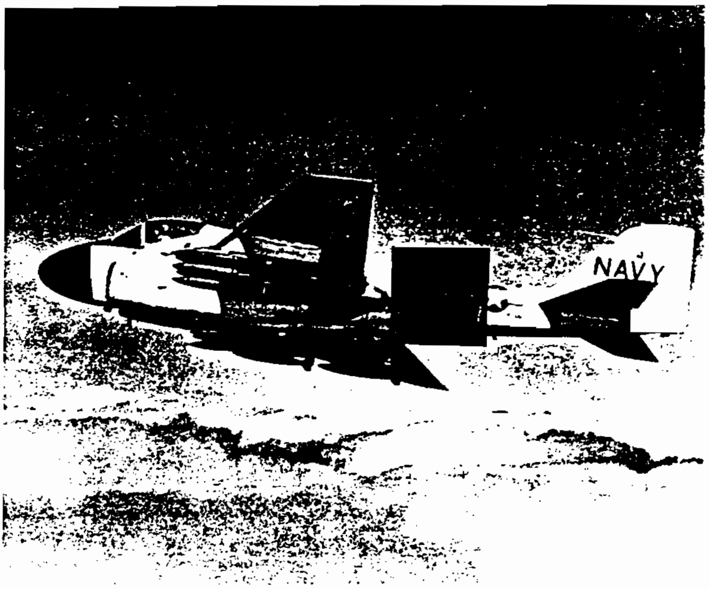
United States Military Aircraft

Model	Manufacturer	Popular Name
Fighter / Attack		
F-100	North American	Super Saber
F-101	McDonnell	Voodoo
F-102	Convair	Delta Dagger
F-104	Lockheed	Starfighter
F-105	Republic	Thunderchief
F-106	Convair	Delta Dart
F-111	Convair	F-111
A-4	Douglas	Skyhawk
A-6A	Grumman	Intruder
A-7A	Ling-Temco-Vought	Corsair II
F-4	McDonnell	Phantom II
F-5	Northrop	Freedom Fighter
A-5	North American	Vigilante
[illegible]11	Grumman	Tiger
Bomber		
B-52	Boeing	Strato Fortress
B-57	Martin	Canberra
B-58	Convair	Hustler
Cargo / Transport Series		
C-130	Lockheed	Hercules
C-135	Boeing	Strato Lifter
VC-137	Boeing	Strato Lifter
C-140	Lockheed	Jet Star
C-141	Lockheed	Star Lifter
C-5	Lockheed	C-5
C-2A	Grumman	C-2A
Special Electronic Installation Series		
E2A	Grumman	Hawkeye



^ Each Grumman A-6A Intruder attack bomber uses nine APM hydraulic filters.v

Helicopter Series

AAFSS	Lockheed	AAFSS
UH-1	Bell	Iroquois
UH-2	Kaman	Seasprite
H-3	Sikorsky	Sea King
H-43	Kaman	Huskie
H-46	Vertol	Sea Knight
CH-47	Vertol	Chinook
QH-50	Gyrodyne	Dash
H-52	Sikorsky	H-52
H-53	Sikorsky	Sea Stallion
H-54	Sikorsky	Flying Crane

Research Series

X-15	North American	X-15
X-19	Curtiss-Wright	Model 200
X-22	Bell	Model D2127
XH-51	Lockheed	Aerogyro
XB-70	North American	Valkyrie
XC-142	Ling-Temco-Vought	XC-142

Trainer Series

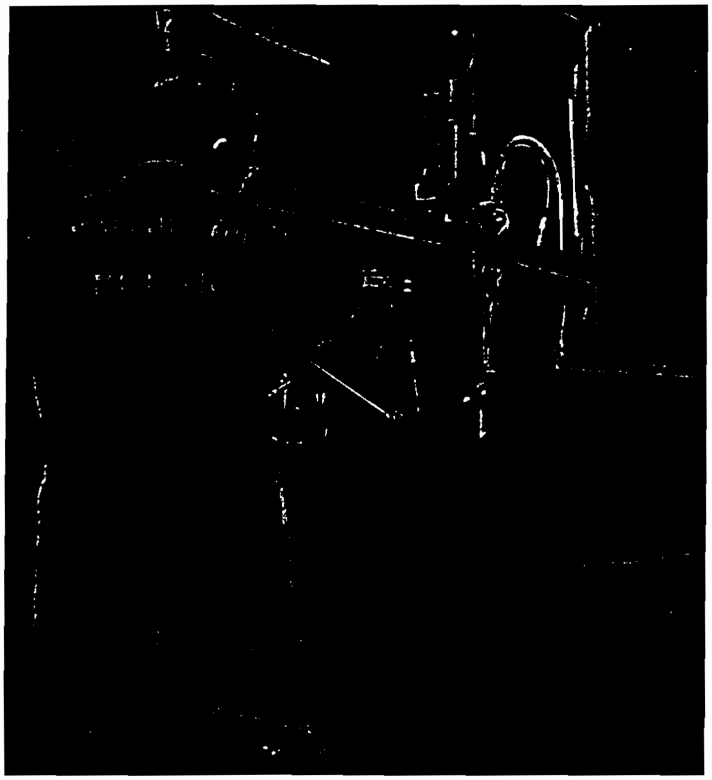
T-38	Northrop	Talon

Patrol Series

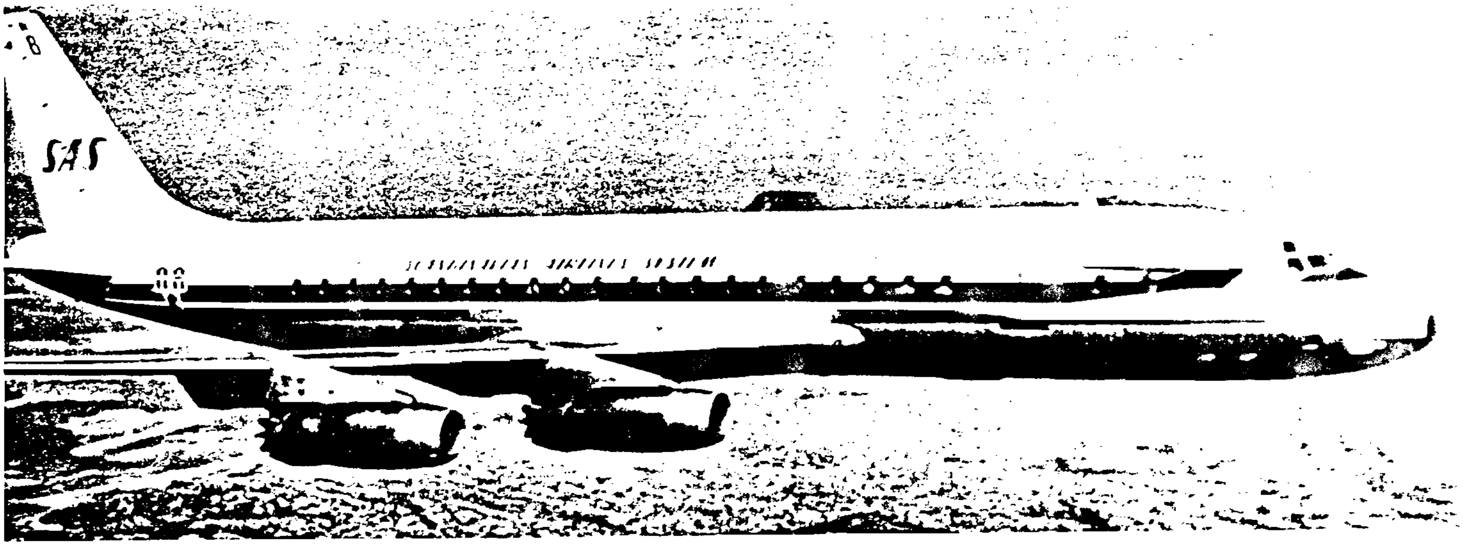
P-3	Lockheed	Orion

VTOL & STOL Series

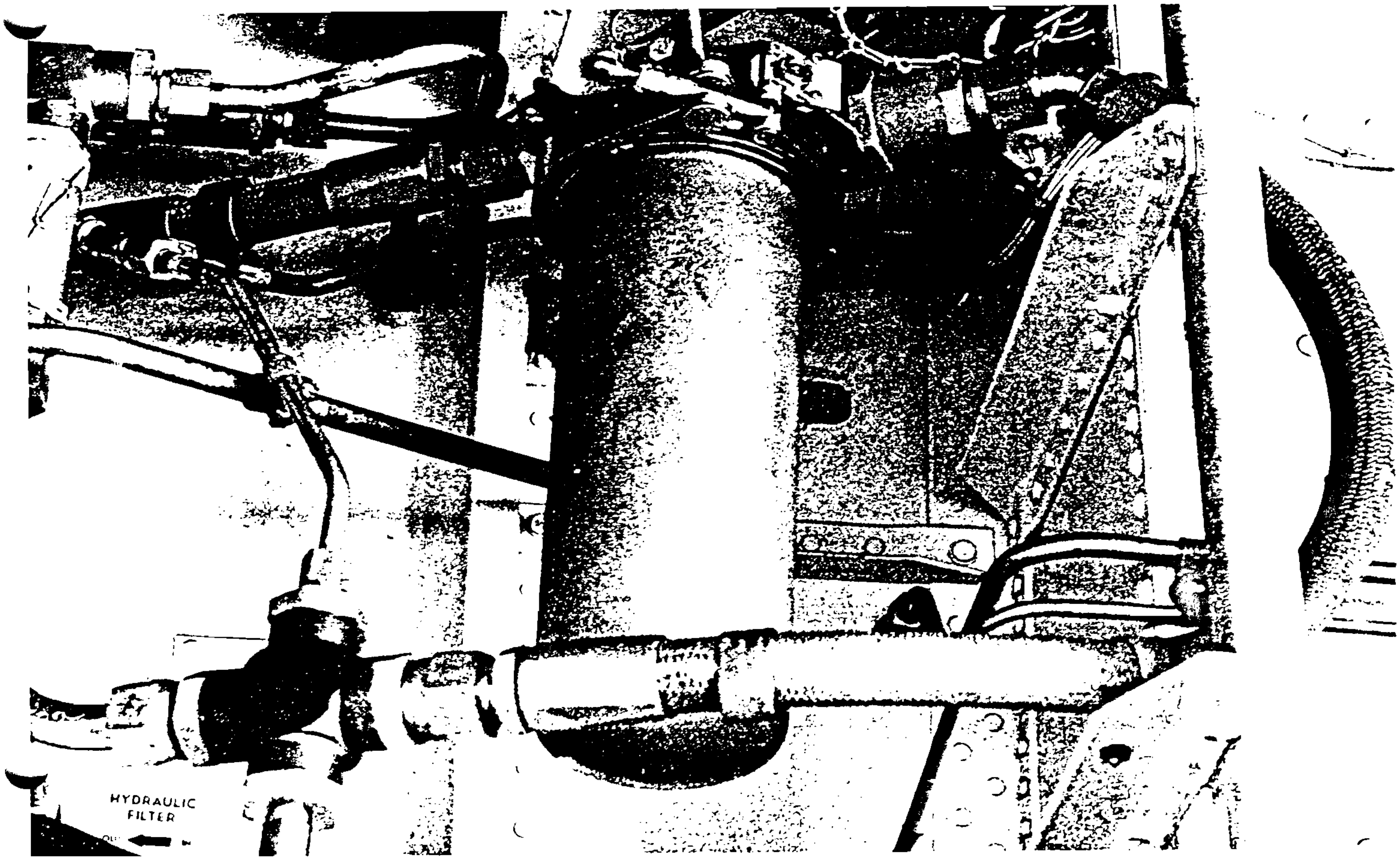
CV-2	De Havilland	Caribou
CV-7	De Havilland	Buffalo



^ Inset shows Pall's renowned "Flying Ultipor" filter used in the Boeing Vertol Chinook Helicopter. v



^ The Douglas DC-8 airliners flown by SAS (Scandinavian Airlines System) are standardized with Pall "Flying Ultipor" filters in their hydraulic system. v



U. S. A. Commercial Aircraft

Model 707	Boeing
Model 720	Boeing
Model 727	Boeing
Model 737	Boeing
Model 210E Centurion	Cessna
Convair 340, 440	General Dynamics
Convair 880	General Dynamics
Convair 990	General Dynamics
DC-8	Douglas
DC-9	Douglas
Electra	Lockheed
Jet Star	Lockheed
Gulfstream II	Grumman
MU-2	Mooney
Lear Jet	Lear
Jet Commander	Aero Commander

U. S. A. Commercial Helicopters

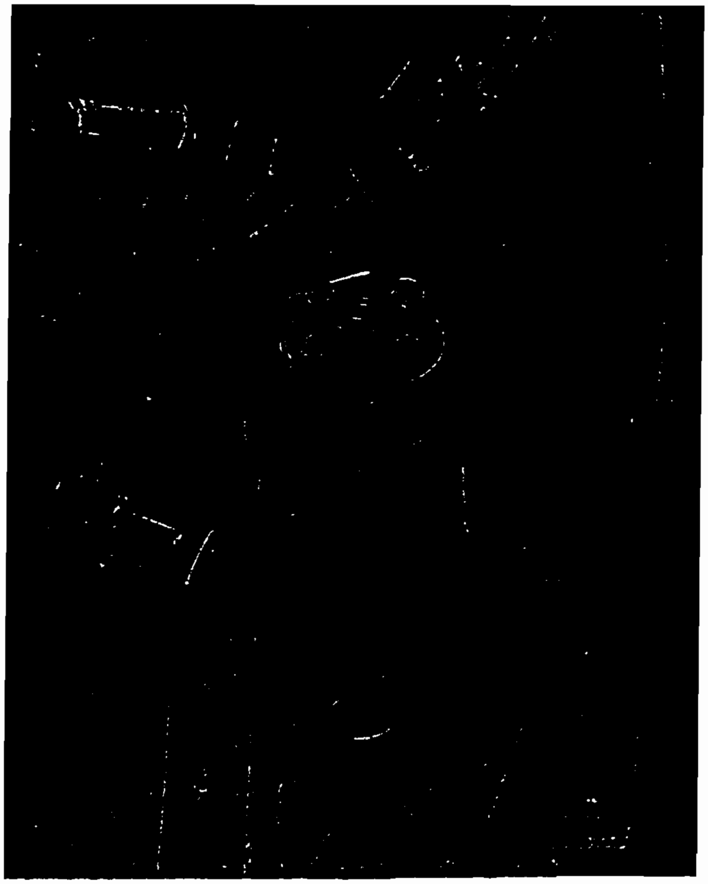
V-107	Vertol
S-61	Sikorsky
S-62	Sikorsky
S-64	Sikorsky

Foreign Aircraft

BAC 1-11	British Aircraft Corp.	(C)
VC-10	British Aircraft Corp.	(C)
BAC 145 Jet Provost	British Aircraft Corp.	(M)
Caravelle	Sud	(C)
F-28	Fokker	(C)
G-91	Fiat	(M)
Garnet Mk. 3	Westland	(M)
D.O. 31	Dornier	(C)
Buccaneer	Hawker Siddely	(M)
Trident	Hawker Siddely	(C)
P. 1127	Hawker Siddely	(M)
P. 1154	Hawker Siddely	(M)
Sea Vixen	Hawker Siddely	(M)
Slayron	Hawker Siddely	(C)
Concorde	Sud/BAC	(C)
V-37 Viggen	SAAB	(M)
D-35 Draken	SAAB	(M)
Twin Otter	De Havilland	(M)

(C) Civilian (M) Military

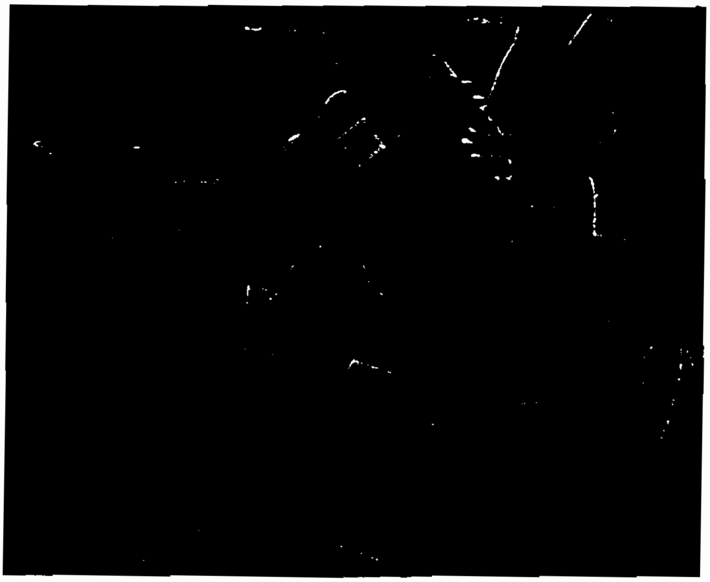
^ Each New York Airways helicopter, a commercial version of the Boeing Vertol Sea Knight, uses four Pall hydraulic filters. v



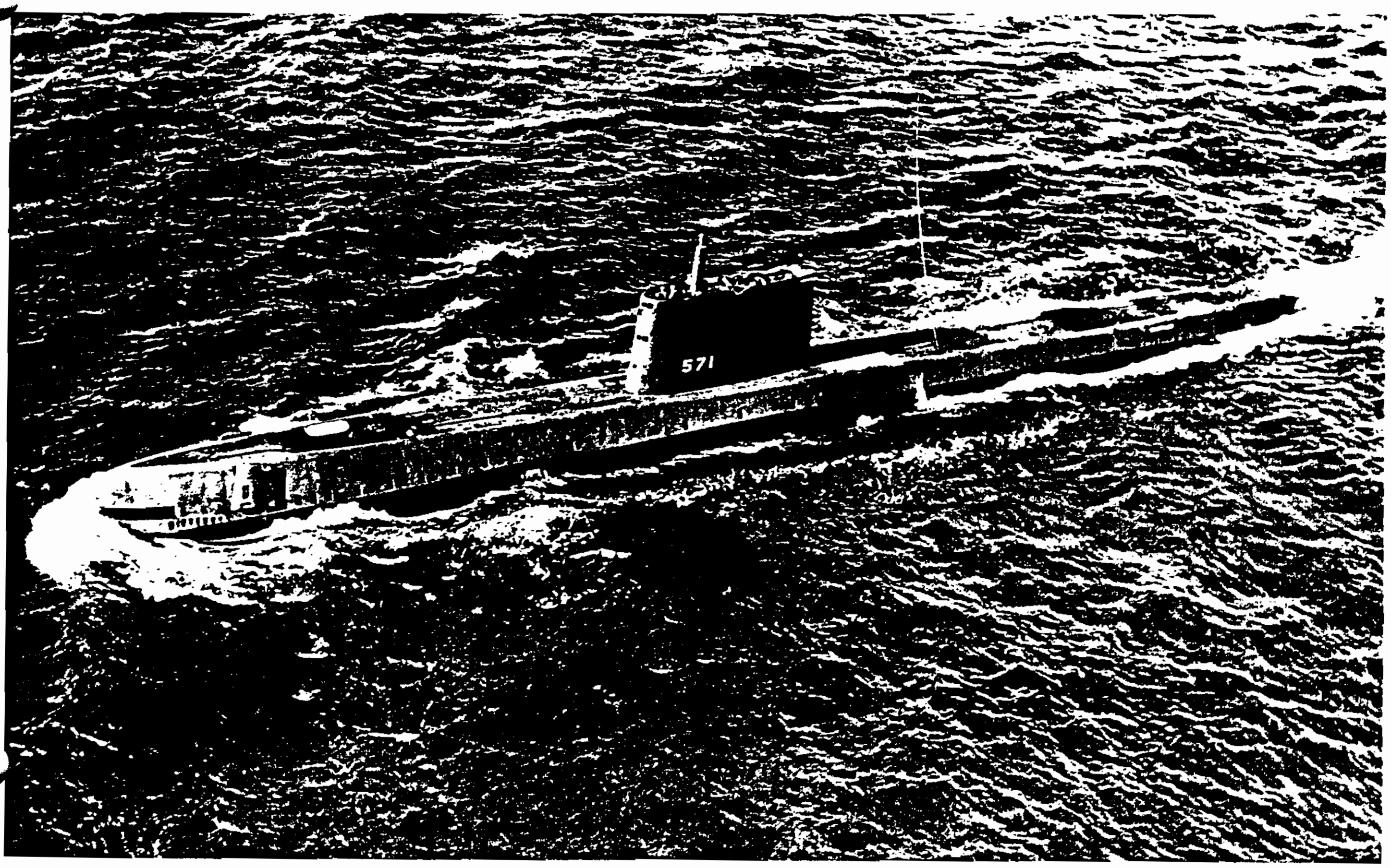
Marine Projects include all nuclear submarines, certain surface vessels, Grumman Hydrofoil, the Mark 48 Torpedo, and underwater deep submersible vehicles.

Pall ground support equipment filters are now used in all U.S. Air Force hydraulic fluid loading carts. The Canadian Armed Services recently retro-fitted all their carts with the same Ultipor filters and have standardized on the use of our Silting Index Determinator.

The broad acceptance of our "Flying Ultipor" filter during the past two years has been most gratifying to us. Fifty commercial airlines including Aero Condor, Air Asia, Air Canada, Air India, Alaska, American, Ansett, Avianca (Colombia), Braniff, British Eagle, British Midland, China, El Al, Ethiopian, F.A.A., Flying Tigers, Frontier, Irish International, Japan, Kuwait, L.A.C.I.C.A. (Chile), Laner Airways, Lufthansa, National, Northwest, Pacific, Pacific Southwest, Page Airways, Pan American, Philippine, Quantas, S.A.S., Sabena, T.A.C.A. (El Salvador), T.A.P. (Portugal), Trans Australia, Trans World, United, Ward,



^ Ultipor disposable element filters are used in the support systems that service our atomic submarine fleet.v



and Western, are now using this remarkable new filter, and it is being furnished as standard equipment on many new aircraft produced both here and abroad.

Missiles & Space Vehicles

Apollo	North American Aviation, Inc.
Atlas	General Dynamics Corporation
Bomarc	The Boeing Company
Gemini	McDonnell Aircraft Corporation
Hawk	Raytheon Company
Juno	Chrysler Missile Division
Jupiter	Chrysler Missile Division
Lem	Grumman Aircraft Engineering Corporation
Mercury	McDonnell Aircraft Corporation
Minuteman	The Boeing Company
Nike	Western Electric Co., Inc.
Phoenix	Hughes Aircraft Company
Polaris	Lockheed Aircraft Corporation
Poseidon	Lockheed Aircraft Corporation
Saturn	The Boeing Company, Chrysler Corp., Douglas Aircraft Corp.
Sergeant	Sperry Utah Co.
Thor	Douglas Aircraft Company
Titan	Martin-Marietta Corporation

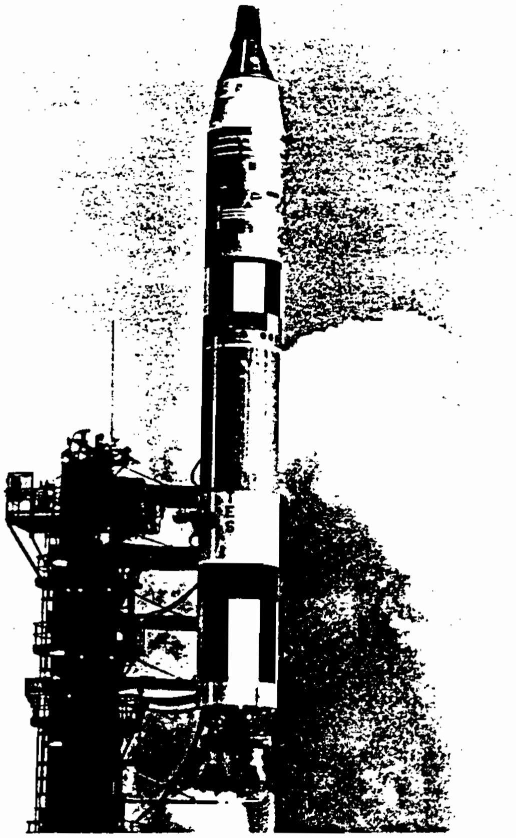
The formation of our Environmental Control Systems Division two years ago has added a new dimension to our aerospace and marine activities by adding heat exchange, sophisticated refrigeration and air-conditioning and the demineralization of critical cooling water in electronic systems. Although we are a comparative newcomer in this large market, the success to date of our new division augurs well for the future. Among the important programs using Pall Environmental Control products are:

A variety of military high power radar systems such as the Navy SPS/29 and SPS/48, the FPS/18 and others.

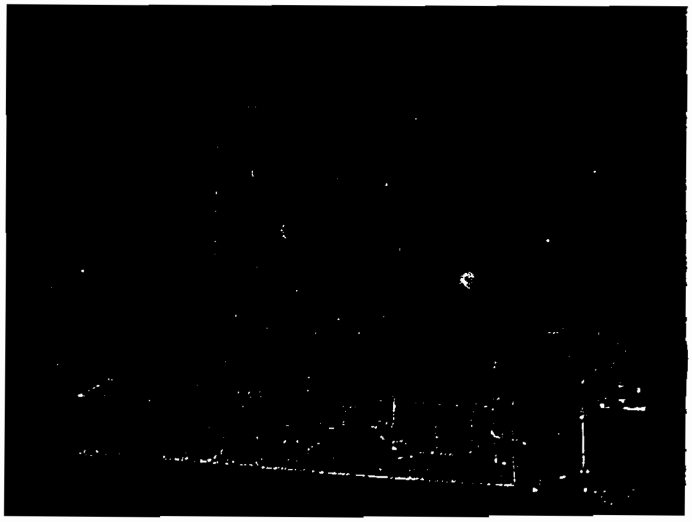
The Boeing 737, the J79 jet engine and both the Navy and Air Force versions of the F-111.

Missiles and their ground support equipment using Pall ECS products include the Saturn V, the Sparrow Missile, the Minuteman missile transporter and Army Communications systems shelter such as the ANTRC-90.

Many versions of stationary and portable radar use our products to pressurize cables and waveguides where



^ v ECS Division developed and produced the Ground Support Cooling Unit shown here and the Computer Temperature Modulator for the NASA Saturn V Space Vehicle. Othe Pall divisions are also contributors to the Saturn program



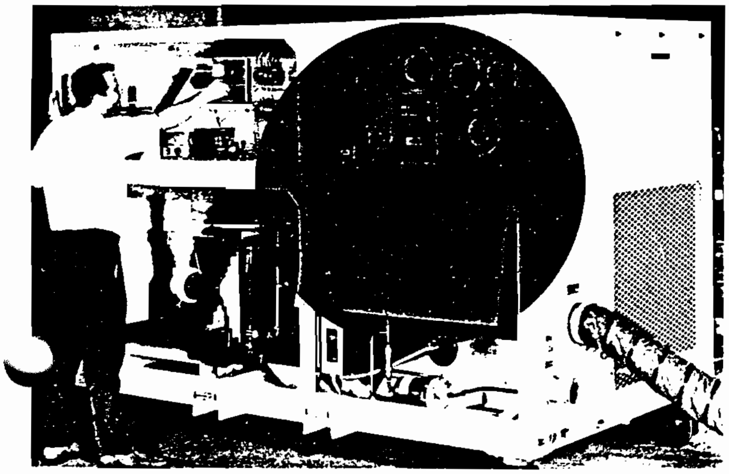
extremely dry air or sulphur hexafluoride (SF_6) gas is used as a dielectric medium.

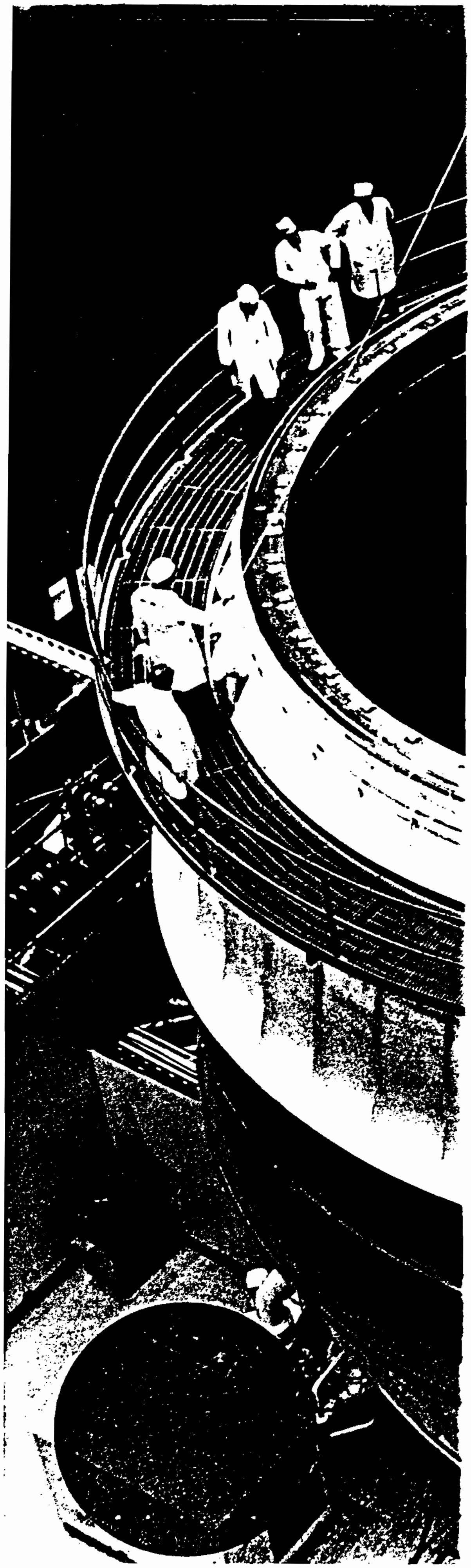
* * *

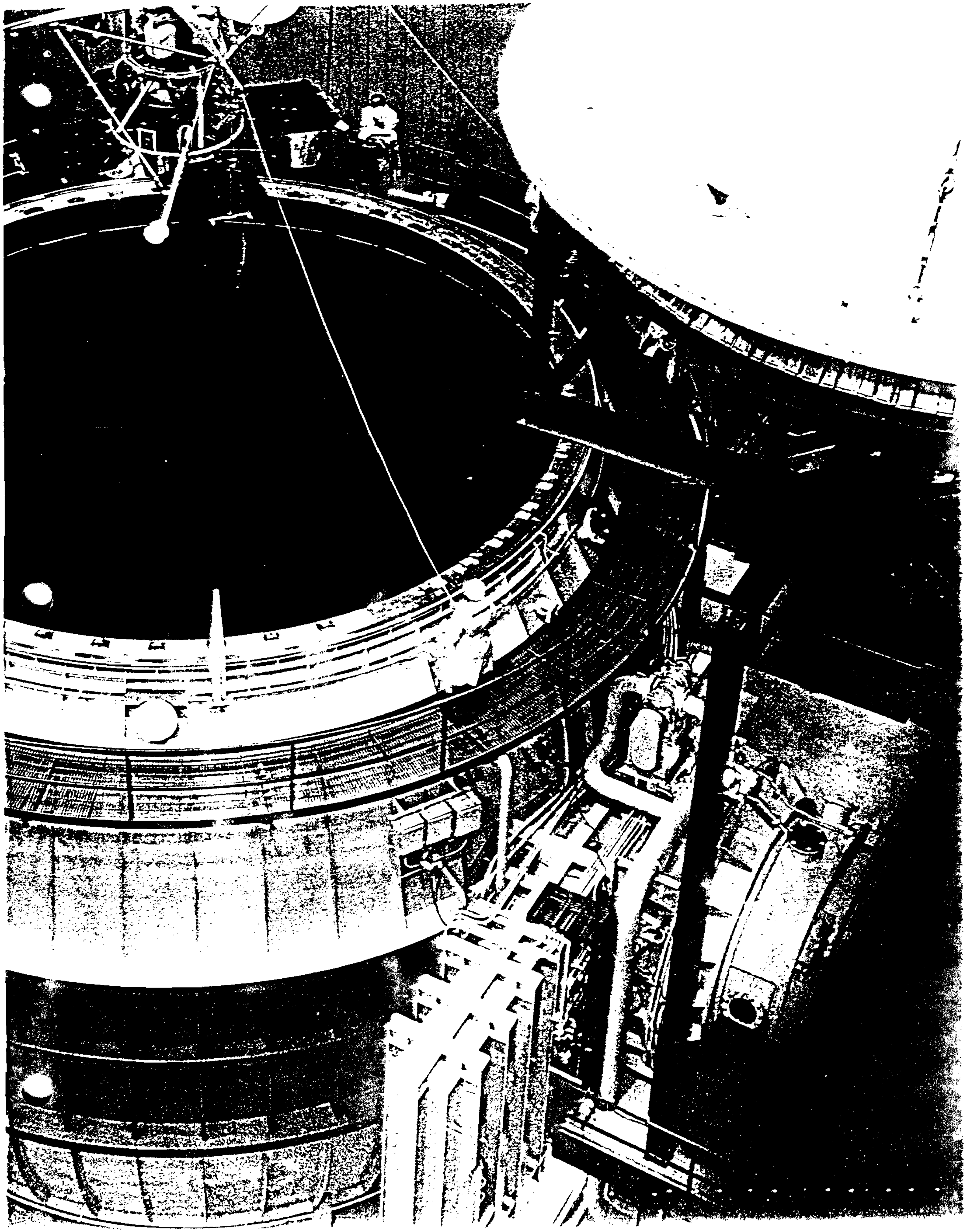
New developments in filter media, differential pressure devices and in heat exchangers are already putting us a generation ahead of the competition — a performance we have accomplished several times before.

Completely new types of filters, some to perform functions we were previously unable to accomplish are also in development. These devices will not only increase our ability to serve the aerospace industry, but will have the same synergistic effect that our older hydraulic filters have had in industrial markets.

v Pall's Spacecraft Temperature Modulator is a part of the environmental control system at this Lunar Orbiter test facility.>







Stanley Wernick, Controller-Secretary reviewing draft of this report with Abraham Krasnoff, Executive Vice President and Treasurer and Murray Relis, Assistant Secretary.

We hope you have enjoyed reading this brochure and have found it informative. Should you have any questions, we suggest you contact whichever of the following is most convenient:

Executive Vice President
Pall Corporation
Glen Cove, New York 11542
Phone: 516-671-4000
Telex: 1-26329
Cable: Pallco

In Europe:
Managing Director
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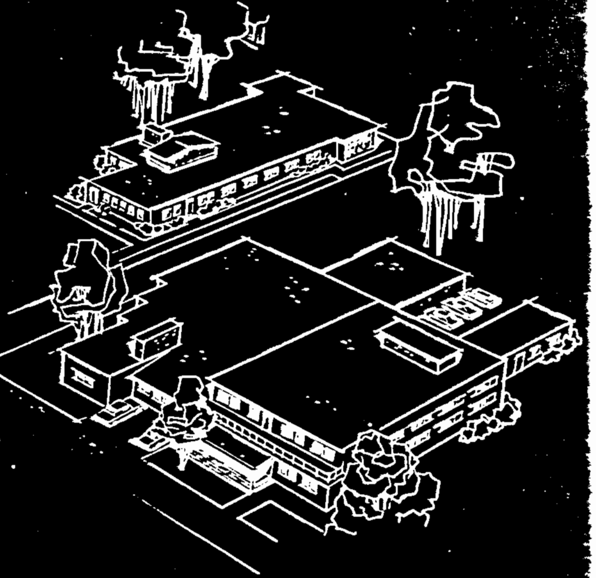
Walton Road
Farlington, Portsmouth
Hampshire, England
Phone: Cosham 7-0901
Telex: 86251

In Latin America:
General Manager
Pall S.A.
Apartado Postal No. 199
Cd. Naucalpan de Juarez
Edo de Mexico, Mexico
Phone: 27-11-37

In Canada:
General Manager
Pall (Canada) Ltd.
4880 Hickmore Street
St. Laurent
Montreal 9, Canada
Phone: 514-636-1370
Telex: 1-20474

1.



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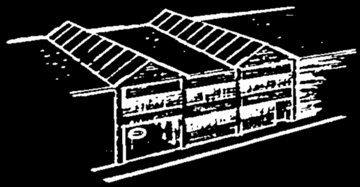

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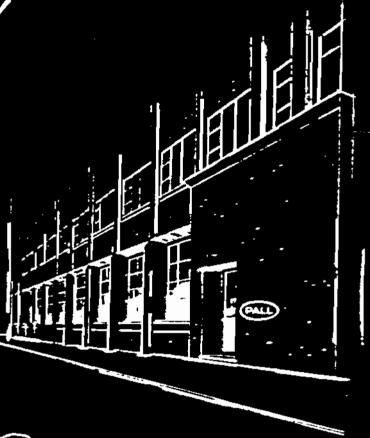

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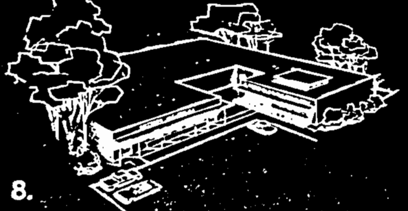

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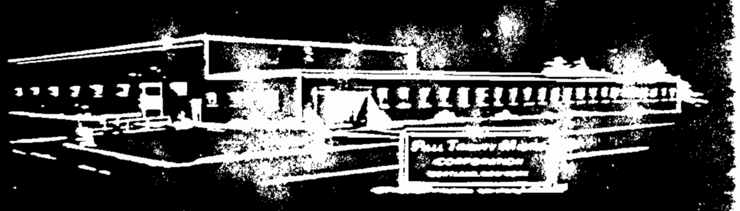
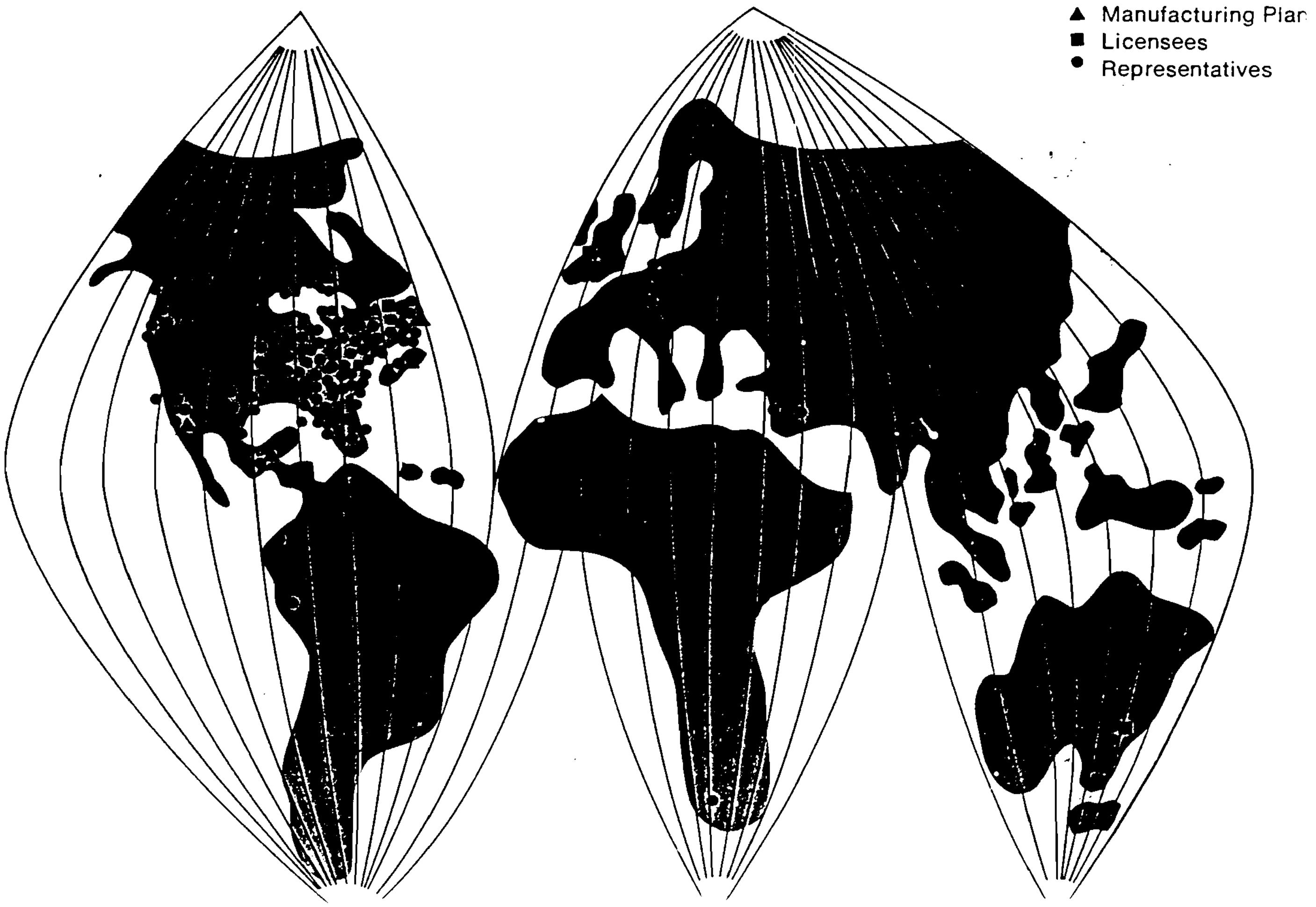


9.

1. EXECUTIVE HEADQUARTERS, GLEN COVE, NEW YORK
2. GLEN COVE, NEW YORK
3. MONTREAL, CANADA
4. PUTNAM, CONNECTICUT
5. MEXICO, D.F.
6. LONG ISLAND CITY, NEW YORK
7. PORTSMOUTH, ENGLAND
8. SOUTH EL MONTE, CALIFORNIA
9. CORTLAND, NEW YORK

Pall Around the World



EXHIBIT

F

PALL CORPORATION

1995 ANNUAL REPORT

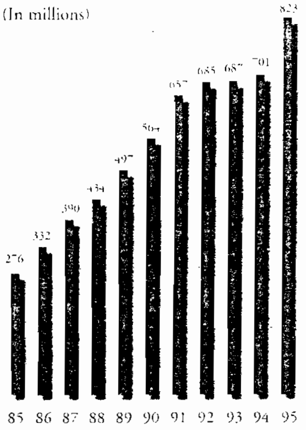
Fiscal Highlights

	Years Ended		
(In thousands, except per share data)	July 29, 1995	July 30, 1994	% Increase
Net Sales	$ 822,823	$700,848	17
Earnings Before Income Taxes	$ 167,704	$135,098[b]	24
Net Earnings	$ 118,436[a]	$ 98,922[b]	20
Earnings Per Share	$ 1.03[a]	$ .86[b]	20
Total Assets at End of Year	$1,074,922	$959,579	12
Working Capital	$ 237,034	$213,586	11
Stockholders' Equity	$ 651,799	$587,206	11
Average Shares Outstanding	115,184	115,678	
Equity Per Share Outstanding at Year End	$ 5.70	$ 5.09	12

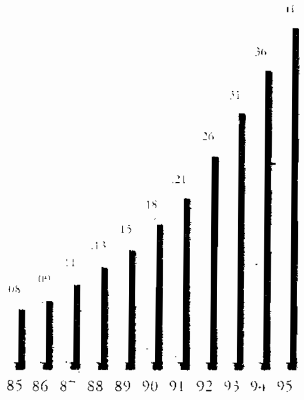
[a] Includes a charge against earnings of $780 after income taxes (1 cent per share) as a result of adopting the Financial Accounting Standards Board Statement No. 112 (Employers' Accounting for Postemployment Benefits).

[b] Includes a pretax charge of $3,696 ($2,332 after taxes, 2 cents per share) representing mainly the cost of restructuring the German operations, and the write-off of a bad debt in the Aerospace operations.

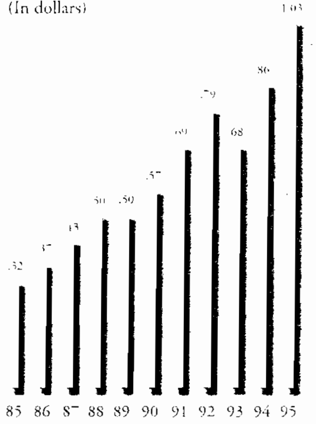
Sales
(In millions)



Dividends Per Share
(In dollars)



Earnings Per Share
(In dollars)



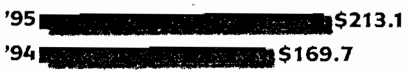
Contents

Pall at a Glance

PERCENT OF TOTAL SALES *(amounts in millions)* **DESCRIPTION**

Fluid Processing

26%



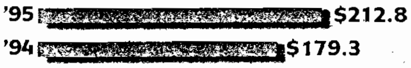
In this, our most diverse market, Pall products are critical to the producers of oil, natural gas, electricity, chemicals, semiconductors, photographic film and plastics. To meet the stringent, yet constantly evolving filtration and separations challenges of these innovators, Pall offers a broad range of sophisticated products and services that enhance the purity of process fluids by removing microscopic and larger contaminants that can devastate production equipment, product yields and quality.

VALUE-ADDED SERVICES

- Remote monitoring, diagnostics and control
- Custom engineering and consulting
- On-site and laboratory fluid and system analysis

Aeropower

26%



Pall is a leading supplier of fluid clarification and high-end separations products to the commercial and military aircraft markets for use on aircraft, ships and land-based vehicles. Our industrial customers include power generation plants, manufacturers of steel, paper, automobiles and mobile equipment – including trucks and earth moving machinery. Pall's high-performance products remove particulates and water from hydraulic and lubrication fluids and systems, extending their useful life, minimizing waste for disposal, and increasing overall productivity.

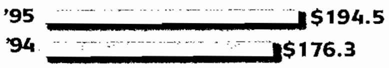
VALUE-ADDED SERVICES

- Contamination control training
- Fluid condition monitoring

Health Care

Patient Protection

23½%



In this critical market, Pall filters protect patients undergoing life saving therapies, including blood transfusions, intravenous feeding, inhalation therapy, anesthesia administration and open heart surgery. Often the last line of defense, our sophisticated products provide unparalleled patient protection from particulates, bacteria, viral and foreign leukocyte contamination, improve patient outcomes and shorten hospital stays.

VALUE-ADDED SERVICES

- Blood bank quality assurance validation assistance
- Scientist-Lecturer programs
- On-site product orientation

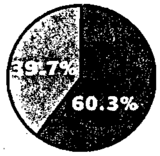
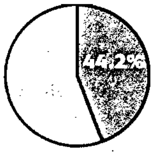
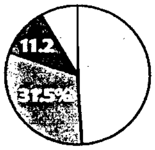
Pharmaceuticals, Diagnostics and Nutrition

24½%

Pall is an innovator and leader in the supply of the filtration systems, validation services and proprietary membranes that are crucial to pharmaceutical and biopharmaceutical manufacturers, producers of diagnostic tests, and food and beverages. These producers rely on our filters and process validation techniques to ensure the safety and efficacy of their products.

VALUE-ADDED SERVICES

- Process and manufacturing validation
- Custom product development
- Scientific Liaison program

SALES BY MARKET SEGMENT *(amounts in millions)*	1995 MARKET POTENTIAL *(amounts in millions)*	COMPETITORS:
■ Microelectronics, Data Storage and Photographic Film 1995 Sales: **$128.6** 1994 Sales: **$ 94.8** ▨ Oil/Gas, Chemical/Petrochemical and Power Generation 1995 Sales: **$ 84.5** 1994 Sales: **$ 74.9**  *Percent of 1995 Fluid Processing Sales*	**$3,450**	Baker-Hughes, Fuji Filter, Funda Filter, Graver, Memtec, Millipore, Nippon Techno, Ronningen-Petter, U.S. Filter
▨ Airborne, Military Land and Marine 1995 Sales: **$ 94.1** 1994 Sales: **$ 79.2** ☐ Industrial and Mobile Fluid Power 1995 Sales: **$118.7** 1994 Sales: **$100.1**  *Percent of 1995 Aeropower Sales*	**$2,050**	Donaldson, Fairley-Arlon, Hydac, Koito Manufacturing, LeBozak, Mark IV Industries, Parker Hannifin, Schroeder, Taisei, Western Filter
☐ Patient Protection 1995 Sales: **$194.5** 1994 Sales: **$176.3**	**$4,075**	Abbott, Asahi Medical
Percent of 1995 Health Care Sales  ☐ BioSupport and OEM Diagnostics 1995 Sales: **$ 32.8** 1994 Sales: **$ 24.6** ▨ Pharmaceutical, Biologicals and Bioprocessing 1995 Sales: **$125.0** 1994 Sales: **$105.9** ■ Food and Beverage 1995 Sales: **$ 44.6** 1994 Sales: **$ 45.0**	**$2,450**	Abcor, Commercial Intertech, Gelman, Koch, Millipore, Sartorius, Seitz Filter

GRAND TOTAL:
$12.025 BILLION

Profile of Pall Corporation

Pall Corporation is the world leader in the burgeoning field of filtration and separations. Our sophisticated products have broad application within three major markets—Fluid Processing, Aeropower and Health Care. The filtration and separations industry is a $12 billion global market with impressive secular growth rates.

The tremendous need for pure fluids is driven by the customer's understanding that contaminants in process fluids generally compromise product quality, affect production efficiency, reduce the useful working life of process fluids and equipment or, in Health Care, compromise patient outcomes. Growth within this vast marketplace is also being fueled by the unprecedented efforts by manufacturers worldwide to minimize waste and employee exposure to hazardous substances.

Pall has distinguished itself within this marketplace through innovative, cost-effective products, dedicated technical support and the ability to efficiently service customers anywhere in the world.

Nearly 50 years ago, we established that the proper format for us was narrow orientation and leadership in filtration, aimed at a broad array of critical applications. In the last few years, we have expanded the scope of our business to encompass the complementary field of separations. Separations capabilities give us access to a wide range of applications that were previously out of reach and enable us to serve the full range of our customers' needs.

Our founding philosophy remains constant. We will only pursue applications in which we can do more for the customer than can others. This means that we must stay close to the advancing and changing needs of a broad array of leading-edge customers. It also means that we continuously work to make improvements in the technology of filtration and separations and the quality of our service to customers.

These guiding principles continue to serve us well as Pall evolves to attain its global potential.

◀ Pall Corporation at a Glance

Letter to Shareholders

> **"1995 marked our return to double-digit growth with sales increasing 17½ percent…"**
>
> ***Eric Krasnoff***
> ***Chairman and Chief Executive Officer***

It was a very good year for Pall Corporation. 1995 marked our return to double-digit growth with sales increasing 17½ percent compared to 2 percent the year before. Just as important, profits improved from $98,922,000 in fiscal 1994 to $118,436,000 in fiscal 1995, and earnings per share increased from $.86 in fiscal 1994 to $1.03 in fiscal 1995. 1995 was our 24th consecutive year of increased sales.

Our vision is to be the sales leader and technical innovator for the filtration, separations and purification needs of each market we enter. We will partner with our customers to add value to their business through the use of Pall products.

At the beginning of our 1995 fiscal year, we said that the key to success was jump-starting sales to achieve double-digit growth. Entry into new markets with an expanded range of products both developed internally and acquired outside of the Company was the direction to achieve this goal. Each of these required investment in our future. Pall management is very pleased that these investments, while strongly positioning us for future growth, have also contributed to sales growth this year…and that they have done so without sacrificing earnings. We applaud Pall employees and distributors worldwide on this achievement.

Pall has a very clear market focus, a strong proprietary technical base, and a sharp sense of the route to apply that technology to achieve commercial success. Central to this is our entry into the separations marketplace. While complementary to our strong position in classic filtration markets, industrial and health care separations opportunities greatly expand our universe of opportunity.

We first invested in industrial separations and have now put in place a worldwide infrastructure to support the increasing revenues that this market is already generating. More recent is our Health Care initiative into separations applications. This is being fueled by our acquisition in January 1995 of Filtron Technology Corporation and a number of promising internally developed products. These "Bioseparations" technologies are now being placed under the Pall Filtron banner to spur penetration of biopharmaceuticals, food and beverage and related markets.

On a geographical basis, sales were strong throughout the world. Our Asian operations deserve particular mention, growing a combined 31 percent for the year. We invested heavily in sales and technical support throughout Asia in 1995. This investment will continue in 1996.

Each of our three market segments performed well in 1995. Aeropower sales increased 18½ percent over last year. Our Aerospace group benefited from rebounding military sales as well as the continuing buildup of our commercial Aerospace business. We have come through the very difficult past few years in this marketplace with our capabilities intact, while greatly increasing efficiency and reducing costs. These efforts continue and we are well along with the consolidation of our three U.S. Aeropower manufacturing sites into two manufacturing sites.

Our vision is to be the sales leader and technical innovator for the filtration, separations and purification needs of each market we enter. We will partner with our customers to add value to their business through the use of Pall products.

On the Industrial side of Aeropower, new products continue to drive double-digit growth. Environmentally attractive products are playing a leading role. Pall's line of oil purifiers, for example, enhance fluid life. Our Coreless *Ultipor III* elements greatly reduce disposal costs and save valuable space in landfills. Also contributing is a major effort to sell our broad range of products to OEMs (Original Equipment Manufacturers) for installation at the factory and to be specified for the spare parts markets. Novel product concepts and world-class engineering and manufacturing are paying off here.

Sales within the Health Care segment grew 13 percent on a worldwide basis. Revenues from blood filters increased 11½ percent. This growth was achieved despite a relatively poor showing by our longtime workhorse, the U.S. Biomedical division. Yet, our technology for the removal of white blood cells (the unwanted carriers of viruses and the causative agent in most transfusion reactions) is increasingly recognized worldwide as both unique and vital to maintaining and enhancing the safety and purity of the blood supply. Our global commercial agreement with Baxter Healthcare is proceeding according to our expectations, while contributing only modestly to sales in 1995. It is expected to add increasingly to our European sales growth in 1996. We are confident that 1996 will show a return to healthy blood filter sales in North America and to even better worldwide results.

We completed the acquisition of the Medical Plastics business of Bayer Corporation in the first quarter of fiscal 1996. This formally unites Pall with its long-time commercial alliance partner. The new entity is called Medsep Corporation and will serve the needs of the world blood banking community for novel systems combining blood collection, filtration and separation.

Of the other three Health Care sub-segments, BioSupport posted the most impressive gains, with sales up 33½ percent. Here, we continue to lead in providing highly engineered porous matrices for the developers of diagnostic tests. Food and Beverage results were lackluster. Many of our new separations technologies are aimed at this segment and we expect 1996 to bring higher sales.

The Pharmaceutical market, and its rapidly evolving Biopharmaceutical sub-segment, showed signs of life in spite of worldwide pressures toward cost containment. Sales increased 18 percent in 1995. A host of new products, such as virus removal filters, separations devices and a tenacious support of our customers with assistance in the validation of their products with the FDA and its sister agencies throughout the world, are expected to push growth in 1996 and beyond.

Fluid Processing, Pall's oldest segment, is acting more like a youngster these days. Sales increased 25½ percent and were led by the Electronics division, which posted a 43 percent increase. This comes on top of a 27 percent gain in 1994. The electronics market, where Pall products are sold to the manufacturers of semiconductor chips, continues to grow rapidly on the coattails of secular market expansion and a florescence of new Pall products. We expect demand for our products in the production of semiconductors to continue to grow through the remainder of this decade. The leading manufacturers are already committing funds to the next technical leap—the 300mm wafer, which will dramatically increase productivity. This places even more stringent requirements for filtration and purification—good news for Pall. Electronics now represents 10 percent of Pall sales, yet we are only the number two filtration supplier to this industry. We have set a goal of becoming the premier supplier by 1997.

Pall has a very clear market focus, a strong proprietary technical base, and a sharp sense of the route to apply that technology to achieve commercial success.

The remainder of Fluid Processing is an amalgam of all basic manufacturing industries. The products sold here are incredibly varied. One common theme is the dramatic increase in separations products. These include our coalescing technologies which can remove water from oil and fuels, and other complex liquid/liquid or liquid/gas mixtures. Coalescence now represents a significant portion of Pall's revenues.

We made a divestiture in late 1995. In our Well Technology area, we had a division accounting for about $4 million annually in sales which provided direct filtration services on-site for oil wells in the Gulf Coast...not really our line of business. We sold this off at about break-even and expect to continue to retain its customers as users of our filters.

We have launched a major productivity initiative, "Materials Management 2000." Our greater size, combined with the information technology revolution both within Pall Corporation and in the transportation industry and vendor base that serve us, create new opportunities to design materials management systems. We want not only to be the best in our industry, but to attain and maintain world-class operation levels in all areas. The goals of this program are straightforward. Certainly we want to save money by becoming more efficient. But of equal importance is to improve the level of service we offer our customers. "Materials Management 2000" will be a potent competitive weapon.

1995 saw two notable retirements from our Board of Directors. Henry Petronis, who served Pall for 33 years and then served on our Board for four years after retiring, left the Board this year. Abraham Krasnoff, whose name is synonymous for a generation of employees and stockholders with Pall Corporation and its success, has also retired from the Board. Both will be missed. On an upbeat note, we are particularly pleased to welcome Katharine Plourde to our Board of Directors. Katharine is an investment analyst and principal with Donaldson, Lufkin & Jenrette, Inc. Her insight and counsel will be an asset to Pall.

Pall Corporation is a technology specialist. We do a few things very well. Our products and services benefit a very broad array of customers in the most sensitive and demanding parts of their operations. We are niche oriented, even though some of those niches represent hundreds of millions of dollars in potential.

Your management is invigorated and optimistic about the future. We can see the products and market potentials requisite for both near and longer-term growth, and we have identified many ways to achieve that potential while continually striving to improve productivity.

The following pages will give you some insight into the roots of our optimism. Thank you for sharing our vision...even if just for a few minutes.

Eric Krasnoff

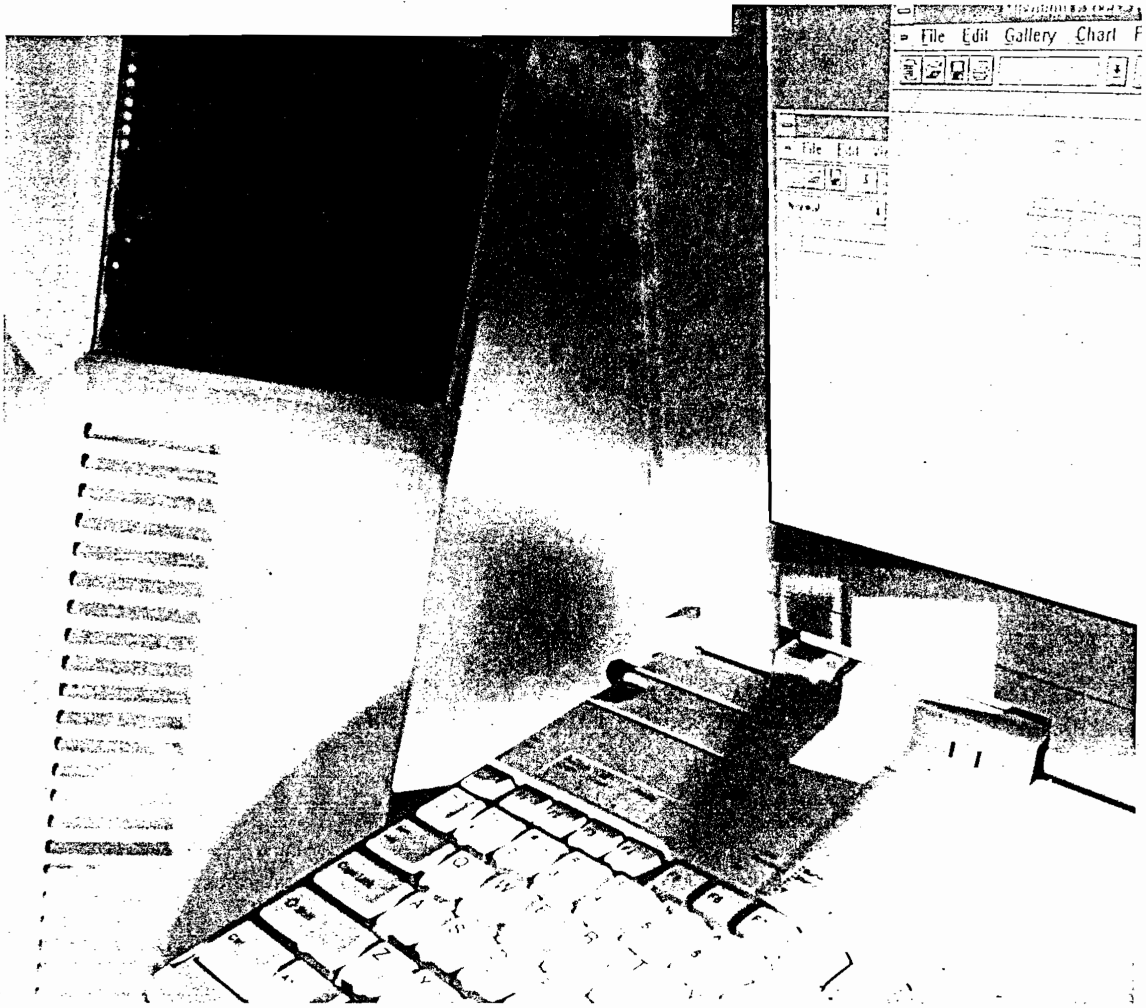
Eric Krasnoff
Chairman and Chief Executive Officer

This year's Annual Report reviews a number of the key businesses that will drive our future growth. It is not a comprehensive listing of all of Pall's businesses. Rather, the presentations are intended to be exemplary of how Pall penetrates and supports a broad range of markets. We hope that you take the time to read this report and come away sharing our excitement for the future.

From left to right: Jeremy Hayward-Surry, President and Chief Financial Officer; Derek Williams, Executive Vice President and Chief Operating Officer; and Eric Krasnoff, Chairman and Chief Executive Officer.

Fluid Processing

Microelectronics



Ensuring Higher Product Yields

Pall filters are carving out deep niches in the high-growth microelectronics industry. By filtering and purifying chemical, water and gas streams, they enable semiconductor manufacturers to remove microscopic contaminants that would otherwise have a devastating impact on sensitive—and extremely expensive—products and equipment. Filtration and purification ensures customers worldwide of consistently high product yields, and delivers significant savings. ■ **The Industry's Innovator.** Pall is a leading supplier to virtually all of the major producers of semiconductor devices and capital equipment. State-of-the-art products, technical expertise and customer service underscore our reputation as the industry's innovator. An example is our new *Gaskleen* PPT Reactive Gas filter, the result of an alliance with the University of Arizona, a SEMATECH Center of Excellence. This device will produce gas purity levels 10 to 100 times better than those available through current purification methods. ■ **Setting the Standard.** Our Microza* ultrafiltration modules have set the industry standard for high-purity deionized water filtration while Pall's new *Ultipleat Posidyne II* filter is allowing customers to double their flow capacity and achieve breakthrough reductions in terms of space for new construction.

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* *Microza is a registered trademark of ASAHI CHEMICAL INDUSTRY CO. LTD.*

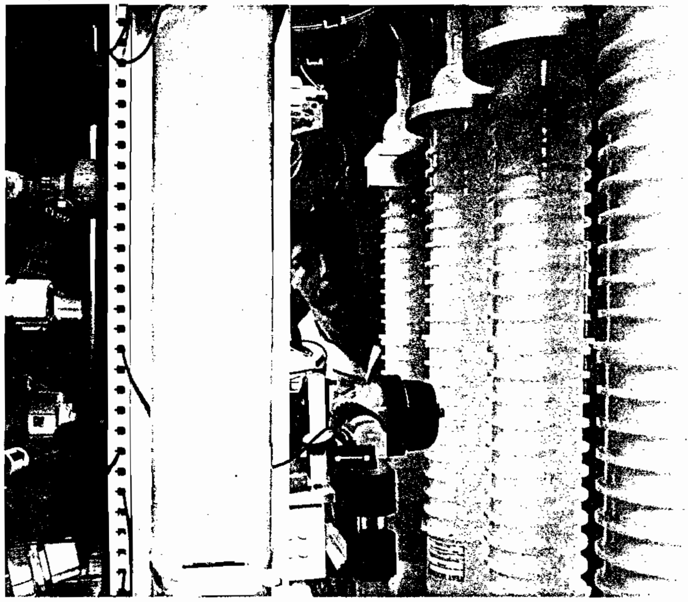


Photo courtesy of Advanced Micro Devices (AMD)

Rapid In Sync with Dynamic Industry Requirements

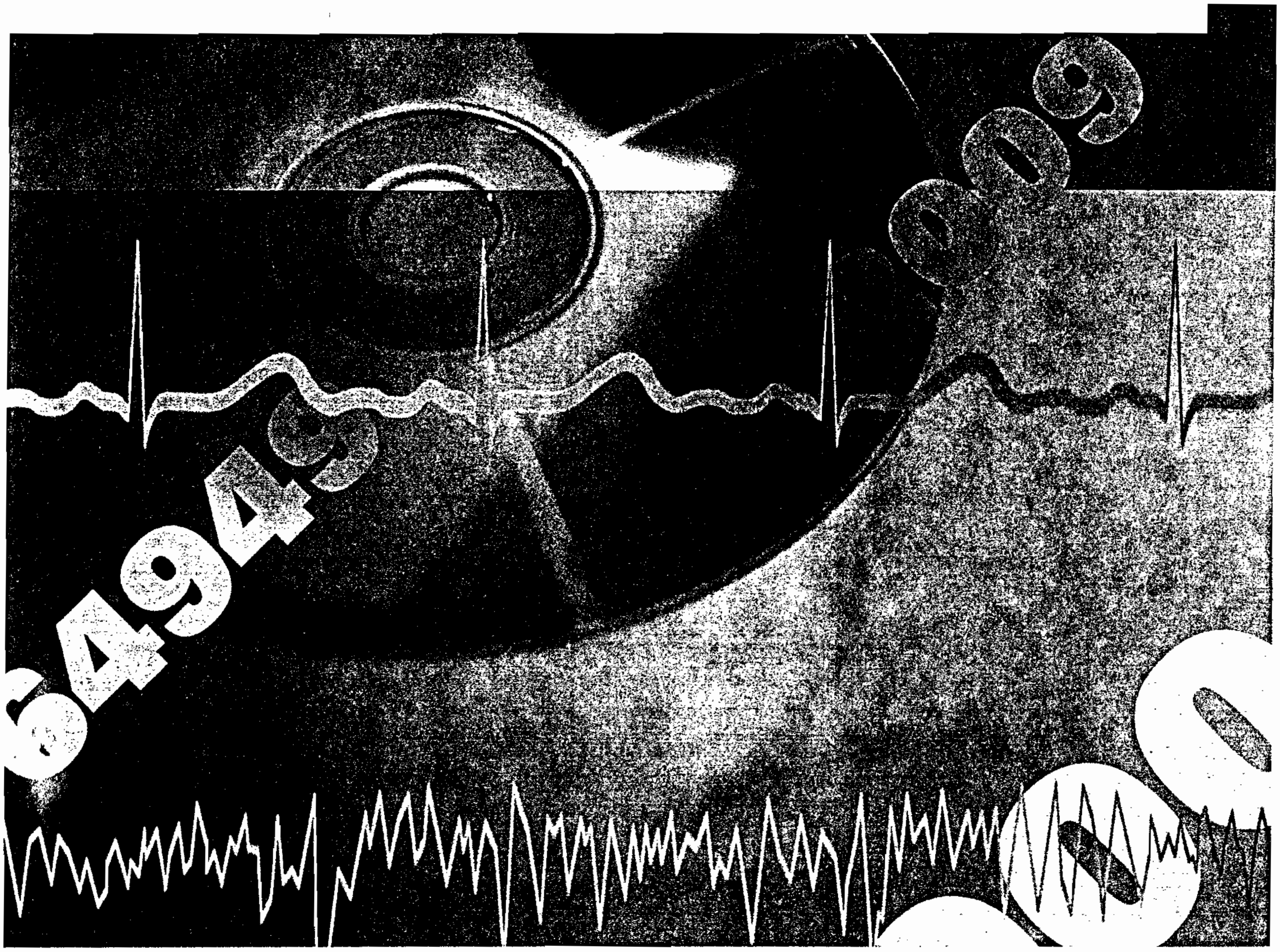
Factors Fueling Growth

The double-digit growth of the microelectronics industry, coupled with our ability to deliver innovative new products, has created an extremely promising outlook for Pall Microelectronics. This high-profile business, which accounts for nearly 40 percent of the sales of our Fluid Processing segment, grew 43 percent in 1995, outpacing the growth of the microelectronics industry. ■ **Sustainable Growth.** We believe that a high level of growth is sustainable over the next three to five years as we increasingly become the filter supplier of choice for semiconductor fabricators worldwide. Driving that market is the explosive growth of microprocessor-based consumer and business products, including personal computers (50 percent of all U.S. employees use a PC at work, while Japan at 20 percent and Europe at 18 percent are pushing hard to catch up), printers, cellular telephones and other wireless communications devices. Consider, half of the world's population has yet to use a telephone. To meet this soaring demand, it is estimated that over 60 new semiconductor fabrication plants will be built or under construction worldwide by the year 2000. This business alone represents a potential $100 million sales opportunity for Pall.

Becoming the Supplier of Choice. Through our work with a top-10 semiconductor manufacturer, we're showing why Pall Corporation has the inside track for supplying state-of-the-art filter systems to the 60 fabrication plants either planned or under construction. Pall was awarded the majority of the filter applications for the first phase of the customer's $1.5 billion fabrication plant in the Southwestern U.S. We delivered every product on time, and are repeating that performance during phase two, now underway. We have delighted our customer through an integrated approach that combines high performance products, like **Gaskleen** ***IV filter assemblies and Microza ultrafiltration modules, with exemplary service, and our scientific and engineering expertise. The latter led to an industry "first"—creation of a 30-inch PFA housing for enhanced filter performance and cost savings.***

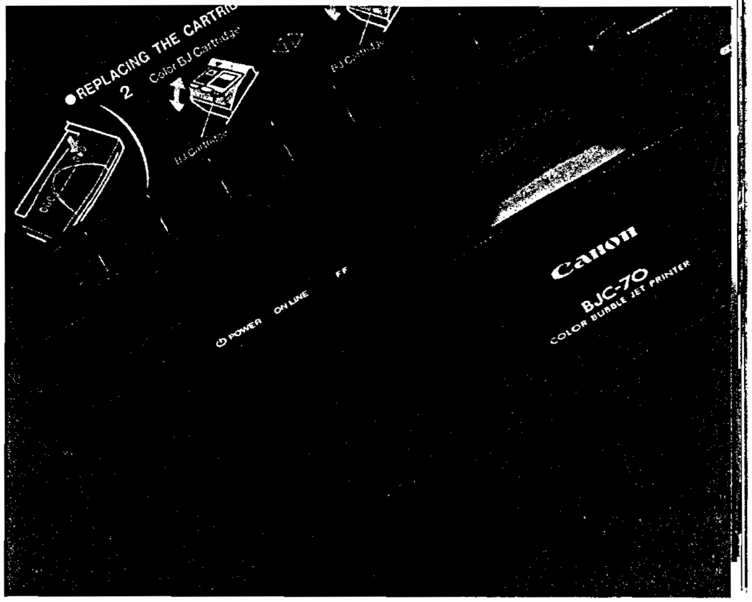
Fluid Processing

Industrial Processing Group



The Competitive Edge

The Industrial Processing Group (IPG) uses a broad array of filtration and high-end separations technologies to solve complex customer problems in the data storage and imaging fields. With customers demanding ever finer levels of filtration, Pall has demonstrated its edge over the competition with sophisticated lines of application-specific products—such as *Fluorodyne VA* filters—coupled with unparalleled technical support. ■ **Computer Industry Inroads.** While photofilm—which includes photographic films and paper, graphic arts films, medical x-ray films and lithographic and flexographic printing plates—continues to be our largest market, the greatest gains in fiscal 1995 came in sales to the computer industry. Here, our filters play key roles in the production of thin film rigid disks for hard drives and magnetic storage devices (floppy disks, audio, computer and video tape). All told, Industrial Processing Group sales increased by 25 percent in fiscal 1995.



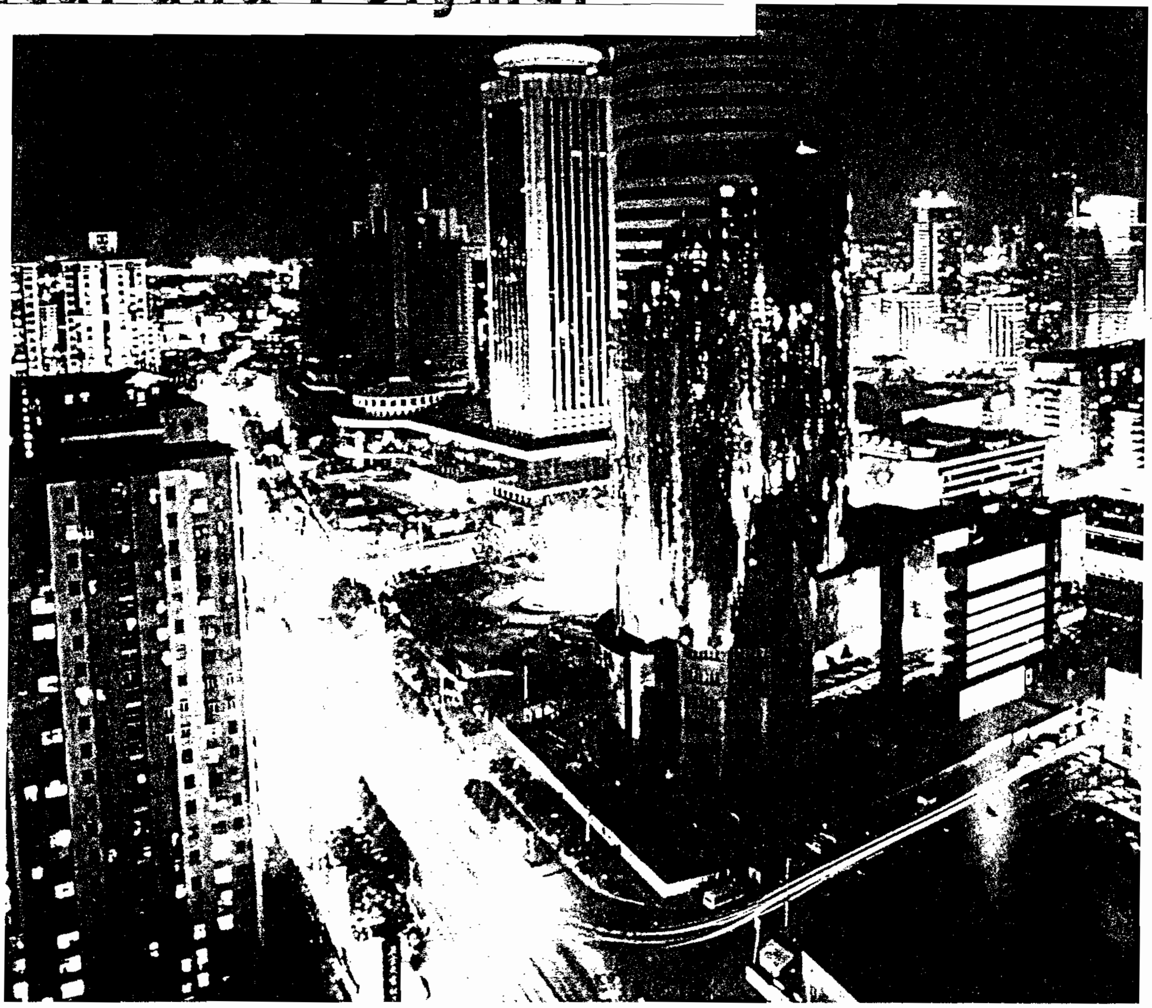
Creating Wealth for Customers Through Enabling Technologies

Factors Fueling Growth

The mission of our IPG organization is to provide not just hardware, but novel solutions to satisfy the most demanding filtration and separations problems—solutions that create wealth for our customers. To that end, IPG has forged close relationships with our customers' engineering and research and development staffs. ■ **Products Tailored to Applications.** This cooperative effort has often led to the development of application-specific new products designed to optimize the customer's fluid systems. An example is the *Fluorodyne VA* filter, which we developed for the computer hard drive market. In addition, Pall's new *Ultipleat Profile* filters have been widely adopted in a broad array of industries, such as photographic and graphic arts film, optical lens and fine chemical manufacturing. ■ **Cost-Saving Retrofits.** In cases where we have retrofitted competitive products, we have reduced customer costs through longer filter life, faster batch filling rates and enhanced product quality. For new filter installations, the unique lower flow resistance of *Ultipleat Profile* filters has enabled our customers to purchase smaller, less expensive filter housings.

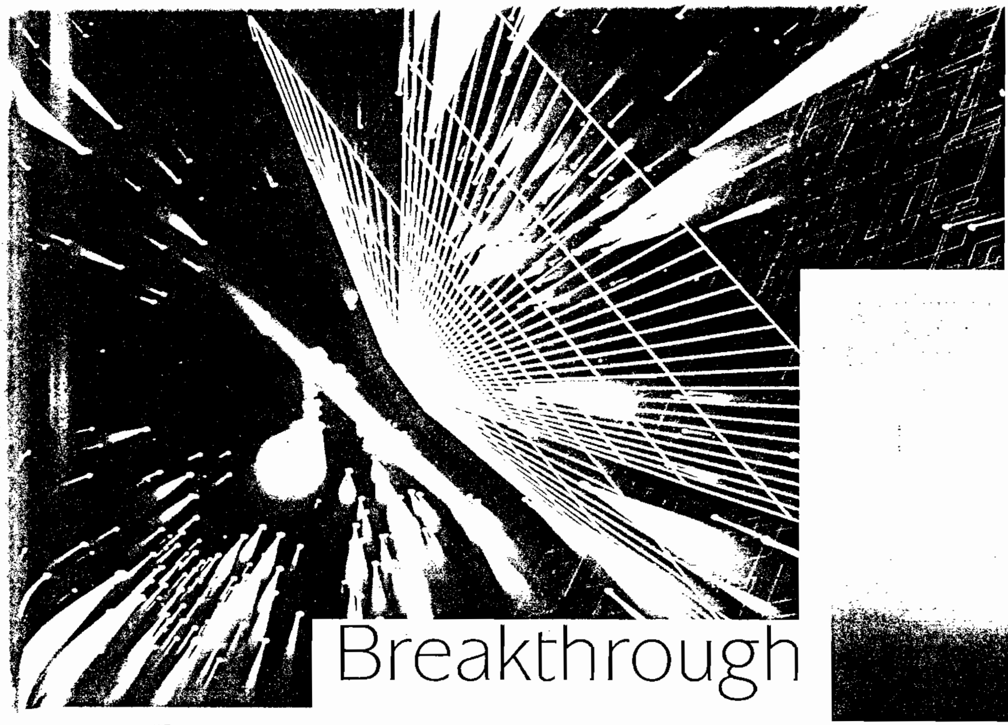
Customizing a Solution. Canon, one of the world's-leading imaging companies, can attest to Pall's application development skills. The problem: existing products did not allow Canon to filter and load ink into ink jet printer cartridges fast enough without purchasing additional filter housings. The solution: Pall scientists and engineers developed the **Fluorodyne VA** ***filter with half the flow resistance of the previously used product. With a greater flow rate through the filter housing, Canon was able to fill shipment containers faster—resulting in increased production without increased production costs.***

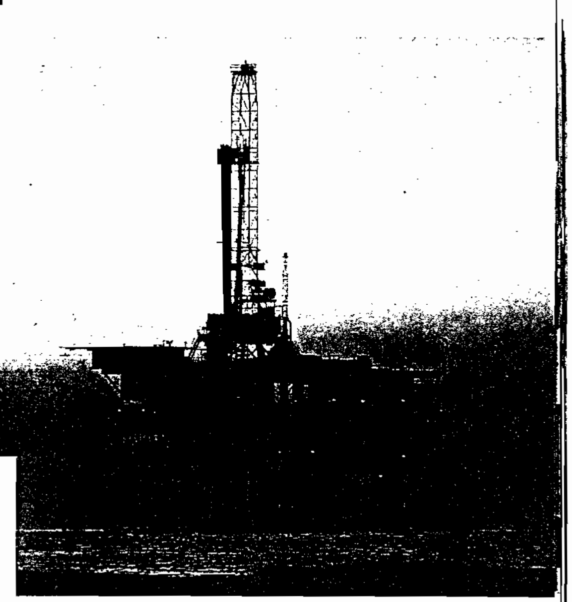
Hydrocarbon Processing, Chemical and Polymer



Using an Integrated Systems Approach

Pall's Hydrocarbon Processing, Chemical and Polymer (HCP) group provides a wide range of businesses—from petroleum refining to polyester film and fiber to hydrogen peroxide production—with well-defined filtration and separations solutions. Because of the breadth of its product line, Pall is able to offer an integrated systems approach to solve customer problems that often involves not one, but a combination of Pall products. ▪ **Cost-Effective Coalescers.** HCP has become a significant supplier of liquid/liquid separations equipment to the petroleum and petrochemical markets through its recently introduced *AquaSep* and *PhaseSep* coalescers. These products are able to separate liquids more efficiently than competitive coalescers and promise to become an economically attractive alternative to more expensive capital equipment currently being used. ▪ **Drilling Breakthrough.** Another Pall product—the *Stratapac* filter—offers a revolutionary approach to sand control in oil and gas wells. With more than 100 offshore installations already, sales of the *Stratapac* filter are expected to triple next year. HCP sales to petroleum producers are also poised to grow dramatically over the next three years as we continue to develop strategic technical alliances with the major producers.





Breakthrough Technologies Turn Profits for Customers

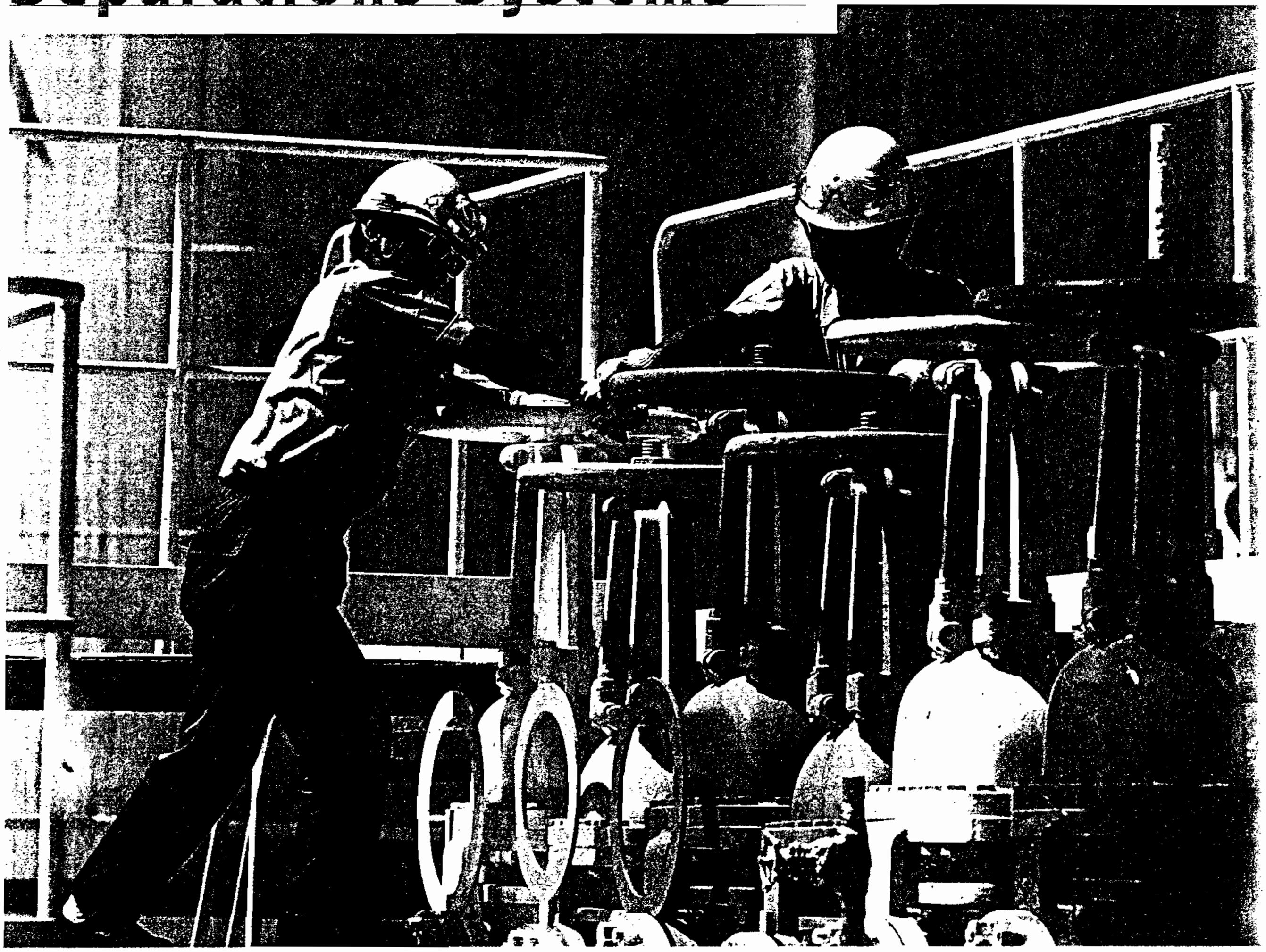
Factors Fueling Growth

Pall HCP is capitalizing on its technical expertise and advanced product capabilities to grow its market share through direct customer partnerships and alliances. Our scientific and marketing teams have developed close working relationships with a number of major petroleum refining and licensing companies and institutes, including customers in the U.S., Eastern Europe and Southeast Asia. In China, our engineers helped the Beijing Chemical Works solve a complex waste minimization problem. ■ **A Major Growth Opportunity.** Pall HCP is taking advantage of the fast growing demand for hydrogen peroxide as a more ecologically friendly product than chlorine. With hydrogen peroxide plants being built worldwide, we are positioning various Pall separations technologies as cost-effective partners.

Bringing a Well Back to Life. Sand production from a sand-prone pay zone forced a Shell company in Malaysia, in Southeast Asia, to close-in the well. In an effort to cost effectively increase production from existing wells, Shell selected a product from Pall—the **Stratacoil** ***filter. This production zone was restored, surging from zero to 850 b/d with little sand production. The payback period for Shell was one week and the company plans to extend the use of this technology to similar wells in its area of operations.***

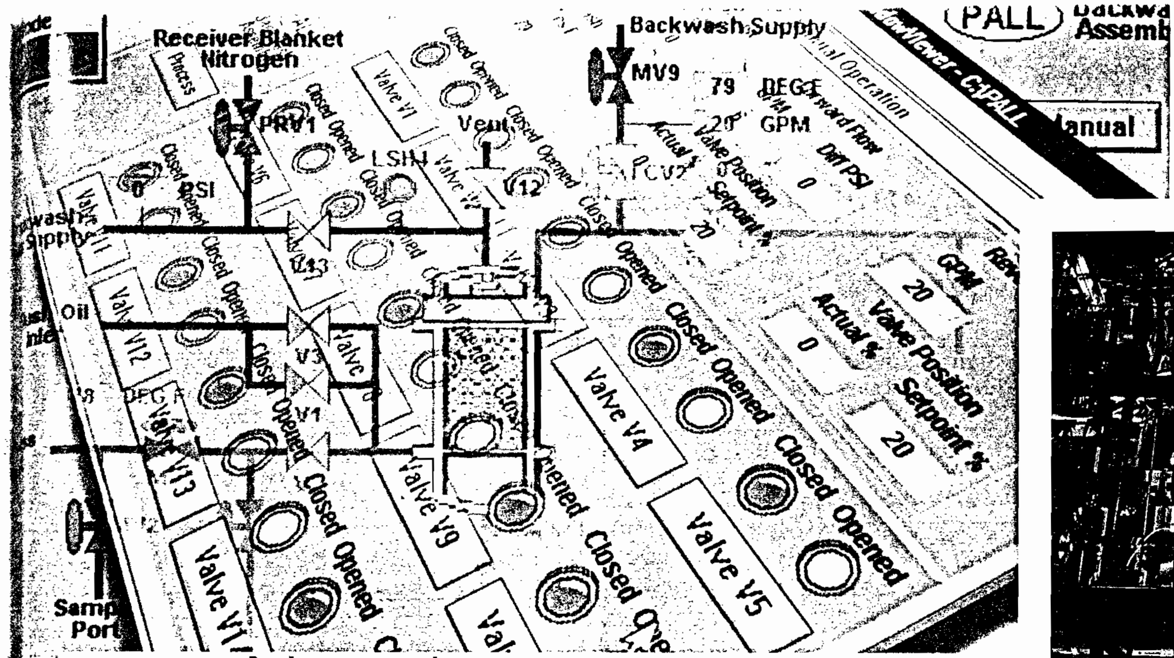
Fluid Processing

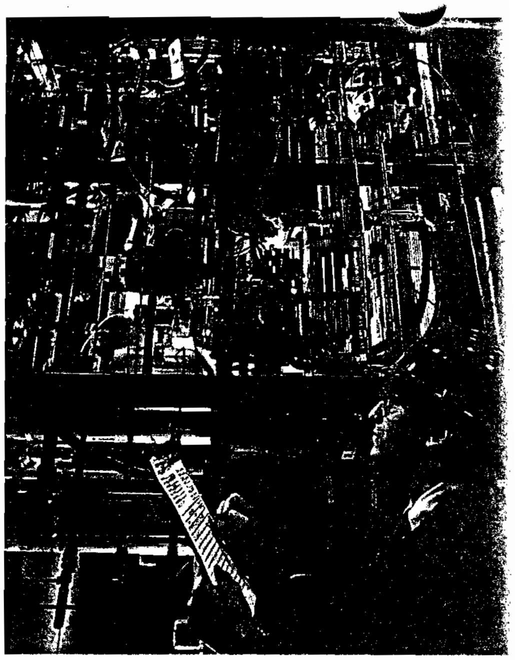
Pall Advanced Separations Systems



Targeting Energy Producers

Organized three years ago to spearhead the Company's move to high-end separations, *Pall Advanced Separations Systems* (PASS) is making major inroads in the multi-billion dollar global energy field. Through a total systems approach, the PASS organization is demonstrating to the power generation, refining and chemical processing industries the key role separations can play in controlling costs and minimizing environmentally hazardous waste streams. ■ **Waste Reduction.** In fiscal 1995, for example, along with our alliance partner, GE Nuclear Energy, we supplied separations systems to nuclear power generating stations incorporating our *Septra* polymeric filters for processing condensate and waste water. This innovative approach is dramatically reduc ing the volume of radioactive waste. In other energy markets, Pa backwash filters were selected by petroleum refineries in the Pacif Rim, Europe and the U.S. as a way to extend catalyst service lif and reduce maintenance costs. ■ **Robust Growth.** Sales of PAS products for the power generation market are expected to gro at a robust 25 percent rate over the next several years, based i part on the strength of our *Septra* filters. China, which has 7 refineries and plans to double its refining capacity by 2010 and Southeast Asia, represent the fastest growing markets fo PASS. We have also been successful in Korea, where Pall recentl teamed up with Goldstar Cable to sell a large backwash system to Honam Oil Refinery.





Novel Technologies for Complex Problems

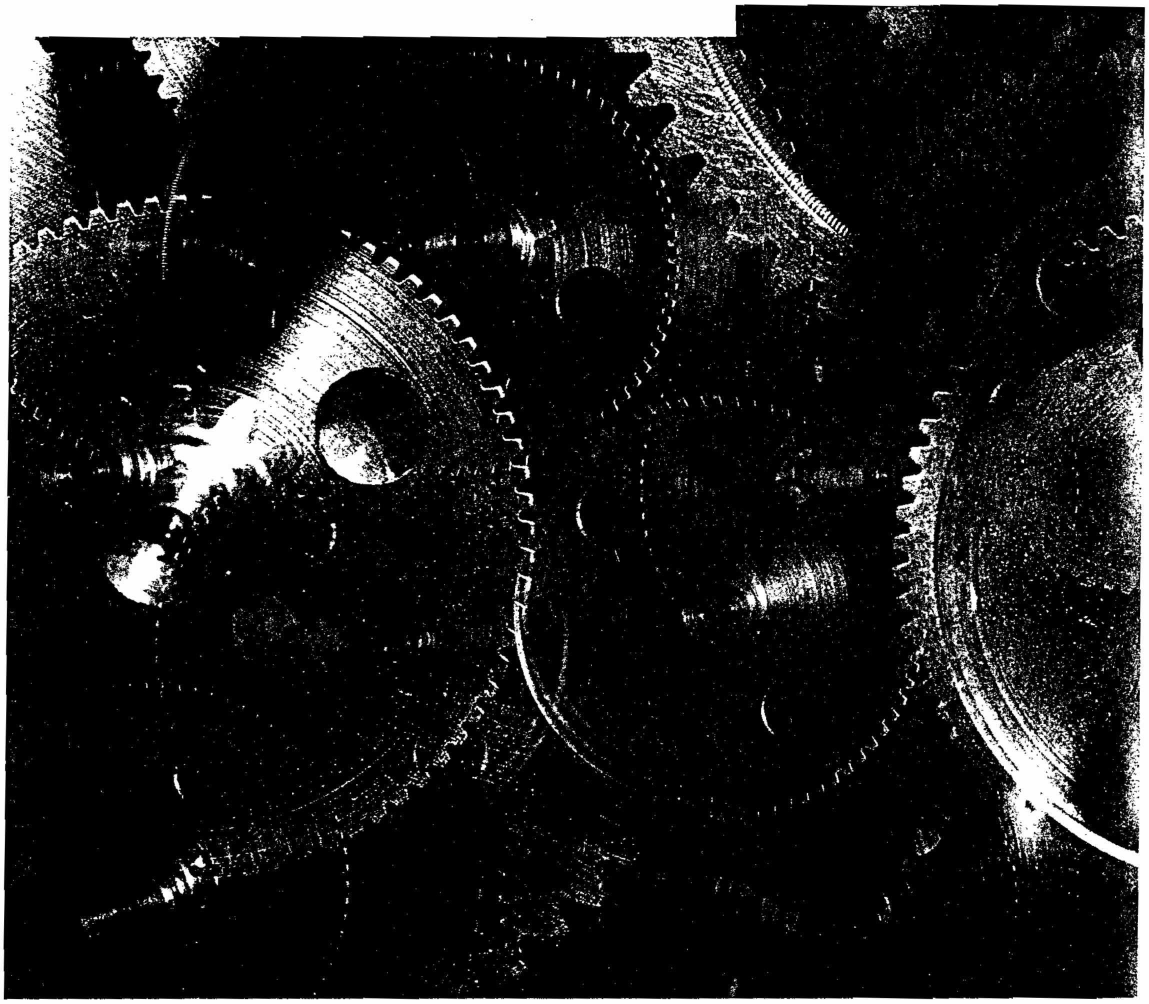
Factors Fueling Growth

By providing the best available technology at competitive prices and defining a "total separations systems" approach to process plant needs, PASS anticipates continued strong top-line growth across its markets. Our alliance with GE Nuclear Energy is a major factor behind our success in the nuclear power generation market. Working with GE gives us significant credibility with customers, offers us high-level contacts at utilities, and allows us to provide world-class filter solutions while GE supplies the engineering and project management expertise. ■ **New Market Thrust.** With few nuclear plants currently on the drawing boards, our market thrust is to upgrade existing plants and move the industry toward even greater radiation control. To that end, we recently introduced the next generation of submicron filters designed to meet stringent efficiency standards while ensuring cost economies. ■ **Backwash Filter Solutions.** The real driver of our power generation business, however, is *Septra* backwashable filters, which operate without the need for filter aids or additives. Because these polymeric elements are durable, they do not require replacement annually, which helps to further reduce waste. ■ **Growing Application.** Catalyst recovery in both gas and liquid phases has become an increasingly important application for PASS products, particularly *Vitropore* ceramic filters and non-metallic *Septra* filters.

Pall Pioneers Remote Monitoring. Pall engineering has found another way to help customers achieve the optimal filter solution: remote monitoring of their backwash system. This unique technology was recently introduced to oil refineries in the form of a large pilot-scale unit developed by Pall that will remain at a customer's site for up to six months to electronically monitor and control the backwash system. More importantly, data collected by this highly versatile unit will demonstrate how Pall backwash technology can improve flow rates and provide catalyst bed protection to a degree previously impossible with competing products. This application is the gateway to eventual remote monitoring of all Pall solid separations systems as we lead the industry to a new era of customer support.

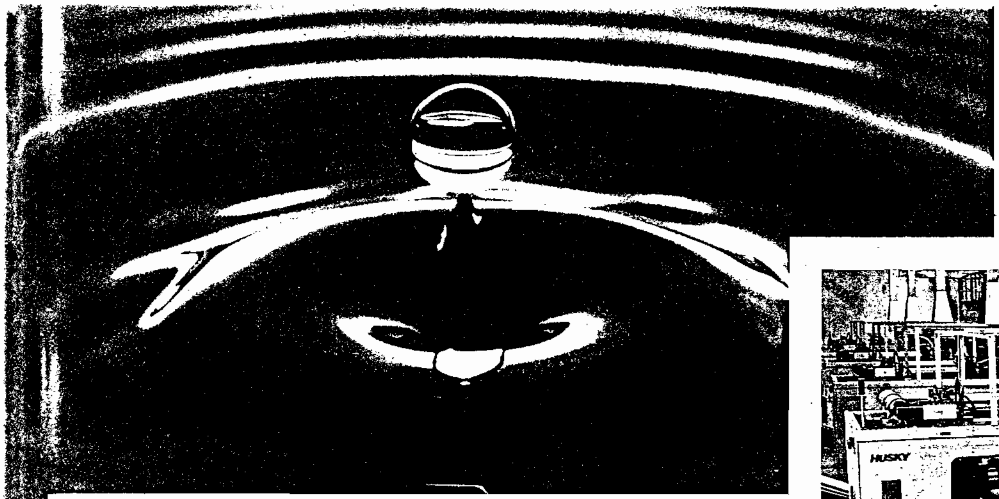
Aeropower

Industrial Hydraulics

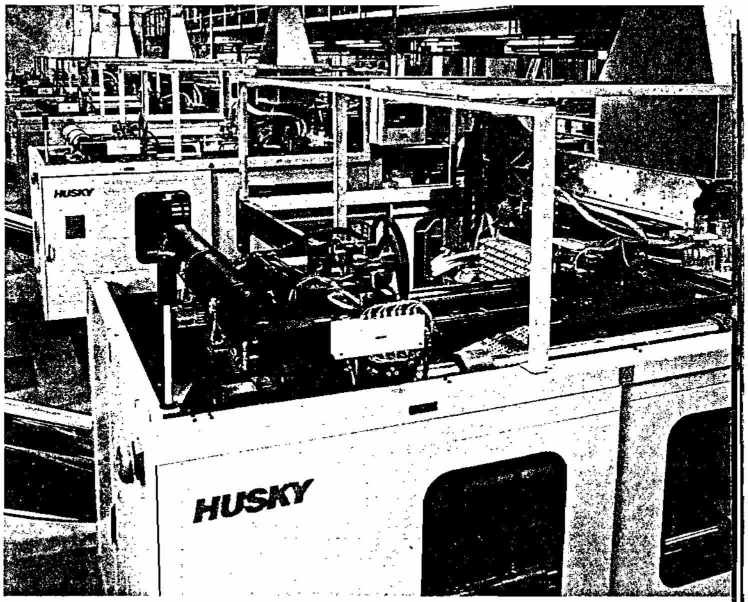


Building Market Share

Industrial equipment users and Original Equipment Manufacturers (OEMs) look to Pall Industrial Hydraulics for a high performance line of filters to meet their stringent hydraulic and lubrication system requirements where the correlation between system cleanliness and productivity is distinct. Our *Ultipor III* filters provide them with particulate control, service life and performance consistency. Mobile equipment users and OEMs also count on Pall hydraulic, lubrication, transmission fluid and diesel engine oil and fuel filters. Pall's oil purifiers protect both industrial and mobile equipment from the harmful effects of water, solvents and gaseous contamination. Increasingly, our products are providing customers with solutions that enable them to reduce operating and maintenance costs. Just as important, they're helping safeguard the environment by minimizing waste and reducing exhaust emissions. ■ **Expanding Customer Base.** Sales to a diversity of global markets increased by almost 19 percent in fiscal 1995. Those markets included pulp and paper, where a turnaround this past year created a resurgence in demand for Pall filters. In the power generation market, the tremendous growth of independent power producers in an industry moving toward deregulation has triggered an expanding customer base. We also opened up new opportunities in the transit and school bus market by introducing the "one filter fits all" concept. This approach reduces inventory and administrative costs for customers and simplifies the maintenance process.



Higher Fluid Cleanliness Standards Reward With Greater Productivity

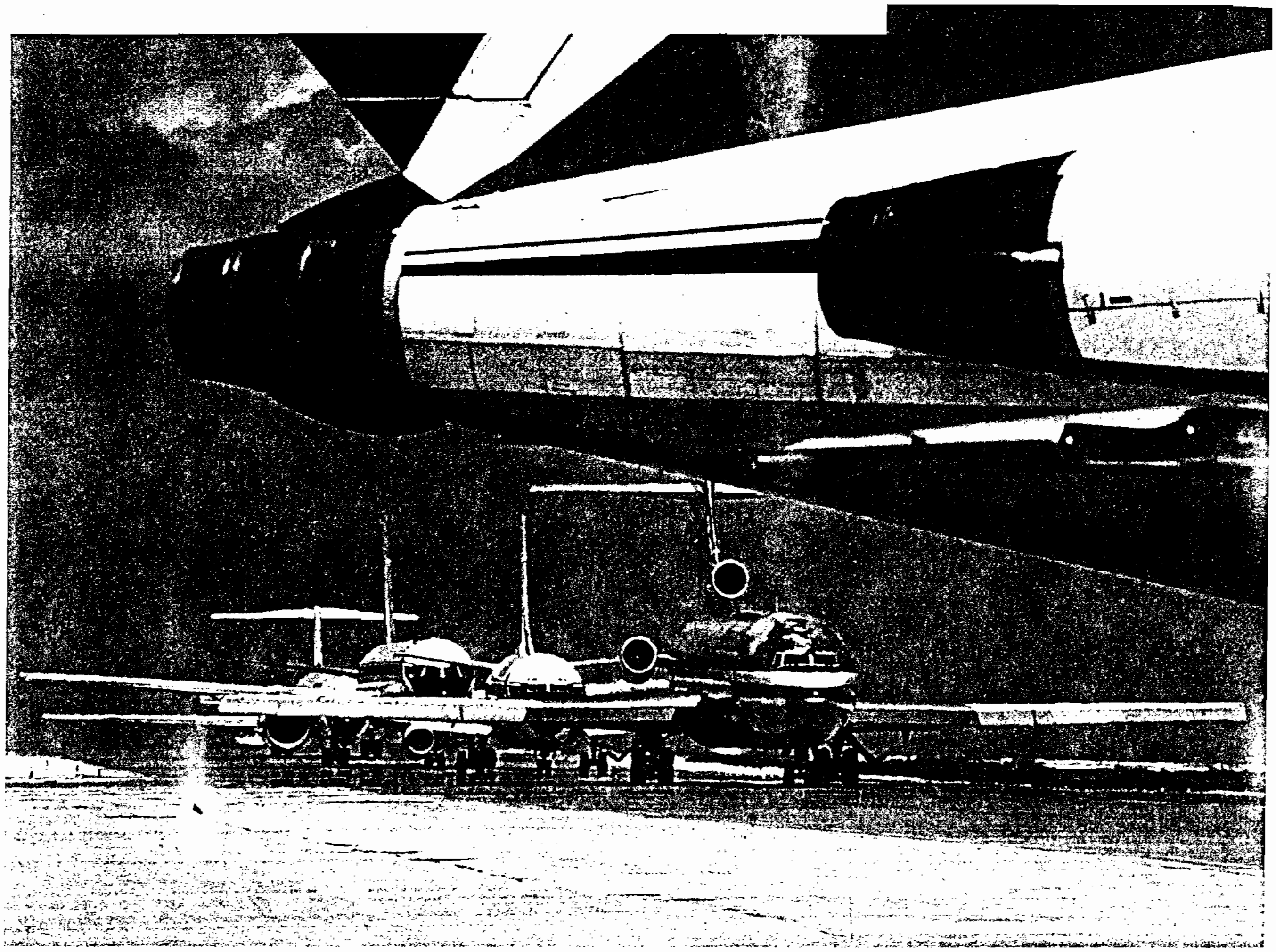


Factors Fueling Growth

Pall Industrial Hydraulics is building market share and customer loyalty through a powerful product mix. ■ **Environmental Protection.** A major new product impacting sales this past year was the Pall Coreless *Ultipor III* element series. Manufactured without metallic parts, Coreless *Ultipor III* elements are allowing us to meet our customers' filtration performance requirements as well as address mounting environmental concerns and reduce element disposal costs. Now, used filters can be safely incinerated, shredded or more compactly crushed to eliminate or minimize use of dwindling landfill space. ■ **Cleanliness Standards.** A thorough customer understanding of system cleanliness standards has become more and more important in the fluid power industry. Our scientists and sales force have taken the lead in offering this expertise. Now, with the introduction of Pall's *PCM100* fluid contamination monitor, customers can keep constant track of system fluid cleanliness levels, ensuring that standards are being met.

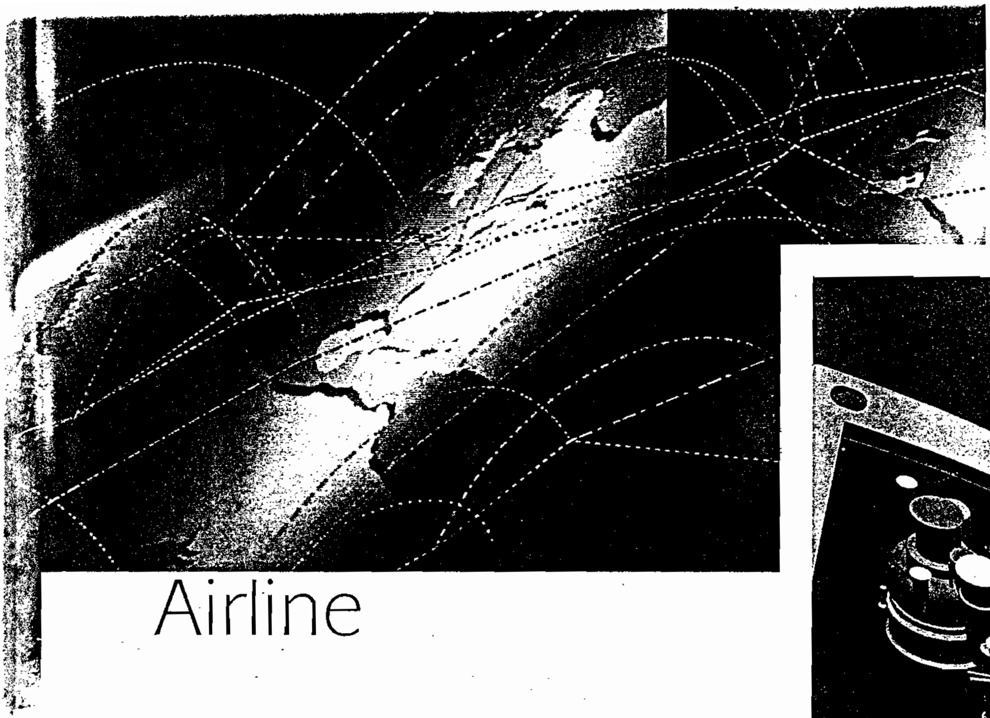
Working for the Environment. Husky Injection Molding Systems Ltd., of Ontario, Canada has declared environmental protection to be "the driving force behind everything we do." As part of that commitment, Husky, one of the world's largest manufacturers of injection molding equipment, is working with Pall Corporation to meet its industrial fluid power needs. We responded by introducing three unique filter housings that incorporate Pall Coreless **Ultipor III** ***element technology, thereby minimizing filter and fluid waste and reducing disposal costs. Pall is helping Husky to produce world-class machines, and live up to its exacting environmental and quality standards.***

Aerospace

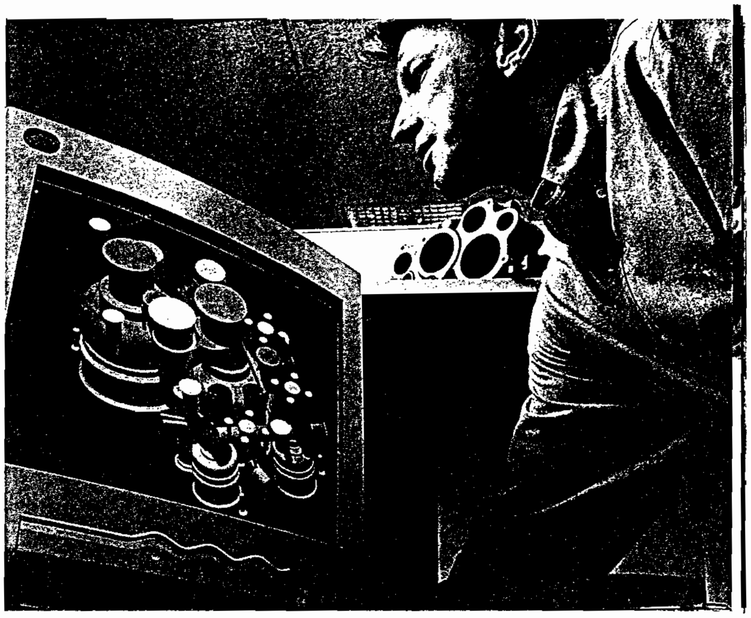


Commercial and Military Focus

Pall Aerospace is the world's leading supplier of sophisticated fluid clarification and separations products to the commercial aircraft market and to the military for use on aircraft, ships and land-based vehicles. By removing contaminants from fuels and hydraulic and lubricating fluids, our filter systems increase the reliability and life of our customers' equipment. They help prevent costly groundings of aircraft and other vehicles. Pall products enhance the health and comfort of commercial airplane passengers and crews by eliminating dust, bacteria and viruses from cabin air circulation systems. ■ **A Stronger Business.** Dramatic cutbacks in worldwide military spending a few years ago, caused us to rethink our Aerospace strategy. We successfully re-engineered our operations and refocused our sales efforts on the commercial aerospace and industrial markets. The military and industrial portions of our Aeropower segment were consolidated, achieving dramatic productivity gains and cost reductions. We made significant investment in state-of-the-art equipment, allowing us to design with extreme precision and manufacture our products faster than ever before. What has emerged is a much stronger and smarter business—one that's well equipped to succeed on a global scale. ■ **Bullish Outlook.** Pall's worldwide Aeropower sales were up nearly 19 percent in fiscal 1995. With military opportunities on the rise, thanks to new generation armored vehicles, helicopters and field artillery systems, and with commercial aircraft manufacturers gearing up to handle a doubling in passenger miles over the next decade, Pall is looking forward to steady and profitable growth in its Aerospace business.



Airline



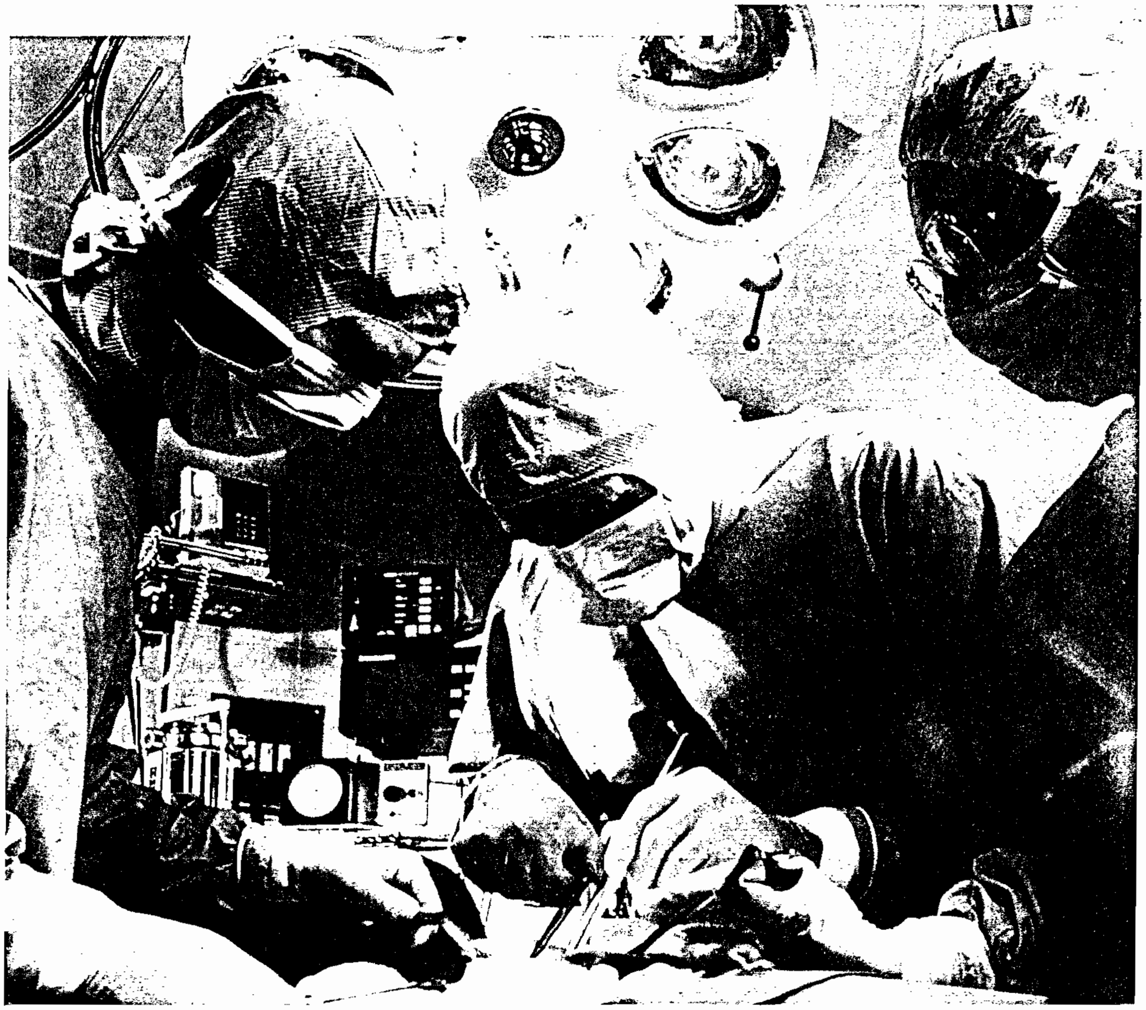
Within Hours

Factors Fueling Growth

We have positioned ourselves for growth through distinct technology, product diversity, global distribution capability and outstanding customer service. ■ **Pall as an Innovator.** Following an industry-wide downsizing, our Aerospace customers look to us more than ever for technical support. We provide it through applications of our innovative filtration and separations technologies. Our *AquaSep* coalescer, for example, is the only proven method for removing water from a new fuel used by the U.S. Air Force. ■ **Distribution Capability.** Pall's global distribution network gives airline customers anywhere in the world immediate access to products and customer service. In fact, our Aircraft On Ground (AOG) Service guarantees dispatch within four hours of receipt of an order. That's helped drive the growth of our sales through distribution—a $75 million potential market—by more than 100 percent over the past three years. ■ **Technical Support.** Enhancing our geographic reach is the worldwide presence of Pall's Scientific and Laboratory Services (SLS). Our trained specialists work directly with customers to identify and solve contamination problems. As a result of these core strengths, more customers are signing long-term agreements with Pall to meet their total filtration needs. And that's giving our Aerospace business a solid platform for future growth.

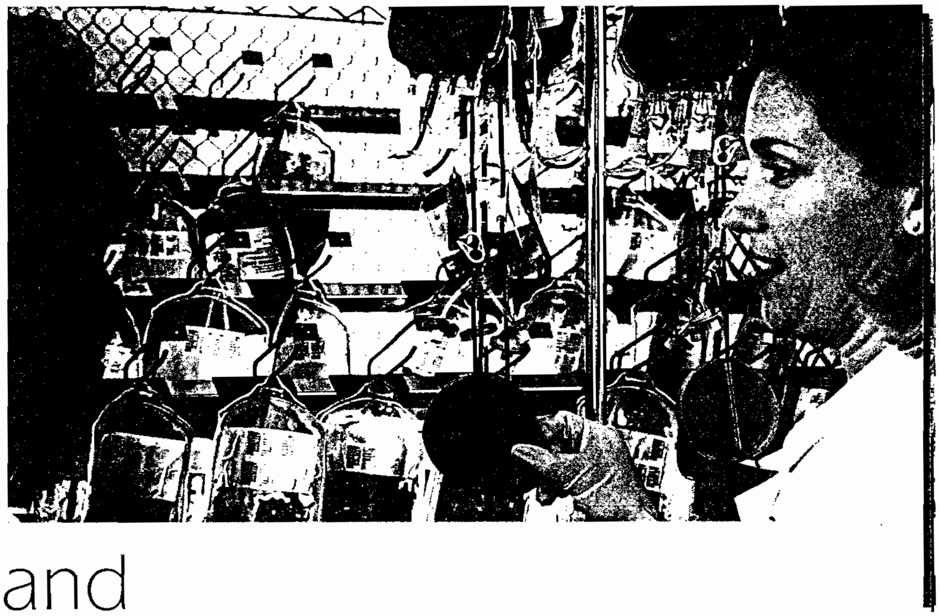
Catering to Customers. Advanced technology is enabling Pall to produce top-performing products within significantly shorter lead times. The Boeing Company had a firsthand look at this capability at our Aerospace plant in New Port Richey, Florida. A visiting team of Boeing technicians took immediate advantage of our ability to design complex cooling system filters for their high-tech V-22 tiltrotor aircraft using three-dimensional computer-aided design (CAD) systems. Working shoulder to shoulder with our CAD engineers, Boeing engineers were able to make changes in real time. They also had a close-up look at Pall's integrated ability to design and machine filter parts. In the case of the V-22 aircraft filter, this concurrent engineering capability is expected to cut design-to-production time in half.

Biomedical



Playing A Pivotal Role

Pall filtration technology in hospital and blood bank settings provides unique patient protection against contaminating bacteria and viruses, as well as the foreign leukocytes found in blood components. The worldwide clamor for dramatic new approaches to reducing the cost of patient care—without jeopardizing quality—has underscored the importance of Pall Biomedical products and technology. Pall filters are playing a pivotal role in improving patient outcomes, shortening hospital stays and cutting health care costs. ■ **Sales Growth.** In fiscal 1995, Pall increased its sales to blood banks dramatically—by approximately 60 percent—as a greater awareness of the benefits of leukocyte depletion of blood components took hold in the blood banking community worldwide. The increases were greatest in Western Europe, where blood centers are moving quickest to more routine pre-filtration of blood for hospital usage. At the same time, blood filter sales to hospitals declined as the process of filtration continues its shift from the bedside to the blood bank. Overall, the market for blood filters rose sharply, with Pall picking up the major share of this expanding business. ■ **Product Strength.** Breakthrough products promise future Biomedical growth. They include *AutoStop* filters for blood banks, to ensure leukocyte reduced platelet rich plasma, and other novel products. ■ **A New Subsidiary.** In May, we announced our intention to acquire the Medical Plastics business of Bayer Corporation, a well recognized innovator and producer of plastic disposable products and preservative solutions used in blood collection and storage. The acquisition was completed in the first quarter of fiscal 1996 and the new entity, Medsep Corporation, will help us provide integrated filtration solutions to this marketplace.



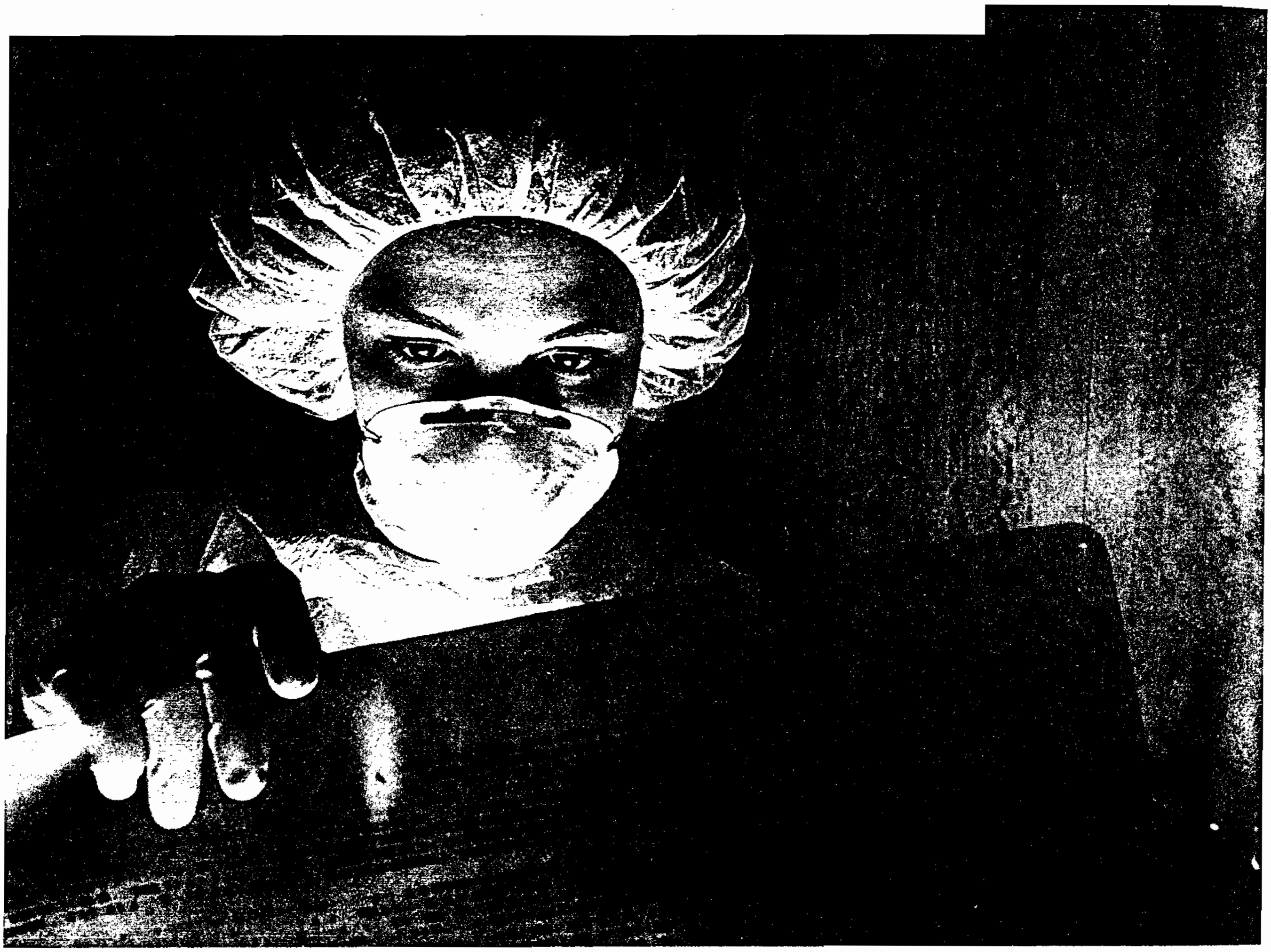
Improving Patient Outcomes and Cutting Health Care Costs

Factors Fueling Growth

Over the past year, the volume of blood undergoing leukocyte removal rose dramatically in the world's blood banks, reflecting increasing demand by hospitals for filtered blood. It illustrates the developing market for blood filters that is being driven by new medical standards of care. Another factor is the breadth of our Biomedical product line, which includes not just blood, but respiratory and intravenous (IV) filters. ■ **Source of Protection.** The increasing need of hospitals to protect workers from patients with resistant strains of tuberculosis, for instance, has resulted in remarkable growth for our breathing circuit filters. We're seeing multiple areas of growth for Pall's IV filters. An example is our total parenteral nutrition (TPN) filters which remove bacteria, fungi and yeast from intravenous feeding solutions administered to patients. ■ **The Power of Alliances.** We're also relying on alliances with health care industry leaders such as Baxter and Haemonetics to fuel our Biomedical business growth. Baxter has begun incorporating Pall's blood filtration products for European customers, a major development. To be sure, more and more health care manufacturers are finding a niche for filters in their product lines.

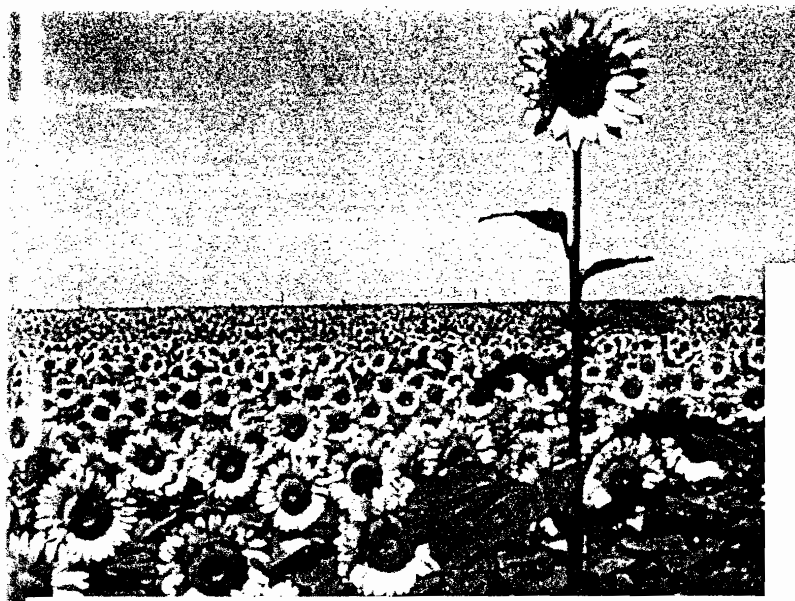
Promoting a Safer Blood Supply. Though a blood transfusion can be a lifesaving procedure for many people, it also poses certain risks. Some of those dangers, such as virus transmission, are being dramatically reduced through careful screening and subsequent filtration of donor blood. About 90 percent of all adverse transfusion reactions, however, can be traced to foreign leukocytes, or white blood cells, naturally present in transfused blood. It is Pall's firm conviction that leukocyte filtration of transfused blood is a necessity, not a luxury. We, and others, are spreading that message through active educational efforts for physicians and patients.

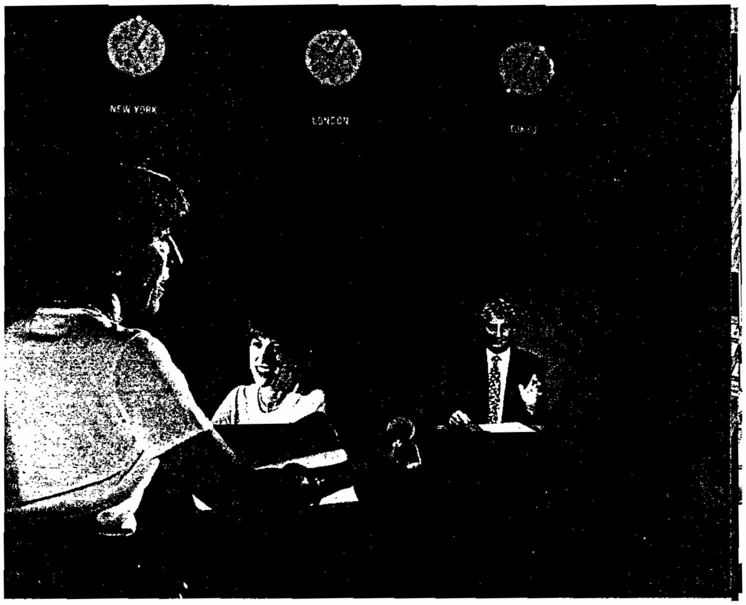
BioSupport



Carving A Competitive Advantage

Pall BioSupport membranes, critical to a wide range of biological analyses, constitute one of Pall's fastest growing businesses. Products used in the diagnosis and monitoring of health conditions such as diabetes, pregnancy and infectious disease, comprise a major market for this young division. Another major growth area is molecular biological applications, where Pall BioSupport is the leading supplier of membranes used for forensic testing, genetic fingerprinting and projects designed to map the genetic makeup of humans. The ability of Pall membranes to ensure accuracy, sensitivity and ease of use gives them distinct competitive advantage. ■ **Impressive Growth.** BioSupport sales grew by 33 percent in fiscal 1995. The blood glucose market continues to be a major source of sales growth, with the American Diabetes Association stressing the importance of frequent monitoring of blood sugar levels as an important companion to treatment.





Growing Through Unsurpassed Customer Communication

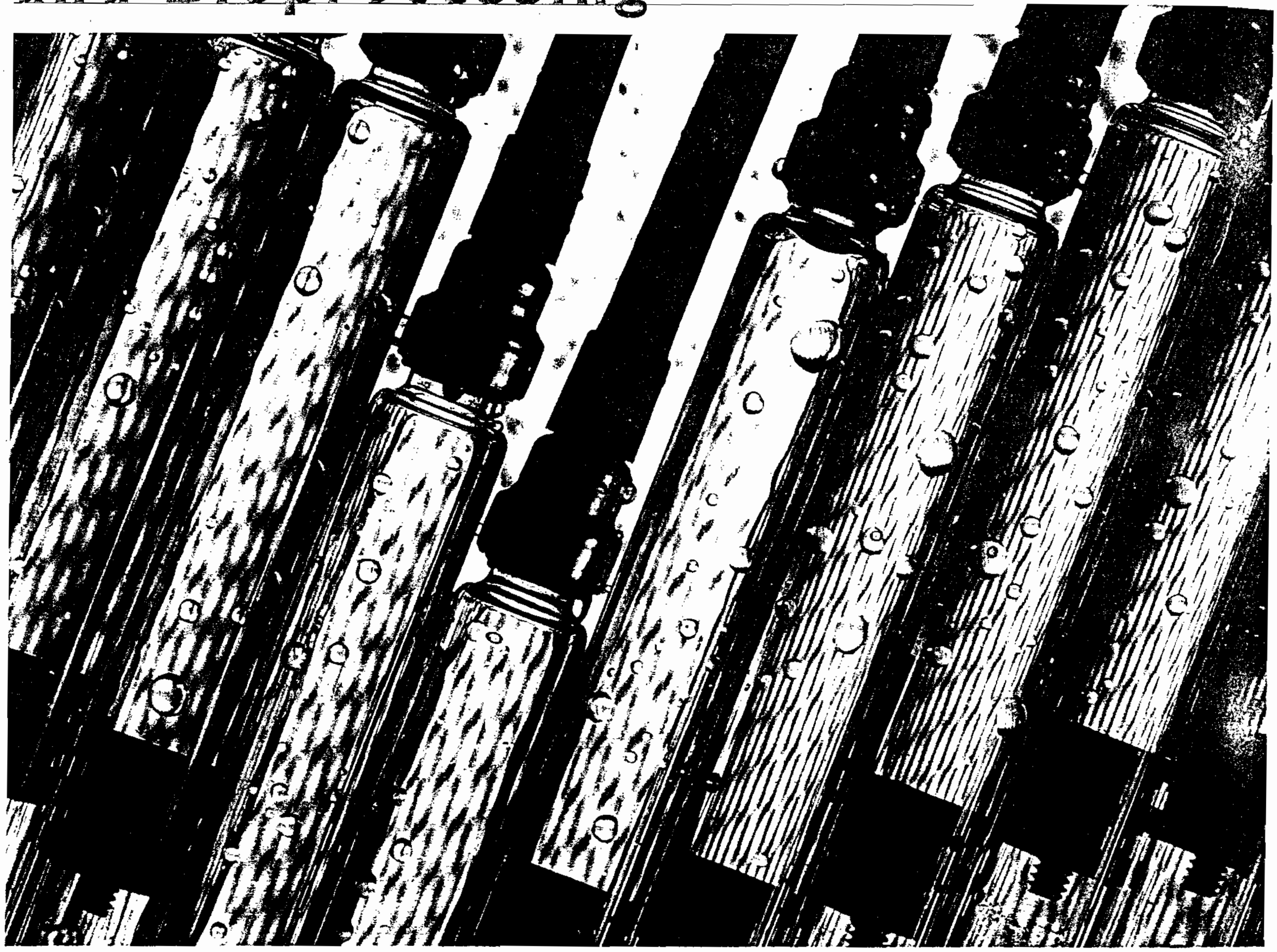
Factors Fueling Growth

Our BioSupport group is looking forward to continued growth on the strength of its cutting edge products and unsurpassed level of technical support. ■ **Thoughtful Products.** *ACCUWIK* and *Hemadyne* membranes are two recently introduced products in tune with the changing needs of the marketplace. The *ACCUWIK* membrane is a microporous, microfilm membrane with flow characteristics that make it highly desirable for single-step diagnostic testing—the direction in which the worldwide market is headed. Our *Hemadyne* membrane is also proving attractive to companies that produce diagnostic test kits. It separates plasma from whole blood for such tests as glucose and cholesterol. ■ **Talking to Customers.** In a business where personal communication is critical, Pall BioSupport is setting the standard through its uncompromising customer support. We routinely bring our R&D and laboratory specialists in at many different points to develop solutions tailored to customer needs.

Just Like Being There. BioSupport's ability to deliver technical information to customers from a wide range of global resources continues to set us apart from the competition. That's why we're using video conferencing in addition to face-to-face meetings to strengthen that vital communications link. This approach worked particularly well in the case of a European company evaluating a wide variety of our filter media. To enhance that process, we scheduled a series of videoconferences that brought together Pall scientists, technical experts and BioSupport management from Europe and the U.S. These open discussions made possible expeditious development of a membrane closely attuned to the customer's needs.

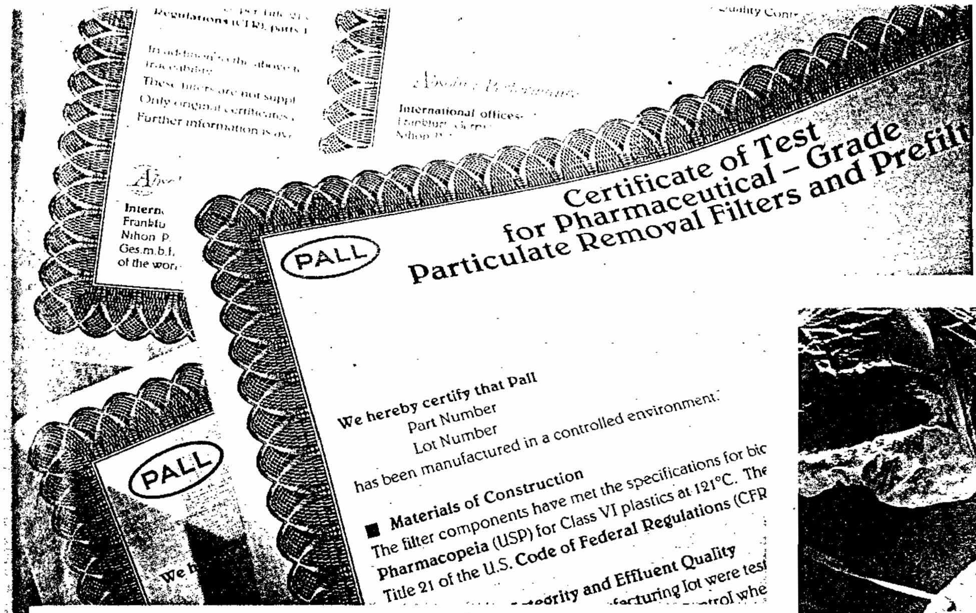
Health Care—Pharmaceuticals, Diagnostics and Nutrition

Pharmaceutical, Biologicals and Bioprocessing



Cost Saving Solutions

Pall continues to lead worldwide in the supply of sterilizing filters and bulk chemical filter cartridges to producers of injectable pharmaceuticals, biopharmaceuticals and therapeutics for both human and veterinary medicine. Pharmaceutical, Biologicals and Bioprocessing (PBB) producers rely on our ability to engineer complete filtration solutions rather than simply supply system components. Significantly, our R&D staff often establishes a direct dialogue with the customer's process development specialists, developing solutions that save countless hours of process downtime and countless dollars in operating costs. Our resources also ensure customer compliance with complex regulatory and validation requirements of the *Guideline on Sterile Drug Products Produced by Aseptic Processing* (published by the U.S. Food and Drug Administration). This prevents the need for costly redesign or revalidation of production sequences. (Validation is the accumulation of evidence that a sterilizing filter will perform as per the claims made for the filter). ■ **Rebounding Markets.** Our global PBB business grew by a healthy 18 percent in 1995. We benefited from a strong position in the U.S. and Pacific Rim markets and from a growing presence in China, where our filters are playing a major role in that country's expanding antibiotics production.



Certificate of Test
for Pharmaceutical – Grade
Particulate Removal Filters and Prefilt

PALL

We hereby certify that Pall
Part Number
Lot Number
has been manufactured in a controlled environment.

■ Materials of Construction
The filter components have met the specifications for bio
Pharmacopeia (USP) for Class VI plastics at 121°C. The
Title 21 of the U.S. Code of Federal Regulations (CFR

…egrity and Effluent Quality
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International offices:

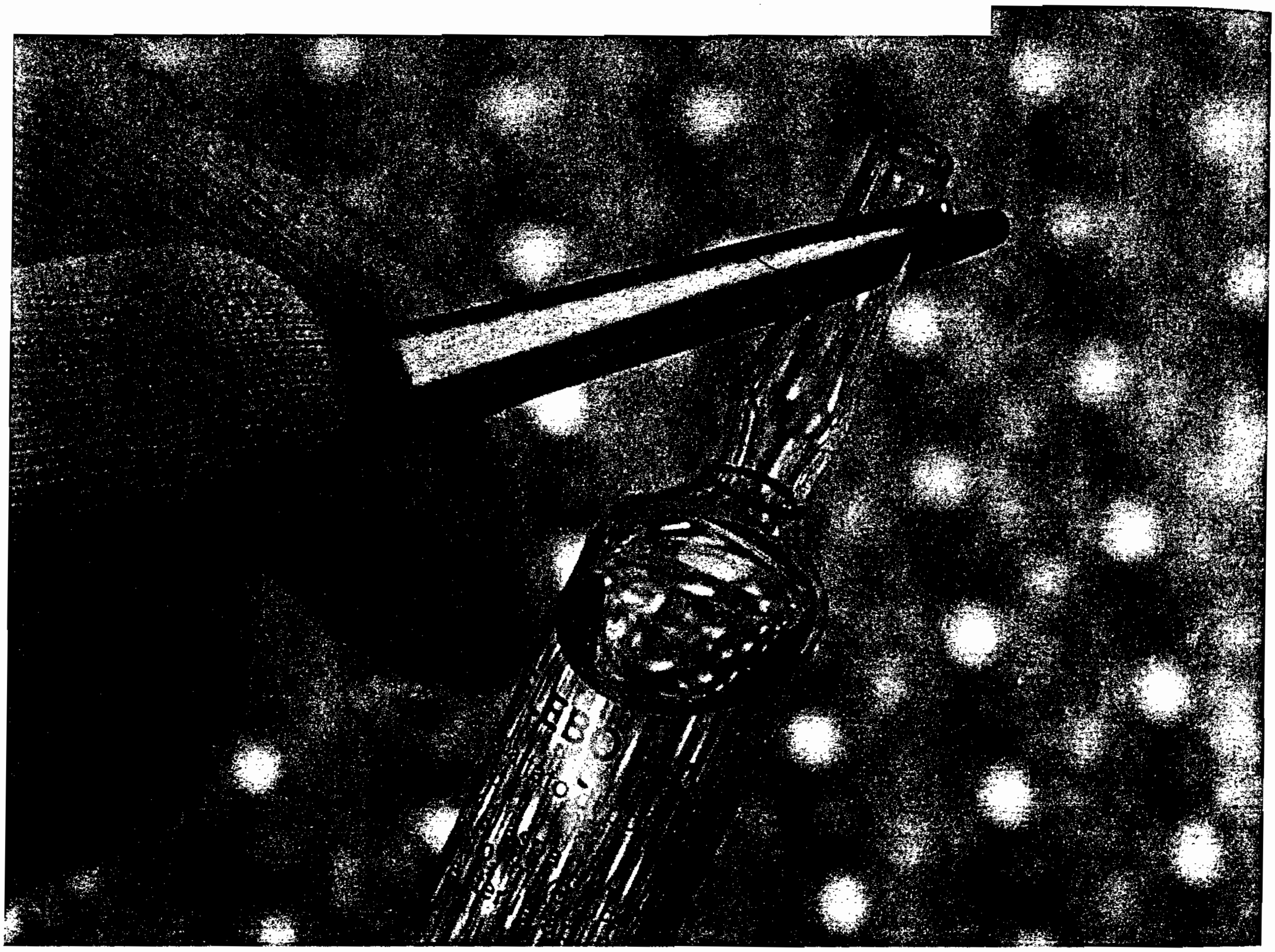
The Method of for Total Systems

Factors Fueling Growth

In the rapidly changing PBB marketplace, Pall is well positioned for growth through its products, technology and unsurpassed technical support. ■ **Product Innovation.** In the product arena, we responded to ever growing concerns over viruses in biological and biopharmaceutical products by introducing our *Ultipor VF* grade *DV50* virus removal filter. This filter won immediate acceptance from many major biopharmaceutical and blood fraction producers around the world for its ability to remove viruses. ■ **Integrity Testing.** Pall is also taking full advantage of the industry's move toward validation of the entire pharmaceutical manufacturing process. Our Parametric Validation Approach is fast becoming the industry standard. The centerpiece of this approach is our new *Truflow Palltronic* integrity test instrument, which can be easily integrated into the customer's automated processes and provides complete validation documentation. ■ **Global Technical Support.** Providing further validation support through the testing and analysis of customer products is Pall's global network of Scientific and Laboratory Services specialists. They are recognized international experts in not just membrane and polymer chemistry, but in customer processes as well.

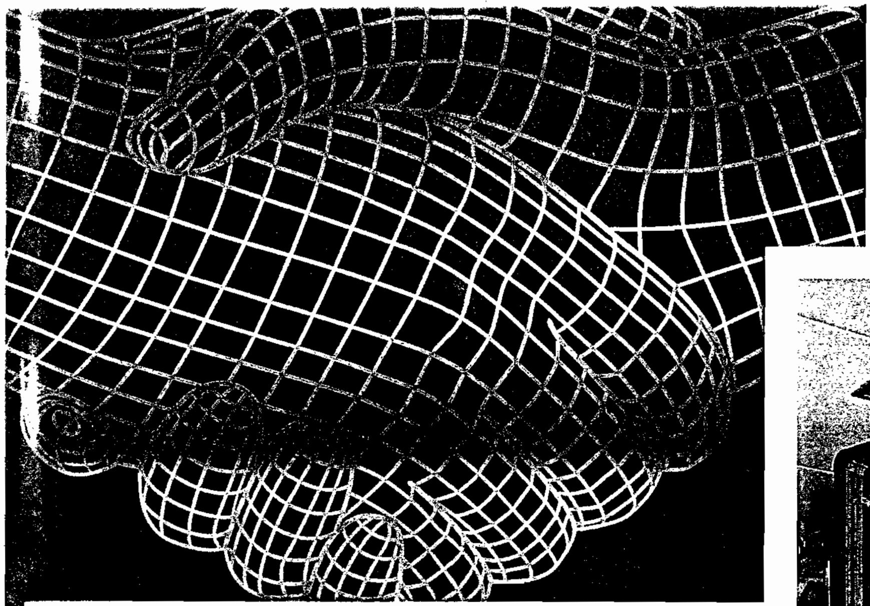
Forging Global Alliances. We believe that to be successful today, companies must be local on a worldwide basis. An example is our relationship with Pharmacia of Sweden. Because of Pall's strength throughout Europe, we've been able to work closely with personnel at each of this pharmaceutical company's sites. More specifically, we've established local Pharmacia/Pall teams that have identified and worked successfully to achieve cost savings. That Pall has been able to deliver a consistently high level of support regardless of the customer's location speaks convincingly of our worldwide resources—and the value of cooperative partnerships.

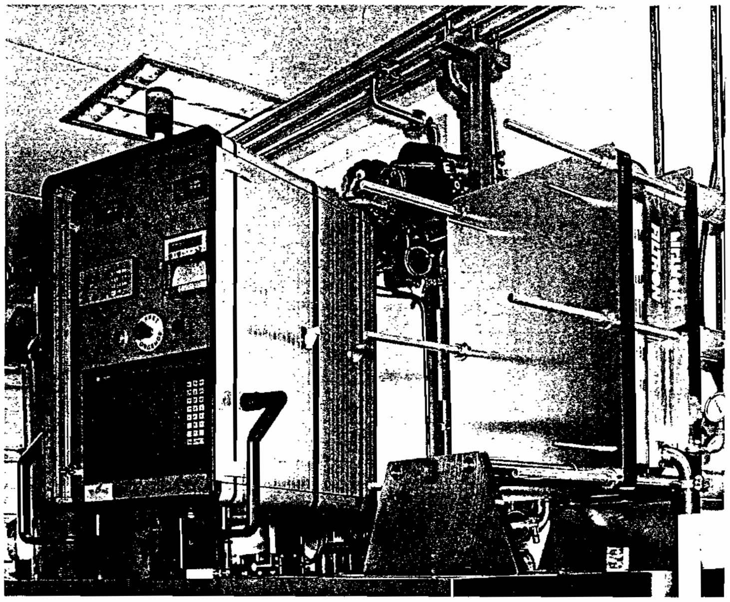
Bioseparations



Vital Separations Role

Pall Bioseparations serves the laboratory, life sciences and food and beverage industries through existing and advanced new separations systems. Pall products meet the critical need of these industries for separation of cell debris from biopharmaceutical fermentation processes and the separation of proteins and enzymes produced in those fermentators. Pall Bioseparations products also purify vaccines and various human and animal blood components. ■ **Acquisition of Filtron.** The addition of Pall Filtron as a family member significantly increases our presence in the laboratory and life sciences markets. The combination of Filtron's ultrafiltration membranes and cassettes with Pall's new family of separations systems enables us to meet our customers' complete filtration and separations requirements, from preclinical to pilot to full-scale production. The introduction of the *Mini-DMF* filter, a small-scale dynamic membrane filter, has also strengthened our laboratory product line. ■ **Food and Beverage.** We continue to be the dominant supplier of filters for cold stabilization of beer. This was supported last year by major sales in the Pacific Rim and China. In Korea, we installed a sophisticated Cluster Filtration System (CFS) which ensures total product quality control and shows promise of replacing traditional pasteurization methods.





Marrying Ourselves to the Customer's Process

Factors Fueling Growth

The teaming of Pall and Filtron will continue to open up new opportunities for distribution, customer support and sales and market penetration. At stake is a potential $300 million worldwide market for ultrafiltration and microfiltration products within the industrial, government and academic laboratory sectors. ■ **Good Product Positioning.** Pall's strategy is to get its separations systems specified at the early laboratory stages of a pharmaceutical or biotechnology product, thus gaining the inside sales track for successive stages of the development and production cycle. While this qualification process can be costly and risk-intensive, it ensures that once approved, Pall is not easily displaced. Helping to ensure continued growth is the introduction of new tangential-flow systems from Pall Filtron which can be easily scaled up to meet customer needs at each stage of the product development cycle. ■ **Strong Market Potential.** In the food and beverage arena, Pall is employing advanced bioseparations technology to open up new market opportunities. The *PallSep* filter, for example, is a unique vibrating membrane filter that succeeds where other cross-flow devices have failed to handle high-solid streams in production and waste minimization applications.

Safer Plasma Transfusions. Pall Filtron has for many years been the major supplier of ultrafiltration systems to the blood bank of Lille, France. Six Pall Filtron* Maxisette™ *cassette systems are in use for the pasteurization process developed and patented by the Central Regionale de Transfusion Sanguine de Lille. This process, validated according to international guidelines, makes it possible for the first time to subject human plasma to heat treatment of 60 degrees Celsius for ten hours in the liquid state. This, in turn, results in the inactivation of viruses such as AIDS and hepatitis, improving the safety of plasma transfusions. We expect other blood banks around the world to adopt the same process and equipment.

Financial Contents

Management's Discussion and Analysis of Financial Condition and Results of Operations

1995 COMPARED TO 1994

I. Results of Operations

Sales for fiscal 1995 increased 17½% over fiscal 1994. Had foreign exchange rates been unchanged, sales would have increased by 11%. Price increases were 1% for the year.

In the fourth quarter of fiscal 1994, the Company incurred a one-time charge of $3.7 million ($2.3 million after taxes, 2 cents per share), mainly in connection with the restructuring of its German operations, and the write-off of a bad debt in the Aerospace operations.

Excluding the one-time charge referred to in the preceding paragraph, the Company's pretax margin increased to 20.4% of sales in fiscal 1995 from 19.8% in fiscal 1994. A decrease in selling, general and administrative expenses as a percentage of sales to 36.7% in 1995, from 37.3% in 1994, was the principal factor in the improved profit margin. The dollar increase in selling, general and administrative expenses resulted from higher exchange rates, the acquisition of Filtron Technology Corporation at the beginning of the third quarter, and an increase in selling costs to better support the growing volume of sales.

The Company's effective tax rate increased to 28.9% in fiscal 1995 from 26.8% in fiscal 1994, such increase resulting mainly from reduced benefits of the Puerto Rico operations due to changes in the U.S. tax laws.

Prior to the cumulative effect of a change in an accounting principle in 1995, and to the one-time charge in 1994, net earnings for fiscal 1995 increased 18% to $119.2 million from $101.3 million in 1994.

In the first quarter of fiscal 1995, the Company adopted Financial Accounting Standards Board Statement No. 112 (Employers' Accounting for Postemployment Benefits). The effect of initially applying this Statement ($1.2 million pretax, $780,000 after taxes, 1 cent per share) is reported as the cumulative effect of a change in an accounting principle.

Net earnings for fiscal 1995 increased 20% to $118.4 million from $98.9 million in fiscal 1994.

II. Liquidity and Capital Resources

The Company's working capital increased by $23.4 million in fiscal 1995, largely from changes in foreign currency exchange rates.

The changes in the components of working capital were:

(In millions)	Increase (Decrease) in Working Capital	Changes Due to Exchange Rates	Other Factors
Accounts receivable	$ 9.1	$11.4	$ (2.3)
Inventories	20.0	6.8	13.2
Other current assets	3.5	0.5	3.0
Short-term borrowings, net of cash and investments	9.6	(1.0)	10.6
Payables and accruals	(17.5)	(4.9)	(12.6)
Income taxes payable	(1.3)	(1.0)	(0.3)
Increase in working capital	$23.4	$11.8	$ 11.6

Capital expenditures totalled $66.5 million in fiscal 1995, and consisted of:

(In millions)	Land & Buildings	Machinery & Equipment	Other	Total
Western Hemisphere	$6.8	$31.0	$3.1	$40.9
Europe	2.4	15.5	5.5	23.4
Asia and Australia	0.1	1.6	0.5	2.2
Total	$9.3	$48.1	$9.1	$66.5

On January 9, 1995, the Company's Board of Directors authorized a program to repurchase shares of its Common Stock. The Board authorized the expenditure of up to $50 million, and this program was completed in May 1995, with 2.3 million shares being purchased.

On November 15, 1994, the Company announced that it had reached an agreement to acquire Filtron Technology Corporation for a price of approximately $28 million (consisting of $2.8 million from working capital sources and 1.28 million shares of the Company's treasury shares, valued at approximately $25 million). This transaction, which is being accounted for as a purchase, was completed at the end of January 1995.

On May 30, 1995, the Company announced that it had reached agreement in principle to acquire the assets of the Medical Plastics Business of Bayer Corporation. This business is a leading producer of proprietary plastic disposable products and preservative solutions used in blood collection and storage. The closing took place on September 29, 1995. The purchase price was $41 million, subject to adjustment based on asset valuations on that date.

III. Impact of Inflation

The Company's financial statements are prepared in accordance with traditional historical accounting systems, and therefore do not reflect the effect of inflation. The impact of changing prices on the financial statements is not considered to be significant.

IV. New Accounting Standard Not Adopted

In March 1995, the Financial Accounting Standards Board adopted Statement No. 121 (Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of), effective for fiscal years beginning after December 15, 1995. Management does not believe that the effect of adopting Statement No. 121 will have a material impact on the financial position of the Company..

1994 COMPARED TO 1993

Results of Operations

Sales for fiscal 1994 increased by 2%. Had foreign exchange rates been unchanged, sales would have increased by 3%. Price increases were 1% for the year.

Cost of sales increased to 36.8% of sales in fiscal 1994 from 36.3% in fiscal 1993, due to product mix. Selling, general and administrative expenses declined to 37.3% of sales in fiscal 1994 compared to 38.2% in the prior year. Net interest expense declined to 0.3% of sales in fiscal 1994 from 0.6% in fiscal 1993.

In the fourth quarter of fiscal 1994, the Company incurred a one-time charge of $3.7 million ($2.3 million after taxes, 2 cents per share), mainly in connection with the restructuring of its German operations, and the write-off of a bad debt in the Aerospace operations.

In the second quarter of fiscal 1993, the Company adopted a restructuring plan to consolidate its Aeropower operations in anticipation of further reductions in military spending, and as a result recorded a charge of $26.7 million ($17.3 million after tax, 15 cents per share).

The Company's pretax margin increased to 19.3% in fiscal 1994 from 15.2% in fiscal 1993. Excluding the restructuring and other charges from both years, the underlying pretax margin increased to 19.8% in fiscal 1994 from 19.1% in fiscal 1993.

Excluding the restructuring and other charges from both years, the Company's effective tax rate was unchanged at 27.0%.

Net earnings for fiscal 1994 increased to $98.9 million from $78.3 million in fiscal 1993. Excluding the restructuring and other charges from both years, fiscal 1994 earnings would have increased 6% to $101.3 million from $95.6 million in the prior year.

Consolidated Statements of Earnings

Pall Corporation and Subsidiaries

	Years Ended		
(In thousands, except per share data)	July 29, 1995	July 30, 1994	July 31, 1993
Revenues:			
Net sales	$822,823	$700,848	$687,222
Interest earned	6,500	5,274	4,713
Total Revenues	829,323	706,122	691,935
Costs and Expenses:			
Cost of sales	305,287	257,624	249,629
Selling, general and administrative expenses	301,686	261,289	262,598
Research and development	45,142	41,283	40,036
Interest expense	9,504	7,132	8,683
Restructuring and other charges	—	3,696	26,710
Total Costs and Expenses	661,619	571,024	587,656
Earnings Before Income Taxes and the Cumulative Effect of an Accounting Change	167,704	135,098	104,279
Provisions for income taxes	48,488	36,176	25,967
Earnings Before the Cumulative Effect of an Accounting Change	119,216	98,922	78,312
Cumulative effect of a change in accounting for postemployment benefits	(780)	—	—
Net Earnings	$118,436	$ 98,922	$ 78,312
Earnings Per Share:			
Earnings before the cumulative effect of an accounting change	$ 1.04	$ .86	$ .68
Cumulative effect of a change in accounting for postemployment benefits	(.01)	—	—
Net Earnings Per Share	$ 1.03	$ .86	$ .68
Average Shares Outstanding	115,184	115,678	115,856

See accompanying notes to consolidated financial statements.

Independent Auditors' Report

Board of Directors
PALL CORPORATION

We have audited the accompanying consolidated balance sheets of Pall Corporation and subsidiaries as of July 29, 1995 and July 30, 1994, and the related consolidated statements of earnings, stockholders' equity and cash flows for each of the years in the three-year period ended July 29, 1995. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Pall Corporation and subsidiaries as of July 29, 1995 and July 30, 1994, and the results of their operations and their cash flows for each of the years in the three-year period ended July 29, 1995, in conformity with generally accepted accounting principles.

As discussed in the Accounting Policies note to the consolidated financial statements, the Company adopted Statement of Financial Accounting Standards No. 112, "Employers' Accounting for Postemployment Benefits" in fiscal year 1995.

KPMG Peat Marwick LLP

Jericho, New York
September 5, 1995

Consolidated Balance Sheets

Pall Corporation and Subsidiaries

(In thousands, except per share data)	July 29, 1995	July 30, 1994
Assets		
Current Assets:		
Cash and cash equivalents	$ 37,913	$ 38,224
Short-term investments	72,850	50,800
Accounts receivable, net of allowance for doubtful accounts of $5,008 and $4,776, respectively	216,216	207,159
Inventories	158,430	138,382
Deferred income taxes	19,443	17,178
Prepaid expenses	15,546	15,346
Other current assets	4,369	3,336
Total Current Assets	524,767	470,425
Property, Plant and Equipment:		
Land	25,783	25,026
Buildings and improvements	246,280	231,342
Machinery and equipment	351,752	308,409
Furniture and fixtures	53,590	44,215
Transportation equipment	13,410	11,637
	690,815	620,629
Less: Accumulated depreciation and amortization	262,884	223,012
Property, Plant and Equipment, Net	427,931	397,617
Other Assets	122,224	91,537
Total Assets	$1,074,922	$ 959,579
Liabilities and Stockholders' Equity		
Current Liabilities:		
Notes payable to banks	$ 117,489	$ 112,034
Accounts payable	47,814	40,401
Accrued liabilities:		
Salaries and commissions	27,863	24,031
Payroll taxes	6,279	5,185
Income taxes	34,311	33,019
Interest	1,624	1,232
Pension and profit sharing plans	9,342	11,014
Other	21,503	16,437
	100,922	90,918
Current portion of long-term debt	9,494	2,819
Dividends payable	12,014	10,667
Total Current Liabilities	287,733	256,839
Long-term Debt, Net of Current Portion	68,814	54,097
Deferred Income Taxes	33,444	31,450
Other Non-current Liabilities	33,132	29,987
Total Liabilities	423,123	372,373
Stockholders' Equity:		
Common stock, par value $.10 per share; 500,000 shares authorized; 117,351 shares issued	11,735	11,735
Capital in excess of par value	56,304	53,769
Retained earnings	643,675	572,388
Treasury stock, at cost (1995 — 2,920 shares, 1994 — 2,032 shares)	(60,389)	(35,144)
Foreign currency translation adjustment	13,036	(1,816)
Minimum pension liability adjustment	(5,145)	(4,711)
Stock option loans	(7,580)	(8,432)
Cumulative unrealized gains (losses) on investments	163	(583)
Total Stockholders' Equity	651,799	587,206
Total Liabilities and Stockholders' Equity	$1,074,922	$ 959,579

See accompanying notes to consolidated financial statements.

Consolidated Statements of Stockholders' Equity

Pall Corporation and Subsidiaries

(In thousands) Years Ended July 31, 1993, July 30, 1994 and July 29, 1995	Common Stock	Capital in Excess of Par Value	Retained Earnings	Treasury Stock	Foreign Currency Translation Adjustment	Minimum Pension Liability Adjustment	Stock Option Loans	Cumulative Unrealized Gains (Losses) on Investments	Total Stockholders' Equity
Balance at August 1, 1992	$ 22,004	$43,526	$485,884	$(33,753)	$ 32,018	$ —	$(4,084)	$ —	$545,595
Net earnings			78,312						78,312
Cash dividends declared			(35,642)						(35,642)
Four-for-three stock split (including $26 paid for fractional shares)	7,334	(7,360)							(26)
Issuance of stock pursuant to exercise of stock options, 402 shares			(4,147)	8,790					4,643
Foreign currency translation adjustment					(44,879)				(44,879)
Minimum pension liability adjustment						(4,996)			(4,996)
Change in stock option loans							(129)		(129)
Balance at July 31, 1993	29,338	36,166	524,407	(24,963)	(12,861)	(4,996)	(4,213)	—	542,878
Net earnings			98,922						98,922
Cash dividends declared			(41,336)						(41,336)
Reduction of par value from $.25 per share to $.10 per share	(17,603)	17,603							—
Issuance of stock pursuant to exercise of stock options, 1,040 shares			(9,605)	20,009					0,404
Purchase of 1,776 shares of Common Stock				(30,190)					(30,190)
Foreign currency translation adjustment					11,045				11,045
Minimum pension liability adjustment						285			285
Change in stock option loans							(4,219)		(4,219)
Net unrealized holding losses on investments								(583)	(583)
Balance at July 30, 1994	11,735	53,769	572,388	(35,144)	(1,816)	(4,711)	(8,432)	(583)	587,206
Net earnings			118,436						118,436
Cash dividends declared			(46,911)						(46,911)
Issuance of stock pursuant to exercise of stock options, 269 shares		(145)	(238)	5,225					4,842
Purchase of 2,437 shares of Common Stock				(52,645)					(52,645)
Issuance of 1,280 shares in acquisition of Filtron Technology Corporation		2,680		22,175					24,855
Foreign currency translation adjustment					14,852				14,852
Minimum pension liability adjustment						(434)			(434)
Change in stock option loans							852		852
Net unrealized holding gains on investments								746	746
Balance at July 29, 1995	$ 11,735	$56,304	$643,675	$(60,389)	$ 13,036	$(5,145)	$(7,580)	$ 163	$651,799

See accompanying notes to consolidated financial statements.

Consolidated Statements of Cash Flows

Pall Corporation and Subsidiaries

(In thousands)	July 29, 1995	[illegible]	July 31, 1993
Operating Activities:			
Net earnings	$ 118,436	$ 98,922	$ 78,312
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization of property, plant and equipment	41,667	36,804	35,188
Amortization of intangibles	4,393	2,737	1,807
Restructuring and other charges	—	[illegible]	23,110
Deferred income taxes	221	[illegible]	(4,289)
Provision for doubtful accounts	998	[illegible]	1,048
Cumulative effect of a change in accounting for postemployment benefits	780	—	—
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable	2,496	(5,[illegible]54)	(14,245)
Inventories	(11,547)	(7,284)	(2,827)
Prepaid expenses	210	(640)	(3,162)
Other assets	(8,576)	(1,848)	(2,433)
Accounts payable	4,625	2,285	(829)
Accrued expenses	1,080	(2,30[illegible])	3,800
Income taxes payable	236	(1,418)	(4,860)
Other liabilities	1,888	1,680	3,945
Net Cash Provided by Operating Activities	156,907	129,717	114,565
Investing Activities:			
Capital expenditures	(66,[illegible]79)	(73,354)	(62,582)
Disposals of fixed assets	4,[illegible]3	1,942	3,059
Short-term investments	(22,630)	13,600	9,952
Acquisitions of license and of businesses, net of cash acquired	(230)	(11,333)	—
Benefits protection trust	(2,599)	(2,567)	(7,072)
Net Cash Used by Investing Activities	(86,835)	(71,712)	(56,643)
Financing Activities:			
Net short-term borrowings	1,930	(4,241)	14,253
Long-term borrowings	21,620	31,165	5,358
Payments on long-term debt	(4,223)	(17,297)	(35,749)
Net proceeds from exercise of stock options	3,043	6,185	4,488
Dividends paid	(45,564)	(39,954)	(26,357)
Treasury stock	(49,997)	(30,190)	—
Net Cash Used by Financing Activities	(73,191)	(64,332)	(38,007)
Cash Flow for Year	(3,119)	(6,327)	19,915
Cash and Cash Equivalents at Beginning of Year	38,224	42,652	26,977
Effect of Exchange Rate Changes on Cash	2,808	1,899	(4,240)
Cash and Cash Equivalents at End of Year	$ 37,913	$ 38,224	$ 42,652
Supplemental Disclosures:			
Interest paid (net of amount capitalized)	$ 9,143	$ 6,292	$ 10,379
Income taxes paid (net of refunds)	47,524	32,670	34,316
Treasury stock issued upon acquisition of Filtron Technology Corporation	24,855	—	—

See accompanying notes to consolidated financial statements.

Financial Information About Industry Segments

Pall Corporation and Subsidiaries

(In thousands)	Fiscal 1995		Fiscal 1994		Fiscal 1993	
	Amount	% Change	Amount	% Change	Amount	% Change
Sales to Unaffiliated Customers						
Health Care	$ 396,907	13	$351,849	0	$353,197	7
Aeropower	212,796	19	179,297	2	176,123	-14
Fluid Processing	213,120	26	169,702	7	157,902	6
Total	$ 822,823	17	$700,848	2	$687,222	0
Operating Profit:						
Health Care	$ 126,914	10	$115,228(a)	-1	$115,992(b)	5
Aeropower	51,342	41	36,487(a)	126	16,129(b)	-63
Fluid Processing	40,112	50	26,784(a)	35	19,785(b)	30
Subtotal	218,368	22	178,499	18	151,906	-10
Interest income	6,500	23	5,274	12	4,713	-13
Interest expense	(9,504)	33	(7,132)	-18	(8,683)	-19
General corporate expenses	(47,660)	15	(41,543)	-5	(43,657)	14
Total	$ 167,704	24	$135,098	30	$104,279	-17
Identifiable Assets:						
Health Care	$ 399,075	8	$369,352	5	$350,832	2
Aeropower	177,389	5	169,433	2	166,683	-17
Fluid Processing	231,971	10	211,487	5	201,115	2
Subtotal	808,435	8	750,272	4	718,630	-3
Corporate	266,487	27	209,307	14	183,643	7
Total	$1,074,922	12	$959,579	6	$902,273	-1
Capital Expenditures:						
Health Care	$ 31,372		$ 26,284		$ 26,688	
Aeropower	12,419		5,568		6,800	
Fluid Processing	16,263		14,181		13,886	
Subtotal	60,054		46,033		47,374	
Corporate	6,425		27,321		15,208	
Total	$ 66,479		$ 73,354		$ 62,582	
Depreciation:						
Health Care	$ 17,912		$ 16,446		$ 15,156	
Aeropower	8,545		7,326		7,924	
Fluid Processing	10,872		10,230		9,624	
Subtotal	37,329		34,002		32,704	
Corporate	4,338		2,802		2,484	
Total	$ 41,667		$ 36,804		$ 35,188	

(a) Includes a pretax charge of $3,696 due principally to the restructuring of the German operations and to the write-off of a bad debt in the Aerospace operations (Health Care – $1,703, Aeropower – $1,503, Fluid Processing – $490).

(b) Includes a pretax charge of $24,610 representing principally the cost of downsizing and further integrating the military portion of the Aeropower business with the Industrial Fluid Power business (Health Care – $2,578, Aeropower – $20,291, Fluid Processing – $1,741).

Financial Information About Foreign and Domestic Operations and Export Sales

Pall Corporation and Subsidiaries

(In thousands)	Fiscal 1995		Fiscal 1994		Fiscal 1993	
	Amount	% Change	Amount	% Change	Amount	% Change
Sales to Unaffiliated Customers:						
Western Hemisphere	$ 325,252	8	$302,287	1	$300,440	-1
Europe	340,541	22	279,423	-4	289,586	-2
Asia and Australia	157,030	32	119,138	23	97,196	12
Total	$ 822,823	17	$700,848	2	$687,222	0
Transfers Between Geographic Areas:						
Western Hemisphere	$ 63,422		$ 61,679		$ 52,832	
Europe	13,838		10,461		8,052	
Asia and Australia	2,025		1,809		1,732	
Total	$ 79,285		$ 73,949		$ 62,616	
Total Sales:						
Western Hemisphere	$ 388,674	7	$363,966	3	$353,272	1
Europe	354,379	22	289,884	-3	297,638	-2
Asia and Australia	159,055	32	120,947	22	98,928	12
Eliminations	(79,285)		(73,949)		(62,616)	
Total	$ 822,823	17	$700,848	2	$687,222	0
Operating Profit:						
Western Hemisphere	$ 87,030	-3	$ 89,898(a)	58	$ 57,020(b)	-28
Europe	102,532	37	74,707(a)	-12	84,578(b)	5
Asia and Australia	27,630	100	13,834	8	12,788(b)	37
Eliminations	1,176		60		(2,480)	
Subtotal	218,368	22	178,499	18	151,906	-10
Interest income	6,500	23	5,274	12	4,713	-13
Interest expense	(9,504)	33	(7,132)	-18	(8,683)	-19
General corporate expenses	(47,660)	15	(41,543)	-5	(43,657)	14
Total	$ 167,704	24	$135,098	30	$104,279	-17
Identifiable Assets:						
Western Hemisphere	$ 385,023	2	$375,970	2	$369,793	3
Europe	308,535	12	275,219	4	265,199	-16
Asia and Australia	127,602	13	112,873	16	97,404	24
Eliminations	(12,725)		(13,790)		(13,766)	
Subtotal	808,435	8	750,272	4	718,630	-3
Corporate	266,487	27	209,307	14	183,643	7
Total	$1,074,922	12	$959,579	6	$902,273	-1

(a) Includes a pretax charge of $3,696 due principally to the restructuring of the German operations and to the write-off of a bad debt in the Aerospace operations (Western Hemisphere – $2,301, Europe – $1,395).

(b) Includes a pretax charge of $24,610 representing principally the cost of downsizing and further integrating the military portion of the Aeropower business with the Industrial Fluid Power business (Western Hemisphere – $19,675, Europe – $4,606, Asia and Australia – $329).

Export sales to unaffiliated customers by the Company's U.S. operations totalled $37,167 in 1995 ($28,907 in 1994 and $28,995 in 1993). The Company considers its foreign operations to be of major importance to its future growth prospects, and does not believe the risk of its foreign business differs materially from its domestic business, except for the risk of currency fluctuations.

Transfers between geographic areas are generally priced on the basis of a mark-up of manufacturing costs, to achieve an appropriate sharing of the profit between the parties.

Notes to Consolidated Financial Statements
Fiscal Years 1995, 1994 and 1993

(In thousands, except per share data)

Accounting Policies

Fiscal Year

The Company's fiscal year ends on the Saturday closest to July 31, except that the Company's foreign subsidiaries are on a July 31 fiscal year. The years ended July 29, 1995, July 30, 1994 and July 31, 1993 each comprise 52 weeks.

Basis of Consolidation

The statements of Pall Corporation are presented in consolidation with its subsidiaries, all of which are wholly-owned. All significant intercompany balances and transactions have been eliminated in consolidation.

Translation of Foreign Currencies

Financial statements of foreign subsidiaries have been translated into U.S. dollars at exchange rates as follows: (i) balance sheet accounts at year-end rates, and (ii) income statement accounts at weighted average exchange rates. Translation gains and losses are reflected in stockholders' equity, while transaction gains and losses are reflected in income. Transaction losses in the amounts of $586, $348 and $25 were incurred in fiscal years 1995, 1994 and 1993, respectively.

The equity in, and advances to, foreign subsidiaries totalled $252,287 and $249,154 at July 29, 1995 and July 30, 1994, respectively.

Cash and Cash Equivalents

For purposes of the statement of cash flows, the Company considers all highly liquid debt instruments purchased with a maturity of three months or less, other than its investments in Puerto Rico, to be cash equivalents. Cash equivalents, consisting principally of short-term bank deposits, totalled $11,808 and $17,703 at July 29, 1995 and July 30, 1994, respectively. The Company holds all cash equivalents until maturity.

Short-Term Investments

Short-term investments, consisting principally of certificates of deposit, time deposits and repurchase agreements secured by government obligations, are held to maturity and are carried at cost, which approximates fair value.

Inventories

Inventories are valued at the lower of cost (principally on the first-in, first-out method) or market.

Property, Plant and Equipment

Property, plant and equipment are stated at cost. Depreciation of plant and equipment is provided over the estimated useful lives of the respective assets, principally on the straight-line basis.

Expenditures for additions, major renewals and betterments are capitalized, and expenditures for maintenance and repairs are charged to earnings as incurred.

Intangible Assets

Costs related to patents and trademarks are amortized using the straight-line method over the estimated useful lives, generally for periods ranging up to 17 years. Goodwill and other intangible assets are amortized over periods ranging up to 20 years.

Income Taxes

The Company accounts for taxes on income using the asset and liability method. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the years in which the differences are expected to reverse.

Earnings Per Share

Earnings per share was computed based on the average number of shares outstanding. Stock options were excluded from the computation since they were not materially dilutive.

Capitalized Interest

Interest in the amounts of $1,365 in 1995, $1,641 in 1994 and $748 in 1993 was capitalized. Such amounts were computed by applying the effective interest rate on the borrowing to the accumulated expenditures incurred for property, plant and equipment.

Accounting Change

In the first quarter of fiscal 1995, the Company adopted Financial Accounting Standards Board Statement No. 112 (Employers' Accounting for Postemployment Benefits). The effect of initially applying this Statement ($1,200 pretax, $780 after taxes, 1 cent per share) is reported as the cumulative effect of a change in an accounting principle.

Acquisition of Filtron Technology Corporation

On January 26, 1995, the Company acquired for approximately $28,000 all of the outstanding shares of Filtron Technology Corporation, a manufacturer of ultrafiltration membranes and cassettes. This acquisition was financed through the issuance of 1,280 shares of the Company's treasury shares valued at approximately $25,000, and the remainder through working capital sources.

The acquisition has been accounted for under the purchase method of accounting and, accordingly, the operations of Filtron are included in the Company's financial statements from the date of acquisition. The results of operations for the Company would not be materially affected had Filtron been included in fiscal 1995 from the beginning of the year, or had it been included in fiscal 1994.

The purchase price exceeded the fair value of the tangible net assets acquired by approximately $22,000.

Restructuring and Other Charges

In the second quarter of fiscal 1993, the Company adopted a restructuring plan to allow for the consolidation of its Aeropower operations due to reductions in military spending. Consolidation was expected to enable greater efficiency in manufacturing and certain overhead functions, despite lower levels of demand. The plan consisted principally of downsizing and further integrating the military portion of the Aeropower business with the Industrial Fluid Power business.

As a result, fiscal year 1993 earnings reflect a pretax charge of $26,710 ($17,310 after taxes, 15 cents per share) for the restructuring plan and also to write-off certain excess corporate leasehold improvements. The charge included $11,530 of inventory write-offs, $9,476 of machinery and equipment write-offs, $3,604 for severance and other expenses, and $2,100 for the write-off of excess corporate leasehold improvements.

In the fourth quarter of fiscal 1994, the Company recorded a one-time pretax charge for $3,696 ($2,332 after taxes, 2 cents per share), due principally to the restructuring of the German operations and to the write-off of a bad debt in the Aerospace operations.

Restructuring and other charges remaining in the July 29, 1995 balance sheet are not significant.

Inventories

The major classes of inventory are as follows:

	July 29, 1995	July 30, 1994
Raw materials and components	$ 61,436	$ 58,999
Work-in-process	17,901	12,737
Finished goods	79,093	66,646
Total inventory	$158,430	$138,382

Other Assets

Other assets consist of the following:

	July 29, 1995	July 30, 1994
Patents and trademarks, net of accumulated amortization of $10,209 and $7,768, respectively	$ 38,728	$34,332
Benefits protection trust	25,848	24,646
Prepaid pension expenses	11,247	8,272
Intangible pension assets	2,964	3,247
Goodwill and other intangible assets, net of accumulated amortization of $1,726 and $246, respectively	26,272	6,087
Other	17,165	14,953
Total	$122,224	$91,537

Patents and trademarks include costs related to successfully defending certain Pall patents, and expenditures made to register new patents and trademarks, as well as paid-up licenses in respect of third party patents.

The benefits protection trust was established for the purpose of satisfying certain previously unfunded pension obligations, in the event of a change of control of the Company. The July 29, 1995 and July 30, 1994 balance sheets reflect related liabilities in the amounts of $28,240 and $26,999, respectively. The trust primarily holds investments in U.S. government obligations and debt obligations of corporations with high credit ratings. The Company considers investments held in the trust to be available-for-sale and, therefore, these investments are carried at fair value. Unrealized gains and losses are reported as a separate component of stockholders' equity, until realized. Realized gains and losses are recognized in earnings upon sale. Contractual maturity dates of U.S. government obligations and of corporate obligations range from

1996–2004 and 1997–2005, respectively. Pertinent information related to the trust follows:

	1995	1994	1993
Company contributions	$ 2,599	$ 2,567	$ 7,072
Total purchases (excluding above contributions)	28,364	33,896	11,339
Total proceeds from sales	29,611	34,309	10,455
Net (losses) gains recognized	(712)*	(157)	120

*Unrealized gains of $746 are reflected in stockholders' equity.

Prepaid pension expenses represent the non-current amounts arising from the excess of cumulative employer contributions and earnings thereon, over accrued net pension expenses.

Intangible pension assets represent, for certain domestic pension arrangements, the excess of unfunded accumulated benefits over unrecognized prior service costs. The July 29, 1995 and July 30, 1994 balance sheets reflect additional long-term pension liabilities of $10,880 and $10,489, respectively, and a reduction in stockholders' equity, net of deferred tax benefits, of $5,145 and $4,711, respectively.

Goodwill and other intangible assets represent the cost in excess of the net tangible assets acquired of the Company's former distributor in Australia and of Filtron Technology Corporation.

Short-Term Debt

The Company had short-term investments in Puerto Rico of $72,850 at July 29, 1995 ($50,800 at July 30, 1994), at the same time that it had bank borrowings of $117,489 ($112,034 at July 30, 1994) outside of Puerto Rico.

Pertinent information with respect to short-term bank borrowings follows:

	1995	1994	1993
Average month-end borrowings	$119,226	$132,252	$112,950
Weighted average interest rate during the year	5.1%	3.5%	3.8%
Highest level of borrowing at any month-end during the year	$160,655	$167,234	$131,506
Weighted average interest rate at year-end	5.1%	4.2%	3.3%

At July 29, 1995, the Company and its subsidiaries had lines of credit totalling approximately $400,000, of which $117,276 had been drawn. Such lines of credit do not represent legal commitments on the parts of the banks and no formal compensating balance requirements relate to them.

Long-Term Debt

	At July 29, 1995	At July 30, 1994
Bank loans in Japan, due in installments through 1999	**$28,501**	$27,858
7.23% term loan, due on June 30, 1999	**20,000**	20,000
7.38% sale-and-leaseback obligation	**21,620**	—
Industrial development bonds, due in the year 1996, with interest at 63% and 67% of prime rates	**4,320**	4,760
Capitalized leases, 4.65% to 16.5% due in varying amounts through the year 2005	**3,867**	4,298
Total long-term debt	**78,308**	56,916
Less: current portion	**9,494**	2,819
Long-term debt, net of current portion	**$68,814**	$54,097

The Company's subsidiary in Japan has entered into loan arrangements with three banks, in the total amount of 2.52 billion Yen ($28,501). The loans are being amortized through the year 1999, and bear interest at rates between 1.7% and 3.6%.

In July 1995, the Company entered into a sale-and-leaseback transaction for certain of its personal properties for approximately $25,000. No gain or loss was recognized on this transaction. For accounting purposes, the Company has treated this transaction as a financing arrangement. Payments are due in installments through the year 2003. Depreciation on the properties has been reflected in accordance with the Company's normal accounting practices.

A subsidiary of the Company has entered into agreements with two industrial development agencies for the financing of building and machinery acquisitions and building renovations. The payments being made by the Company are in the form of rent payments, equal in amount to the principal and interest on the bonds. Upon final payment of the bonds, the Company will reacquire the properties for a nominal price. The transactions have been accounted for as financings and the future rent payments net of interest are treated as debt on the balance sheet.

The aggregate annual maturities of long-term debt during the fiscal years 1996 through 2000 are approximately as follows: 1996, $9,494; 1997, $19,816; 1998, $4,677; 1999, $36,384; and 2000, $3,489.

Income Taxes

The components of earnings before income taxes and the cumulative effect of a change in an accounting principle are as follows:

	1995	1994	1993
Domestic operations	$ 56,708	$ 62,135	$ 27,365
Foreign operations	110,996	72,963	76,914
Total	$167,704	$135,098	$104,279

The Company and its domestic subsidiaries file a consolidated Federal income tax return. The provisions for income taxes, excluding the cumulative effect of a change in an accounting principle, consist of the following items:

	1995	1994	1993
Current:			
Federal and Puerto Rico	$10,155	$ 4,229	$ 2,692
State	350	350	410
Foreign	37,762	27,191	27,154
Total	48,267	31,770	30,256
Deferred:			
Federal	(387)	4,585	(5,207)
State	—	75	(125)
Foreign	608	(254)	1,043
Total	221	4,406	(4,289)
Total income tax expense	$48,488	$36,176	$25,967

The tax effects of temporary differences and loss carry-forwards that give rise to significant portions of the net deferred tax liability at July 29, 1995, July 30, 1994 and July 31, 1993 are as follows:

	1995	1994	1993
Deferred tax asset:			
Inventories	$ 9,125	$ 9,221	$ 13,191
Pension liabilities	12,044	11,325	9,559
Accrued expenses	3,667	2,468	2,561
Other	5,642	4,584	2,874
Total deferred tax asset	30,478	27,598	28,185
Deferred tax liability:			
Plant and equipment	(41,215)	(39,025)	(34,991)
Pension assets	(2,564)	(1,697)	(1,430)
Other	(700)	(1,148)	(1,239)
Total deferred tax liability	(44,479)	(41,870)	(37,660)
Net deferred tax liability	$(14,001)	$(14,272)	$ (9,475)

A reconciliation of the provisions for income taxes, excluding the cumulative effect of a change in an accounting principle, follows:

	1995		1994	1993
	Amount	% of Pretax Earnings	% of Pretax Earnings	% of Pretax Earnings
Computed "expected" tax expense	$58,696	35.0%	35.0%	34.6%
Tax benefit of Puerto Rico operations	(9,716)	(5.8)	(8.9)	(10.9)
Federal tax credits and other effects	(603)	(0.3)	—	(0.6)
Foreign income and withholding taxes, net of U.S. foreign tax credits	(117)	(0.1)	0.5	1.5
State income taxes, net of Federal income tax benefit	228	0.1	0.2	0.3
Total and effective tax rate	$48,488	28.9%	26.8%	24.9%

* 34.6% was the effective rate which resulted from the change in the Federal income tax rate from 34% to 35% as of January 1, 1993.

United States income taxes have not been provided on the retained earnings of foreign subsidiaries, which totalled $173,544, $161,047 and $118,962 at July 29, 1995, July 30, 1994 and July 31, 1993, respectively. Foreign subsidiaries have paid, and are expected to continue to pay, dividends out of accumulated earnings. Any additional U.S. taxes arising from the repatriation of such earnings, less applicable credits for taxes paid abroad, would not be material.

The Company's Puerto Rico subsidiaries are organized as "possessions corporations" as defined in Section 936 of the Internal Revenue Code. A change in the provisions of Section 936 decreased the available U.S. tax credit from 100% of income to 60%, effective during the year ended July 29, 1995. The exemption from Puerto Rico income tax remains at 90%. Repatriation of these earnings results in Puerto Rico withholding taxes of no more than 10% being imposed.

Common Stock

Stock Split

On November 20, 1992, the Board of Directors declared a four-for-three stock split effective December 28, 1992. The par value of the new shares issued totalled $7,334, which was transferred from capital in excess of par value to the Common Stock account.

All share and per share data for prior periods presented have been restated to reflect the stock split.

Reduction in Par Value and Increase in Number of Authorized Shares

At the annual meeting held on November 18, 1993, the shareholders approved an amendment to the Certificate of Incorporation, reducing the par value of the Common Stock from $.25 per share to $.10 per share, and increasing the number of authorized shares of Common Stock from 200 million to 500 million. As a result of the reduction in par value, the Common Stock account was reduced by $17,603 and the capital in excess of par value account was increased by the same amount.

Shareholder Rights Plan

On November 17, 1989, the Board of Directors adopted a Shareholder Rights Plan. Under the Plan, each shareholder received a dividend of one right for each share of the Company's outstanding Common Stock. Each right entitles the holder to purchase one share of Common Stock at an initial exercise price of $60 per share. Initially, the rights are attached to the Common Stock and are not exercisable. The rights become exercisable and will trade separately from the Common Stock ten days after any person or group acquires 20% or more of the Company's outstanding Common Stock, or ten business days after any person or group announces a tender offer for 20% or more of the outstanding Common Stock. Each right not owned by the acquiror would become exercisable for the number of shares of Common Stock of the Company having a market value at that time of twice the exercise price of the right. Alternatively, the Board of Directors could exchange the rights not owned by the acquiror for Common Stock at an exchange ratio of one share of Common Stock per right.

The effective date of the rights dividend was December 1, 1989, to shareholders of record on that date. Such rights are also attached to Common Stock issued subsequent to December 1, 1989. The rights will expire on December 1, 1999, unless earlier redeemed by the Company. The rights are redeemable by the Board of Directors for .33 cents per right at any time until a 20% position has been acquired in the Company's Common Stock by a person or group.

Stock Repurchase Programs

On August 3, 1993, the Company's Board of Directors authorized a program to repurchase shares of its Common Stock. The Board authorized the expenditure of up to $30,000, and this program was completed by the end of fiscal 1994, with 1,763 shares being acquired.

On January 9, 1995, the Company's Board of Directors authorized another program to repurchase shares of its Common Stock. The Board authorized the expenditure of up to $50,000, and this program was completed by the end of fiscal 1995, with 2,306 shares being acquired.

The shares repurchased under these programs were held in treasury for use in connection with the exercise of options granted under the Company's stock option plans, and the acquisition of Filtron Technology Corporation.

Other

As of July 29, 1995, 6,398 shares of Common Stock of the Company were reserved for the exercise of stock options. To the extent that the treasury shares referred to in the preceding paragraphs are used to satisfy option exercises, these reserved shares will not be issued. At July 29, 1995, the Company held 2,920 treasury shares intended for use upon stock option exercises.

Pension and Profit Sharing Plans and Arrangements

Pension Plans

The Company and its subsidiaries provide substantially all domestic and foreign employees with pension benefits. Pension costs charged to operations totalled $9,018, $8,638 and $8,818 in fiscal years 1995, 1994 and 1993, respectively.

The Company's pension plans provide benefits based on salary and length of service. Funding policy for domestic plans is in accordance with ERISA funding standards; for foreign plans, funding is determined by local tax laws and regulations. Plan assets are invested primarily in common stocks, bonds and cash instruments. At both July 29, 1995 and July 30, 1994, 49 shares of Company Common Stock were held in the Company's domestic pension funds.

Net periodic pension cost for these plans in fiscal years 1995, 1994 and 1993 was:

	U.S. Plans			Foreign Plans		
	1995	1994	1993	1995	1994	1993
Service cost	$ 2,665	$ 2,651	$ 3,227	$ 4,115	$ 3,582	$ 3,411
Interest cost on projected benefit obligation	5,308	4,851	4,579	3,469	2,635	2,582
Return on plan assets	(7,472)	(763)	(2,017)	(5,282)	(3,854)	(4,156)
Net amortization and deferrals	5,198	(1,383)	266	(400)	(388)	(377)
Net periodic pension cost	$ 5,699	$ 5,356	$ 6,055	$ 1,902	$ 1,975	$ 1,460

The following table presents the plans' funded status and amounts recognized on the Company's consolidated balance sheets at July 29, 1995 and July 30, 1994:

	Assets Exceed Accumulated Benefits				Accumulated Benefits Exceed Assets			
	U.S. Plans		Foreign Plans		U.S. Plans		Foreign Plans	
	1995	1994	1995	1994	1995	1994	1995	1994
Actuarial present value of benefit obligations:								
Vested benefit obligation	$ 4,471	$ 3,365	$ 36,070	$ 30,023	$ 56,985	$ 52,660	$ 8,752	$ 6,660
Accumulated benefit obligation	4,696	3,590	36,153	30,100	60,041	54,590	9,860	7,680
Projected benefit obligation	4,696	3,590	40,252	33,414	69,618	63,257	12,656	9,974
Plan assets	4,937	4,178	59,775	49,220	37,351	29,111	8,147	6,113
Projected benefit obligation (in excess of) or less than plan assets	241	588	19,523	15,806	(32,267)	(34,146)	(4,50	(3,861)
Unrecognized net (gain) or loss	(456)	(106)	(5,738)	(4,756)	11,564	12,795	(1,84	(1,372)
Unrecognized prior service cost	970	348	204	217	2,428	2,531	(	0
Unrecognized net obligation or (asset) at date of adoption	(507)	(549)	(2,990)	(3,276)	(1,558)	(1,681)	594	564
Additional minimum liability	0	0	0	0	(10,880)	(10,489)	(170)	(178)
Prepaid pension cost (liability) in the consolidated balance sheet	$ 248	$ 281	$ 10,999	$ 7,991	$(30,713)	$(30,990)	$ (5,931)	$ (4,847)
The assumptions used were:								
Discount rate	7.75%	8.25%	5.5–8.5%	5.5–8.0%	7.75%	8.25%	5.5–7.0%	5.5–7.8%
Rate of compensation increase	4.25–5.25%	4.75–5.5%	2.8–5.5%	2.9–4.0%	4.25–5.25%	4.75–5.5%	4.0–5.0%	4.0–5.0%

The long-term rate of return for the U.S. plans was 9.0% in each year, and for the foreign plans ranged from 5.5% to 9.0% in 1995 and 5.5% to 8.5% in 1994.

At July 29, 1995 and July 30, 1994, the Company had recorded additional minimum pension liabilities of $10,880 and $10,489, respectively. Related intangible assets in the amounts of $2,964 and $3,247, respectively, are reflected in non-current assets, and reductions in stockholders' equity, net of deferred tax benefits, of $5,145 and $4,711, respectively, are recorded.

The Company and its subsidiaries also participate in certain multi-employer pension plans for the benefit of its employees who are union members. Contributions to these plans were $1,417, $1,307 and $1,303 for fiscal years 1995, 1994 and 1993, respectively.

Profit Sharing Plan

The Company's profit sharing plan covers substantially all domestic employees of the Company and its participating subsidiaries, other than those employees covered by a union retirement plan. The plan provides that, unless the Board of Directors decides otherwise, the Company contribute annually the lesser of (a) the amount which, when added to forfeitures for the year, equals 7½% of the amount by which the consolidated net operating income before income taxes of the Company and its participating subsidiaries exceeds $500, or (b) the amount deductible for Federal income tax purposes. The provisions for fiscal years 1995, 1994 and 1993 were $4,293, $4,683 and $3,711, respectively.

Incentive Compensation Plan

The plan provides additional compensation to officers and key employees of the Company and its subsidiaries based upon the achievement of specified management goals. The Compensation Committee of the Board of Directors establishes the goals on which the Company's executive officers are compensated, and management establishes the goals for other covered employees. With respect to the officers covered by the employment contracts referred to in the Contingencies and Commitments footnote, any incentive compensation payable to an officer under the incentive compensation arrangement described in this paragraph is reduced by the incentive compensation payable under the formula contained in his/her employment contract. The aggregate amounts charged to expense in connection with the plan were $5,781, $5,019 and $5,289 in fiscal years 1995, 1994 and 1993, respectively.

Stock Option Plans

The Company has adopted several plans which provide for the granting of stock options to officers, employees and non-employee directors, at option prices equal to the market price of the Common Stock at date of grant, which results in no charge to earnings. The forms of option adopted provide that the options may not be exercised within one year from the date of grant, and expire if not completely exercised within five years from the date of grant. For the most part, in any year after the first year, the options can be exercised with respect to only up to 25% of the shares subject to the option, computed cumulatively.

	At July 29, 1995	At July 30, 1994
Options exercisable	2,222	1,146
Options available for grant	1,322	1,428

Changes in the options outstanding during fiscal years 1993, 1994 and 1995 are summarized in the following table:

	Number of Shares	Price Per Share
Balance—August 1, 1992	**3,582**	**$ 9.40–$19.66**
Fiscal 1993:		
Options granted	49	18.25– 22.31
Options exercised	(452)	9.40– 18.38
Options terminated	(26)	10.13– 18.38
Balance—July 31, 1993	**3,153**	**9.40– 22.31**
Fiscal 1994:		
Options granted	3,375	15.25– 19.81
Options exercised	(1,040)	9.40– 18.38
Options terminated	(245)	10.13– 18.50
Balance—July 30, 1994	**5,243**	**9.60– 22.31**
Fiscal 1995:		
Options granted	194	16.00– 21.44
Options exercised	(269)	9.60– 18.81
Options terminated	(92)	18.25– 22.31
Balance—July 29, 1995	**5,076**	**11.69– 21.44**

Since June 1992, the Company has delivered treasury shares upon the exercise of stock options.

Other Non-Current Liabilities

This consists primarily of accruals for deferred compensation plans and arrangements, the benefits of which are, and will continue to be, paid to covered officers and employees.

Contingencies and Commitments

On April 19, 1995, a jury verdict for $7,000 in damages was rendered against the Company in a product disparagement action. In the opinion of management and outside counsel, post-trial motions filed by the Company requesting the court to either (a) dismiss the jury verdict as a matter of law, or (b) grant a new trial, will be successful, resulting in no loss to the Company, and therefore, no accrual for the judgment has been made in the accompanying consolidated financial statements.

The Company and its subsidiaries are subject to certain other legal actions which arise in the normal course of business. It is management's belief that these other actions will not have a material effect on the Company's consolidated financial position.

The Company and its subsidiaries lease office and warehouse space, automobiles, computers and office equipment. Rent expense for all operating leases amounted to approximately $13,100 in 1995, $11,000 in 1994 and $10,200 in 1993. Future minimum rental commitments at July 29, 1995 for all noncancelable operating leases with initial terms exceeding one year are $8,500 in 1996; $5,400 in 1997; $3,800 in 1998; $2,300 in 1999; $1,100 in 2000; and $700 thereafter.

The Company has employment agreements with its executive officers, the terms of which expire at various times through July 31, 1999. Such agreements, which have been revised from time to time, provide for minimum salary levels, adjusted annually for cost-of-living changes, as well as for incentive bonuses which are payable if specified management goals are attained. The aggregate commitment for future salaries at July 29, 1995, excluding bonuses, was approximately $10,000.

Financial Instruments, Off-Balance-Sheet Risks and Concentrations of Credit Risk

The Company enters into forward exchange contracts, generally with terms of 90 days or less, to manage its foreign currency transaction exposures. Effects of changes in currency rates on those transactions are therefore minimized and hedges are accounted for as part of the underlying transactions. The tota value of open contracts at year-end was not material.

The Company sells its products to a diverse group of customers in the Health Care, Aeropower and Fluid Processing industries throughout the world and as such does not consider itself exposed to concentration of credit risks. These risks are further minimized by placing credit limits, ongoing monitoring of the customers' account balances, and assessment of the customers' financial strengths.

The Company's cash and cash equivalents and investments are in high-quality securities placed with a wide array of financial institutions with high credit ratings. This investment policy limits the Company's exposure to concentration of credit risks.

The Company considers the fair value of all financial instruments to be not materially different from their carrying value at year-end.

Information by Industry Segment and Geographic Area

Specified financial information by industry segment and geographic area for fiscal years 1995, 1994 and 19[illegible] is summarized on pages 33 and 34 of this report.

Event Subsequent to Date of Auditors' Report

On September 29, 1995, the Company completed its acquisition of the assets of the Medical Plastics Business of Bayer Corporation. This business is a leading producer of proprietary plastic disposable products and preservative solutions used in blood collection and storage. The purchase price of approximately $41,000 was financed from working capital sources.

Proforma unaudited results of operations, assuming this acquisition had taken place at the beginning of fiscal year 1993 would not be materially different from those earnings reported in the Consolidated Statements of Earnings on page 29.

The purchase price exceeded the fair value of the tangible net assets acquired by approximately $11,000, which will be allocated to goodwill.

Quarterly Financial Information (Unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year
1995:					
Net sales	$159,195	$192,847	$217,309	$253,472	$822,823
Gross profit	97,207	119,682	140,184	160,463	517,536
Earnings before income taxes and the cumulative effect of an accounting change	19,012	37,827	47,575	63,290	167,704
Net earnings	12,529 (a)	26,481	33,508	45,918	118,436 (a)
Earnings per share	0.11 (a)	0.23	0.29	0.40	1.03 (a)
1994:					
Net sales	141,874	169,710	177,814	211,450	700,848
Gross profit	86,673	105,641	114,585	136,325	443,224
Earnings before income taxes	15,380	30,598	37,475	51,645 (b)	135,098 (b)
Net earnings	11,073	22,031	27,817	38,001 (b)	98,922 (b)
Earnings per share	.10	.19	.24	.33 (b)	.86 (b)

(a) Includes a charge against earnings of $780 after income taxes (1 cent per share) as a result of adopting the Financial Accounting Standards Board Statement No. 112 (Employers' Accounting for Postemployment Benefits).

(b) Includes a pretax charge of $3,696 ($2,332 after taxes, 2 cents per share) due principally to the restructuring of the German operations and to the write-off of a bad debt in the Aerospace operations.

Common Stock Prices and Cash Dividends

Pall Corporation's Common Stock is listed on the New York and London Stock Exchanges. The table sets forth quarterly data relating to the Company's Common Stock prices and cash dividends declared per share for the past two fiscal years.

	Fiscal 1995		Fiscal 1994		Cash dividends per common share	
Price per share	High	Low	High	Low	1995	1994
Quarter:						
First	**$18.38**	**$15.75**	$21.25	$15.63	**$0.0925**	$0.08
Second	**20.25**	**17.13**	21.00	17.50	**0.105**	0.0925
Third	**23.63**	**18.63**	19.13	16.00	**0.105**	0.0925
Fourth	**24.00**	**20.38**	17.25	13.63	**0.105**	0.0925

There are approximately 7,000 holders of record of the Company's Common Stock.

Eleven-Year Sales

(In thousands, to nearest $25,000)	1995	1994	1993	1992	1991	1990	1989	1988[a]	1987[a]	1986	198
Health Care	**$396,900**	$351,850	$353,200	$331,550	$267,625	$214,125	$188,400	$148,050	$129,325	$ 96,225	$ 74,25
Aeropower (without NBC)	**212,800**	179,300	176,125	204,725	232,200	191,100	165,475	154,775	137,125	132,650	106,97
Fluid Processing (without Air Dryers)	**213,125**	169,700	157,900	148,800	157,150	159,275	143,125	111,025	86,575	66,550	61,82
Subtotal	**822,825**	700,850	687,225	685,075	656,975	564,500	497,000	413,850	353,025	295,425	243,05
Air Dryers	—	—	—	—	—	—	—	19,850	31,250	31,025	31,57
NBC Canisters	—	—	—	—	—	—	—	325	5,800	5,600	1,30
Total	**$822,825**	$700,850	$687,225	$685,075	$656,975	$564,500	$497,000	$434,025	$390,075	$332,050	$275,92

(a) Restated to reflect the acquisition of RAI Research Corporation on September 30, 1988, accounted for as a pooling of interests. Prior years have not been restated, due to immateriality.

Five-Year and Ten-Year Compounded Growth Rates

(To July 29, 1995)	Five-Year	Ten-Year
Health Care	13%	18%
Aeropower	2%	7%
Fluid Processing	6%	13%
Total	8%	13%

Eleven-Year Financial History

(In millions, except per share data and number of employees)	1995	1994	1993	1992	1991	1990	1989[b]	1988[b,c]	1987[c]	1986	1985
Results for the Year:											
Sales	822.8	700.8	687.2	685.1	657.0	564.5	497.0	434.0	390.1	332.0	275.9
Cost of sales	305.3	257.6	249.6	262.1	258.8	224.5	190.2	175.2	157.6	142.5	113.4
Selling, general and administrative expenses	301.7	261.3	262.6	253.0	242.4	207.8	190.3	163.0	139.8	115.8	98.9
Research and development	45.1	41.3	40.0	34.8	30.3	24.0	20.1	17.0	14.9	12.3	11.4
Interest expense (net)	3.0	1.8	4.0	5.3	9.7	10.8	5.8	5.0	9.8	6.8	5.6
Other charge (income)	—	3.7[d]	26.7[e]	3.7[f]	—	—	6.5	(10.2)	—	—	—
Earnings before taxes	167.7	135.1	104.3	126.2	115.8	97.4	84.1	84.0	68.0	54.6	46.6
Income taxes	48.5	36.2	26.0	36.0	35.9	31.2	26.4	27.2	19.7	13.7	12.3
Accounting change	(0.8)[g]	—	—	2.5[h]	—	—	—	—	—	—	—
Net earnings	118.4	98.9	78.3	92.7	79.9	66.2	57.7	56.8	48.3	40.9	34.3
Earnings per share[a]	1.03[g]	.86[d]	.68[e]	.79[h]	.69	.57	.50	.50	.43	.37	.32
Dividends declared per share[a]	.41	.36	.31	.26	.21	.18	.15	.13	.11	.09	.08
Capital expenditures	66.5	73.4	62.6	56.2	58.3	81.8	66.2	50.2	35.6	39.2	43.0
Depreciation	41.7	36.8	35.2	34.4	31.9	26.8	24.7	21.2	18.0	13.6	10.1
Year-End Position:											
Working capital	237.0	213.6	192.5	223.3	197.3	166.2	173.4	159.1	136.6	102.0	77.6
Property, plant and equipment (net)	427.9	397.6	357.6	366.1	331.8	319.0	255.8	220.8	199.4	176.9	144.7
Total assets	1,074.9	959.6	902.3	912.9	786.7	797.8	717.0	581.8	532.5	440.6	362.4
Long-term debt	64.8	54.1	24.5	59.0	51.6	56.3	40.4	41.2	41.2	42.2	35.5
Total liabilities	[illegible]	372.4	359.4	367.3	301.6	357.8	345.9	252.8	256.7	219.7	189.6
Equity	[illegible]	587.2	542.9	545.6	485.1	440.0	371.1	329.0	275.8	220.9	172.8
Other Ratios and Statistics:											
Net earnings (excluding other items and accounting changes) as % of:											
Sales	14.5	14.4	13.9	13.5	12.2	11.7	12.4	12.3	12.4	12.3	12.4
Average total assets	11.7	10.9	10.5	10.9	10.1	8.7	9.5	9.6	9.9	10.2	10.5
Average equity	19.2	17.9	17.6	18.0	17.3	16.3	17.6	17.7	19.4	20.8	21.6
Average shares outstanding[a]	115.2	115.7	115.9	116.9	116.2	115.8	114.9	113.9	113.1	109.4	108.4
Equity per share[a]	5.70	5.09	4.68	4.72	4.15	3.80	3.21	2.88	2.43	2.01	1.59
Number of employees at year-end	6,500	6,200	6,300	6,400	6,400	6,300	6,200	5,600	5,400	5,100	4,800
Price range of stock during the year[a]:											
High	24.00	21.25	23.16	24.09	20.12	12.46	11.42	11.79	11.66	11.22	6.73
Low	15.75	13.63	16.38	16.59	8.71	10.04	8.33	6.50	8.09	6.00	5.39

(a) Reflects all stock splits since January 1, 1984.

(b) The air dryer and NBC canister lines were disposed of in fiscal 1988 and 1989, respectively. Fiscal 1989 pretax earnings were reduced by a payment of $6.5 million (4 cents per share) in settlement of an indemnification obligation pertaining to the Gore-Garlock patent infringement lawsuit. Fiscal 1988 pretax earnings included a $10.2 million gain on the sale of the air dryer line (6 cents per share), and a charge in connection with an inventory takeback resulting from the reorganization of certain distribution arrangements of $4.6 million (3 cents per share).

(c) Restated to reflect the acquisition of RAI Research Corporation on September 30, 1988, accounted for as a pooling of interests. Prior years have not been restated, due to immateriality.

(d) Represents principally the cost ($2.3 million after taxes, 2 cents per share) of restructuring the German operations, and of writing off a bad debt in the Aerospace operations.

(e) Represents principally the cost ($17.3 million after taxes, 15 cents per share) of downsizing and further integrating the military portion of the Aeropower business with the Industrial Fluid Power business.

(f) Represents a charge from the settlement of certain promissory notes received in connection with the sale of the air dryer business in a leveraged buy-out reported in fiscal 1988.

(g) Represents a decrease in earnings (1 cent per share) as a result of adopting the Financial Accounting Standards Board Statement No. 112 (Employers' Accounting for Postemployment Benefits) in the first quarter of fiscal 1995.

(h) Represents an increase in earnings (2 cents per share) as a result of adopting the Financial Accounting Standards Board Statement No. 109 (Accounting for Income Taxes) in the first quarter of fiscal 1992.

Corporate Directory

Senior Officers

Eric Krasnoff
Chairman and Chief
Executive Officer

Jeremy Hayward-Surry
President, Treasurer and
Chief Financial Officer

Derek Williams
Executive Vice President and
Chief Operating Officer

Donald Nicholls
Executive Vice President

Group Vice Presidents

Clifton Hutchings
Gerhard Weich
Arnold Weiner
Samuel Wortham

Secretary

Peter Schwartzman

Senior Vice Presidents

Dr. Joseph Adiletta
Peter Cope
Dr. Peter Degen
Robert Festa
Dr. Thomas Gsell
Erwin Kirnbauer
Dr. Vlado Matkovich
John Miller
Dr. Roger Page
Akio Satake
Robert Simkins
Donald Stevens

Vice Presidents

Dr. Leonard Bensch
Jane Block
Thomas Bormann
Claude Broussy
Jack Cole
John Farris
Terry Flack
Anthony Gatland
Stephen Geibel
Charles Grimm
Dr. Martin Hirsch
Patricia Iannucci
Sakae Isohata
Dr. Hyman Katz
Paul Kohn
Neil MacDonald
William Palmer
Clarence Treppa
Gilbert Weiner
Marcus Wilson
Charles Wolowitz

Directors

Abraham Appel(2,3,4,5)
President, Appel
Consultants, Inc.,
Toronto, Canada

Ulric Haynes(3)
Dean, The Frank G. Zarb
School of Business
at Hofstra University,
Hempstead, New York

Jeremy Hayward-Surry(1)
President, Treasurer and
Chief Financial Officer
of Pall Corporation

Eric Krasnoff(1)
Chairman and Chief
Executive Officer
of Pall Corporation

Dr. Edwin Martin, Jr.(4,5)
President Emeritus,
The National Center for
Disability Services,
Albertson, New York

Dr. David Pall(1)
Founder Chairman
of Pall Corporation

Katharine Plourde
Principal,
Donaldson, Lufkin &
Jenrette Inc.
New York, New York

Chesterfield Seibert(2,3,5)
Retired Chairman and
Chief Executive Officer,
Marietta Corporation,
Cortland, New York;
Retired Executive Vice
President of
Pall Corporation

Heywood Shelley
Partner,
Carter, Ledyard & Milburn
Attorneys,
New York, New York

Alan Slifka(4)
Managing Partner,
Alan B. Slifka and
Company/Halcyon
Partnership,
New York, New York

Dr. James Watson(2)
President, Cold Spring
Harbor Laboratory,
Cold Spring Harbor,
New York

Derek Williams
Executive Vice President and
Chief Operating Officer
of Pall Corporation

Board Committees

(1) Executive
(2) Audit
(3) Compensation
(4) Stock Option
(5) Nominating

Corporate Headquarters

2200 Northern Boulevard
East Hills, New York 11548-1289
Telephone: 516-484-5400
Fax: 516-484-3529

Principal Plants

Glen Cove, East Hills,
Port Washington, Hauppauge
and Cortland, New York

Pinellas Park, New Port Richey
and Fort Myers, Florida

Covina, California

Putnam, Connecticut

Northborough, Massachusetts

Fajardo, Puerto Rico

Portsmouth, Ilfracombe,
Newquay and Redruth, England

Tsukuba, Japan

Counsel

Carter, Ledyard & Milburn
New York, New York

Patent Counsel

Leydig, Voit & Mayer
Chicago, Illinois

Auditors

KPMG Peat Marwick LLP
Jericho, New York

Registrar and Transfer Agent

Wachovia Bank of
North Carolina, N.A.
Corporate Trust Department
301 North Church Street
P.O. Box 3001
Winston-Salem, NC 27102
1-800-633-4236 or 910-770-5821

Annual Shareholders' Meeting

Tuesday, November 21, 1995
2:30 p.m., The Garden City Hotel
Garden City, New York 11530

Dividend Reinvestment Plan
Shareholders have a convenient opportunity for automatic reinvestment of cash dividends and voluntary cash investments in the Company's stock through the Dividend Reinvestment Plan. Participating shareholders pay no brokerage commissions or other charges on purchases of shares under the Plan; all such commissions and charges are paid by the Company.

You must own at least 50 shares of Pall Common Stock to join the Dividend Reinvestment Plan (or to rejoin if your participation in the Plan has terminated). As a Plan participant, whether or not you have elected to reinvest your dividends, you can make voluntary cash contributions of $100 or more at any time subject to a maximum of $5,000 a month.

Direct Deposit of Cash Dividends
Shareholders can choose to have dividend payments automatically deposited to checking, savings, or money market accounts at any financial institution that participates in the Automated Clearing House system. The Deposit will occur on the dividend payment date, thus providing immediate access to funds. The Direct Deposit of Cash Dividends Service is provided free of charge.

Shareholders interested in participating in either the Dividend Reinvestment Plan or the Direct Deposit of Cash Dividends Service should contact our Registrar and Transfer Agent.

Investor Relations

You may obtain, at no cost, copies of Pall Corporation's Form 10-K Report from:
Pall Corporation
Investor Communications Manager
25 Harbor Park Drive
Port Washington, NY 11050-4630
Telephone: 1-800-205-7255
In New York State: 516-484-3600
Fax: 516-484-3649
E-Mail Address:
invrel@pall.com

Trademarks

All product names appearing in type form different from that of the surrounding text are trademarks owned by Pall Corporation or its subsidiaries.

Additional Information

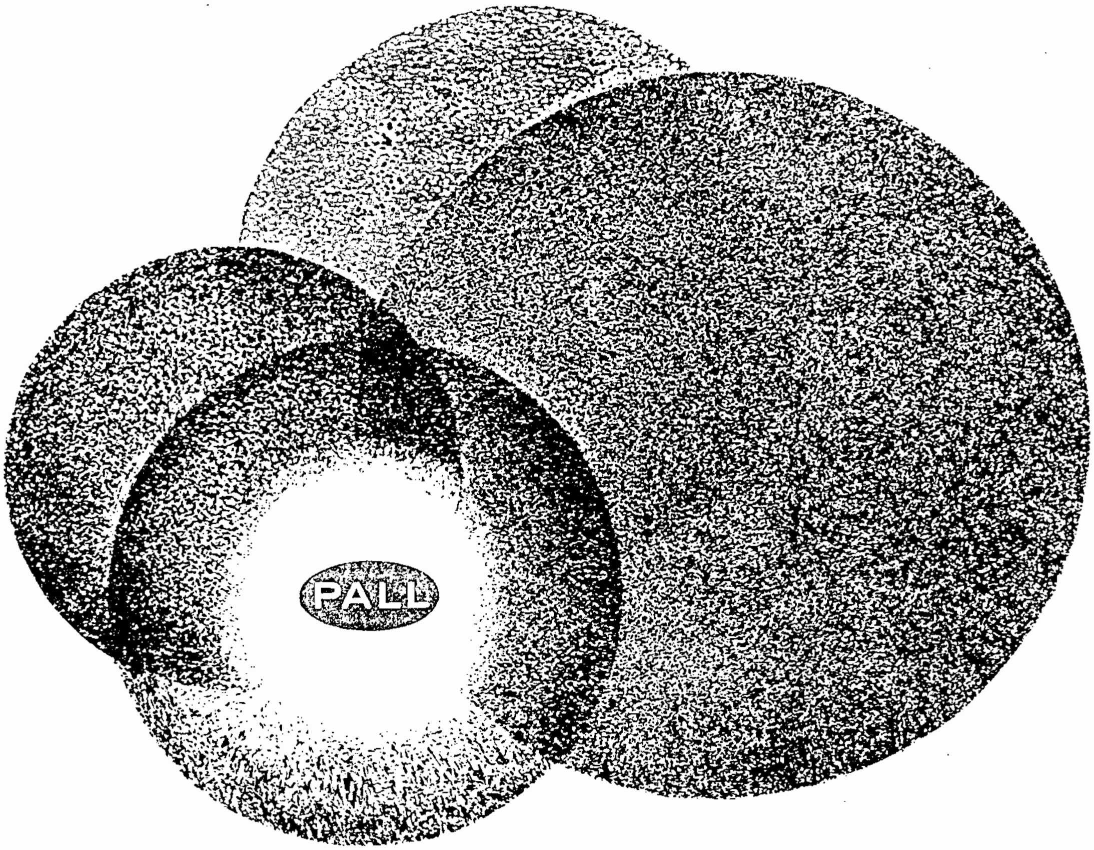
Pall Corporation is an equal opportunity employer and maintains affirmative action programs covering minorities, women, the handicapped, disabled veterans and veterans of the Vietnam era.

♻ This report has been printed on recycled paper.

The papers used in this annual report were manufactured in mills that use Pall filters on their paper machines.

EXHIBIT
G

"Office
Copy"



PALL
CORPORATION

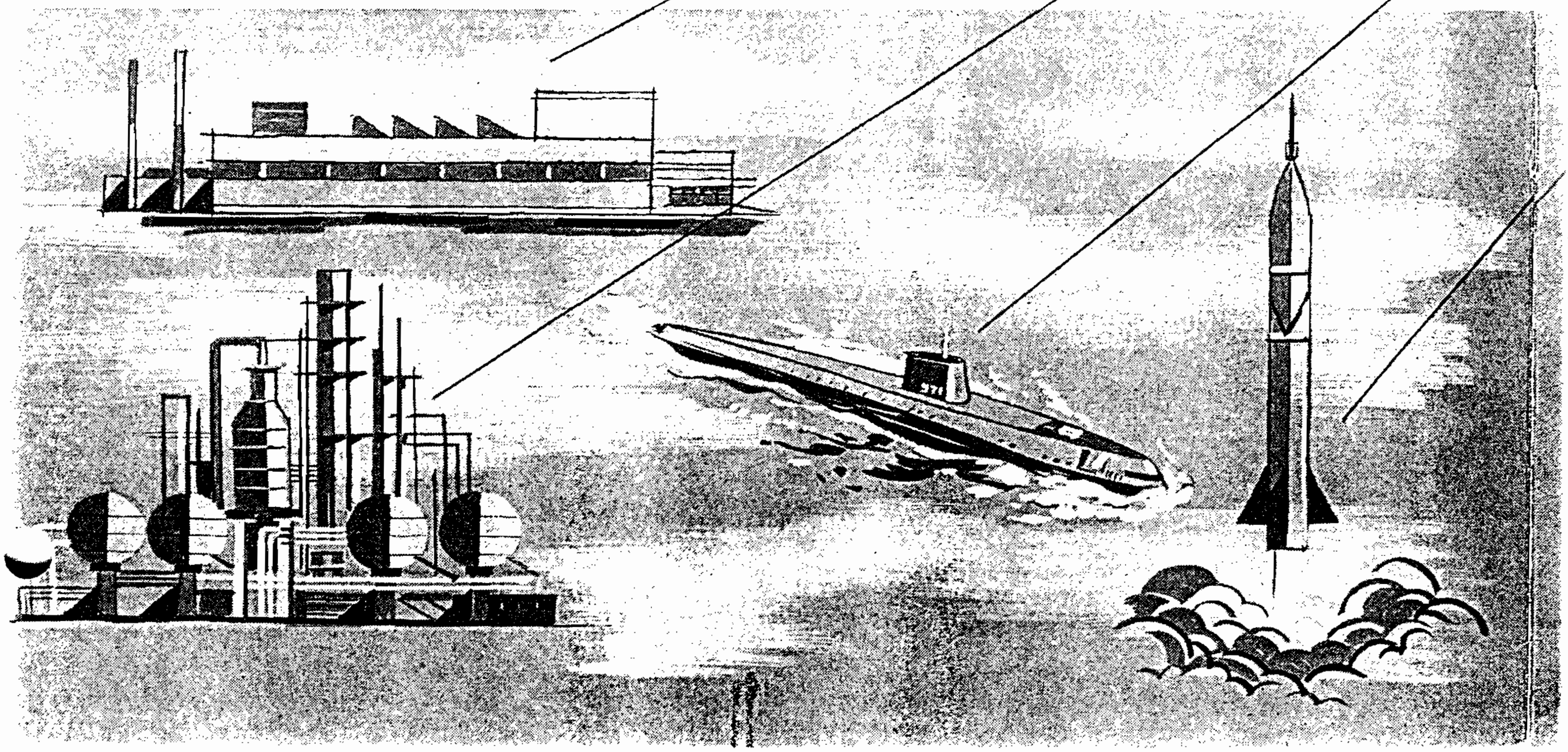
ANNUAL REPORT

for the year ended July 31, 1958

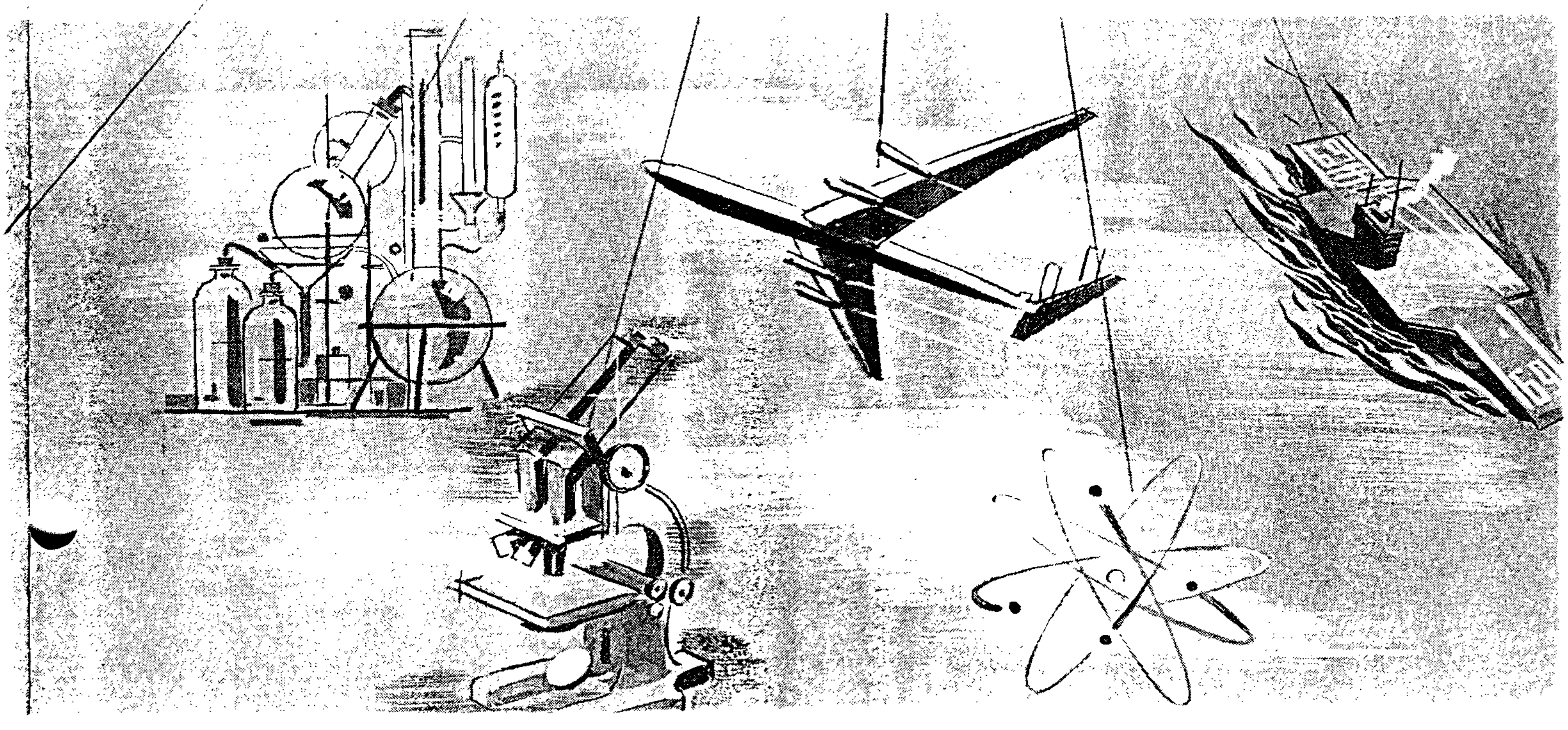
THE FUTURE IS UPON US...

We live in an age of wonder drugs, synthetic materials, atomic power and space flight; with science and technology progressing in ever accelerated tempo.

Playing vital roles in the amazing accomplishments of our time, filter media and filtration equipment contribute efficiency, reliability and safety to twentieth century methods and materials. The products of Pall Corporation range widely in use from research to industry; from manufacture of consumer goods to the operation of atomic submarines. Pall is geared to the world of today; is helping to build our world of tomorrow.



PALL
CORPORATION
GLEN COVE, N.Y.



DEAR STOCKHOLDER

In this, our first published annual report, we have a threefold purpose: first, to tell you something of our business philosophy and aims; second, to acquaint you with the history and development of Pall Corporation, including the results of operations for the past year; third, to describe our analysis of expectations for the coming year, and of new developments in our organization and products.

Micro Metallic Company (incorporated as Micro Metallic Corporation in 1946) was established in 1944. It started as a single individual (the undersigned) with an idea concerning one product. The product was porous stainless steel, which, it was hoped, would find a market in the chemical industry. It was felt that porous stainless steel would fill a need for filters capable of withstanding high temperatures, high pressures and corrosive conditions. The product had never been made, and a technically difficult process had to be developed. Nevertheless, a successful market was developed in a comparatively short time.

This epitomizes our philosophy even today.

Our development efforts are centered on products requiring a high degree of specialized technical skill to fill needs in major markets. High quality of product and complete engineering service to the customer are by-words of our operation.

The historical section of this report will show you how we grew with this guiding philosophy, and the new development section will bring you up to date on our latest products and operations.

We have just completed our fourth consecutive year of substantial increase in volume and profit with earnings of $1.01 per share, or an increase of about one third over the prior year. Volume was similarly higher.

With a backlog of $1,200,000 on August 1, the start of our new fiscal year, quotations for all of our products at a high level, and four new products in beginning production, we view our prospects for the coming year with confidence.

For their excellent performance in the past and their continued key role in the future we thank the nearly 200 fine men and women of our organization.

David B Pall

DAVID B. PALL
President

FISCAL HIGHLIGHTS

	Year Ended July 31	
	1958	*1957*
Consolidated Net Sales	$3,232,407	$2,464,505
Earnings Before Taxes	$ 381,562	$ 296,650
Taxes on Income	$ 179,243	$ 138,859
Earnings After Taxes	$ 202,319	$ 157,791
Per Common Share	$1.01	79¢
Dividends Per Class A Share*	37½¢	None
Total Assets	$1,451,481	$1,020,843
Invested in Capital Assets at end of year	$ 424,678	$ 321,501
Working Capital at end of year	$ 530,662	$ 363,654

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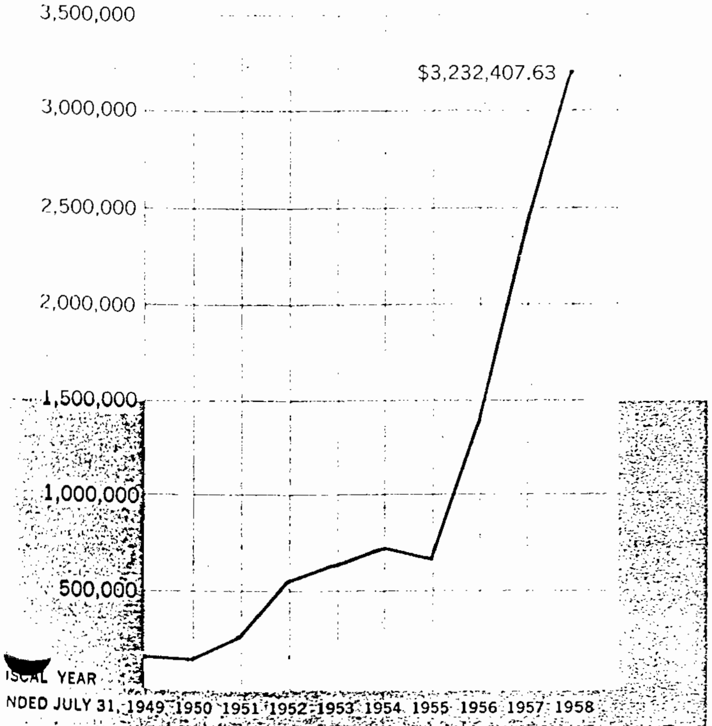
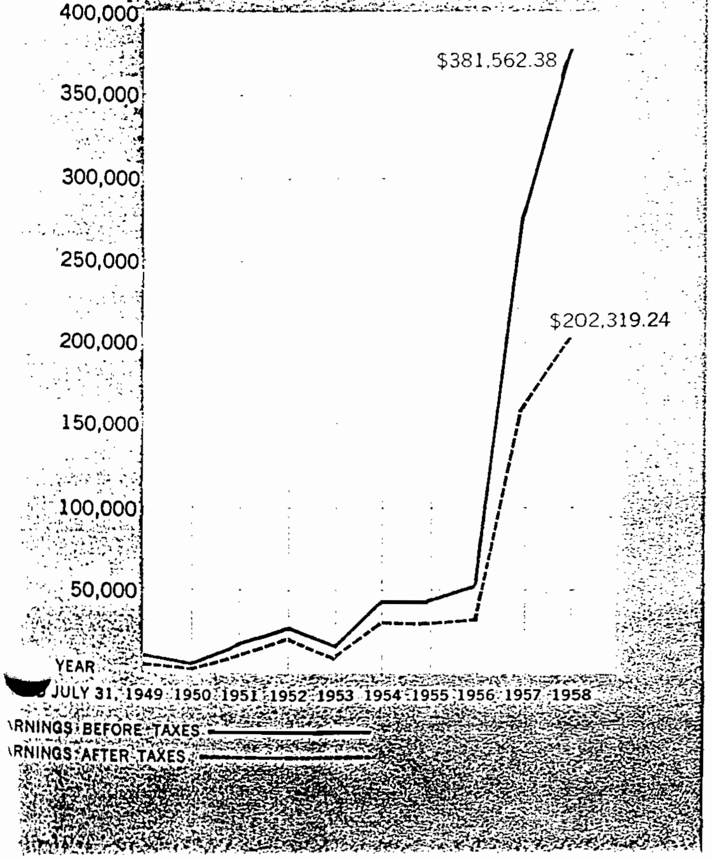
* Quarterly dividends of 12½¢ per share declared in January, April and July 1958.

SALES • 1949-1958



EARNINGS • 1949-1958



THE PAST AND PRESENT

Your Company was incorporated in New York in 1946 under the name Micro Metallic Corporation, which it continued to use until November, 1957, when it changed its name in recognition of the contribution made to its development by Dr. David B. Pall, its principal executive officer.

Nearly all the filtration equipment manufactured by the Company utilizes, as the filtering medium, sintered stainless steel (known as porous stainless steel under the trademark "PSS"); sintered woven stainless steel (which is sold under the trademark "Rigimesh"); or various porous plastic compositions. This Company was the first to develop successfully filtering media using each of these three types of material.

During the past 12 years, Company sales have grown from $33,000 in 1947 to $3,232,000 in the fiscal year ended July 31, 1958. Developments in the jet engine, missile, atomic energy, chemical processing and other fields in the last ten years have greatly accelerated the demand for filtration equipment of the types manufactured by the Company because of their capability of operating under conditions created by high temperatures, high pressure and corrosive chemicals, fluids and gases. The Company maintains extensive laboratory facilities and a staff of about 40 qualified engineers and scientists in design, application, testing and prototype manufacture work. The Company is unusual, if not unique, in the degree to which it is able to furnish assistance in this industry to its customers in designing products for their specialized needs.

WHO, WHAT AND WHERE WE ARE

Micro Metallic Division concentrates for the most part on the production of porous stainless steel filters for industrial use.

Aircraft Porous Media, Inc. produces "Rigimesh" sintered wire cloth filters, principally for airborne use.

Micro Metallic Nassau Co., Inc. & Glen Properties, Inc. own and operate real estate which includes the Company's plant and land.

Micro Filter Sales Corp. is a western hemisphere trade corporation which sells the Company's products in Canada.

Porous Plastic Filter Co., Inc. produces chemically inert porous plastic filters for industrial and commercial use.

All of these subsidiaries are wholly owned by Pall.

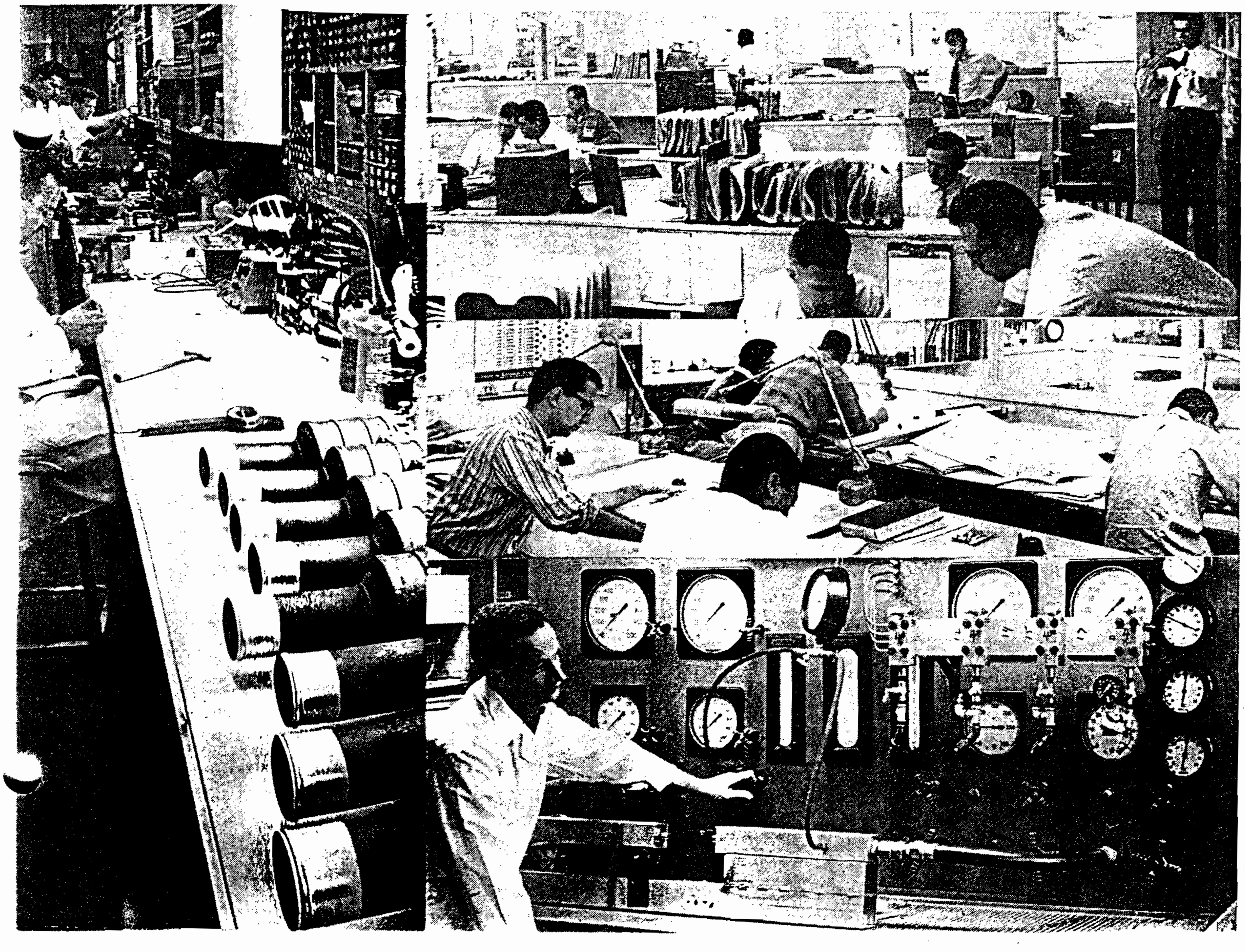
60% owned **Fibrous Glass Products, Inc.** manufactures thermal, shock and vibration insulation materials of molded fiber glass for a wide variety of applications as well as fiber glass filters.

60% owned **Glen Components Corp.** with extensive machine tool facilities is in the business of precision machining of hydraulic and electronic components and provides machine facilities for Aircraft Porous Media, Inc.

Two plants, located on a 5¼ acre site in Glen Cove, Long Island, occupy 35,000 square feet. The buildings are nearly all concrete block and sprinklered When acquired, the building consisted of 8,000 square feet constructed during the 1920's. The Company rebuilt an additional 4,000 square foot area which had been destroyed by fire prior to acquisition. It has since added at various times construction aggregating 23,000 square feet of new plant and office space. The plant has a dust-free assembly area and two testing laboratories. Including office, plant and laboratories there are about 20,000 square feet of air-conditioned space. In addition to the above, plans are in process to replace an 8,000 square foot rented plant in Hicksville, Long Island with a 10,000 square foot building on a two acre site in Nassau County, Long Island, and to add 5,000 square feet of engineering and manufacturing space to the main plant.

The Company's equipment, in addition to standard machine tools, includes many unique items. The equipment used for manufacturing the various sintered materials, and for manufacture and testing of aircraft filters is largely designed and built by the Company in line with its own processes. Such equipment embodies useful and original features not generally available to the industry. Similar unique equipment is used in molding plastic filters and fibrous glass.

The Company has approximately 200 employees, of which 120 are factory employees; 40 engineers and scientists; the remaining are drafting, office, administrative and executive workers. The factory employees are represented by Local 365, United Automobile Workers. The present contract, expiring June 6, 1959, reflects better than average wage rates and working conditions. The Company also provides insurance, hospitalization, and other benefits. There have been no labor disturbances since it began operations.



OUR CUSTOMERS

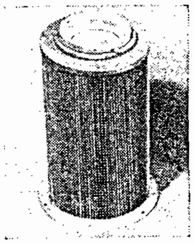
Our customers include a substantial proportion of the country's larger corporations. Some of the principal applications of our products are:

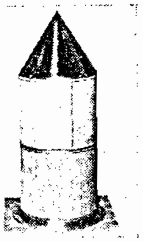
AIRCRAFT AND MISSILES

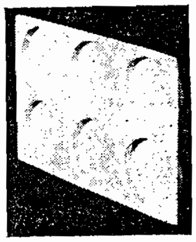
The Company's products are used in filtration of fuels, hydraulic and lubricating oils, and air and other gases. Most modern commercial and military aircraft are fitted with our filters; including Douglas' DC-8, the Lockheed 1649 Constellation, all Century series fighters, the B-52 and the C-130. Pure jet and turbo prop engines also utilize the Company's filters including General Electric's J-79, Pratt & Whitney's J-75 and Curtiss-Wright's J-65W12. They are also used in all major missiles, and many smaller ones, including both ICBM's and the Army's Jupiter IRBM.

Initial production orders of porous stainless steel sheets have been delivered for use in boundary layer control of military jet aircraft. In this application turbulence is reduced and landing speeds are lowered as air is sucked through the porous material. Rigimesh as a "transpiration-cooled" wall in jet engine burner liners is also in test production. As a result of passing cooling gases through such a wall, lower wall temperatures are maintained, resulting in longer engine life. Porous stainless steel also is used as a de-icing device on the leading edge of the wing of several aircraft.

Molded fiber glass is used in many special applications including insulation of nose cones.

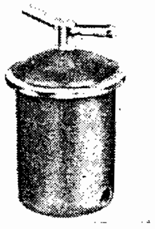






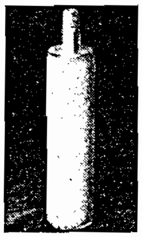
ATOMIC ENERGY

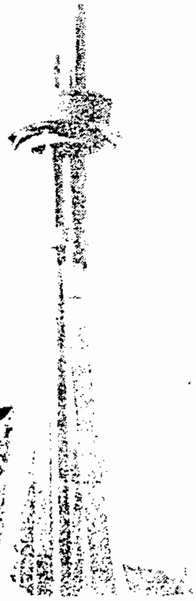
Virtually all atomic energy plants and atomic research laboratories in the United States are among the Company's regular customers. Applications range from the filtration of molten metal alloys to processes in the handling of uranium ore. The Company provided filters for the first atomic power plant (which was constructed for the submarine Nautilus) and for most other atomic power plants including the Skate and other submarines.

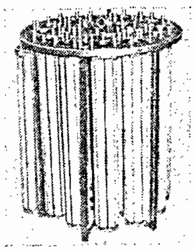


CHEMICAL

The Company makes filters used in the manufacture of Du Pont's Mylar, nylon, and plastics manufactured by other companies. In the filtration of liquids and gases there is a wide variety of applications in the chemical industry.

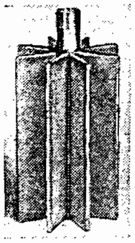






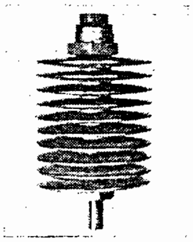
PETROCHEMICAL

Large retention systems using porous stainless steel have been installed in the petrochemical industry to recover costly fluid catalysts. An example is in the conversion of natural gas to gasoline, hydrocarbons, and other chemicals in the South African plant of "SASOL," engineered by The M. W. Kellogg Co. This plant is now being increased in capacity after several years of successful operation. Porous metal filters for general purposes are also widely used in this industry.



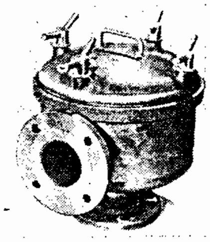
PHARMACEUTICAL

The Company sells filters for sterilizing systems in the production of pharmaceuticals, process water systems, ampoule washing, and in the manufacture of vaccines and antibiotics.



ELECTRONICS

The principal applications in this industry are the filtration of matter used to coat television tubes and the production of devices to filter air used in cooling instrument housings.



METALLURGICAL

The Company makes filters for use in purifying sodium in the production of titanium metal, in addition to other refining processes.

As the President's letter indicated these markets grew through our constant readiness to recognize industrial needs and to develop products to fill them.

Porous stainless steel was the first such product and today's improved version is, we believe, the largest powder metallurgy product made in the world, as well as the principal consumer of fine stainless steel powder. New types of PSS filters are constantly developed for special needs of our customers, while our standard types are found in plants throughout the world.

Porous Teflon and Kel-F, uniquely inert to most corrosives, were developed to meet special needs of our customers.

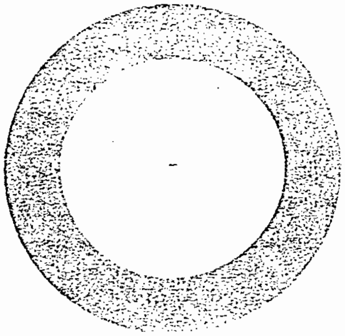
Several years ago the growing need of the aircraft and missile industries, with which we had had little previous contact, for high pressure, high temperature, high quality filters small in size and weight came to our attention. The then existing aircraft filter industry appeared unprepared for meeting these needs and we entered the field with the development of "Rigimesh." This has proved to be the most important new development in fine filtration since our own porous stainless steel 10 years earlier. The use of "Rigimesh" has spread from aircraft and missiles to many industrial applications.

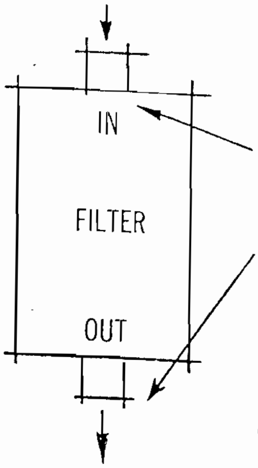
More recent developments will be discussed in the section entitled THE FUTURE.

A LEXICON

We think this page will help you to understand your Company's main products and what we do as you read about our new developments. Most of our filters clarify liquids and gases by removing particles ranging in size from fractions of a micron to 10 microns (and larger, of course). Their ability to hold large quantities of particles before causing an excessive pressure drop (called Dirt Holding Capacity) is an important design feature.

The line in the center of this circle is 1000 microns (4/100 of an inch) wide. A particle 25 microns in diameter is too small to be seen by the naked eye.





PRESSURE DROP is *the difference in pressure* of a fluid entering a filter *here* and the lower pressure when it comes out *here.*

Pressure drop increases as dirt collects in the filter element.

This is POROUS STAINLESS STEEL with an average hole size of 20 microns. (Blow smoke through this to see how permeable it is)

This is RIGIMESH with an average hole size of 18 microns.

Filters are rarely supplied as simple flat sheets. Usually the filter material is formed and combined with solid metal parts, in order to make it most useful. By such fabrication, RIGIMESH like the sample can be made to withstand 5,000 pounds per square inch pressure drop.

THE FUTURE

NEW ORGANIZATIONAL DEVELOPMENTS

In the months to come our two 60% owned subsidiaries, **Glen Components Corp. & Fibrous Glass Products, Inc.** are expected to develop to a point where they will make substantial contributions to our growth and stability.

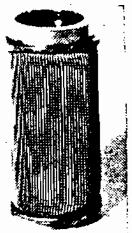
Glen Components Corp. began operations in its own 6,000 square foot building in August, 1958 fully equipped and staffed to produce precision hydraulic components. With its almost 100 machine tools, Glen Components is a major addition to Aircraft Porous Media's manufacturing capacity; it will make many items now subcontracted, and enable us to provide increased service to our customers.

Fibrous Glass Products, Inc. was at a very low ebb when we acquired our interest late in 1957. Our purpose was primarily to protect our source of molded fiber glass filters developed by Porous Plastic Filter Co., Inc. Under the impetus of revitalized management and technical and financial aid, this organization is now becoming a significant factor in its field.

Fibrous Glass Products' sales and backlog have risen almost every month since January. In addition to its custom molded products for military and industrial customers it is tooled and in production on pipe fitting insulation which is increasingly being specified on large construction projects such as office buildings, schools and industrial plants. Our progress in this area has been aided considerably by the close cooperation of Owens-Corning Fiberglas Corp. Filtration applications have also been found. Fiber glass filters are presently being marketed on a limited basis and Porous Plastic Filter Co., Inc. is working on projects which we hope will extend the market.

NEW PRODUCT DEVELOPMENTS

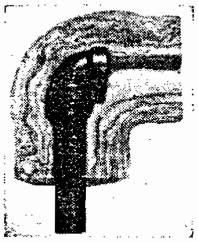
Supramesh,® a new type of metallic filter which accomplishes extremely fine filtration and high dirt holding capacity with unusually small size. Just introduced commercially this product is already in use on submarines and airborne applications. It is the only filter currently on the market capable of meeting an important new proposed military standard for airborne and missileborne filters.



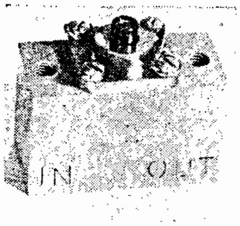
Certipore®: Using a plastic filter medium, this product has application in a variety of fields. Certipore filters are the only high capacity filters on the market capable of removing *all* particles above 3 microns (about 1/20th the size of the smallest visible particles). Initial sales of Certipore have been made for use in missile servicing and launching equipment.

Capillator, a porous plastic for dispensing such products as lotions, deodorants, etc., this product was developed to compete with spray bottles and "roll on" applicators, and is presently being field-tested by a large toilet article manufacturer.

Fitrite: In contrast to competitive products our pipe fitting insulation is premolded to the shape of the pipe fitting. Only on the market a few months it has been well received by the construction industry.



Differential Pressure Indicator: An as yet unnamed new product — but an extremely promising one — is our newly developed pressure drop indicator. Small, light weight and relatively inexpensive in large quantities, this item has a considerable number of applications in the aircraft and missile industries as well as a variety of other fields. It has caused more excitement among our customers than any product since the introduction of "Rigimesh."



Sales of all five of these new products have already been made and at least three could make material contributions to sales in fiscal 1959. A number of promising new products are in various stages of development at this time, in keeping with your company's policy of continuous research and development of proprietary specialties for industry.

ROBBINS, GREENE & SOSNOFF
Certified Public Accountants
745 FIFTH AVENUE
NEW YORK 22, N. Y.

Board of Directors,
PALL CORPORATION
30 Sea Cliff Avenue,
Glen Cove, New York

We have examined the consolidated balance sheet of Pall Corporation and its wholly-owned subsidiaries as at July 31, 1958 and the related consolidated statements of earnings, retained earnings and capital in excess of par value for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying consolidated balance sheet and related consolidated statements of earnings, retained earnings and capital in excess of par value present fairly the financial position of Pall Corporation and its wholly-owned subsidiaries as at July 31, 1958 and the results of operations for the year then ended, in conformity with generally accepted accounting principles consistently applied.

ROBBINS, GREENE & SOSNOFF

New York, New York
September 25, 1958.

PALL CORPORATION

AND WHOLLY-OWNED SUBSIDIARIES

CONSOLIDATED

STATEMENT OF EARNINGS

for the year ended July 31, 1958

Net sales	$3,232,407.63
Cost of sales	2,235,915.35
Gross profit on sales	996,492.28
Selling, general and administrative expenses	618,255.82
Earnings from operations	378,236.46
Rent and miscellaneous income	3,325.92
Earnings before provision for federal and state income taxes	381,562.38
Provision for federal and state income taxes	179,243.14
EARNINGS — FOR THE YEAR ENDED JULY 31, 1958	$ 202,319.24

CONSOLIDATED STATEMENT [illegible]

Balance, beginning of fiscal year	$ 291,309.09
Add: Net earnings — for the year ended July 31, 1958	202,319.24
	493,628.33
Deduct: Transfer to Class B stock in connection with reclassification of 105 shares of no-par value stock issued for $26,208.00, into 77,700 shares of Class B stock	51,492.00
Cash dividend — Class A stock	7,500.00
Cash dividend — Class B stock	675.00
Transfer to Class B stock in connection with the issuance of 80,338 shares to acquire stock of the subsidiary companies issued for $1,285.00	79,053.00
	138,720.00
RETAINED EARNINGS — AS AT JULY 31, 1958	$ 354,908.33

CONSOLIDATED [illegible]

Balance, beginning of fiscal year	None
Add: Capital in excess of par value arising from the issuance of Class B stock of $1.00 par value, as follows:	
1 — 20,062 shares for $100,310.00 of stockholders loans	$ 80,248.00
2 — 1,900 shares for $9,500.00 of debenture bonds payable	7,600.00
Capital in excess of par value arising from the issuance of 20,000 shares of Class A stock of $1.00 par value at $5.00 per share	80,000.00
	167,848.00
Deduct: Commissions, printing costs, legal fees, etc. incurred in connection with the issuance of Class A stock	14,812.89
CAPITAL IN EXCESS OF PAR VALUE — AS AT JULY 31, 1958	$ 153,035.11

The comments contained in the accompanying Notes to Financial Statements are an integral part of these statements and should be read in conjunction herewith.

PALL CORPORATION AND W

CONSOLIDATED B

AS AT J

ASSETS

CURRENT ASSETS:		
Cash on hand and in bank	$ 75,564.12	
Accounts receivable	395,937.99	
Advances to partly-owned subsidiary	53,035.91	
Miscellaneous receivables	9,837.99	
Advance on purchase	4,049.52	
Prepaid expenses	16,355.56	
Merchandise inventory	526,474.19	
TOTAL CURRENT ASSETS		$1,081,255.28
FIXED ASSETS — AT COST:		
Land	$ 21,800.00	
Buildings, machinery, equipment, etc., less accumulated depreciation of $117,265.59	285,613.01	
TOTAL FIXED ASSETS		307,413.01
OTHER ASSETS:		
Investment in capital stock of partly-owned subsidiary	$ 14,430.00	
Advances to partly-owned subsidiary	47,478.3[illegible]	
Deferred charges and deposits	902.50	
Research and development	1.00	
Patent rights	1.00	
TOTAL OTHER ASSETS		62,812.84
TOTAL ASSETS		$1,451,481.13

NOTES TO FINANCIAL STATEMENTS A

NOTE 1 — CONSOLIDATION OF STATEMENTS • The statements of Pall Corporation are presented in consolidation with its wholly-owned subsidiaries: Aircraft Porous Media, Inc., Micro Metallic Nassau Co., Inc., Micro Filter Sales Corp., Porous Plastic Filter Co., Inc. and Glen Properties, Inc. Intercompany transactions have been eliminated. There are no unrealized profits from intercompany transactions.

The accounts of Glen Components Corp., a 60% owned subsidiary not yet in operation, are not consolidated; nor are those of Fibrous Glass Products, Inc., a 60% owned subsidiary acquired during the last fiscal year, whose operations for the nine months ended July 31, 1958 resulted in a net loss of $29,105.14.

NOTE 2 — MERCHANDISE INVENTORY • Merchandise inventory was taken under our supervision and was priced at the lower of cost (on the first-in first-out basis) or market. Raw materials, including materials entering into work in process and finished goods, were priced on the basis of average cost. Charges for labor and overhead included in finished goods are based mainly on cost.

Opening and closing merchandise inventories used in the computation of cost of sales for the year ended July 31, 1958 are as follows: July 31, 1957 — $292,517.29; and July 31, 1958 — $526,474.19.

NOTE 3 — FIXED ASSETS • The amount at which fixed assets are stated in the consolidated balance sheet represents cost, after accumulated depreciation.

The fixed assets and respective accumulations of depreciation are as follows:

	Cost	*Accumulated Depreciation*	*Net*
Machinery and equipment	$207,067.28	$ 84,847.62	$122,219.66
Office furniture and equipment	27,259.79	5,993.14	21,266.65
Automobiles	9,454.76	3,993.74	5,461.02
Buildings	159,096.77	22,431.09	136,665.68
Land	21,800.00	—	21,800.00
	$424,678.60	$117,265.59	$307,413.01

WHOLLY-OWNED SUBSIDIARIES

BALANCE SHEET

JULY 31, 1958

LIABILITIES AND STOCKHOLDERS' EQUITY

CURRENT LIABILITIES:		
Accounts payable	$179,648.32	
Loan payable	20,000.00	
Accrued expenses payable	154,509.47	
Withheld income taxes	13,597.95	
Federal and state income taxes payable	179,243.14	
Mortgage payable — current portion	3,594.78	
TOTAL CURRENT LIABILITIES		$ 550,593.66
LONG-TERM DEBT:		
Mortgage payable — net of current portion	$ 14,911.80	
Debenture bonds payable	150,000.00	
Loans payable	28,032.23	
TOTAL LONG-TERM DEBT		192,944.03
TOTAL LIABILITIES		$ 743,537.69
STOCKHOLDERS' EQUITY:		
Class A stock, par value of $1.00 per share, 225,000 shares authorized, 20,000 shares issued and outstanding	$ 20,000.00	
Class B stock, par value of $1.00 per share, 180,000 shares authorized, issued and outstanding	180,000.00	
Capital in excess of par value	153,035.11	
Retained earnings	354,908.33	
TOTAL STOCKHOLDERS' EQUITY		707,943.44
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY		$1,451,481.13

AS AT JULY 31, 1958

Buildings includes new construction in progress in the amount of $10,085.83, as to which there is a commitment, upon completion, from the Nassau Trust Company, Glen Cove, New York, for a ten year self-liquidating first mortgage of $50,000.00 with interest at 5½% per annum.

No depreciation has been taken on construction in progress.

NOTE 4 — MORTGAGE PAYABLE • The building and one acre of land at 30 Sea Cliff Avenue, Glen Cove, New York, owned by Micro Metallic Nassau Co., Inc., is subject to a first mortgage held by The Franklin National Bank in the amount of $18,506.58 as at statement date. This mortgage bears an interest rate of 5% per annum and is self-liquidating by March 19, 1963.

Amortization on the mortgage for the fiscal year August 1, 1958 to July 31, 1959 will amount to $3,594.78.

NOTE 5 — DEBENTURE BONDS PAYABLE • Pall Corporation has outstanding $135,000.00 of 7½% debenture bonds due November 30, 1965. These bonds are callable, in whole or in part, upon thirty days written notice to registered bondholders. The registered owners may, at their option, request redemption of up to twenty percent of the original issue price during any one year ending November 30th, on a non-cumulative basis.

Micro Metallic Nassau Co., Inc. has outstanding $15,000.00 of 8% debenture bonds due September 30, 1960. The bonds are not redeemable.

NOTE 6 — CONVERTIBILITY OF STOCK • After December 2, 1958 shares of Class B stock are convertible, at the option of the holders thereof, into Class A stock on a share for share basis. Accordingly, 180,000 shares of Class A stock have been authorized and are reserved for such purpose.

NOTE 7 — DIVIDENDS • Under the provisions of the amendments to the certificate of incorporation dated November 12, 1957, any dividend declared on Class B stock shall be in an amount per share equal to 1% of the amount per share of the dividend then being declared or paid on the Class A stock.

NOTE 8 — RENEGOTIATION OF GOVERNMENT SUBCONTRACTS • Pall Corporation and Aircraft Porous Media, Inc. may be subject to renegotiation of government subcontracts performed during the last two fiscal years.

Since the companies are facing a possible renegotiation for the first time and no reliable precedent is available, no provision has been made for this contingency.

PALL CORPORATION

DIRECTORS

DR. DAVID B. PALL, *Chairman*
ABRAHAM KRASNOFF
DONALD M. HARRIS
JEROME S. SHULMAN

OFFICERS

DR. DAVID B. PALL, *President*
ABRAHAM KRASNOFF, *Vice President, Secretary & Treasurer*
DONALD M. HARRIS, *Assistant Secretary*

AUDITORS

ROBBINS, GREENE & SOSNOFF
745 Fifth Avenue
New York, New York

TRANSFER AGENT

THE FRANKLIN NATIONAL BANK
County Seat Office
Mineola, L. I., New York

CORPORATE STRUCTURE

DIVISION

MICRO METALLIC DIVISION
Industrial Filters; PSS® Porous Stainless Steel

WHOLLY OWNED SUBSIDIARIES

AIRCRAFT POROUS MEDIA, INC.
Aircraft and Missile Filters; Rigimesh® Sintered Wire Cloth

POROUS PLASTIC FILTER CO., INC.
Plastic and Fiber Glass Filters; Certipore® Membrane Filters

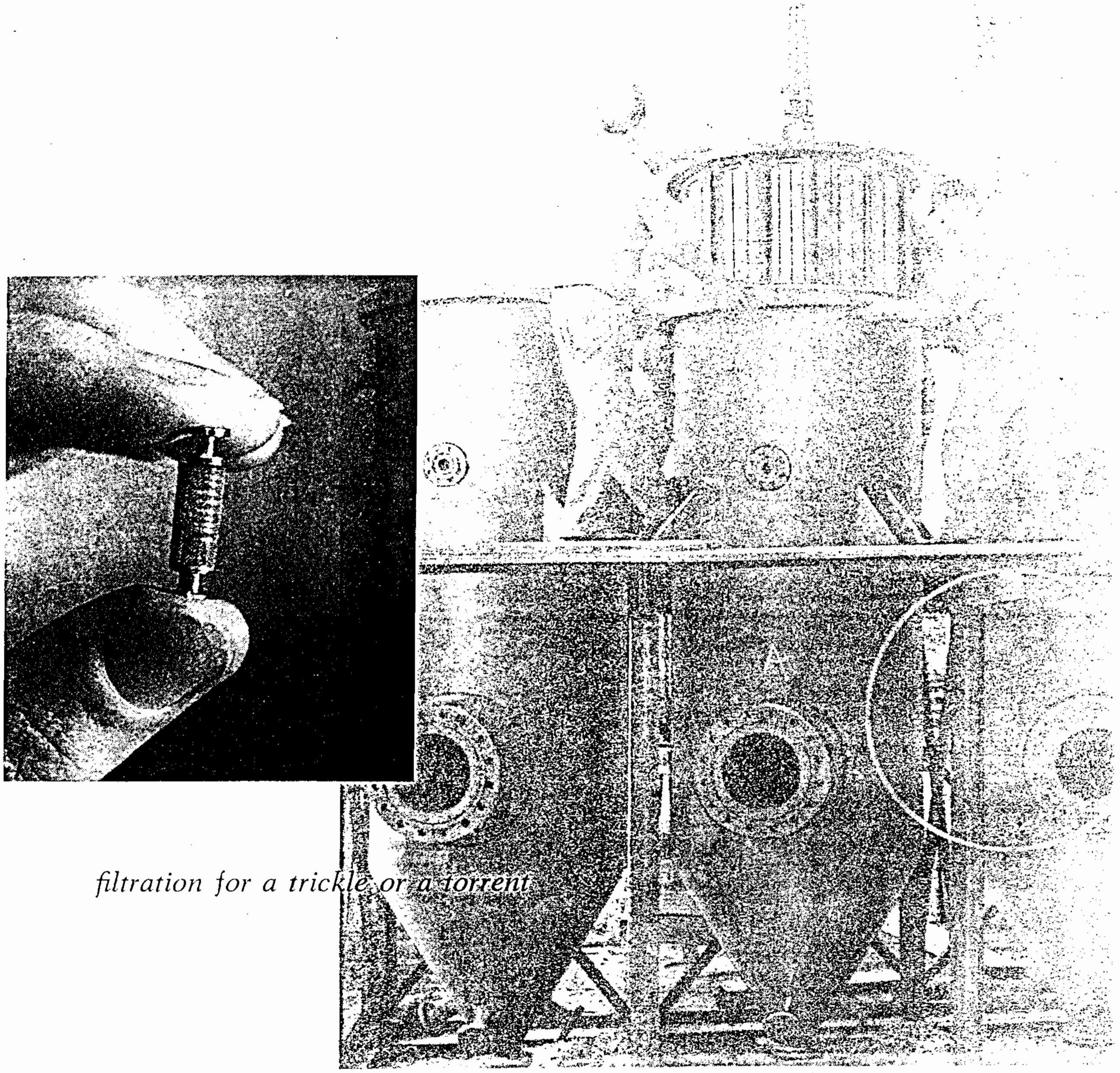
MICRO FILTER SALES CORP.
Sales to Canada

MICRO METALLIC NASSAU CO., INC. & GLEN PROPERTIES, INC.
Real Estate

50% OWNED SUBSIDIARIES

GLEN COMPONENTS CORP.
Machined Parts for Aircraft Hydraulics and Electronics
(Supplier to Aircraft Porous Media, Inc.)

FIBROUS GLASS PRODUCTS, INC.
Molded Fibrous Glass; Fitrite® Pipe Fitting Insulation

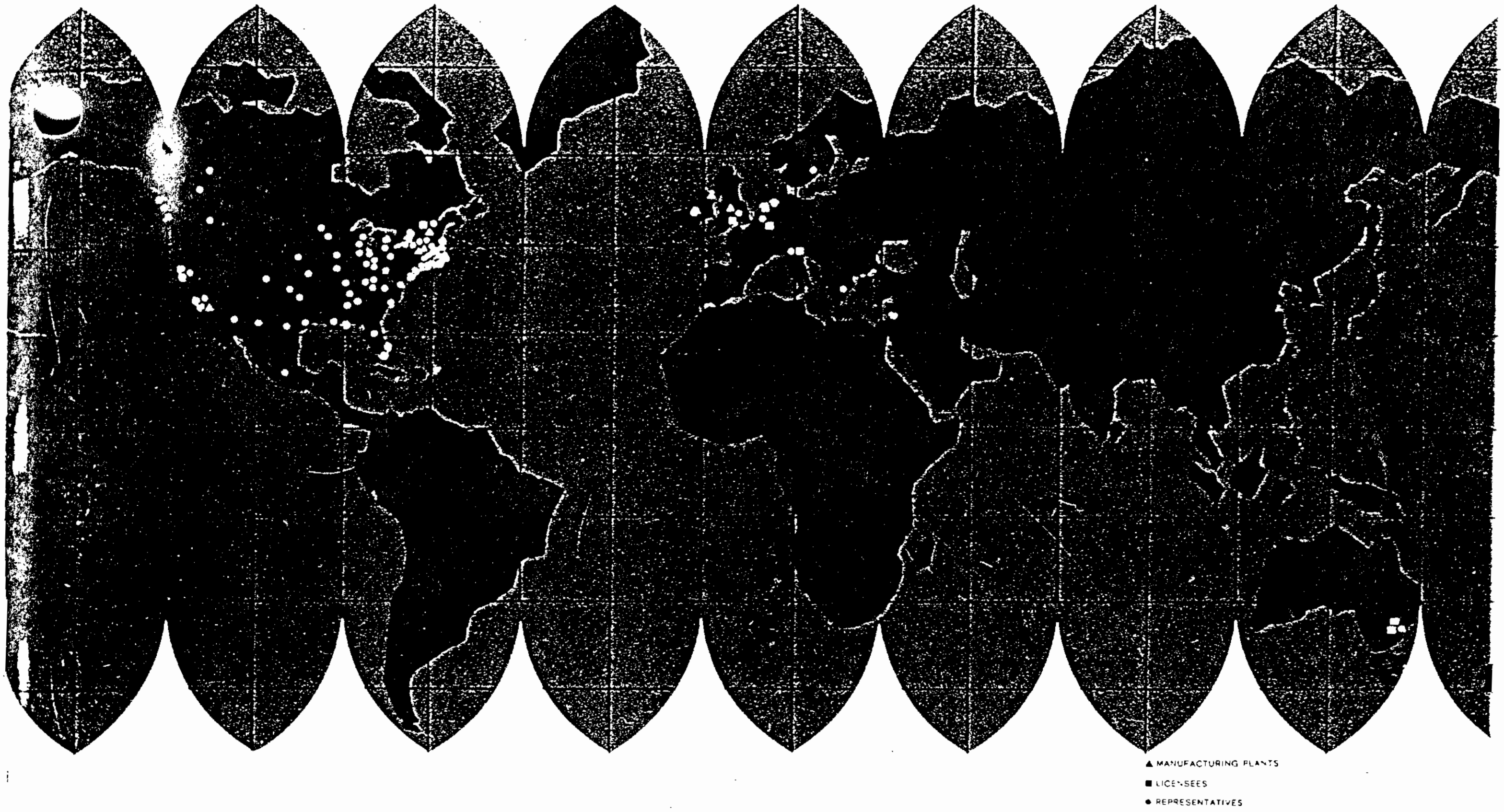


filtration for a trickle or a torrent

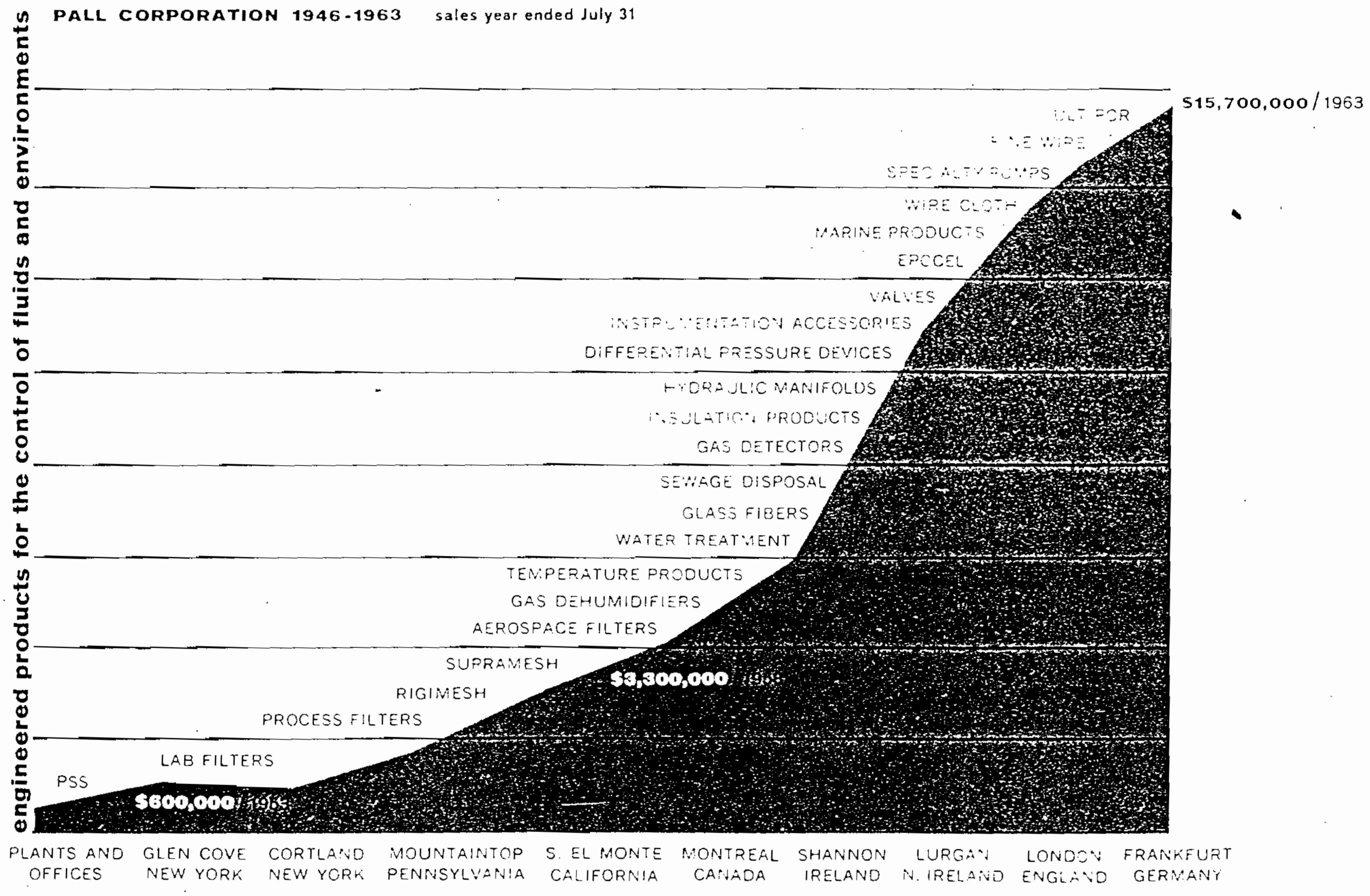
EXHIBIT

H

PALL CORPORATION 1963-64



engineered products for the control of fluids and environments



our only constancy is change

PALL CORPORATION 1963–64

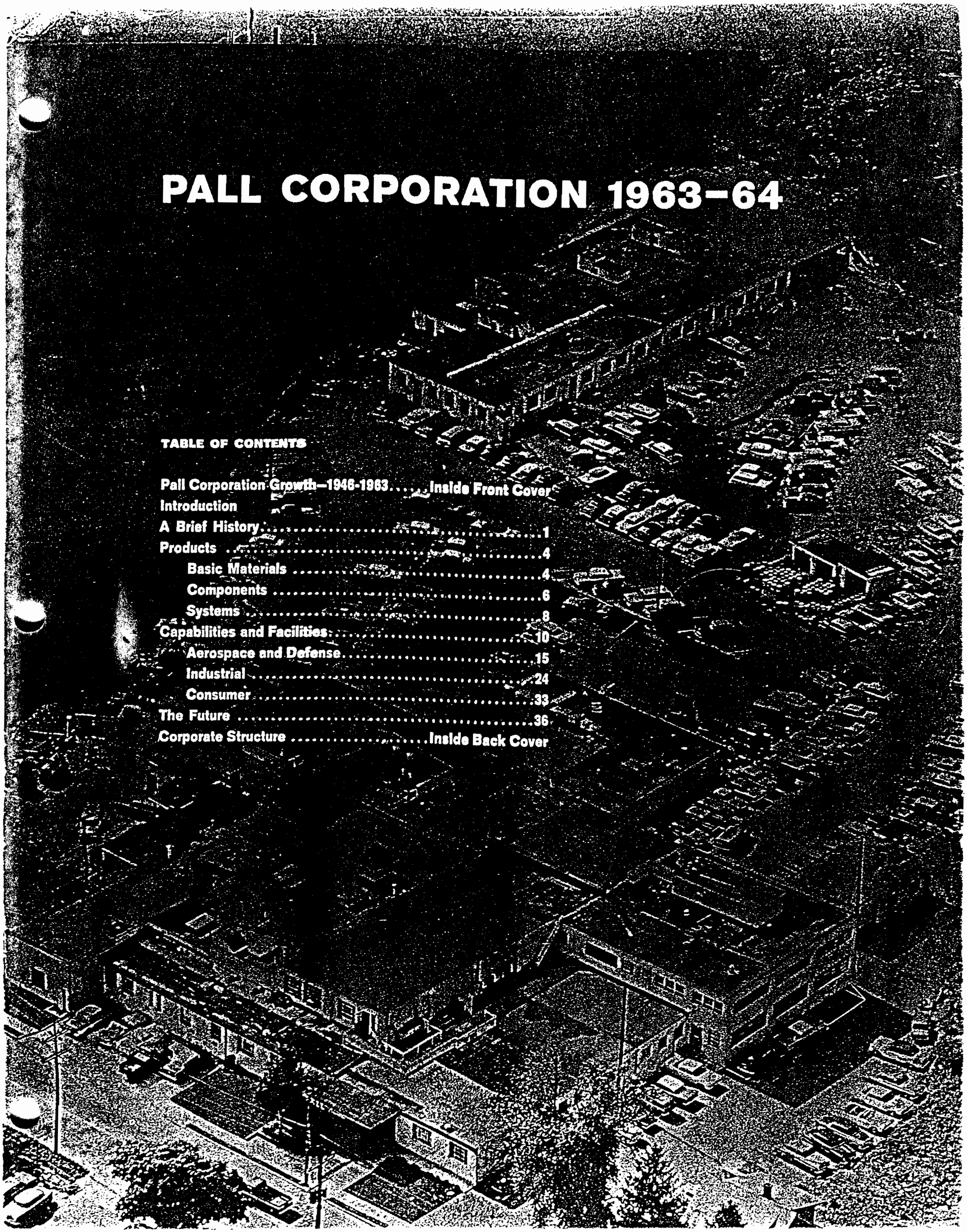


TABLE OF CONTENTS

A WORD OF INTRODUCTION . . .

We have made the statement that our only constancy is change — change for the better! It is for this reason that this report is dated. On the following pages you will find a description of our capabilities, products and facilities as they exist in the fall of 1963. Pall Corporation is a growing company and as we add to our world wide facilities, we will also add to the products needed to serve existing and new customers, to the advancement opportunities of our employees and to the equity of our shareholders. From time to time this report will be amended or supplemented to reflect the change that is certain to take place.

Raison d'etre

As technology advances in many industries, so does the need for closer controls and the utilization of fine tolerances, high temperatures, high pressures and corrosive atmospheres. Modern aerospace, marine and submarine systems require increasingly high levels of component reliability for safe and economical operation.

Population growth running ahead of large central sewage and water treatment facilities calls for safe, easily used and maintained sanitation products for the maintenance of health.

Increasing prosperity among the peoples of the world increases the demand for a more comfortable environment, and for simply operated safety devices in such leisure time activities as boating.

Pall products for the control of fluids and environments are designed to solve problems in all of these spheres of activity.

Pall research and development is organized to anticipate new needs.

Pall engineering, sales and manufacturing facilities are situated to serve on an international basis in our ever shrinking world.

BRIEF HISTORY

Following his invention of sintered porous stainless steel sheet (PSS^R), Dr. David B. Pall organized Pall Corporation (then known as Micro Metallic Corporation) in August, 1946. He planned to produce this new engineering material for filter manufacturers, on the premise that they would surely recognize its place in meeting the requirements of advancing technology.

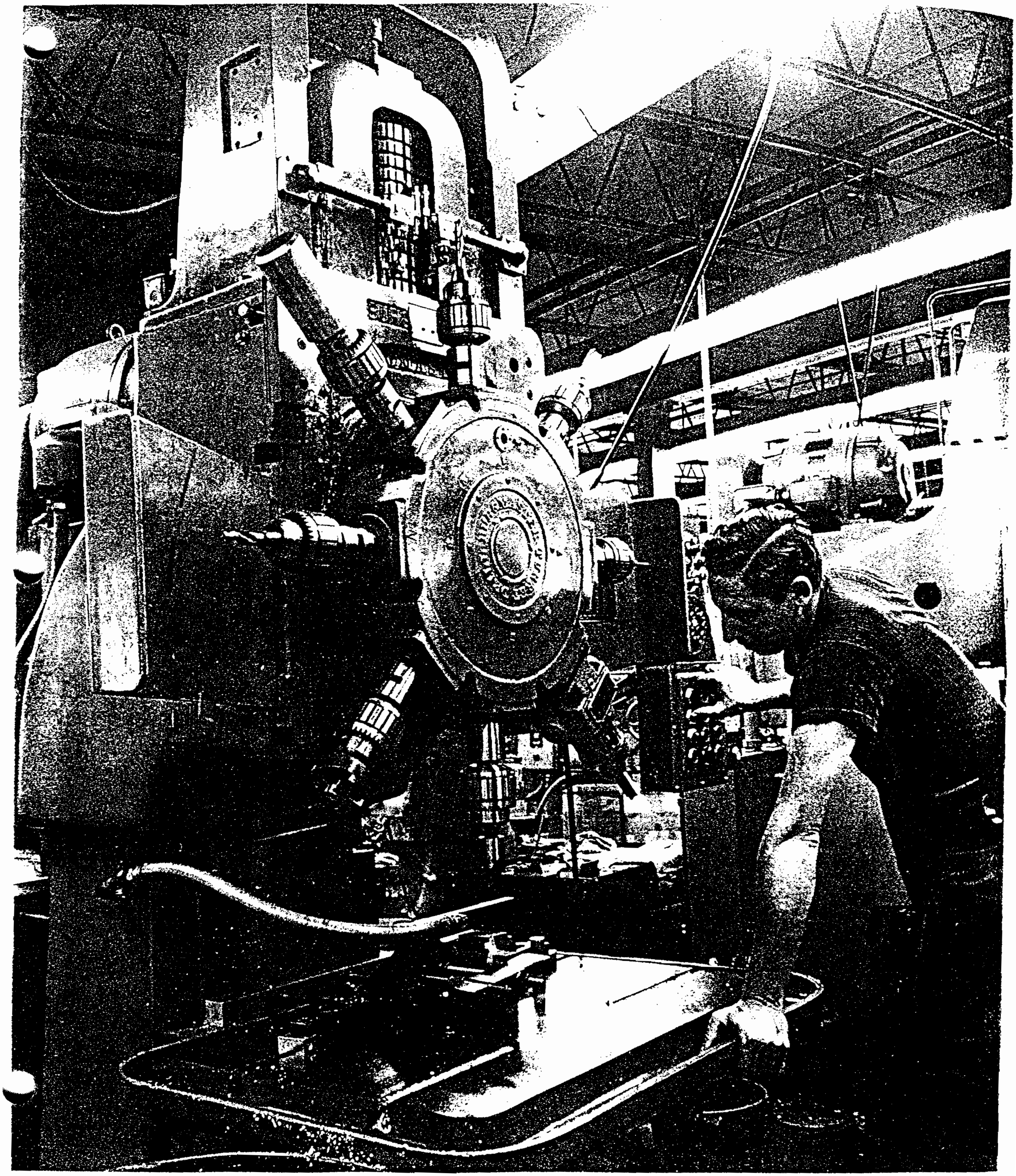
The fact that existing manufacturers showed no interest in the use of porous stainless steel was fortuitious, for we quickly turned to the development of our own line of filters. Since then, we have become a leader both in the development of new filter media and in the engineering and manufacture of filtration and other fluid processing equipment.

Along the way subsidiaries were organized for special purposes. Among the more important of them are Aircraft Porous Media, Inc., which has become the free world's leading supplier of aerospace filters; Glen Components Corporation. now a large precision machining operation which has greatly increased the Company's flexibility and self-sufficiency; and Pall-Ulster Limited, Belfast, Northern Ireland, which with its associated companies (Pall-Shannon Ltd., Shannon, Ireland and Precision Fine Wire Weaving Ltd., London, England) draws fine wire, builds looms and weaves and distributes wire cloth — including some of the filter media used by other subsidiaries.

Other subsidiaries were acquired rather than organized. First among them was Fibrous Glass Products, Inc., a small supplier of molded glass fibers, which was acquired in 1957 to protect our supply of certain Pall-developed disposable filters. Fibrous also developed a broad line of molded insulation products. To achieve its full promise in the large glass fiber market, Fibrous built and is now operating in Mountaintop, Pa., an integrated plant to manufacture glass fibers as well as molded products.

In November of 1960, Hollinger Machine Co. Ltd. of Montreal, Canada, was acquired. Hollinger was well established in the water treatment business, serving the consumer market in Canada with a well engineered line of water conditioners, pumps and other equipment. This acquisition put us into the consumer market with a line allied to our own and offering many avenues for development.

In May of 1961, Trinity Equipment Corporation and its sales subsidiary, Trincor Corporation, were acquired. Over twenty years old, Trinity is a leader in the manufacture of gas drying equipment, thermocouples and thermowells (protective devices for thermocouples and



r temperature sensing elements). Pall engineering and development fit in closely with this line. In addition, Trinity brought to the merger a highly developed industrial sales organization, tailor-made to market our newer lines of industrial products. Trinity's name was recently changed to Pall Trinity Micro Corporation and now includes our U.S. industrial filter operations.

Lloyd & Hillman Ltd., with a well-known line of flow and temperature instrumentation accessories (closely related to part of the Trinity line) and a well-established marketing organization in the United Kingdom, was acquired in March, 1962. Recently, Pall-UK, Ltd. was organized in London to operate in association with Lloyd & Hillman in the manufacture and sale to the European market of the Pall Trinity Micro product line.

Pall GmbH, Frankfurt, Germany was organized in September, 1962 to serve as a sales, service and purchasing operation for the corporation.

Mectron Industries, South El Monte, California, was acquired in June, 1963 to add miniature filters to the company's line and to provide Western facilities for Aircraft Porous Media, Inc.

Each major subsidiary is a self-contained operating company with its own engineering, sales and manu[illegible]uring management, and each in its own way is in the forefront of its field. Each is directed by a President, Managing Director or General Manager who is responsible for its satisfactory performance.

Our executives include nationals of each country in which we have a plant — an essential in dealing with the regional and national problems which must be understood to operate successfully in any area.

Successful companies as well as individuals must be responsible members of the community in which they live. It is not uncommon to find busy Pall executives participating in local affairs along with their activities in national and international business and technical organizations.

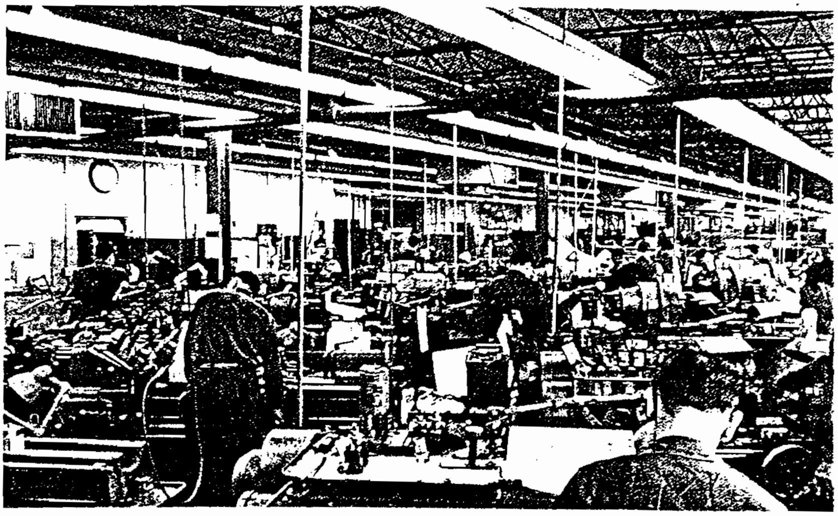
The parent company maintains close liaison with each operation; it exerts central control over research and development, fiscal policies and long range planning and, in addition, provides marketing, manufacturing and engineering coordination and assistance.

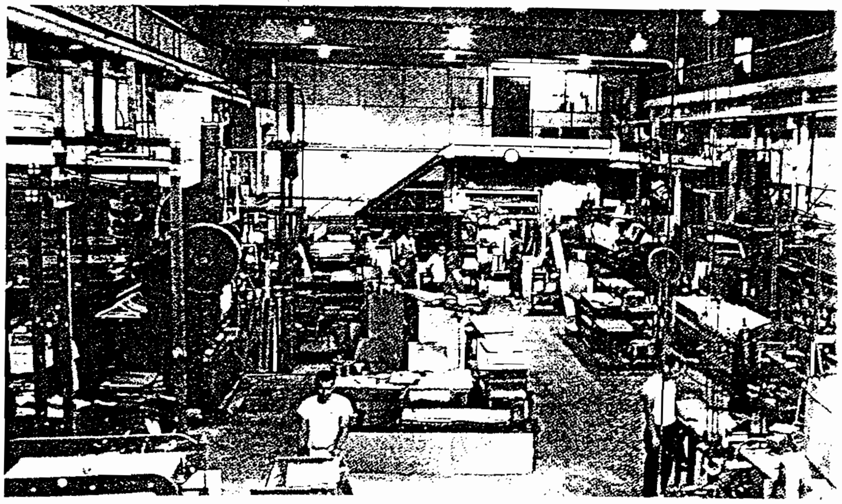
Over the years, extensive sales and service representation has been established throughout North America and Europe and, to a limited extent, in the Pacific and the Middle East. Licensees have been established in Australia, Belgium, Canada, England and Italy.

At mid-summer 1963 we occupied about 250,000 square feet of modern buildings in four states in the U.S., and in four other countries. In planning then were additional facilities in the U.S., Europe and Mexico. At that time we employed more than 800 people, including about 100 graduate engineers and scientists.

Left. Precision mac[illegible] parts at Glen Cove plant. Reading [illegible] design to precision hardware [illegible] range of modern [illegible]

Precision [illegible] in the small parts [illegible] subsidiary, [illegible]





Furnace at Glen Cove plant where PSS, RIGIMESH and SUPRAMESH porous materials are produced

PRODUCTS

Our products include:

Basic Materials – Items which, although they may perform a function by themselves, are generally combined with other items in a finished article.

Components – Complete articles which perform one or a limited number of functions and are generally used in combination with other components in an operating system.

Systems – A combination of components which perform a series of functions or a complete operation. These may be sub-systems which are in turn components of larger systems.

The line between these classes of products is not always clear and is arbitrarily drawn for the purposes of this presentation.

Each operating division of the company sells its own products but we are more and more frequently able to improve our service and solve complex problems by calling upon the combined talents and special facilities of a number of our divisions.

Please note the symbols following many of the items below.

1 – Any item so marked is a **Pall first** and most of them are still uniquely ours, requiring special know-how and Pall-developed equipment for their production.

R – Registered trademark of Pall Corporation or its subsidiaries in one or more countries. (Details on request.)

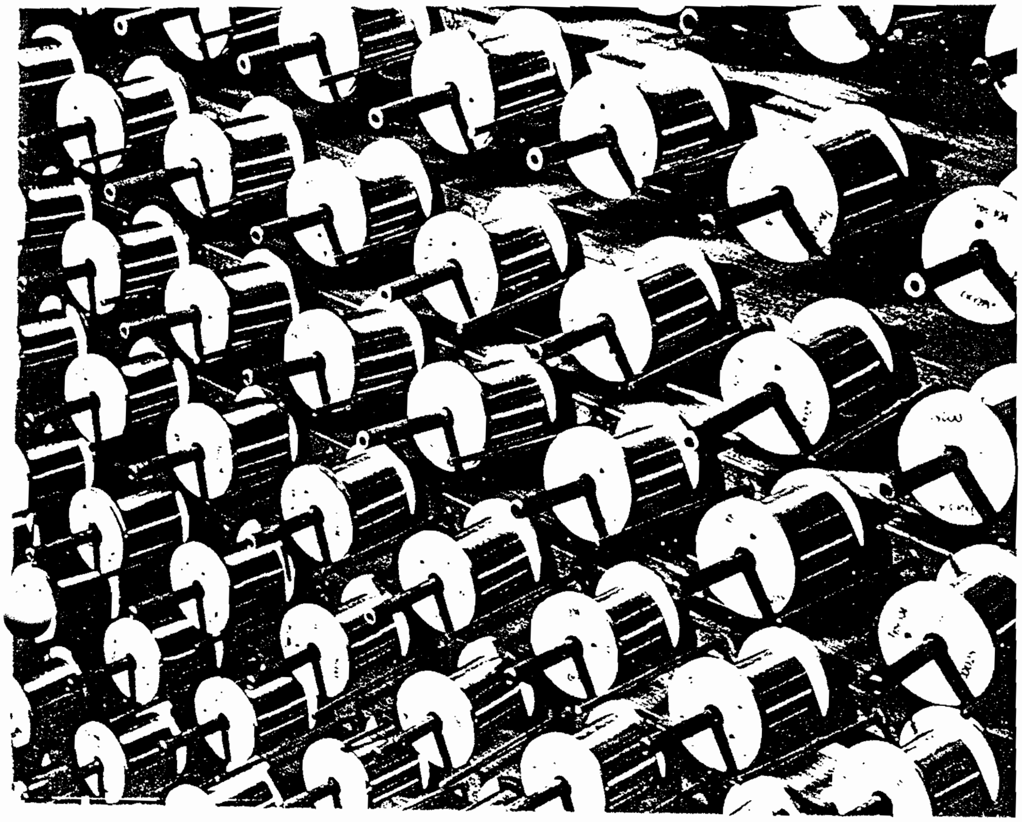
P – Patents issued or pending to Pall Corporation or its subsidiaries in one or more countries. (Details on request.)

Basic Materials

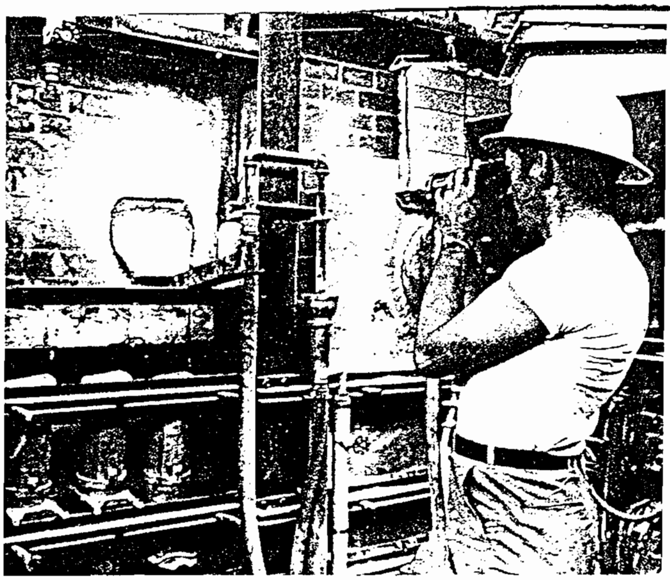
Drawn Wire—Wire of various alloys drawn from rods and used for weaving wire cloth, for thermocouples and for other purposes.

CERTIMESH^{R}—Quality controlled woven wire cloth (more commonly called gauze in Europe) as it comes from the loom. This material is used as a non-critical and lower quality filter medium than RIGIMESH. It is also converted into RIGIMESH. As the only major filter manufacturer with its own wire drawing and weaving facilities, we are able to exert special quality control measures without which the highest quality product is unattainable.

RIGIMESH^{1RP}—Porous metal made from sintered woven wire cloth in a variety of high alloys and in many combinations of weaves, layers and thicknesses.



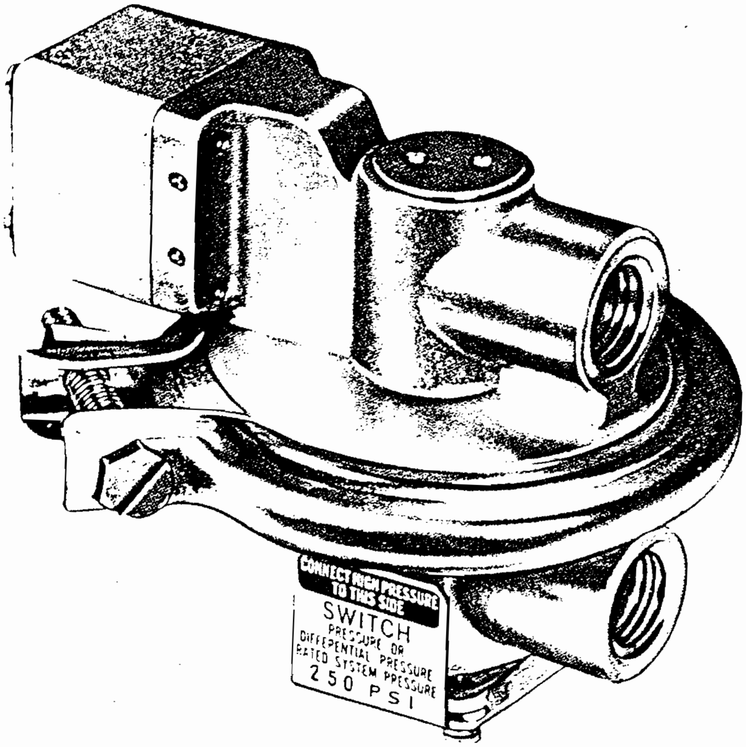
Fine stainless steel wire being fed to looms making ultra-fine wire cloth at Pall-Ulster, Ltd. Our Belfast, Northern Ireland plant supplies wire and wire cloth manufactured to our rigid requirements for the fabrication of filter elements.



Checking the furnace melt at Fibrous Glass plant in Mountaintop, Pa. Our recently built, integrated plant made us the first new manufacturer of glass fiber wool in many years.

Instrument control panel for automated operation of Fibrous Glass plant. Sand, borax and other raw materials are put in at one end of the assembly line. Finished insulation products ready for packaging come out the other end.

Deltadyne switch—one of series of high quality, light weight devices which signal or control changes in pressure and differential pressure in fluid systems.



These materials are mainly used as filter media and for transpiration cooling.

SUPRAMESH^{1RP}—The finest grade of 100% stainless steel filter medium in existence. Made by a special combination of PSS and RIGIMESH.

PSS^{1RP}—Porous metals in sheet form made of sintered metal powders. This material is formed, welded and machined (within certain limitations) like sheet metal and is most commonly used as a filter medium. PSS is produced mainly in stainless steel, nickel and monel. Other high alloys and noble metals are also produced in this form.

EPOCEL^{1R}—High grade disposable filter medium composed of epoxy resin impregnated cellulose. Developed by Pall as the first high area disposable cellulose based filter medium suitable for general application in the process industries, and for water and other potable and parenteral materials.

ULTIPOR^{1RP}—Extremely fine epoxy resin bonded inorganic fiber filter medium for absolute removal of sub-microscopic particles, including bacteria, fungi and even viruses.

Fibrous Glass—Glass fibers formed directly from molten glass made from sand, borax and other raw materials. The glass fibers are resin impregnated and collected as continuous "wool" blanket in a highly automated process. The blanket is further processed to produce various types of insulation products, filters and other products.

TRINOX^{R}—Mineral insulated, metal sheathed thermocouples providing special characteristics for many critical applications.

Components

BELVALVE Relief Valves^{1RP}—Highly efficient, small and lightweight valves for relieving pressure. BELVALVES have only one moving part and are particularly well suited for use with filters.

Multiport Valves^{1P}—Long life, high quality, economical valves for use in multiple cycle automatic home water treatment equipment.

Gas Detection Cells^{1P}—The only non-electrical devices to sense the presence of explosive gas mixtures.

Dump Valves^{1P}—Special valves which permit automatic elimination of one fluid from a system while retaining another — for example, water from a gasoline filter.

DELTADYNE Differential Pressure Switches^{1RP}

Indicators and Gauges — Devices which signal or control changes in pressure in fluid systems. DELTADYNES are capable of operating under conditions where no other similar devices have been available.

Thermal Conductivity Meters^{1} — The first device to make almost instantaneous measurement of insulation efficiency.

PETROSORB^{1R} and COALEX^{1RP} — Devices which by purely mechanical or combinations of mechanical and adsorptive means, separate one fluid from another in a liquid or compressed gas system. Hydrocarbons are removed to levels never before achieved.

Water Pumps — A series of sump, shallow well, deep well and other pumps for domestic and farm use.

Chemical Feed Pumps^{P} — Special pumps for chlorination and other water treatment. A completely new line of more sophisticated pumps for broad process industry as well as water treatment use is now in advanced stages of design.

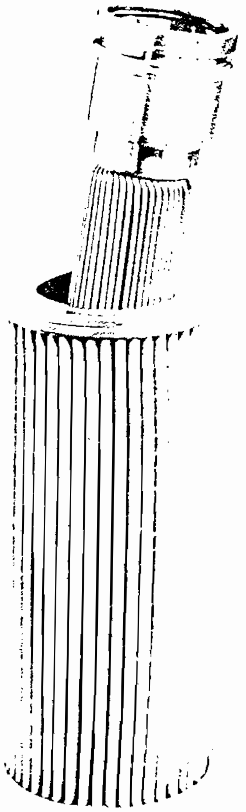
Orifice Plates and Flanges — Precision made and calculated orifices which control or sense pressure or flow in process plants.

Multipoint Thermocouples^{1P} — Manufactured in addition to standard types of thermocouples and a very broad line of thermowells, the unique Multipoints are large assemblies — as much as seventy feet long — which enable the process industry user to make a single installation in large reaction vessels to obtain multiple temperature readings.

Filter Elements^{1P} — Probably the broadest line of filter elements in industry. Hundreds of models for applications range from the clarification of molten metals to the purification of water, and from sterilizing of air to the removing of contamination from liquid oxygen. Almost all made with proprietary filter media.

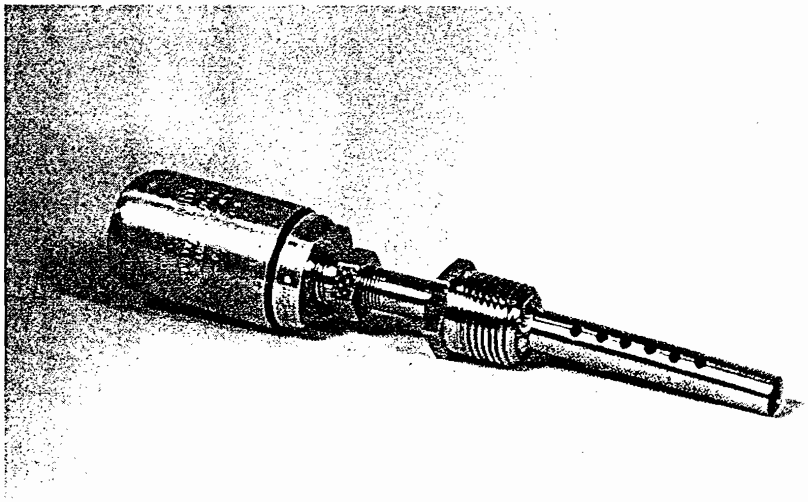
Filter Housings^{1P} — As with filter elements, an extremely broad line with hundreds of models for very low and very high flow rates, pressures and temperatures and with many adjunct devices based on unique proprietary designs.

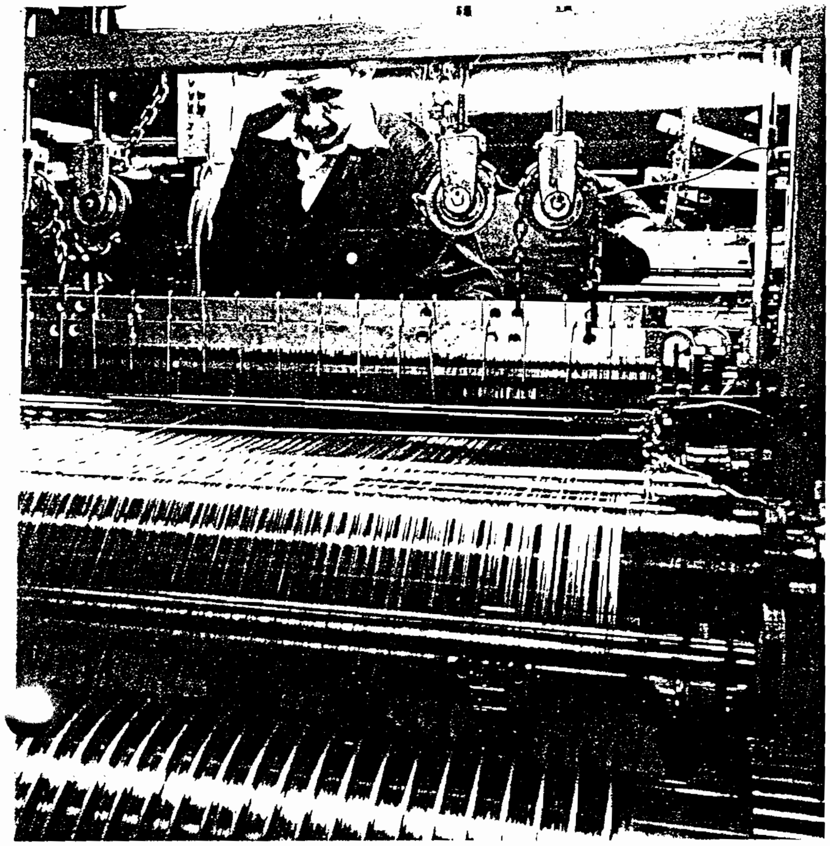
Fabricated Wire Cloth Products and Miscellaneous Hardware — In serving our customers, our various divisions often design and manufacture many items not usually marketed as proprietary items. These range from instrumentation accessories to transpiration cooling devices. Some become production items and others aid customers with special problems or demonstrate the use of our products.



Small two-stage ULTIPOR triphane filter designed to replace old-fashioned, crude filter elements in use throughout industry. Combining our unique ULTIPOR or EPOCEL disposable media with SUPRAMESH or RIGIMESH, these filters are providing hitherto unachievable protection for many fluid systems.

Thermocouple assembly for rapid temperature sensing, manufactured by our Trinity subsidiary.





Systems

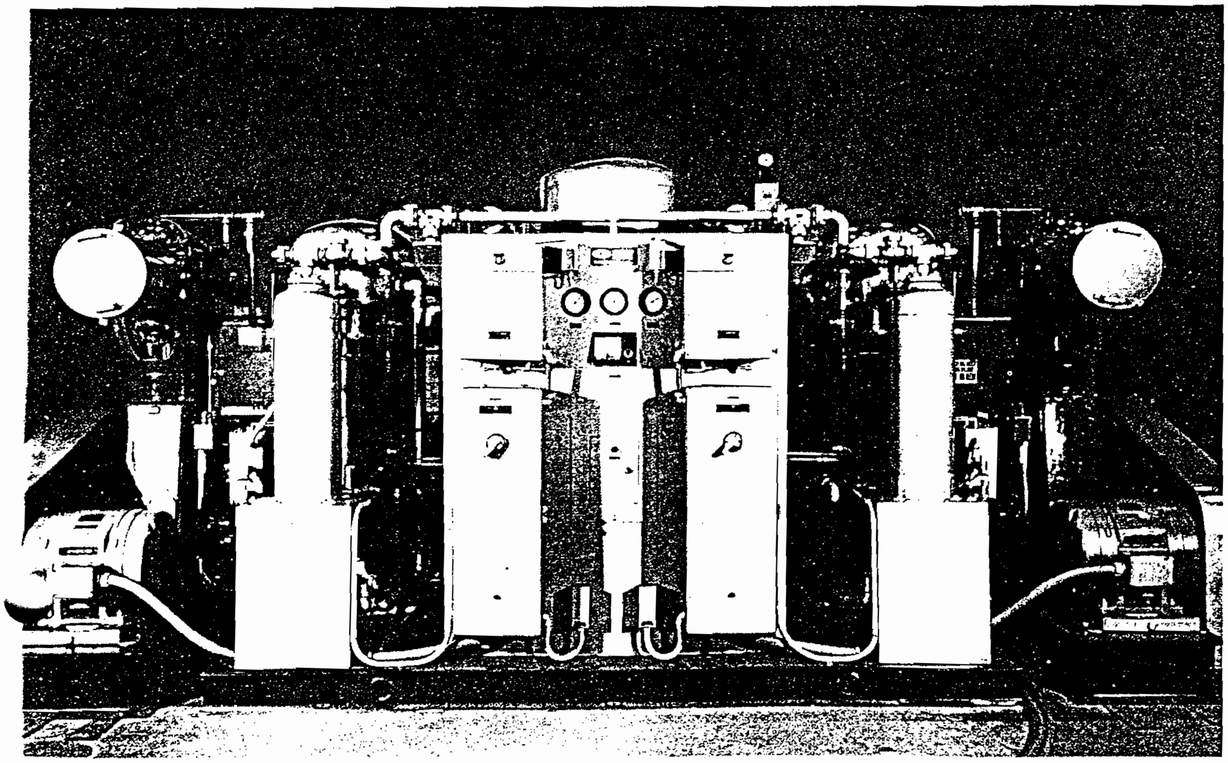
Hydraulic and Pneumatic Manifolds[1]—Highly engineered sub-system packages combining a variety of components such as filters, valves and differential pressure devices in such a manner as to sharply reduce weight, size and leak points found in separately assembled components.

Fuel-Water Separator-Eliminators[1]—In growing use on pleasure boats, these compact economical systems clarify fuel, separate water from the fuel and eject the water from the system.

Air and Gas Dehumidifiers[1]—A broad line of automatic desiccant drying systems in wide use for a variety of gases and conditions. These include many Pall firsts – one of which is the newly developed all-pneumatic HX dehumidifier.

Compressed Gas Purifiers[1]—One step of sophistication beyond the Dehumidifier. The combined efforts of

Wire cloth loom designed and manufactured by Pall, based on our extensive experience in the utilization of precision-made wire. We are now offering a line of these industrial wire cloth looms for sale.



Unitized Dry Air System, engineered and manufactured at Cortland. Unitized Air Systems were developed for the DEW (Distant Early Warning) line and have since been used on other important [illegible] radar installations and elsewhere in defense [illegible]

Right: Justifiable French Canadian pride in one of the first Canadian built packaged sewage treatment plants is shown by bi-lingual plaque attached to plant built by our subsidiary, Hollinger Machine Co., Ltd.

three of our operations supplied the first system of this kind for a new state-of-the-art requirement for space vehicle launching. These systems remove virtually all water vapor, hydrocarbons and particulate contaminants from extremely high pressure gas systems.

Municipal Water Plants —The first pressure (rather than open sand bed) municipal water system in Canada was installed by us in 1963. This follows installation of many smaller plants for institutional and industrial use.

Sewage Disposal Plants — Our packaged sewage disposal plants are in successful operation treating raw sewage and delivering an effluent of potable water quality.

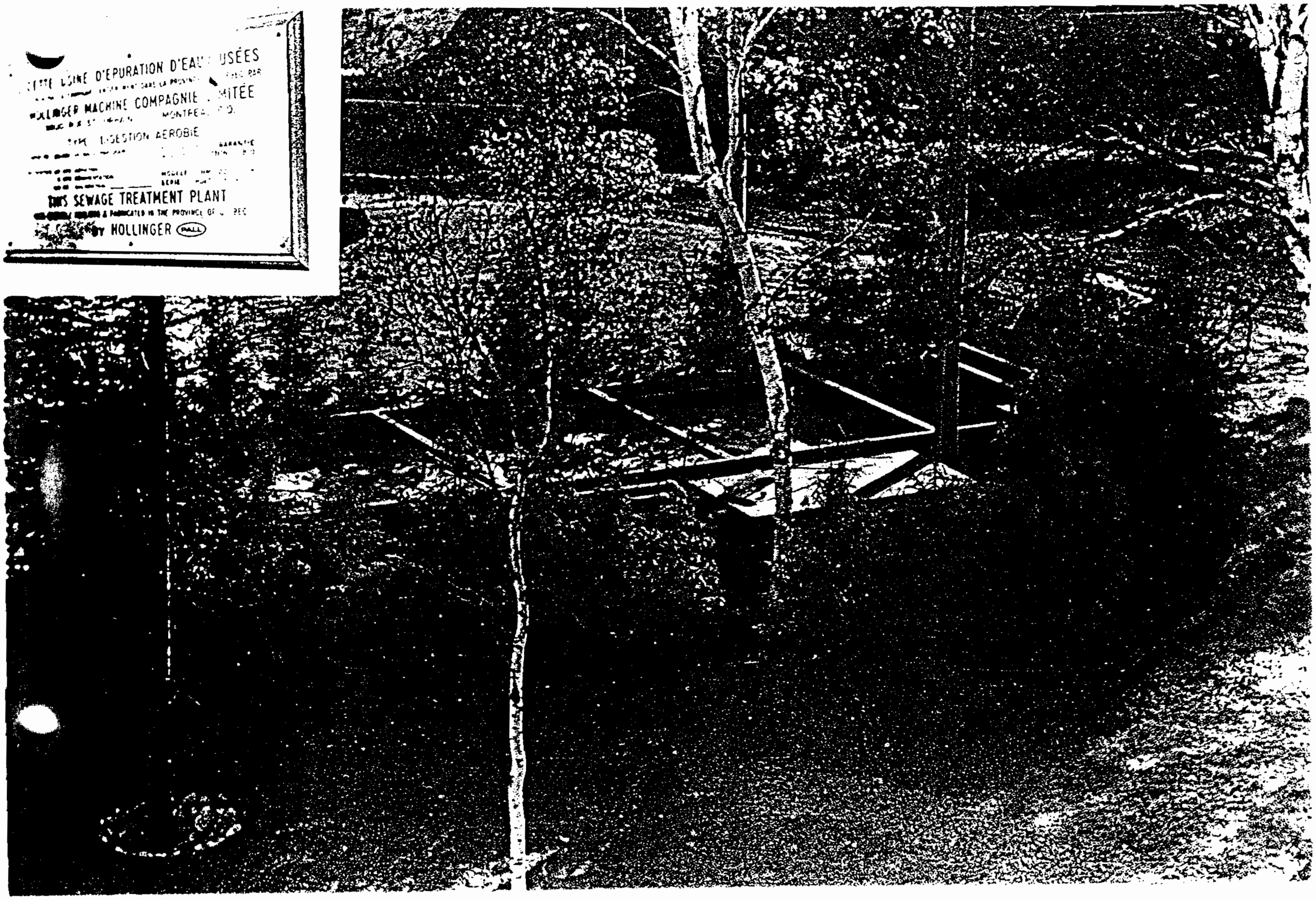
Explosive Gas Detection Systems[IP]—These completely non electrical systems detect and warn of the presence of dangerous gas mixtures. They are in wide use on pleasure boats as well as in industrial applications where standard models are either entirely mechanical or deliver a remote signal which in turn can operate electric switches away from the hazard area.

Water Treatment Systems —These systems perform such functions as softening water automatically.

Looms —Wire cloth looms of special design have been used in our own production for some time. A line of industrial wire cloth looms for sale is now being designed. These looms are for materials not involved in the manufacture of our proprietary ultrafine filters.

Dual Filtration Systems[IP]— First widely used in 1962 to bring a new level of ultra-fine filtration to Air Force hydraulic oil ground carts, new unique dual filtration systems are now becoming airborne.

Filter Maintenance Systems[I]— These systems include the unique HIPS (Hyper Intense Proximal Scanning) ultrasonic filter cleaner developed in cooperation with Cavitron Ultrasonics, Inc. — and other Pall developed devices such as bubble point test stand and backflush cleaners, for improving ground support of filters.



CAPABILITIES AND FACILITIES

Introduction

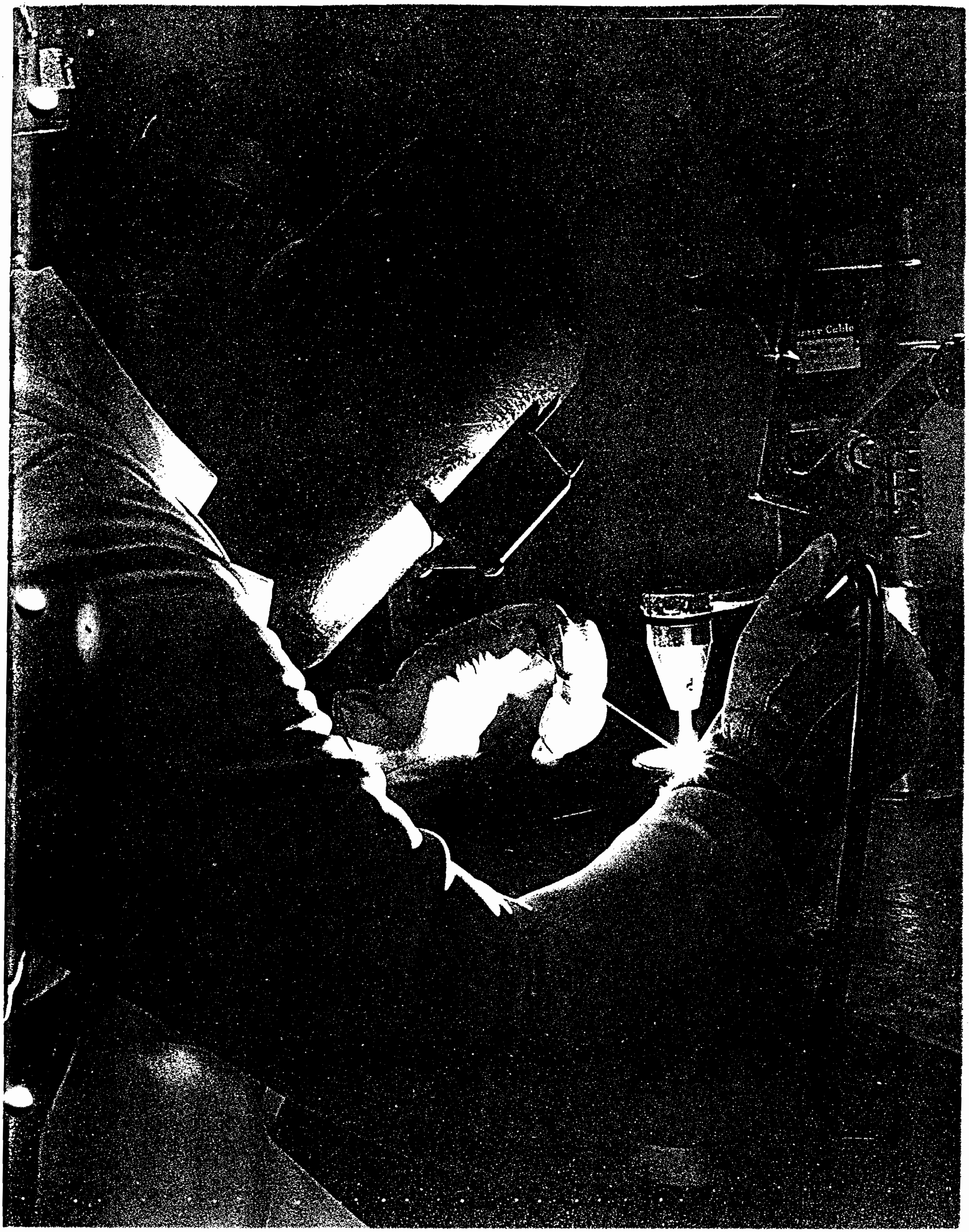
Technological advance belongs to no one nation and comes from no one professional group. It does come from a state of mind – a peculiar combination of a drive to excel, an attained high level of technical competence, purposeful dedication and that rare quality, inventive insight. When these factors are present, new ideas and inventions will result. Coupled with top grade service and manufacturing organizations, such a set of conditions results in superior customer service. Throughout our organization we work to stimulate an atmosphere and interchange of ideas under which these conditions will be obtained. Our record indicates a substantial degree of success, and our efforts continue in this direction.

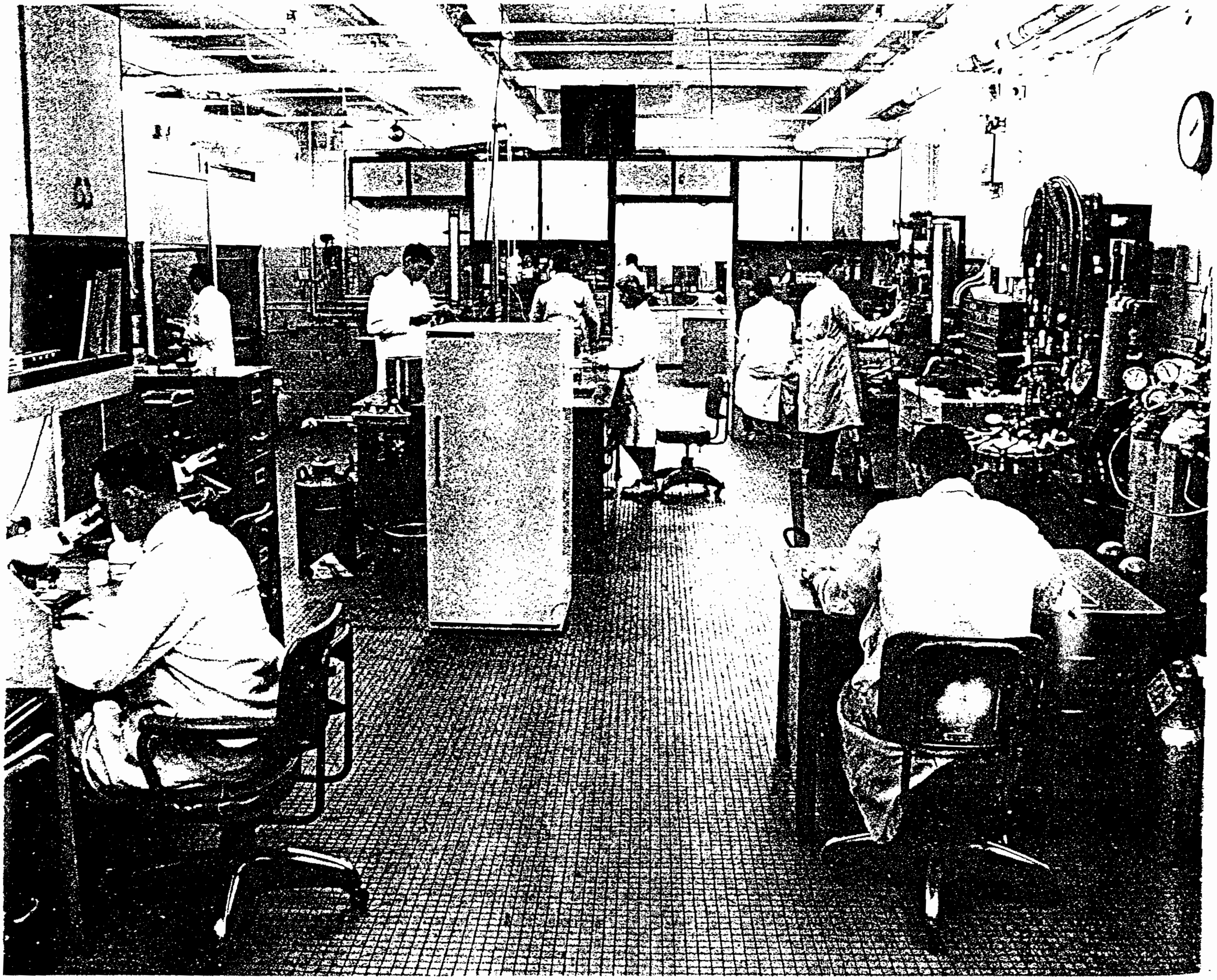
In a number of our fields of activity we have made state-of-the-art advances – in many of them we serve the growing numbers of international companies and programs in which governments participate on a multinational basis. These factors create new requirements. Top quality service capabilities must be available in widespread locations. Where needed to implement this service, and to assure customers who buy from us as a sole source, of continued supply in any emergency, some duplication of manufacturing facilities is required. We are always alert to this need and are particularly proud of the fact that no customer of ours has ever suffered a serious loss or delay on our account. On the other hand, we have been able to handle hundreds of emergency requirements ranging from almost overnight response in helping to get a large process plant on stream after a disastrous explosion, to keeping an entire fleet of commercial aircraft in service after failure of another supplier's equipment. Similar expeditious service has solve many smaller problems that occur from day to day fo hundreds of our customers.

Research and Development

As a general rule we do not seek R & D contracts bu rather devote these facilities toward the development o proprietary products. When called upon for the solutio of problems for which we are uniquely qualified an which are likely to lead to development of new product we consider government or other outside sponsore Research & Development programs. For example, Pa Corporation accepted an Air Force contract for deve opment of high temperature hydraulic filter housings.

Of more importance – many problems that exist i current fluid systems may be under study and close


Power Cable



A portion of one of our laboratories.
Pall employs about 100
graduate engineers and scientists.

Right: Portion of Aircraft Porous
Media's drafting room.
Drawings and other records are produ
and microfilmed in this a

solution in our laboratories. And an experimental or prototype piece of hardware, or often a tested product, may be produced in relatively short order for the answer to a problem.

Our facilities include mechanical, metallurgical, chemical, biological and environmental test laboratories, and, to a limited degree, electronic test facilities. Our personnel are qualified in the following disciplines: physics, organic chemistry, physical chemistry, biology, microbiology, metallurgy, chemical engineering, mechanical engineering and electrical engineering.

Engineering

Engineering excellence is central to all of our operations. We are organized to solve difficult engineering problems as a matter of routine.

Value engineering and the achievement of optimum reliability as well as product and process improvement are continual functions of our engineering departments.

Whether our ultimate consumer is a home owner seeking protection of his water supply, a process plant operator who needs assured clarity in his product, or an astronaut whose systems must be protected from contamination, our engineering orientation assures him that the latest state of the art is embodied in the Pall product he uses.

Our engineering services include:

Application Engineering – In many cases by drawing from the customer's description of his operating conditions and our vast storehouse of proven designs, we are able to recommend the proper product in very short order. Very frequently it is an off-the-shelf item or a minor modification of one.

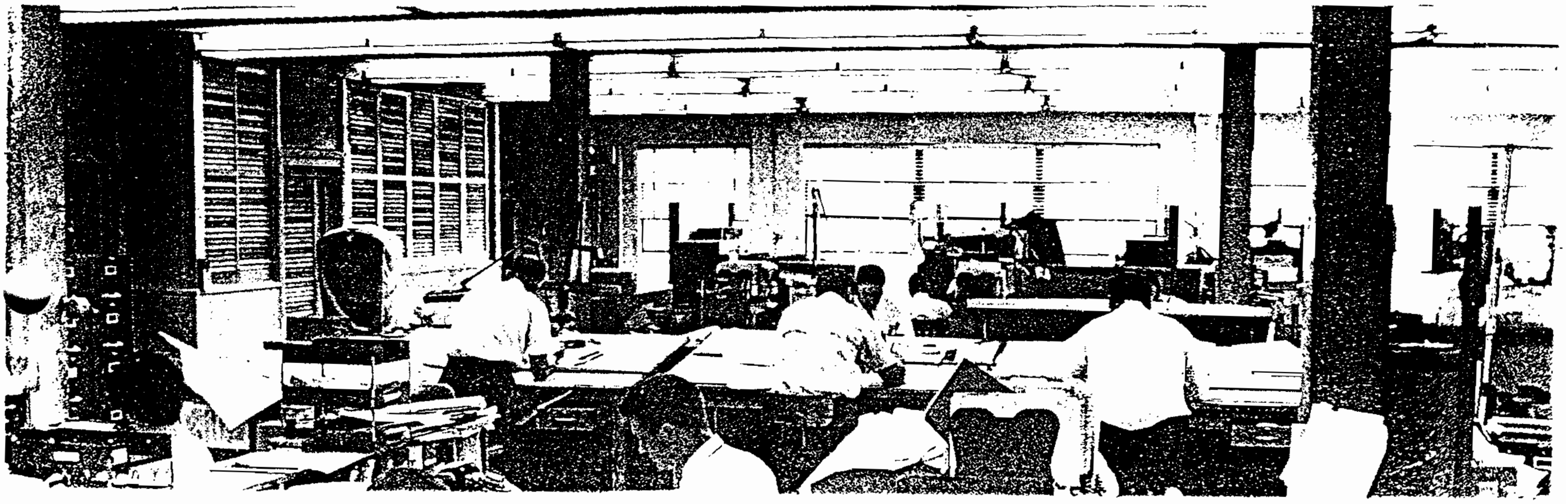
System Analysis – Our customer may be in the process of establishing the parameters of his system or perhaps he has run into system problems which have escaped solution. Working closely with the customer's engineers, our engineering specialists and our laboratory facilities are frequently called into play. Early utilization of this service has saved our regular customers needless expenditures of both time and money.

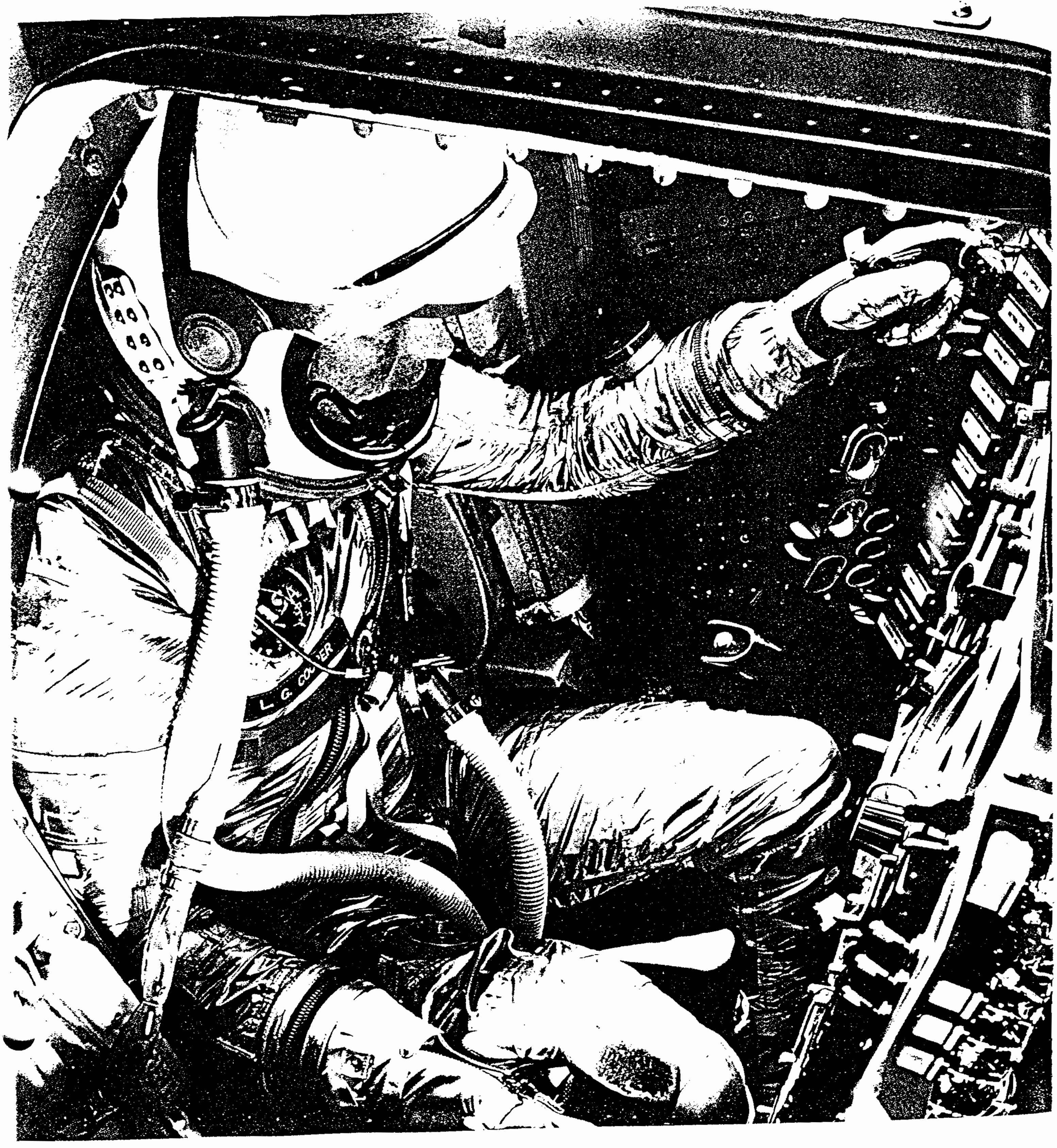
Specification Writing – The critical demands of modern systems and the difficulty in staying abreast of the latest technology in many fields makes it almost impossible for the individual customer, no matter how large, to write specifications that will assure him of optimum results. Our engineering organization provides model specifications or tailor-makes them to the individual needs of our customers.

Customer Personnel Orientation – As indicated in the preceding paragraph, it is almost impossible for the customer, whether a major petroleum, chemical or aerospace company or a government agency, to have competent specialists in all fields. Preferably through visits to our plants and laboratories, but often through seminars held at customers' facilities, we are able to help keep customer purchasing and engineering departments abreast of current developments.

Marketing

In the following sections our capabilities and facilities are summarized by market. Extensive field sales, service and distribution organizations stand ready to serve. The name and location of our representative nearest you, technical and other product information, and detailed facilities information is available on request from the regional main offices listed at the beginning of each market section.




L. G. COOPER

Left: A Pall filter permitted astronaut Gordon Cooper's space suit temperature control to function properly [illegible] his historic flight (though there had been space [illegible] trouble on previous flights, without the [illegible] filter). Pall filters have also played an important part in other Project Mercury operations—both airborne and on ground support equipment.

Aerospace — Industrial Hydraulics — Defense

Region	Name & Location	Telephone	Telex	Cable
Australia, New Zealand & Malaya	H. P. Gregory & Co. Ltd.* 74 Clarence Street Sydney, Australia (industrial hydraulics only)	29 2551		Gregory
	Fairey Aviation Company, Ltd.* Sydney, Australia	UY 1221		Fairey, Sydney
Canada	Jarry Hydraulics Ltd.* 3600 Rachel Street East Montreal 4, Canada (aerospace only)	514 VI. 2-8221	0012918	
U.K. & Other British Commonwealth Countries	Fairey Engineering Ltd.* Cranford Lane, Heston Hounslow, Middlesex England	Hayes 2821	22230	Airily, Hounslow
Continental Europe	Avions Fairey S.A.* Gosselies, Belgium	Charleroi (07) 35.01.90	7241	Belfair Goslies
Scandanavia	Transaero, Inc. Abrahamsbergsvagen 38 Bromma, Sweden	260061		
Western U.S.	Western Division—APM 9857 Remer Street South El Monte California	213-443-0413	TWX = 213-442-5656	
U.S. (other than Western States) & Other Areas	Aircraft Porous Media, Inc. 30 Sea Cliff Ave. Glen Cove, N. Y.	516 OR 1-4000	01-26329 TWX = 516-671-6272	Pallco

*Indicates licensee-representative. Factory service and some manufacturing is done by licensees. The extensive facilities of these plants are, however, not included in facilities descriptions.

General Capabilities & Operating Philosophy

There is an axiom in the space vehicle industry: "If a part can fail, it will fail!" The entire defense industry, constantly increasing in sophistication and complexity, is becoming ever more aware of this.

Pall Corporation has been a leader in the development of parts that will not fail. As sophistication and the need for reliability have increased, so has the demand for products such as ours. We entered this market when we found in 1954 that airborne systems with contamination-sensitive servo-mechanisms, pumps and other vital parts were in trouble for lack of adequate filters. Existing suppliers offered no solution. In a very short time Pall engineering and production solved the major filtration problems and revolutionized airborne filtration.

From the time of the 1949 Constellation and the F-100 (the commercial and military aircraft being built when we entered the field) to the Boeing 727 and F-110 (the latest production commercial and military aircraft), and from the Vanguard and Atlas to the Saturn and Minuteman, we have been the leading supplier of airborne filters. More recently, as a result of developments in 1962, we have also become leaders in ground support filtration.

Pall filters have also been used to protect nuclear submarine hydraulic and pneumatic systems from the time of the Nautilus.

In a similar fashion, we have been selected to provide critical gas purification and dehumidification systems, specially engineered insulation, and differential pressure devices for a variety of defense and aerospace systems. Our porous materials are also essential parts of new concepts in rocket and jet engines.

There is currently abroad in the United States a great hue and cry about "value engineering," about removing the "gold plating from military hardware," about "not buying quality beyond the requirement of the specification," and about "the need for more competitive bidding."

This stems from the powerful and highly desirable drive of the Department of Defense and of Congress to keep the military budget in bounds and to buy each needed function at its optimum price.

We of Pall Corporation take particular pride in our contributions to defense and public health. In addition to providing solutions to many critical problems – for example, providing a filter (not called for in any specification) that permitted astronaut Cooper's space suit temperature control to function when there had been trouble on all previous flights – we have been able to demonstrate that the total purchases of our airborne filters (running into many millions of dollars) have resulted in savings to the government of more than the cost of our products. This saving results not from comparison with cheaper (and inadequate) products previously specified, but in weight and size reduction and in increased life of other components.

Value Engineering – The design of an item to perform a function at the lowest possible cost is a way of life in our organization. It goes so far that every product and every process is virtually under constant review at all levels up to top management.

Maximum simplification (no gold plating) is a corollary of high grade engineering and is an essential of all of our designs.

We spend considerable effort to encourage specifications that truly reflect the performance requirement.

As you will see from our publications list – we are prepared to meet legitimate competition in any area, and we frequently publish documents which, although they may educate competition, contain knowledge needed in the public interest.

Principal Aerospace & Defense Products

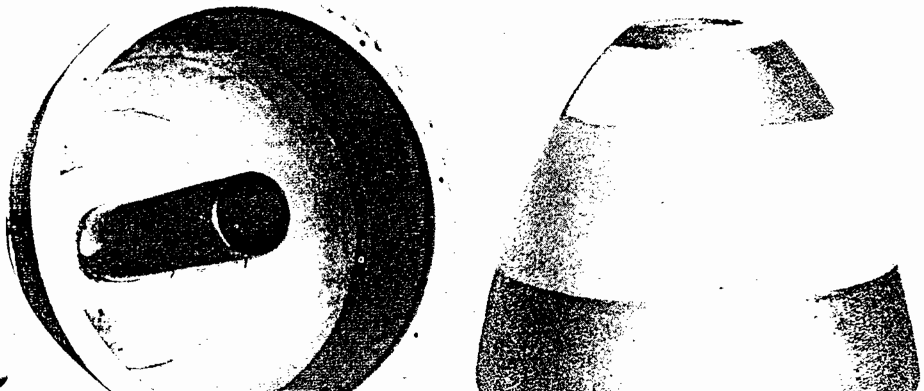
A summary of our principal aerospace and defense products and the periods in which they were introduced to meet new state-of-the-art needs follows:

1955 Aerospace and submarine systems were rapidly growing in sophistication and the need to meet previously unheard of weight, size, temperature and contamination control requirements was not met by the filter industry.

RIGIMESH^R was invented, and the first airborne filters using this revolutionary new material were introduced to the aircraft industry. This remarkable material, supported by superior filter designs, rapidly became and still is the most widely used filtration product in critical airborne applications.

Long range non-filtration programs using RIGIMESH for such applications as increasing operating temperature limits of jet engines also began in 1955. Production of both jet and rocket engines using RIGIMESH as a structural component began in 1962. New design concepts made possible by RIGIMESH are embodied in these engines, and resulted in a great stride forward.

Air Force technician connecting ULTIPOR.9 TRIPHANE filter now standard equipment on Air Force hydraulic ground service carts.



RIGIMESH porous media products [illegible] in transmission cooling. These products have increased the operating temperatures [illegible] of jet [illegible] essential [illegible]

1956-1961 Unitized dry air systems — the first self-contained dry gas systems — were developed for the DEW line and later used on other important defense radar systems.

Custom designed insulation was developed for a nuclear "sub-killer" submarine.

SUPRAMESH R—an extremely fine material combining the merits of both RIGIMESH and PSS R (porous stainless steel) was developed for extremely critical airborne use. The first filters were developed to meet MIL-F-8815, the latest filter specification. To our knowledge, ours are still the only filters proven to meet this specification.

DELTADYNE R—the industry's first high quality, lightweight device to indicate changes in differential pressure was introduced and rapidly came into wide use. The indicator has been followed by a broad line of switches and gauges based on the Deltadyne principle.

BELVALVE R–a new concept of improved reliability in relief valves, gained wide use.

Automatic shut-offs, another Pall first, were introduced to permit leakproof removal of filters from pressurized systems.

Standard factory molded fiber glass products for assuring proper insulation and maximum economy on Naval vessels were introduced.

HIPS (Hyper Intense Proximal Scanning) — ultrasonic cleaners incorporated into a piece of ground support equipment with many capabilities was developed in cooperation with Cavitron Ultrasonics, Inc., and has come into wide use to maintain filter efficiency and economy of use. HIPS is part of a line of Pall-developed ground support equipment which continues to grow in scope and utilization, and which permits the use of relatively unskilled personnel in many maintenance operations.

1962-1963 ULTIPOR R —It has been recognized for some time that contaminants of the size of 10 microns or more cause serious problems in hydraulic systems. From the time of our development of RIGIMESH this problem was effectively solved, and a major contribution had been made to the advancement of sophisticated hydraulic systems.

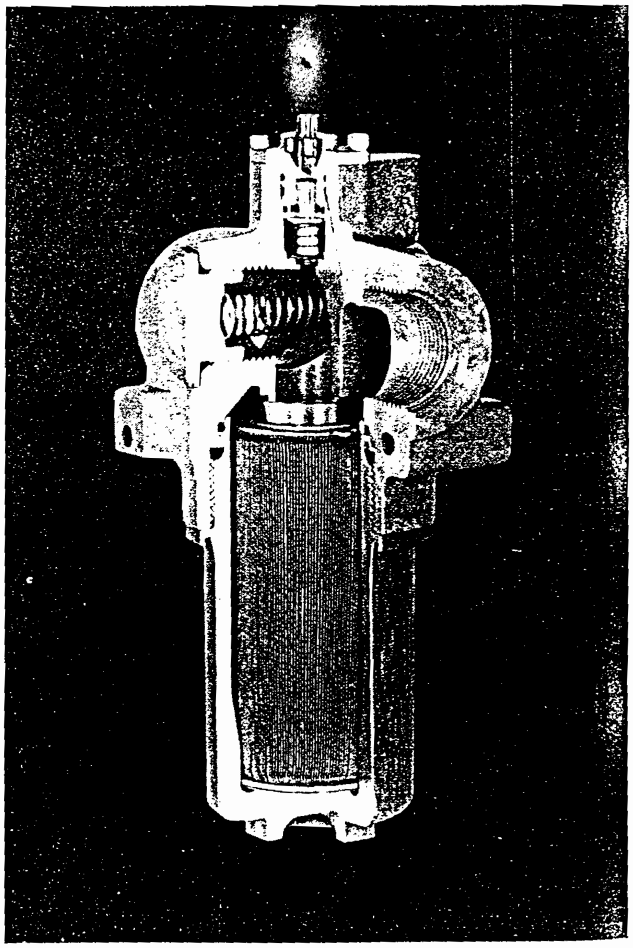
Concepts of filtration change with increased knowledge, and new problems are discovered as others are solved.

Recently engineers have recognized that particles in the range of 0.1 to 5 microns are a cause of serious problems, including undue wear of expensive hydraulic system components.

With growing awareness of the critical nature of this problem, our development organization accelerated completion of a type of ULTIPOR that would assure removal of all particles 3 microns and larger (as well as nearly all smaller particles) while at the same time permitting the large volume flow of fluid needed to service aerospace systems.

Extensive testing in both ground support and airborne applications has yielded results even beyond our expectations — some so startling that they may revolutionize previous concepts of machine wear and lubricating oil utilization. Whereas it had been taken for granted that a pump, since it has moving metal parts, must continually wear, it has been found that ULTIPOR filtration of the fluid entering the pump may reduce wear to the point where it cannot be measured over an extended period of time. Similarly it was assumed that

Cross section of typical high pressure airborne hydraulic filter. Pall has been the leading supplier of airborne filters since we entered the field in 1954.



oils would break down in the normal course of use at elevated temperatures and pressures. With ULTIPOR filtration, fluid breakdown was significantly reduced after substantially prolonged use.

Within one year overwhelming superiority of this product added leadership in ground support filtration to our already acknowledged primacy in airborne filtration.

New developments with this product – engineered in some instances with entirely new concepts of filtration systems – have come in rapid order. After extensive controlled flight testing, a new dual filtration system (which includes ULTIPOR, SUPRAMESH and a newly developed flow control valve) has been approved for use on commercial airliners.

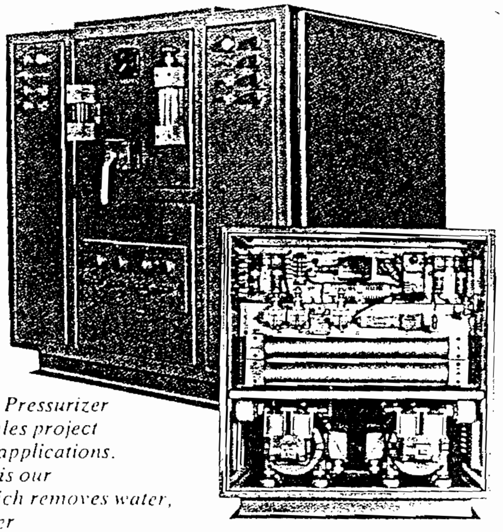
This product, which we call the "Flying Ultipor," adds to both flight safety and economy. It not only reduces pump wear, but eliminates extensive ground flushing and adds many hours of aircraft utilization. An installation costing under $1,000, and maintained at a cost to the airlines of less than $500 per year, may reduce operating cost by $5,000 to $50,000 on a typical passenger jet!

A serious problem also exists, due to growth of bacteria and fungi in jet fuel, which results in corrosion of wings and other difficulties. Tests by two different government agencies show that ULTIPOR is the first product capable of cleaning up bacteria- and fungi-contaminated fuel under field conditions.

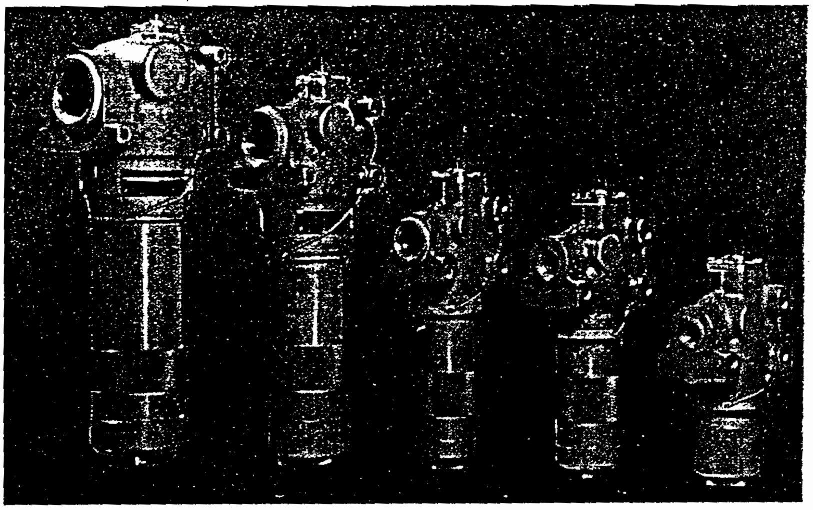
ULTIPOR is also being used to sterilize space vehicles, to protect sterilized chambers used by the Public Health Service, to remove contaminants from dielectric oils in extremely sophisticated radar systems (no other way was found to make these systems work), and for many other critical applications, including ultrafine filtration of space-borne fluids. It is being designed into pocket-size systems to protect individual water supplies.

Hydraulic Manifolds have been another development of the recent past which have gained unusually rapid acceptance and serve as an excellent example of superior engineering. These systems have combined and miniaturized components, and have made possible the elimination of many needless leak and contamination points. They have also improved reliability, and sharply reduced weight and size. Our work in this field is already making new hydraulic valve concepts available to our customers.

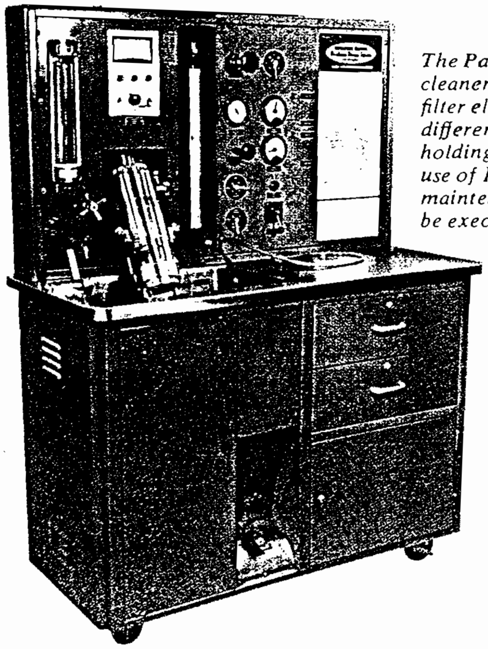
High Pressure Gas Purifiers were also introduced in this period to meet a new state-of-the-art requirement for the Saturn program. Compressed gases carry moisture and hydrocarbon vapors which may cause system



Trinity Waveguide Pressurizer used in Nike Hercules project and other military applications. Part of this system is our Heat-Les dryer which removes water, oil vapors, and other contaminants from compressed air.



SUPRAMESH Aircraft Hydraulic filters, developed to meet an extremely critical airborne use, are still the only filters we know that meet the latest military specifications for filters of this type.



The Pall-Cavitron HIPS ultrasonic cleaner which can restore filter elements to their original differential pressure and dirt holding capacity. With the use of HIPS, what was a complicated maintenance operation can now be executed by unskilled labor.

Portion of the Class 4 White Room at our Glen Cove plant. Special air conditioning, sanitary dress and other precautions insure contamination control in this area devoted to research and production of sophisticated aerospace and defense products.

malfunction and, in the latter case, also present an explosion hazard. New extreme levels of purification in such systems were attained with equipment resulting from a combined effort of several of our divisions. We believe this combination of capabilities could not have been found in any one other company.

Other Pall products, such as explosive gas detectors, Petrosorb and Coalex fluid separators, EPOCEL filters and thermocouples are used in diverse aerospace and defense applications.

Industrial Hydraulics has been included in this market category since this field is closely related in application to aerospace, submarine and military vehicular systems. We have recently turned our attention to this field and find considerable interest in our products.

The list below of vehicles on which we are a major supplier will give you an indication of the broad use of our products:

Commercial aircraft: Boeing 707, 720 and 727, Convair 880 and 990, Douglas DC-8, Lockheed Electra and Jet Star.

Commercial helicopters: Vertol V107, Sikorsky S61, S62 and S64A.

Military aircraft: F100, 101, 102, 104, 105, 106, W2F, A2F, A4D, F4B, F4C, A3J, B52, B58, B70, KC135, C130, C140, C141 and Fiat G-91.

Military helicopters: HRB-1, HC-1B, HSS-2, HU-51 and HU2K.

Missiles and space vehicles: Atlas, Minuteman, Polaris, Thor, Sergeant, Titan, Hawk, Nike, Bomarc, Jupiter, Juno and Saturn.

Marine: All nuclear submarines, Grumman Hydrofoil and other military and commercial vessels.

Our ground support equipment is now used in virtually all Air Force ground hydraulic carts and in many other applications, including radar and microwave systems and space vehicle launching equipment. No attempt has been made to list these myriad applications. Newly designed systems and applications incorporating our products, such as the Vickers VC-10 and British Aircraft BAC-111, are also not included.

Aerospace & Defense Facilities

Our facilities for aerospace and defense products have become highly integrated.

Much of our equipment is designed and built by us for processes of our own development. This gives us capabilities unavailable to competitors and an unusual degree of built-in process quality control. No government-owned facilities or equipment are used by Pall Corporation in any of its operations.

Plants devoted primarily to aerospace, defense and industrial hydraulic production (excluding facilities of licensees in England, Belgium, Canada and Australia) include approximately 100,000 square feet. In addition, facilities of other plants are utilized for products which are similar to industrial or consumer products. Large air-conditioned, clean production areas are utilized. One plant maintains a qualified white room. Production equipment in these plants include:

Wire drawing in many alloys from 0.02" and finer to 0.0009".

Wire weaving in many alloys from crimped heavy wire to 325 x 2400 mesh.

Porous Media Fabrication – Equipment for PSS, RIGIMESH, CERTIMESH, SUPRAMESH, EPOCEL, ULTIPOR and GLAS-KLEER elements from miniature sizes to hundreds of square feet.

Filter Element, Housing, Valve, DELTADYNE and Adjunct Devices Manufacture – Extensive company-owned machining, forming, welding, brazing, heat treating, anodizing and other facilities are utilized.
Heliarc, arc and resistance welding.
Machine tools range from engine lathes to automatic screw machines and from drill presses to automatic chuckers. Our wide range of metal working equipment includes many special items.

Test Stands – Primarily company-designed, our stands cover all hydraulic and lube oils, jet fuels and others. Stands range in size up to a 1,350 GPM fuel test cell.

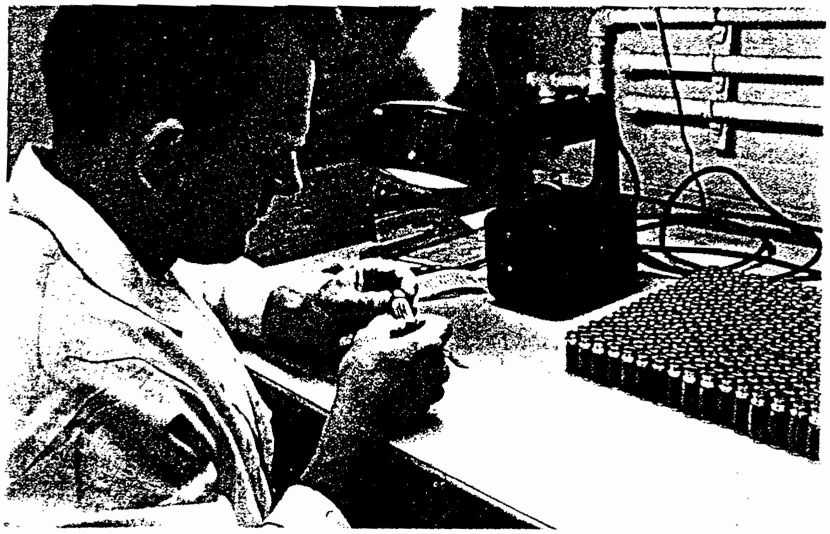
Sintering and other Porous Media Production—A wide range of company-designed equipment is used for PSS, RIGIMESH, SUPRAMESH, ULTIPOR and GLAS-KLEER porous media.

Environmental Test Facilities – High and low temperature facilities primarily for flow fatigue, impulse and vibration.

Inspection Equipment—Extensive inspection equipment ranges from microscopes to optical comparators and from chemical analysis apparatus to dimensional inspection tools. Much specialized as well as the usual standard equipment is used.

Laboratories – As described under "Research and Development".

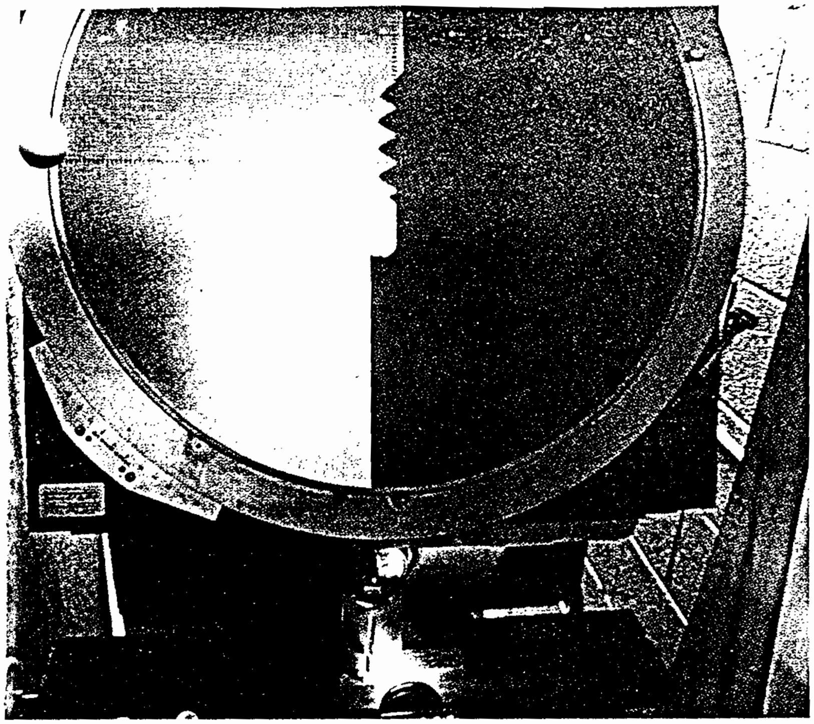
This brief description of facilities is intended for the general reader. Details are available on request when required for customer facilities surveys.

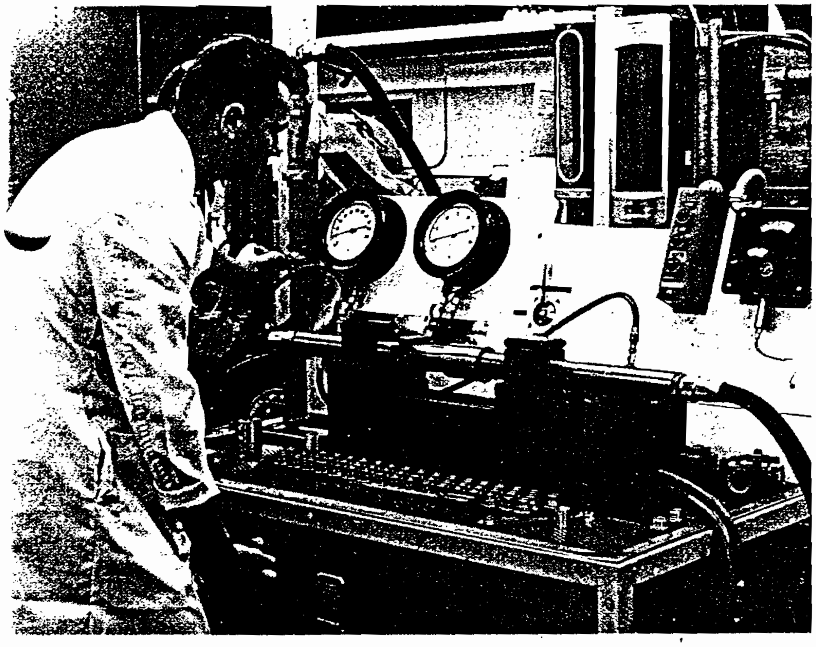


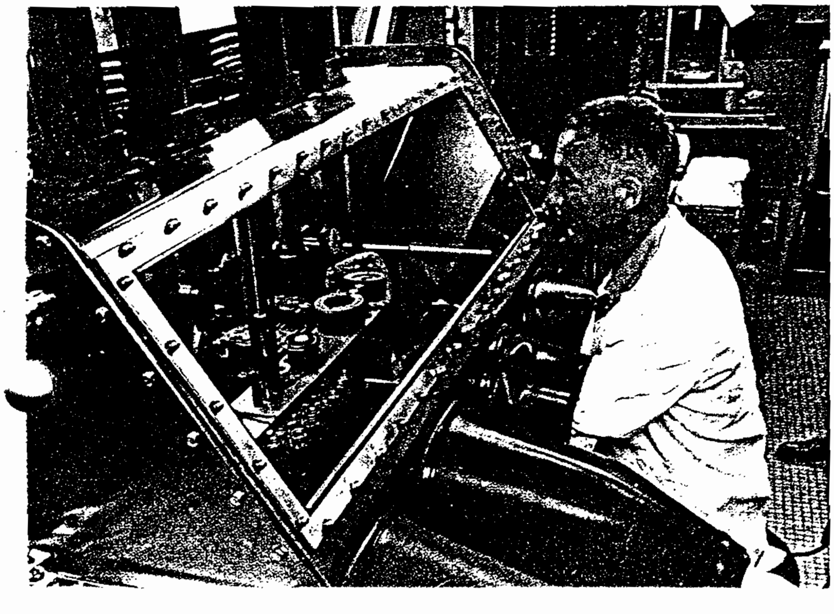
Top: Quality control of Pall products is maintained by a well equipped staff which makes rigorous checks in all stages of manufacture from design to final packaging.

Center: Final inspection of completed filter elements.

Bottom: Bubble Point Test Stands developed by Pall Corporation are used to determine pore size of filter elements.







Top: The thread form on a machined part being magnified and checked on an optical comparator. Our other extensive inspection equipment includes microscopes, dimensional inspection tools, fluid measuring instruments and apparatus for chemical analysis.

Center: Testing of "Belvalve" relief valve assemblies under functional working conditions. In addition to standard test equipment, we employ much specialized apparatus of our own design.

Bottom: This futuristic looking apparatus is used for the manufacture of filter elements requiring a controlled atmosphere.

Publications

Any of the following list of technical literature, Field Service Reports, published articles and other documents is available on request:

field service reports

- F4 A Method for Determining the Degree of Cleanliness of the Interior of Hydraulic Components and of the Down-Stream side of Hydraulic Filter Elements; Report No. APM-FSR-4A (proposed SAE-ARP-599).
- F5 Comparison of a Stacked Disc Pack Type Filter Element and an APM RIGIMESH® Element on Basis of Removal Efficiency, Dirt Holding Capacity, and Life Cycle Test with MIL-L-7808; Report No. APM-FSR-5.
- F6 The Effect of Corrosion Inhibitors in Jet Aircraft Fuels on the Interfacial Tension Between the Fuel and Water and on Surface Tension of Water; Report No. APM-FSR-6.
- F7 Determination of Resonant Frequency for a RIGIMESH® Filter Element; Report No. APM-FSR-7.
- F8 Anaylsis of the Cleanliness of Teflon Lined High Pressure Hose using a Bend Test; Report No. APM-FSR-8.
- F9 A Method for Determining the Degree of Contamination of Sampling Valves; Report No. APM-FSR-9A.
- F10 Evaluating Effectiveness of Filter Element Cleaning Methods; Report No. APM-FSR-10C (proposed SAE-ARP-725).
- F11 A Discussion of the Pros and Cons of Customer Performed Epoxy Resin Repair of Filter Elements; Report No. APM-FSR-11.
- F12 Specification of LOX and LH_2 Filters; Principles and Practical Considerations; Report No. APM-FSR-12.
- F13 Testing of Filters for First Article Inspection of Pall-Cavitron Hyperintense Proximal Scanning Ultrasonic Filter Element Cleaner; Report No. APM-FSR-13.
- F14 Methods of Evaluating Sonic Cleaning Systems; Report No. APM-FSR-14A.
- F15 Filter Element Reliability Considerations; Report No. APM-FSR-15.
- F16 Preliminary Analysis of Contamination Released Downstream When a Stainless Steel Filter Element is Installed into a Simulated Anodized Mating Cavity; Report No. APM-FSR-16.
- F17 Evaluation of the Acceleration Produced by the Filter Element-Tap Test. Contamination Measurement Method; Report No. APM-FSR-17.
- F18 Transpiration Cooling Through RIGIMESH® Sintered Woven Wire Sheet; Report No. APM-FSR 18.
- F19 Cold Sterilization of Aircraft Gas Turbine Fuel Containing Microbial Contaminants; Report No. APM-FSR-19.

technical reports and reprints

- R1 Development of Filters for 400° and 600°F Aircraft Hydraulic Systems; WADC-TR-56-249 dated May 1956.
- R2 Hydraulic Filter Requirements for Industrial Servo Systems, dated April '60.

R3 Summary of Fuel and Strainer Specifications; Drawing AD-3418-2.

R4 Summary of Data Pertaining to Filters in Aircraft Engine Specifications; Drawing AD-3418-4.

R5 State of The Art of Filtration Media Suitable for Airborne Fuel Filter and Strainer Equipment on gas Turbines.

R6 Technical Proposal for Pall-Cavitron HIPS® Hyperintense Proximal Scanning Ultrasonic Filter Element Cleaner; Report No. APM-TP-59-4, dated 1 Dec. '59.

R7 Focused Energy Cleans Filters; Bulletin No. RA-2 (Reprinted from 11 April '60 Product Engineering).

R8 Impulse Test Accuracy as Function of Transducer Location, dated 2 May '58.

R9 The Advantages of Sintered over Unsintered Woven Wire Mesh; Bulletin A13B.

R10 Description and Operation of BELVALVE® Relief Valve; Bulletin A21.

R11 Characteristics of Particles and Particle Dispersoids; Bulletin No. A20. (Reprinted from Stanford Research Institute Journal, Third Quarter, 1961.)

general reports and reprints

G1 Quality Control Manual, QCM-2.

G2 New Goals For Small Company Growth. (Reprinted from 27 Aug. '62 Steel Magazine) Technical History and Philosophy of Pall Corporation.

G3 Latest Pall Corporation Annual Report.

G4 Facilities Report, Aircraft Porous Media, Inc.

G5 Weaving Fine Wire Cloth; Bulletin E12.

qualification test reports

Q1 ULTIPOR®.9 TRIPHANE® 3-Micron Absolute Filter Assembly per MIL-F-27656A; Report No. QTR-5457.

Q2 DELTADYNE® Differential Pressure Indicators; Report No. QTR-2100-3B.

Q3 Filter Assemblies and Elements per MIL-F-8815; QTR-3258-GT.

Q4 RIGIMESH® Filter Element per MIL-F-5504B; Report No. QTRS-1315E-GT-1.

Q5 EPOCEL Filter Elements per MIL-F-5504B; Report No. QTR-4723-12.

specification and procedures

S1 Procedure for the Determination of Particulate Contamination of Hydraulic Fluids by the Particle Count Method. SAE-ARP-598*.

S2 A Dynamic Test Method for Determining the Degree of Cleanliness of the Downstream Side of Filter Elements. SAE-ARP-599*.

S3 Filters, Hydraulic, Aircraft. MIL-F-5504A*.

S4 Filters, Hydraulic, Aircraft. MIL-F-5504B*.

S5 Filter and Filter Elements, Fluid Pressure, Hydraulic, Line, 15 Micron Absolute, Type II Systems. MIL-F-8815*.

S6 Filter and Filter Element, Fluid Pressure, Hydraulic, Absolute, 25 Micron, −65° to +450° and +600° F. MIL-F-25682. (USAF)*.

S7 Filter, Fluid, Pressure, Absolute, 5 Micron, Hydraulic. MIL-F-27656. (USAF)*.

S8 General Specification for Fluid, Filters and Filter Elements. APMS-900.

S9 Model Detail Specification for Filters and Filter Elements, Fluid. APMS-901.

S10 Proposed Detail Specification for Filter and Filter Elements, Fluid Pressure, Hydraulic, Line, 15 Micron Absolute, Type II Systems. APMS-902.

S11 Adjustment of Maximum Pore of RIGIMESH® and SUPRAMESH® Filter Elements Damaged in Service. APMS-911.

S12 Procedure for Obtaining Cleaning and Test Data for Elements to be Cleaned on the HIPS® Cleaner. APMS-913.

S13 Cleaner, Ultrasonic Filter Element, Hyperintense Proximal Scanning. (long spec.). APMS-910.

S14 Cleaner, Ultrasonic, Filter Element, Hyperintense Proximal Scanning. (short spec.). APMS-914.

product literature

Bulletin A1081A—Supramesh and Rigimesh Filter Assemblies
Bulletin A4—Tee Type Filter Assemblies
Data Sheets A4-1 thru A4-32—Tee Type Data Sheets
Bulletin A7—Supramesh Aircraft Hydraulic Filters
Bulletin A5B—Element-in-Line Filter Assemblies
Data Sheets BA5-1 thru BA5-22—Element-in-Line Data Sheets
Bulletin A6—Rigimesh and Supramesh Filter Elements
Data Sheets A6A1, A6A11, A6A12, A6A13, A6A41, A6A42, A6A43, A6A51, A6C1, A6C2, A6C3, A6C11, A6D1, A6D2, A6D12, A6E1, A6F1, A6G1, A6H1—Element Data Sheets
Bulletin A107B—Rigimesh
Bulletin A2B—3-Micron Absolute Filters
Bulletin A2C—10-Micron Absolute Filters
Bulletin A3A—Ultipor.9 Triphane Absolute 3 Micron Filter
Bulletin E25—Widest Range of Filters for Industry
Bulletin A14—Modular Valve Filter Manifold
Bulletin A16—Deltadyne Differential Pressure Indicators
Data Sheets A16-1 to A16-8—Deltadyne Indicators
Bulletin A15—Deltadyne Pressure and Differential Pressure Switches
Data Sheets A15-1 thru A15-8—Deltadyne Switches
Bulletin A17—Deltadyne Adjustable Pressure and Differential Pressure Switches
Bulletin A18—Deltadyne Adjustable Pressure and Differential Pressure Switches
Bulletin A19—Deltadyne Adjustable Pressure and Differential Pressure Switches
Bulletin E11A—Differential Pressure Remote Indicator
Bulletin A9—Pall-Cavitron HIPS Ultrasonic Cleaning System
Bulletin A11—Pore Size Determinator
Bulletin E16A—Pall Gas Detector
Bulletin A20—Characteristics of Particles and Particle Dispersoids
Bulletin A24—Screensert

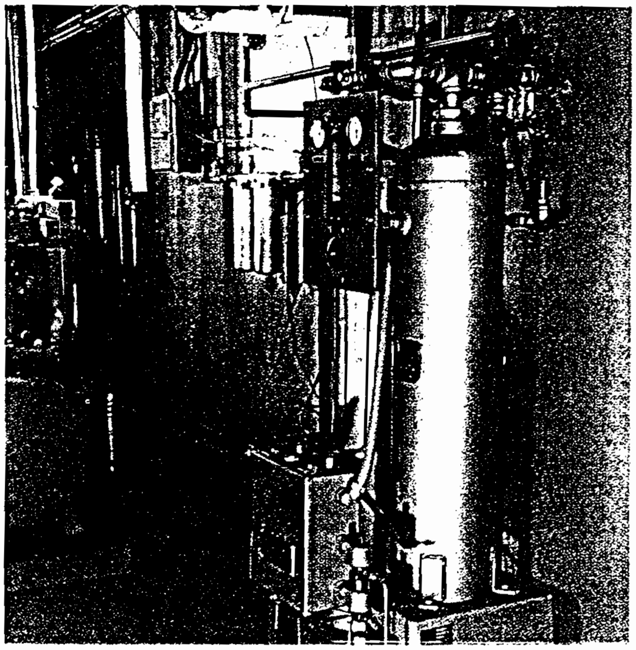
*Government reports offered by Pall Corporation as a service to its customers.

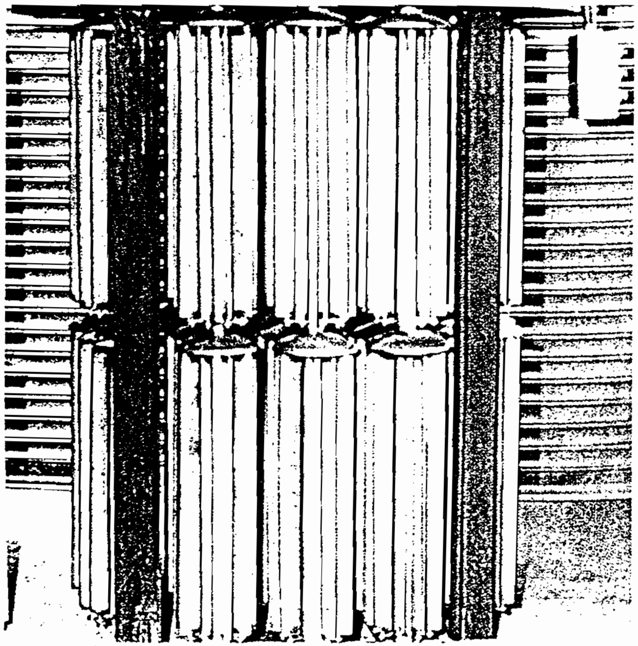
Industrial Activities (Other than Fibrous Glass, Wire and Wire Cloth)

Region	Name & Location of Main Office	Telephone	Telex	Cable
Australia, New Zealand and Malaya	H. P. Gregory & Co. Ltd. 74 Clarence Street Sydney, Australia	29 2551		Gregory
Canada	Hollinger Machine Co. Ltd. 9800 Rue St. Urbain St. Montreal, Canada	514 DU 7-7331		
Italy	Pressindustria (Filters Only) Via Settembrini, 11 Milano, Italy	Milano 206.705		Pressindustria
Other British Commonwealth and European Countries, and United Kingdom	Pall (U.K.) Ltd. 45 Balfe Street Kings Cross, London N.1 England	BRunswick 6661-5	23901	Flowise
Mexico & Other Latin American Countries	Servo Mex, S.A. Av. Oaxaca 28, 6o PISO Mexico, D.F.	25-[illegible]-10		
U.S. & Other Areas	Pall Trinity Micro Corporation Cortland, New York	607 SK 6-7535	TWX # 607-371-1266	Trincort

FOR FIBROUS GLASS contact Fibrous Glass Products, Inc., Mountaintop, Pa., telephone 717 GR 4-6731.

FOR WIRE AND WIRE CLOTH in the U.S., contact Pall Corporation, Glen Cove, N. Y. telephone 516 OR 1-4000; telex 01-26329; TWX 516-671-6272; cable PALLCO, Glen Cove, N. Y. For all other areas, contact Precision Fine Wire Weaving Co., Ltd., London, England, telephone Clerkenwell 4481; telex 21425.





General Capabilities

Since World War II the process industries (chemical, pharmaceutical, food processing, petroleum, distilling, metallurgical and petrochemical) and the power, atomic energy and electronic industries have increasingly used close controls, finer tolerances and new extremes of temperature and pressure.

Similarly to the concurrent development and use of RIGIMESH with the latest rocket and jet engines, many processes were designed to use our porous media. For example, most of the highest quality high polymer films made in the U.S. are produced in systems which must use either RIGIMESH or PSS. Long periods of development yielded little success until Pall engineers, working in close cooperation with engineers of major chemical companies, solved the problem.

For many years we have been the principal supplier of permanent media types of filters and a leader in the supply of gas dehumidification equipment and thermowells. More recent developments have made us an increasingly important factor in disposable filters. We now have the broadest line of clarification filters in industry, and offer a more complete process filtration service than was ever available.

Filling another technological gap, the superiority of our compressed gas systems has been significantly advanced with our new HX all-pneumatic dryer. This unique product makes highly efficient dehumidification possible without the use of electricity—an important factor in mobile equipment, in natural gas lines and in any situation in which an explosion hazard is present.

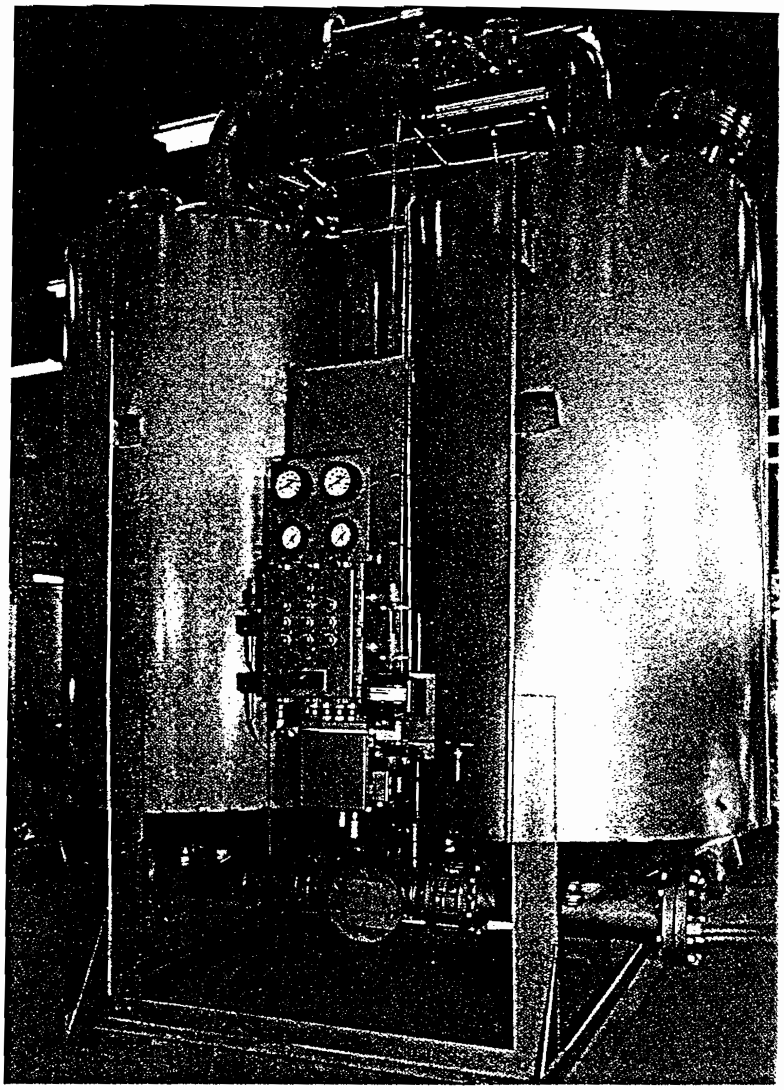
Another development of major importance is PETROSORB—which gives us the capability of removing virtually all condensible hydrocarbons from an air or gas stream. These previously presented a major built-in explosion hazard in many systems as well as a serious source of contamination.

New developments in our temperature sensing line, including Multipoint, miniature Trinox and snap-in thermocouples, have given us a much more important position in this field.

Principal Industrial Products

A summary of our principal Industrial Products and the history of their introduction follows:

1946-1950 During this period PSS^R (porous stainless steel), an entirely new filter medium, was introduced. We soon developed and introduced porous stainless



Above: Trinity Dehumidifier removes moisture and hydrocarbon vapors from compressed gas—thus also removing elements which might cause a malfunction or an explosion.

Opposite Left: This installation of Trinity dryers and Micro Metallic filters at the Forrestal Research Center, Princeton, N. J. is an example of the benefits offered by Pall's overall experience and capability in contamination control.

Opposite Right: We make big filters as well as small ones. A "Bayonet" filter assembly, almost as tall as the average man, being installed in a major chemical plant.

Final filtration of beverages is one application for PSS metal filters. This installation is in a distillery.

steel laboratory filters, and then full scale industrial filters. Many new filter designs of an improved nature gained rapid acceptance from industrial users.

It was also during this same general period that Trinity Equipment Corporation developed a broad line of precision machined, corrosion resistant thermowells for the protection of temperature sensing devices, and established itself as the leader and first full-line manufacturer in its field.

1951-1955 Trinity acquired and substantially improved a line of dehumidification equipment to satisfy growing demands for moisture free air and gas systems.

We continued to intensify our development and engineering program and introduced Porous Teflon* and Kel-F** for filtration of extreme corrosives.

The first application of PSS for large scale catalyst retention systems was made.

During this period new high quality films made of extremely high temperature, viscous, contamination-sensitive polymers were being developed in this country and only close cooperation of Pall engineering with the engineering departments of large chemical companies made the process possible. It is interesting to note that with our increasing activity in Europe we have now been sought out to help solve similar problems there with Pall equipment.

1956-1961 The HEAT-LES compressed air dryer, the most notable advance in gas drying in 25 years, was introduced.

Glas-Kleer disposable glass fiber filters were put on the market for limited applications.

Molded, engineered glass fiber products were introduced to the appliance, electronic and other industries.

Deltadyne pressure and differential pressure switches, based on new engineering concepts, were introduced.

Petrosorb, the first adequate answer to removal of dangerous oil vapors from compressed gas systems, was placed in use.

1962-1963 Cartridge Filters. One of our most important industrial product developments of this period is the EPOCEL disposable paper filter element and its companion product for ultra-fine filtration—ULTIPOR.

Disposable cartridges have been used by industry for many years, but no high area, long-life cartridge for use under a wide variety of conditions has been available. Paper filters, long used in automobile and other vehicular applications, had not been successfully developed for use with process fluids, water and aqueous solutions. Our EPOCEL cartridge filled this void and has been gaining rapid acceptance.

EPOCEL, with ULTIPOR and our broad range of other filter media—together with a new housing line—have enabled us to offer the plant engineer an easy-to-order, flexible, standard filtration system for almost any need.

ULTIPOR—A New Family of Filters—For many years there has been a great need—one which is constantly increasing—for filters which can remove extremely fine contaminants, including bacteria and even viruses. This need exists not only in such obvious places as drug manufacture, but also in the production of semiconductors and among industrial users of many fluids.

The problem is not only to remove such incredibly small particles with absolute certainty but to do so in a manner which is economically feasible for large scale application.

Until ULTIPOR, the only available methods were adaptations of hard to handle laboratory techniques using fragile materials and expensive equipment. These do not permit either high throughput rates or adequate time on stream. In addition, it is not always possible to pre-test these materials to be certain of absolute removal ratings. Such tests are standard with ULTIPOR.

This dash (-) is 1,000 microns long. A particle 25 microns in size is too small to be seen with the naked eye. Typical bacteria may be ⅓ of a micron in size or 3,000 times smaller than the dash shown above! We produce standard disposable filters which will remove such bacteria quantitatively and at the same time economically—with both excellent throughput and onstream life.

For special applications we have a still finer filter, which will remove viruses 75,000 times smaller than the dash to which we have been referring!

ADVANCED GAS DRYERS—Compressed air, nitrogen, hydrogen and other gases are widely used throughout industry for such diverse applications as operation of pneumatic controls, conveying powdered or granular materials by fluidizing, pressurizing waveguides and coaxial cables, clarifying controlled atmospheres in manufacturing processes and many others. These gases must be freed of water and oil vapors which normally contaminate them. Water is normally removed by passing the gas through a desiccant bed which absorbs the vapors. In time, the desiccant becomes saturated. To provide a constant flow of dry gas the desiccant beds are periodically regenerated in equipment such as our Trinity dryers. Until 1957 the regeneration process was accomplished by the introduction of heat. In that year Trinity introduced the first automatic system which op-

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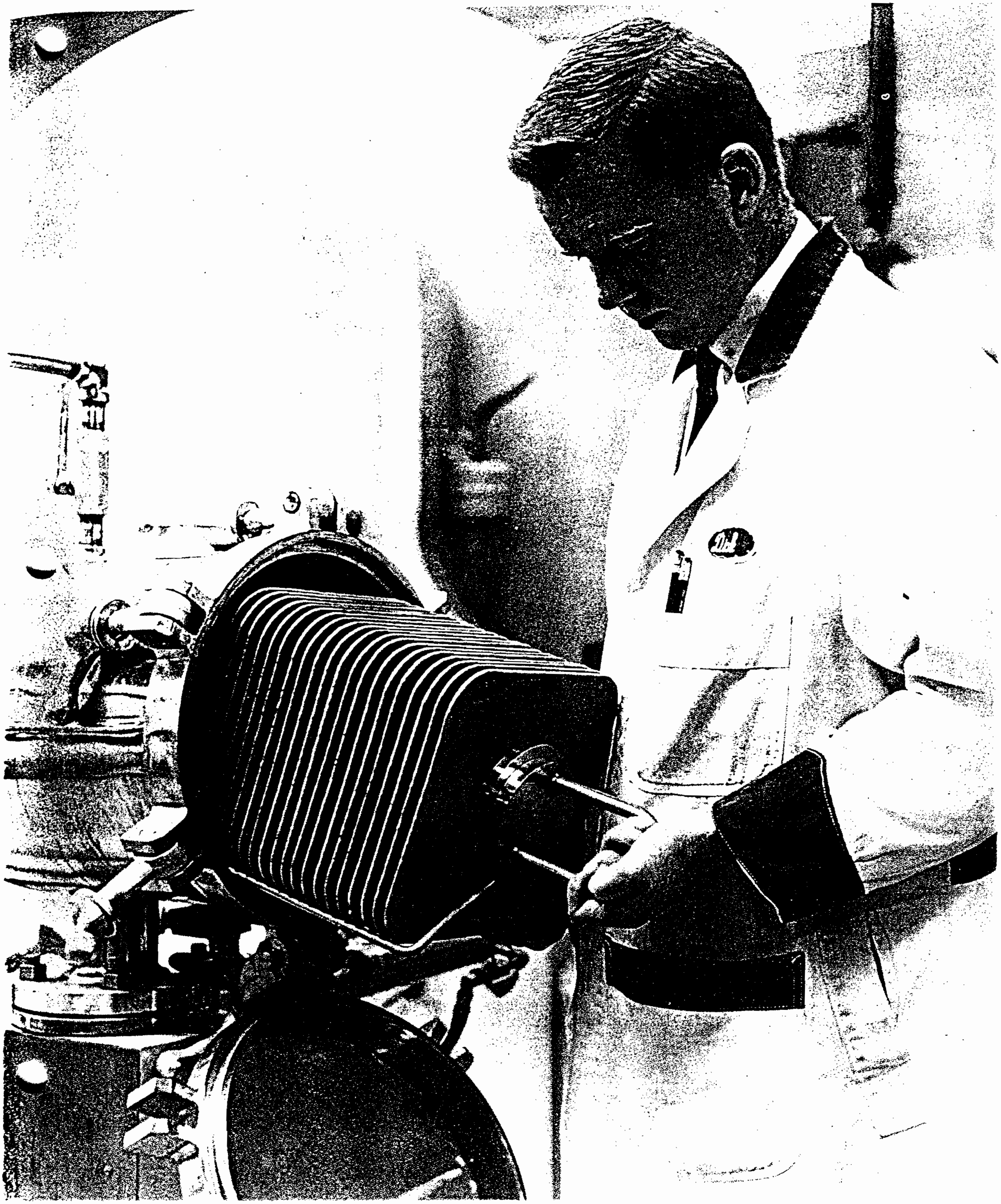
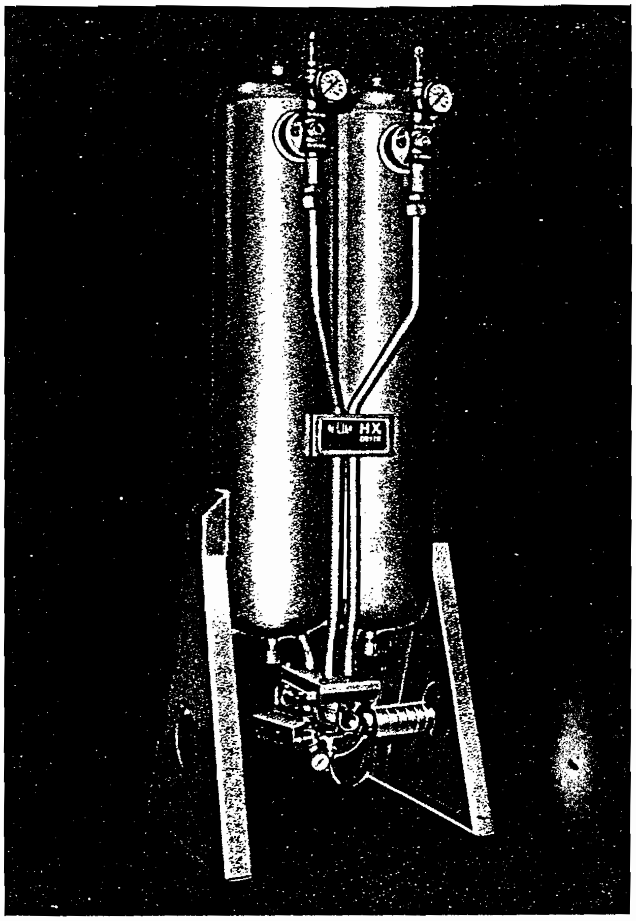
*TM of duPont

**TM of 3M

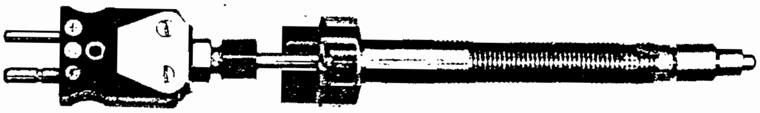




Top: Our recently announced HX automatic gas dryer which operates without external power source. This makes possible efficient dehumidification in mobile equipment, and in natural gas lines and other situations where there is an explosion hazard or where electricity is not available.

erated without an external heat source. This was a great step forward and represented the last notable advance in gas drying equipment, until our HX all-pneumatic dryer (to which we referred earlier) carried gas dehumidification technology another long step forward.

WATER SOFTENER VALVES—The single most serious service problem in the widespread home water softening equipment industry is caused by failure of a multiport control valve. Unable to find an adequate valve for their own water softener production, our Canadian subsidiary, Hollinger Machine Co., Ltd., has developed and is now selling to other manufacturers a new valve, for which patent application has been made. This new valve is not only superior in performance, but also lower in cost.



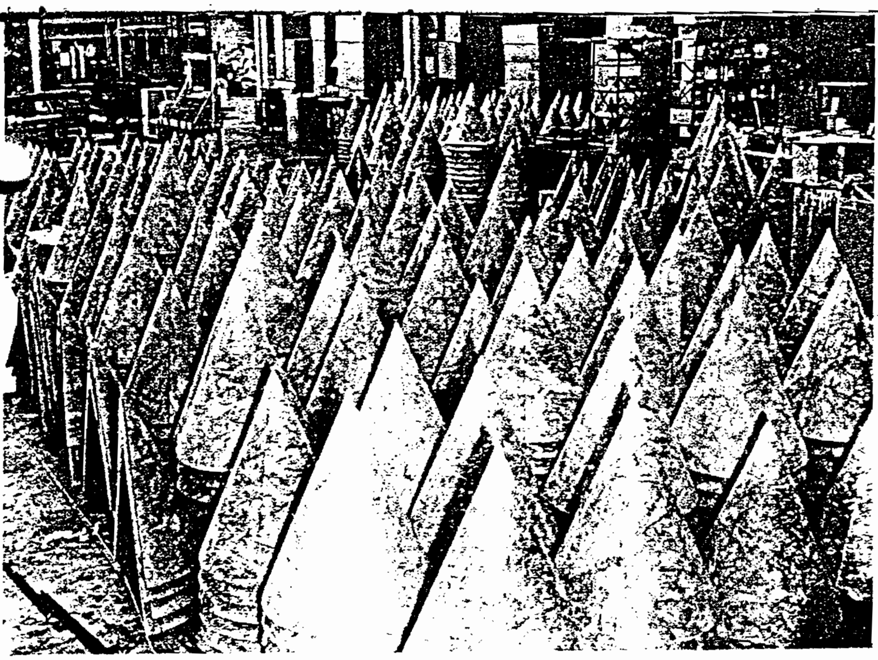
A Trinox thermocouple assembly widely used for temperature control in the plastics field.

WIRE CLOTH—During this period our wire cloth facility, which began as an essential integration step for quality control and filter development in our aerospace line, came into being as a separate operation. This facility now offers a very broad range of wire cloth for industrial use. Engineering oriented, as are all Pall operations, our wire cloth facility is able not only to supply highest quality off-the-shelf materials, but also special needs as well. Our own wire drawing facilities—just recently installed—aid immeasurably in giving us unusually broad capabilities.

FIBROUS GLASS—As mentioned in the historical section of this report, our original entry in the glass fiber business was to protect our supply of the glass fiber filters we developed in 1957. Our inability to find a continuing supply of adequate quality and a reasonable price for the fibrous glass wool which served as our raw material, led us to develop our own process and we became the first new manufacturer of glass fiber wool in many years. The successful operation of this plant was a notable engineering achievement and was accompanied by new product development in acoustic, thermal and shock insulation products. However, just as our continuing technology has obsoleted competitive products, it sometimes curtails our own products. The remarkable EPOCEL and ULTIPOR lines have limited the sphere of our Glas-Kleer filters to a much narrower range of application than previously anticipated. Glas-Kleer is superior to many other products on the market but in most cases is eclipsed, just as these others are, by EPOCEL and ULTIPOR.

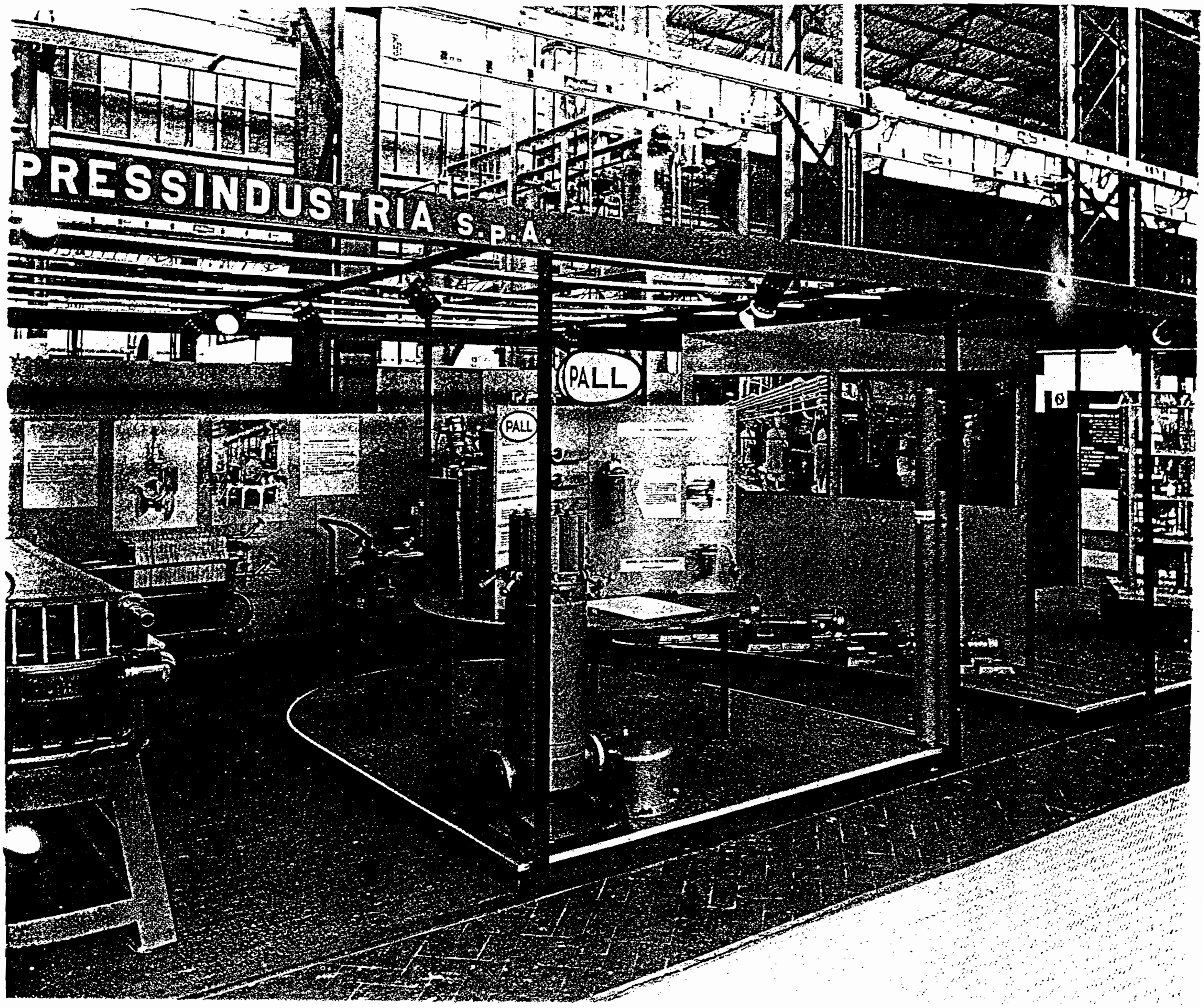
The largest markets for fibrous glass are in insulation products for the construction and processing industries.

The manufacture of glass fibers for insulation is a highly competitive business dominated by one large company and actively engaged in by three others, all of which are well established and larger than we are. In



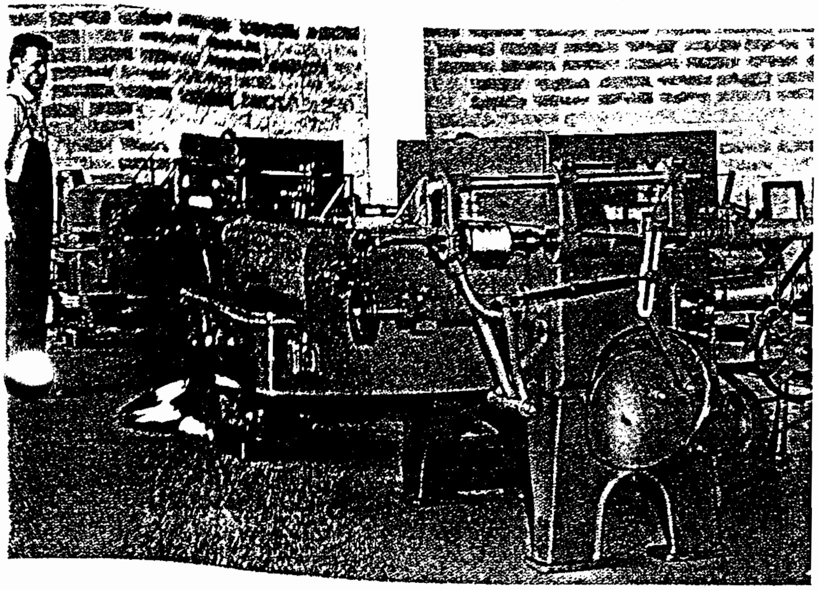
Fibrous Glass cones awaiting shipment at Mountaintop, Pa. plant. These were produced in quantity for a Christmas display for a leading chain of clothing stores.

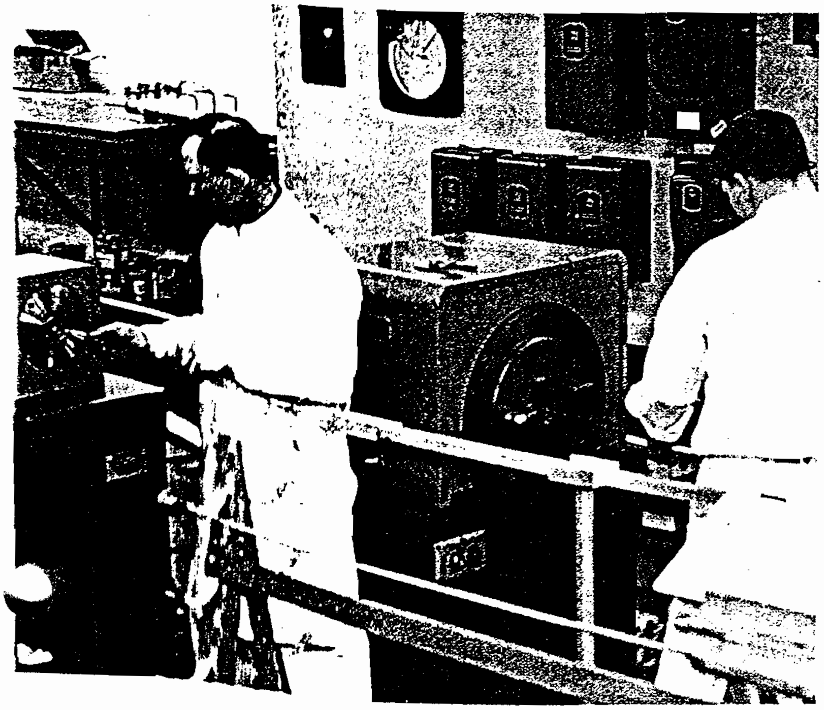
Below: An example of our international marketing effort. Pall filters displayed at Rassenga Internazionale della Chimica Show (International Exhibition of Chemistry) in Milan, Italy, June 1963 by Pressindustria S.p.A., Pall industrial filter licensee in Italy.



Top: Newly installed wire drawing machinery at the Pall Shannon, Ltd. plant in Ireland.

Bottom: Part of the Trinox thermocouple manufacturing area at our Cortland, N. Y. plant. Development of miniature Trinox and snap-in thermocouples (as well as Multipoint thermocouples which make possible multiple temperature readings in a large vessel) have enhanced our position in this field.





addition to selling under their own names, these companies also manufacture their products for, and under the brand name of, many other companies.

We have entered into a joint venture with one of these latter companies. It is Baldwin-Ehret-Hill, Inc., a well-established manufacturer of certain types of insulation materials, and a successful distributor of fibrous glass materials purchased from others, along with other products for the construction and process industries.

Under the joint venture we are to produce and Baldwin-Ehret-Hill, Inc. is to distribute a broad range of glass fiber products. Other licensing or joint venture possibilities in the large glass fiber market are being explored.

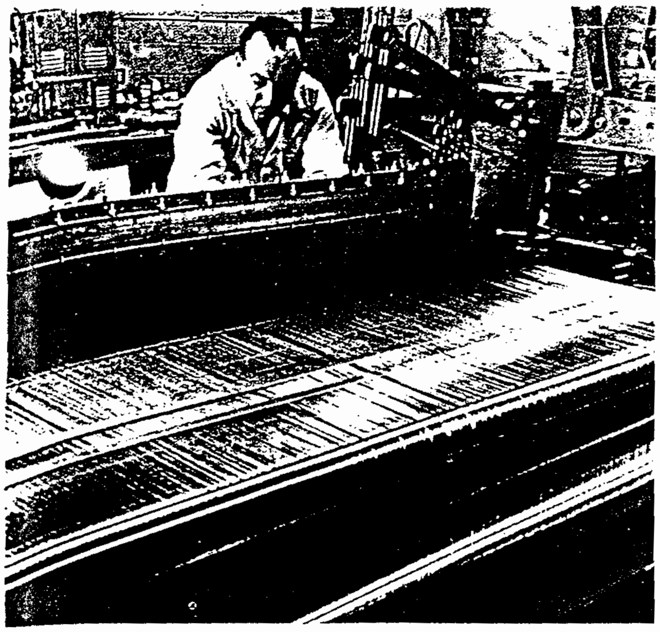
Facilities

As with aerospace products, our industrial equipment facilities are highly integrated. They include, in addition to the types of equipment described under Aerospace, certain additional special facilities for the manufacture of pressure vessels, for the manufacture of insulated thermocouples and for the testing of compressed gas dehumidification equipment.

Plants devoted primarily to industrial equipment (other than fibrous glass and wire cloth) encompass about 60,000 square feet.

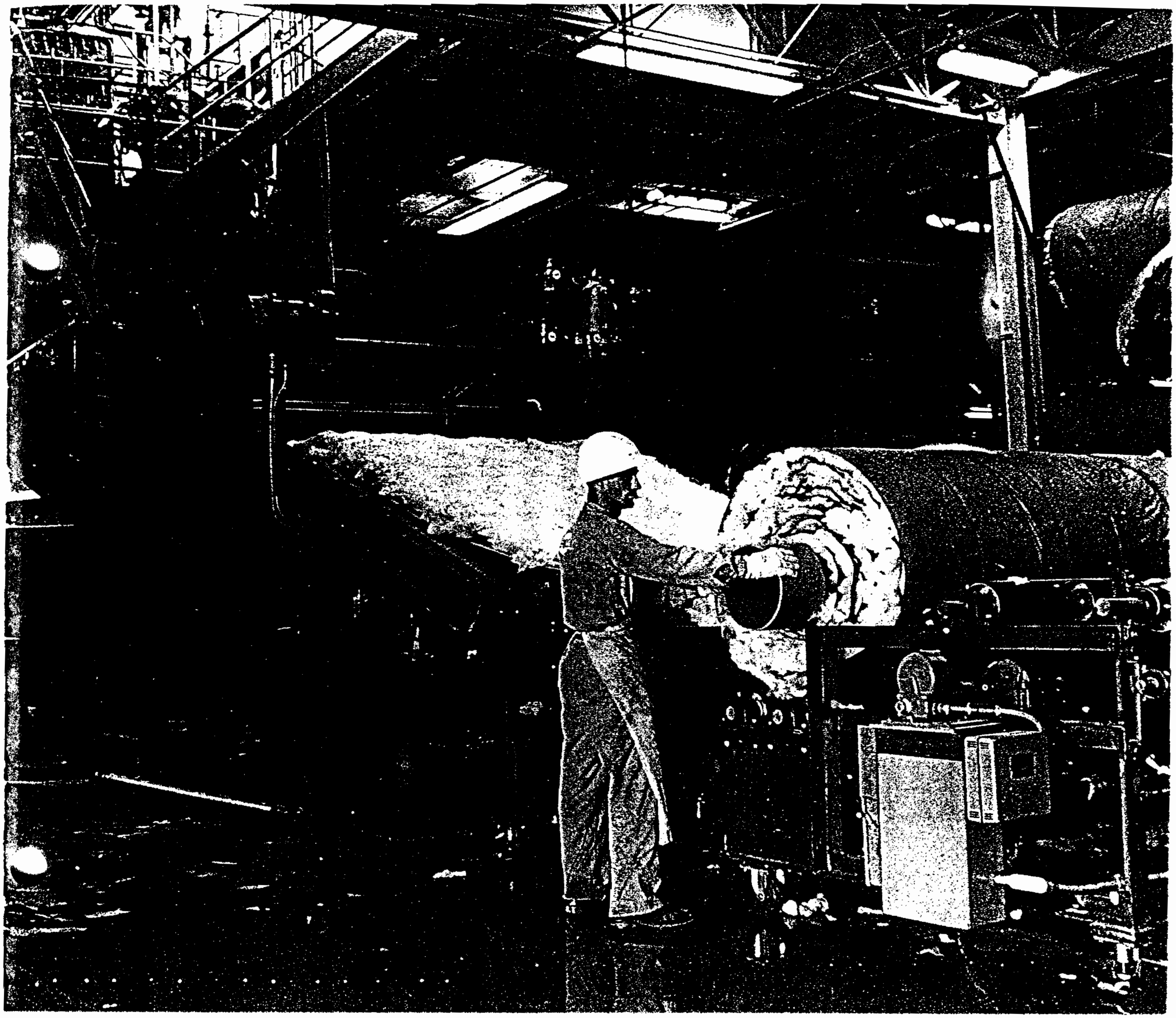
Fibrous glass facilities, in a plant of about 60,000 square feet, include much specialized, highly automated equipment of our design. This equipment is capable, for example, of introducing sand, borax and other raw materials at one end and continuously turning out such finished products as pipe insulation ready for packaging at the other end.

Wire and wire cloth facilities, again with much equipment of our own design, are housed in plant space of about 30,000 square feet. These facilities are capable of serving substantially any industrial wire cloth need.



Wire weaving loom makes Space Age meshes at Pall-Ulster, Ltd. plant in Northern Ireland. New Pall inventions in mesh design are now making sharply increased product life and miniaturization possible.

Below: Fibrous Glass insulation being made at our Mountaintop, Pa. plant. The capabilities engineered into this modern plant have enabled us to develop new products in the acoustic, thermal and shock insulation fields.



Publications

The following list of technical literature, published articles and other documents is available on request:

FILTERS

Bulletins

E-25 Disposable and Cleanable Filter Cartridges
M-201A Porous Metal Filters and Filter Media
P-103C Porous Plastic Filters and Filter Media
A-107B Sintered Mesh Filters and Filter Media
FP-311 Type FP Dryer Pre-Filters
FA-312 Type FA Filters (Oil Vapor Adsorbers)
FM-313 Type FM Filters (Mechanical Separators)
FC-314 Type FC Filters (Centrisorb)

PUBLICATIONS

Dr. D. B. Pall—Filtration of Fluid Catalyst Fines (Industrial and Engineering Chemistry)
Dr. D. B. Pall—Porous Metal Sheet (Materials and Methods)
C. H. Hacker—Rating the Fluid Filter Media (Product Engineering)
J. Lagakos—Beer Filtration (American Brewer)

HUMIDITY PRODUCTS

Bulletins

HA-308A Heat-Les Dryers
A-309 Type A Heat Reactivated Dryers
AB-310 Type AB Blower Type Dryers
A-319 MP-60 Dryer
HX-320 HX Automatic Dryer
CD-138 Unitized Dry Air Systems

Data Sheets

C-301 Moisture Content Comparison Chart
C-302 Dew Point Conversion Chart
C-303 Dew Point Vs. PPM
C-304 Nomograph: Dew Point Vs. Pressure
C-305 (Moisture Content Vs. Dew Point
C-306 (Grains per SCFM
C-307 (Vs. Atmospheric Dew Point
C-308 Water Content of Air (High Pressure)
C-309 Psychrometric Chart
C-310 Gases and Vapors
C-311 Useful Data
C-312 Discharge of Air Through An Orifice
C-313 Temperature Conversion Table
C-314 Temperatures of Saturated Steam
100 Vacuum Renegerating Heat-Les Dryers
101 Miniature Compressor-Dehydrators
102 Portable Dry Air Systems

TEMPERATURE PRODUCTS

THERMOWELLS

Bulletins

TT-304 Selection of Thermowells
TT-301 Thermowells for Thermocouples
TT-302 Thermowells for Bimetallic Thermometers
TT-305 Thermowells for Filled Systems
TT-303 Thermowells for Test Instruments
TT-307 Econo-Wells

Data Sheets

8571 Plastic and Glass Coatings
3571 Metal Coatings and Jackets

THERMOCOUPLES

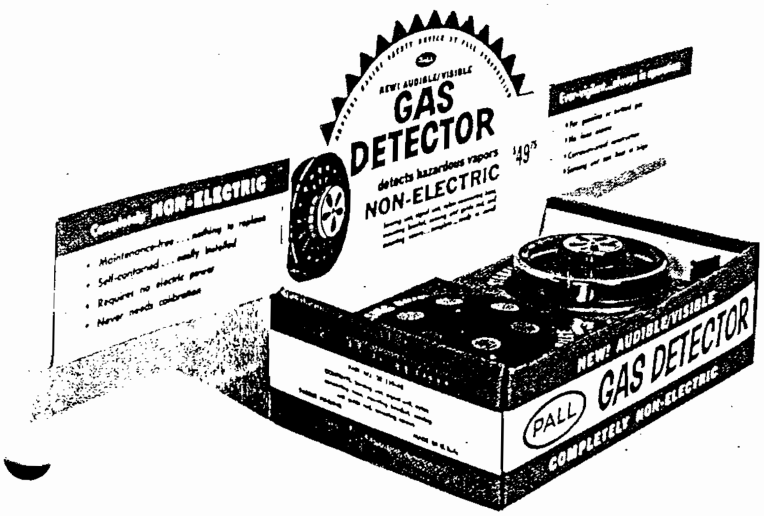
Bulletins

TT-306 Thermocouples
TT-317 Trinox
TT-318 Insulated Thermocouple and Extension Wire

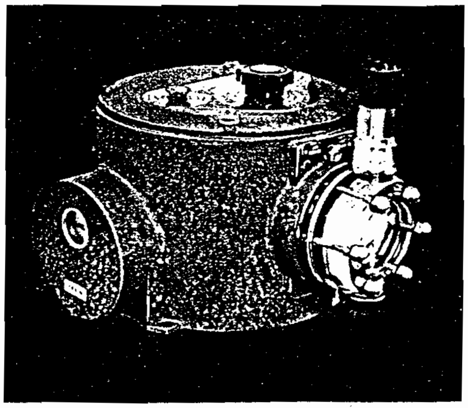
Data Sheets

B-203 Characteristics of Various Thermocouple Combinations

The Pall marine gas detector, without use of electric power, aids boating safety by warning when dangerous fumes accumulate. This same principle is used in other Pall devices for industrial safety and home fire protection.



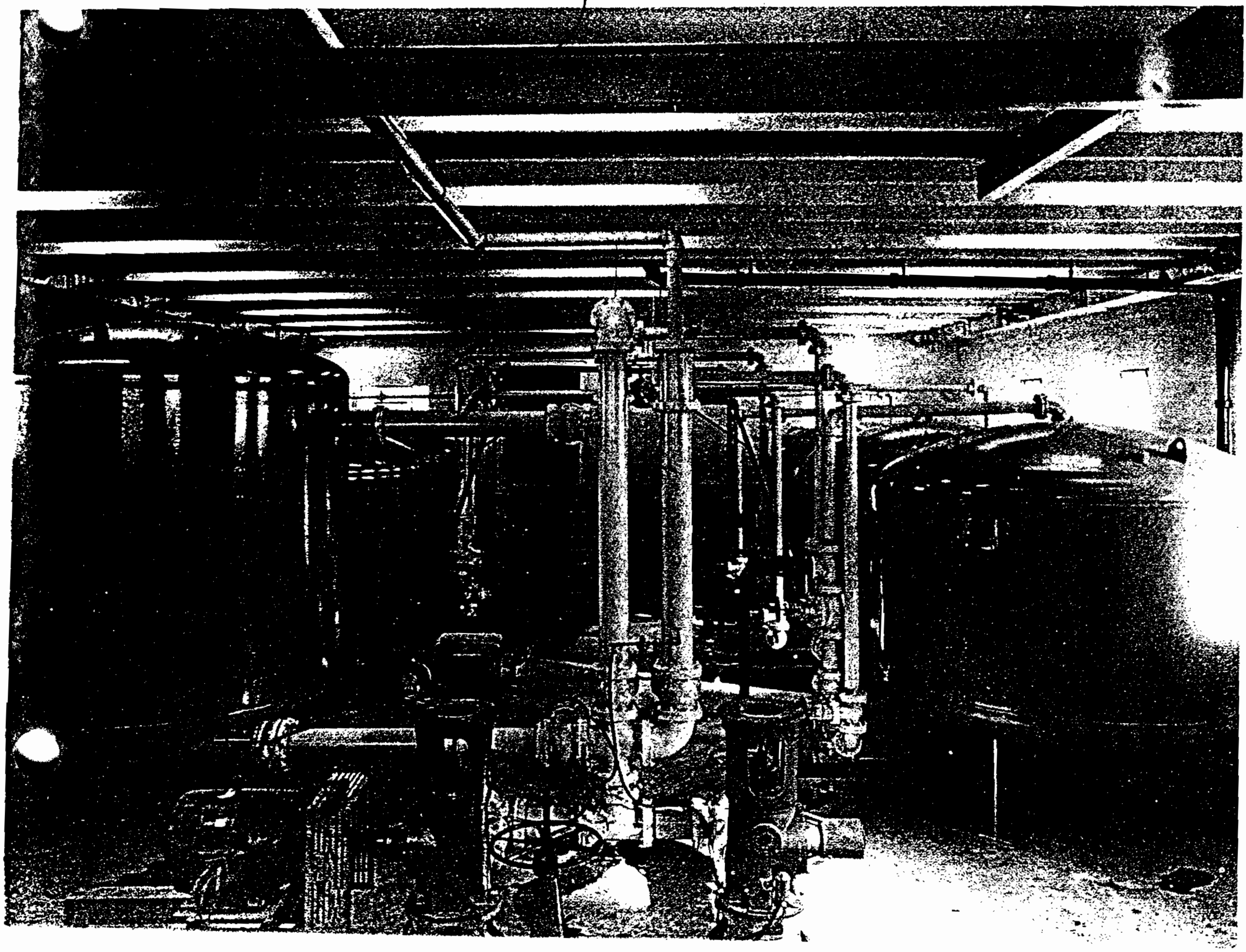
Right: Pumps, pressure filters and retention tanks, part of the complete municipal water purification system recently designed and installed by our Canadian subsidiary, Hollinger Machine Co. Ltd. at Vercheres, Quebec.



The Hollinger Chemical Feed Pump is used to purify water by adding controlled quantities of chlorine. Made and marketed in Canada by our Canadian subsidiary, these Hollinger pumps are now developing a market in the United States.

Consumer and other non-Industrial Activities

Region	Name & Location of Main Office	Telephone	Telex	Cable
Canada	Hollinger Machine Co. Ltd. 9800 Rue St. Urbain St. Montreal, Canada	514 DU 7-7331		
Mexico	Servo Mex, S.A. Av. Oaxaca 28, 6o PISO Mexico, D.F.	25-50-10		
U.K. & Europe	Pall (U.K.) Ltd. 45 Balfe Street Kings Cross, London N.1 England	Brunswick 6661-5	23901	Flowise
U.S. & Other Areas	Pall Corporation 30 Sea Cliff Avenue Glen Cove, N. Y.	516 OR 1-4000	01-26329 TWX # 516-671-6272	Pallco



PallGuard Water Purifiers, the most complete line of home water treatment filters, remove bacteria, dirt, taste, odor and other impurities from home drinking water.

Our products for the consumer and other non-industrial markets stem from one of three directions:

1. Products originating in aerospace or industrial lines which have clear consumer potential.
2. New developments to fill important needs where there is no existing industry or where existing industry has not met requirements.
3. Products for special markets where we have marketing, production or technical advantage.

The most important item falling into Category 1 is again the remarkable ULTIPOR. After extensive testing in our laboratory, in the well-known laboratories of Foster D. Snell and U.S. Testing Company, in the laboratories of a number of voluntary and government hospitals and pharmaceutical manufacturers, and by the U.S. Public Health Service, the U.S. Army and others, ULTIPOR is being widely used to sterilize both liquids and gases.

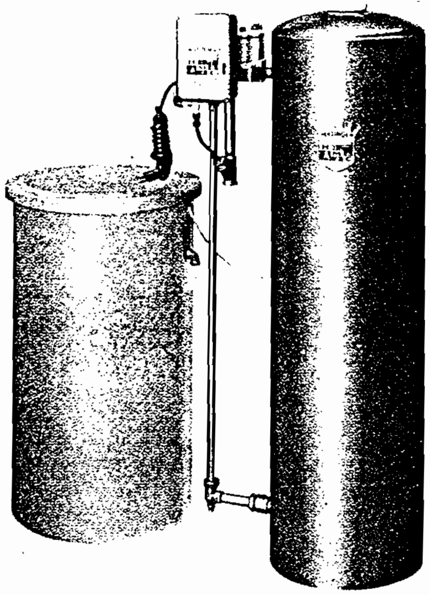
For the consumer market a household ULTIPOR filter, attractively packaged and easy to use, is now being marketed in the U.S. and Canada. This product is a bacteriologically sterile filter of relatively low cost and long life. Capable of freeing water completely from bacteria, the household ULTIPOR is important not only for use in under-developed areas, but for the approximately 6,000,000 American families who have individual water supplies, and are in danger of suffering from the alarming increase in water pollution you may have read about in the newspapers.

Along with ULTIPOR we have developed a broad line of water treatment cartridges, fitting in a common housing, to cope with other problems such as over-chlorination, taste and odor, hardness and turbidity.

Additional products in this category which are now being marketed include the unique sePall. This device, designed for the protection of small marine engines, purifies fuel not only by filtration of fine contaminants, but also by separating water from the fuel and automatically ejecting it from the system. This solves one of the most common causes of engine wear and failure.

Falling into Category 2 and developed during the 1962-3 fiscal year is the Pall line of devices to detect smoke and explosive or poisonous gases. These devices are being used in warning of the presence of gasoline fumes on pleasure boats and, in addition to a growing number of plant safety applications, have potential for such other uses as protection of workers in manholes and home fire protection. They are unique in that, unlike other gas detectors, the Pall products are completely non-electrical, and thus avoid need for any power supply and the accompanying explosion hazard; they are also less expensive than other devices.

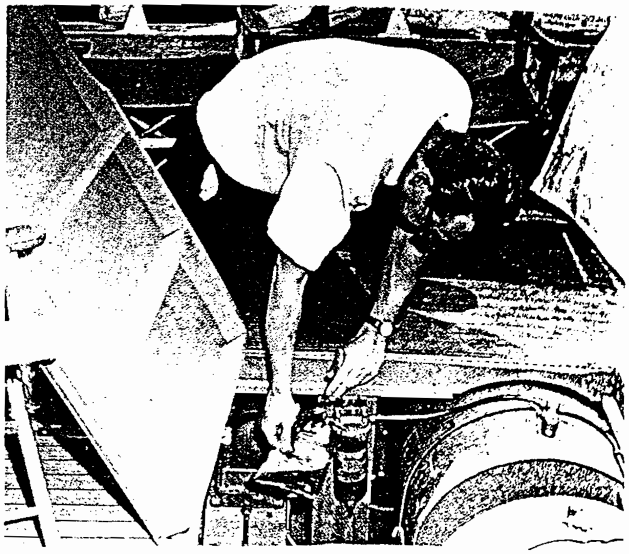
Also in Category 2, but in a totally different area of activity, we have been working with a leading thoracic surgeon towards the development of a new type of artificial lung. This new equipment, now being tested with animals, holds out the hope of substantial life saving in heart surgery. We are also working cooperatively with a specialist in haematology on equipment for clinically separating blood into its various components—red cells, white cells, platelets and plasma. One application would be in a newly developed method for curing certain types of leukemia—and many other applications are foreseen. In addition to their humanitarian aspects, both of these offer possibilities of commercial return. Also in the medical field, our new virus filters quantitatively remove many viruses; these filters are now under test in a number of laboratories.



Left: Water softener made by our Hollinger subsidiary improves washing, cleaning and cooking in areas with hard water.

Below-Top: The Pall portable water purifier, using our uniquely effective ULTIPOR filter, enables everyone—from the Armed Forces to picnickers—to obtain pure drinking water from contaminated sources.

Below-Bottom: Our sePall fuel water separator being installed on a marine engine. By separating water as well as dirt from the fuel supply, and automatically ejecting the water from the fuel system, this device guards against stalling, corrosion and engine wear.



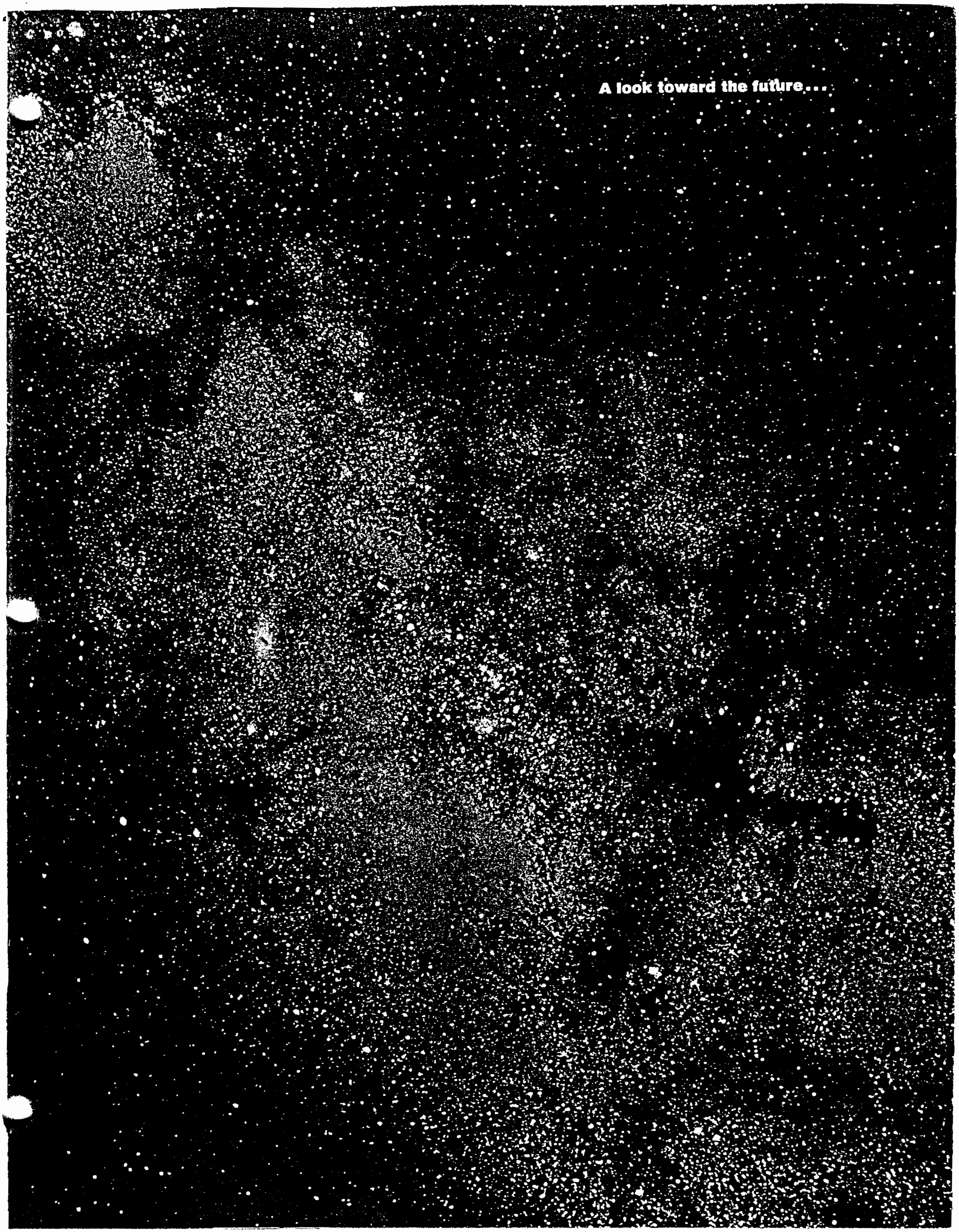
The third category embraces mainly the consumer products of Hollinger, which are marketed principally in Canada. With the long experience and proven products of Hollinger we continue to serve Canada with domestic water treatment equipment and pumps. Our Hollinger chlorinators are also competitive with any others on the market and are being sold in the United States. The domestic cartridge line described in Category 1 is to a great extent a development of our Canadian facilities and is partially manufactured in Canada. Our Canadian laboratory carries on continuing work in the water treatment field and is, to our knowledge, the only Canadian manufacturer of packaged sewage disposal plants and municipal pressure water treatment systems.

The pioneering effort of Hollinger has resulted in the first Canadian installation of a pressurized (rather than open sand bed) municipal water system in the Quebec town of Verchere. Hollinger packaged sewage disposal plants of high efficiency are in use in growing numbers, giving protection against contaminated water supply.

Both of these products of our Canadian operation have resulted in an economic breakthrough, providing proper water and sewage treatment at previously unattainable low cost.

Facilities

Special biological and other water testing facilities are maintained for these products. In addition to 10,000 square feet of plant and special equipment which are used primarily for consumer products, production, laboratory and testing facilities of other operations are also partially devoted to this line.



A look toward the future . . .

Publication of our corporate philosophy in a national magazine and in our 1962 annual report has evoked considerable interest.

In these times of economic uncertainty, rapid technological advancement and rising domestic and international competition, it is not possible to stand still, nor is it possible to depend on the momentum of past accomplishments to carry one forward.

Industries will either advance or fall back. A precondition to advancement is a state of mind—a philosophy—that is conducive to forward strides.

The cardinal points of our corporate philosophy are:

1
to build and maintain a superior technical and management organization

2
to engage only in activities we thoroughly understand

3
to be venturesome (but not reckless)

4
to look for fields of expansion where others in the industry are technologically weak and where rapid and continued change is likely

5
to enter some relatively untried fields where a product appears to be lacking altogether and where a substantial market looks likely

6
to explore consumer markets related to our industrial capabilities

7
to know our production costs

8
to emphasize manufacturing improvement along with product development

9
to intensify and expand our sales efforts

In a word, this is a philosophy of growth—in markets, in products and in capabilities—all leading to security and new opportunity for our employees, optimum service to our customers, and increased earnings for our stockholders.

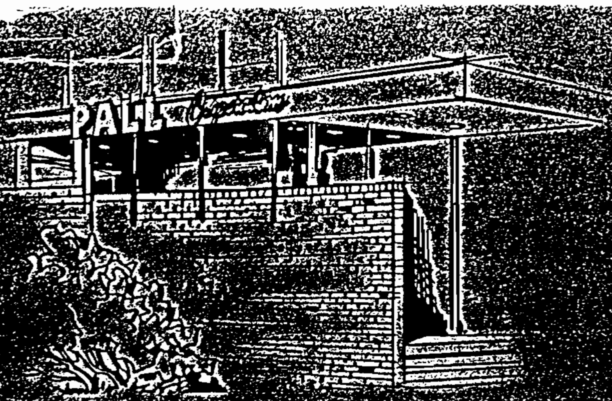
PALL CORPORATION

Manufacturing Divisions

Aircraft Porous Media, Inc.
Fibrous Glass Products, Inc.
Glen Components Corporation
Hollinger Machine Co., Ltd.
Lloyd & Hillman, Ltd.
Mectron Industries
Pall Shannon, Ltd.
Pall Trinity Micro Corporation
Pall-Ulster, Ltd.
Pall (U.K.) Ltd.
Vector Labs Corp.

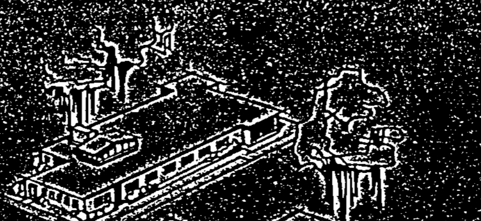
Sales Divisions

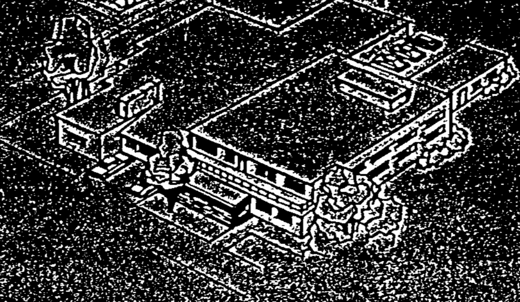
Micro Filter Sales Corp.
Precision Fine Wire Weaving Co., Ltd.
Pall GmbH
Trincor Corporation



PALL CORPORATION, EXECUTIVE HEADQUARTERS, GLEN COVE, N.Y.

GLEN COMPONENTS CORPORATION, GLEN COVE, N.Y.

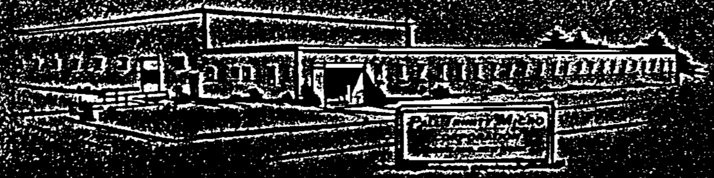




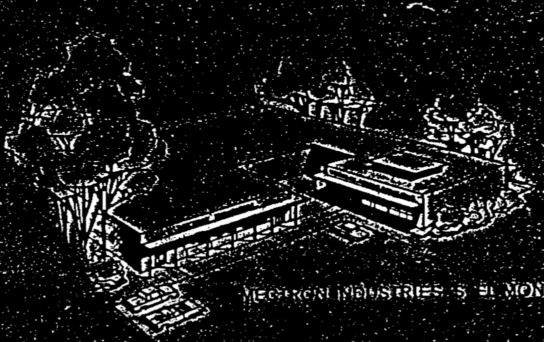
AIRCRAFT POROUS MEDIA, INC., GLEN COVE, N.Y.

FIBROUS GLASS PRODUCTS, INC., MOUNTAINTOP, PENNSYLVANIA

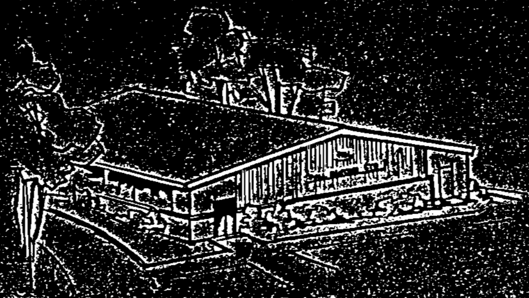
HOLLINGER MACHINE CO., LTD. AND VECTOR LABS CORP., MONTREAL, CANADA



PALL TRINITY MICRO CORPORATION, CORTLAND, N.Y.

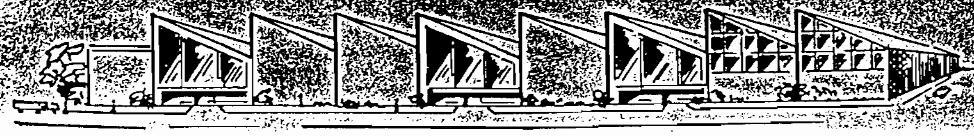


VECTRON INDUSTRIES, S. EL MONTE, CALIFORNIA



PALL-ULSTER, LURGAN, NORTHERN IRELAND

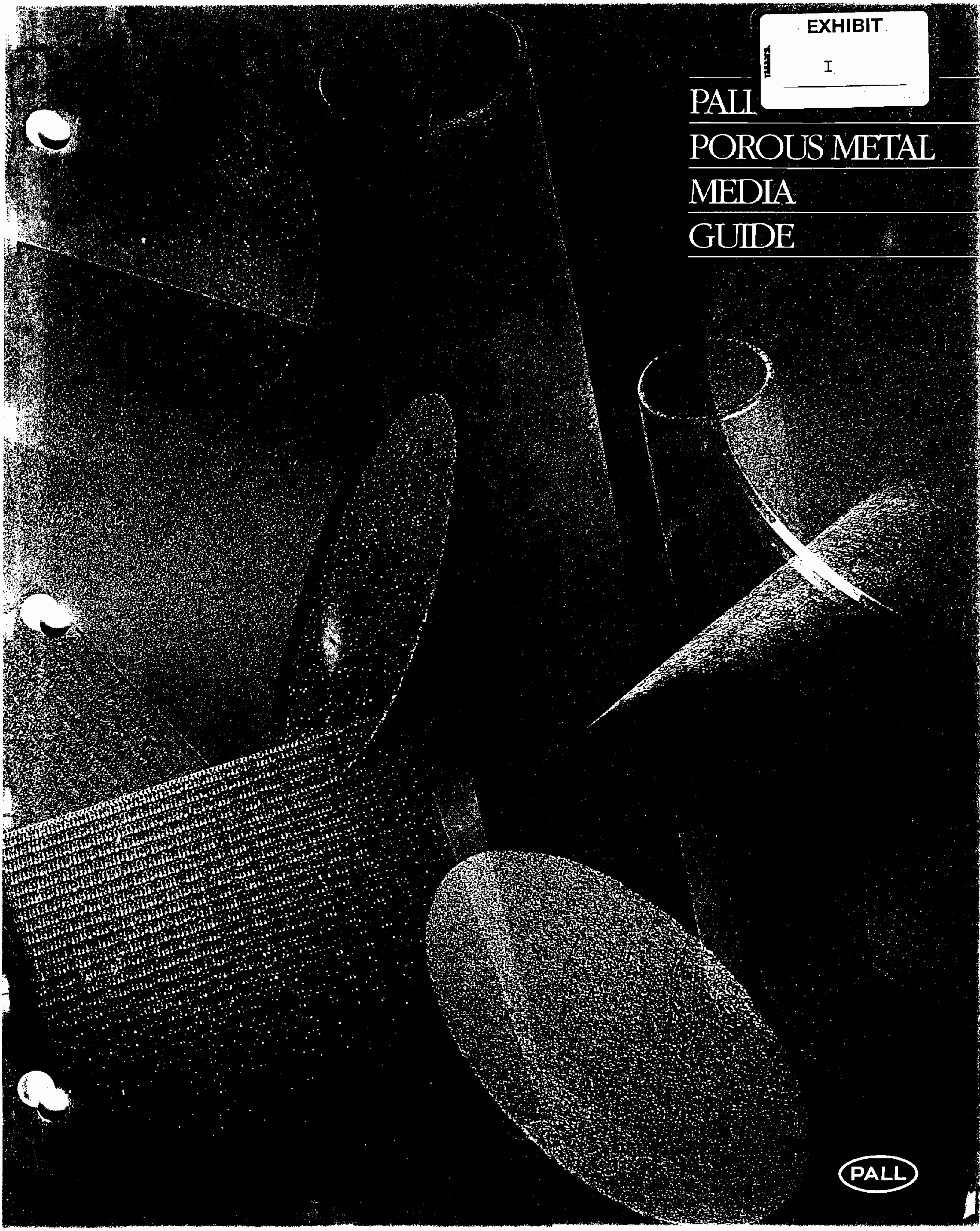
PALL (U.K.) LTD. AND LLOYD & HILLMAN LTD., LONDON, ENGLAND



EXHIBIT

I

PALL
POROUS METAL
MEDIA
GUIDE



PALL

Pall Porous Metal Media

Since its establishment in 1946 Pall Corporation, the world leader in fluid clarification, has been in the forefront of metallic filter media manufacturing. Dr. Pall developed a technique to manufacture PSS,® Porous Stainless Steel, by sintering stainless steel powder without the need for resin binders or compression. This invention was the foundation on which Pall Corporation was built. Today, a great many proprietary processes and custom designed equipment are used, in conjunction with sintering and annealing furnaces, to manufacture a broad range of state-of-the-art porous metallic materials.

These unique media are produced by Pall Trinity Micro (PTM), a division of Pall Corporation, Cortland, NY, a facility certified to ISO 9001 quality standards. Pall metal media are fabricated into finished filter products by Pall manufacturing facilities, including Pall Trinity Micro, Cortland, New York; Pall Europe Limited, in Portsmouth, England, and Pall Aeropower Corporation, Pinellas Park, Florida. In addition, non-fabricated porous metal materials are available to customers for a variety of applications where metal media are required.

Unique Capabilities

Through continuous research, Pall Corporation has pioneered many unique porous metallic media and refined manufacturing processes to meet specific application requirements. Focusing on industry needs, Pall Corporation remains the leader in state-of-the-art technology through new porous metal product development.

In response to the ever increasing demand for greater dirt holding capacity and superior overall performance, PTM now offers seven standard metallic media and has the ability to produce an unlimited combination of porous metal products including:

- Integral composites of sintered mesh layers to meet precise flow, pressure drop, or thickness requirements.
- Various metallic media combinations such as; powder metal sintered to the upstream surface of metal meshes, powder metal sintered within the pore structure of woven wire of mesh, and metal fibers sintered onto powder metal and/or wire mesh.
- Unique metal media combinations can be developed to produce a variety of customized filter media products with exceptionally fine absolute rated depth filtration characteristics.
- Also, many of these metal media are available in a wide selection of alloys to produce porous metal products which are suitable for extreme temperatures and corrosive environments.

Since PTM is a manufacturer of all types of porous metal media, we can select the best material and optimize manufacturing processes to meet specific application requirements. With the assistance of our extensive Research and Development Facility (Process Equipment Development), and our various fabricating facilities, Pall Corporation has maximum flexibility and an unequalled capability to serve our customers in the best possible way.

PMM,® PSS,® Rigimesh® and Supramesh® are registered trademarks of Pall Corporation.

PMF is a trademark of Pall Corporation.

Inconel® is a registered trademark of Inco Alloys International.

Hastelloy® is a registered trademark assigned to Haynes International.

Carpenter® is a registered trademark of Carpenter Steel Company.

Metal Media Selection Guidelines

Selection of the most suitable porous metal medium for a given application should be based on the following criteria:

- Operating conditions (temperature, pressure, and flow rate)
- Removal rating and efficiency
- Required clean pressure drop
- Required alloy (chemical and temperature compatibility)
- Required media strength (i.e. ultimate tensile strength, fatigue strength, or modulus of elasticity)

By first understanding the application and identifying the specific requirements, we can focus on a medium that meets or exceeds our customer's expectation. Several of our porous metal media were developed with specific applications and optimal performance in mind, such as: PMF porous metal fiber for polymer filtration, and H-Series PSS for polymer segment style filters.

Many different metallic media selections can be made for a wide variety of applications. When in doubt, please contact your Pall representative for assistance.

The raw material of metallic media

Why Metallic Media?

Characteristics of sintered metal filter media

Controlled pore size

All sintering is performed in high temperature vacuum or controlled atmosphere furnaces. Once the material is sintered, the pore size is fixed and the filter medium will produce consistent, reliable removal. To ensure absolute retention ratings, each grade of medium is tested by the bubble point technique, which correlates to the largest diameter hard spherical particle that can pass through the medium.

High pressure and temperature capabilities

Metallic media are inherently strong and, when properly supported, can provide filtration products capable of withstanding very high differential pressures–up to 10,000 psid (690 bar). One of their outstanding characteristics is the extreme temperatures which they can tolerate. Temperatures can range from cryogenic, as low as –450°F (–268°C), to temperatures in excess of 1500°F (815°C), depending upon the metal alloy used, the type of medium selected and the atmosphere to which the media will be exposed.

Freedom from extractables

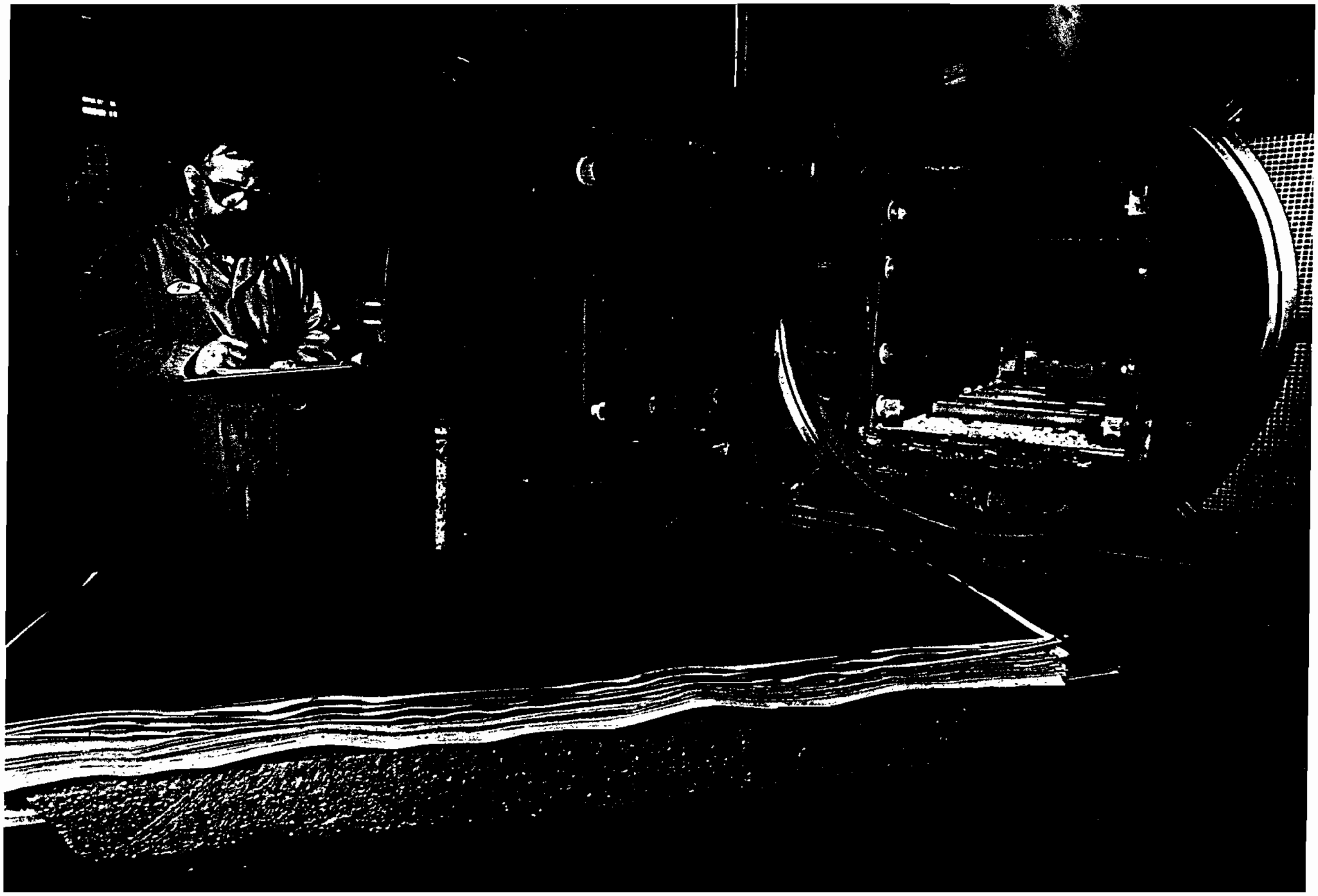
Unlike polymeric or resin impregnated media, Pall metallic filter media will not contribute soluble or extractable materials to contaminate or impart taste or odor to the filtered product.

Freedom from media migration

All Pall sintered metal filters are free from particle or fiber shedding and will not contaminate the filtrate.

Corrosion resistance

Stainless steel is the standard material of construction; it exhibits excellent corrosion resistance in most fluids and service conditions. As the result of our superior metallurgical and sintering techniques, all of our stainless steel metal media is produced with a maximum carbon content of .03%. Our sintering process is very effective in minimizing carbon content, thus, chromium carbide precipitation at the metal boundaries, which causes intergranular corrosion, is kept to a minimum. This results in a porous metal media with longer in-service life. Slight variations in operating conditions, especially those associated with system upset, can have a major impact on corrosion resistance. For existing systems, samples can frequently be supplied for long term exposure and verification of alloy selection.

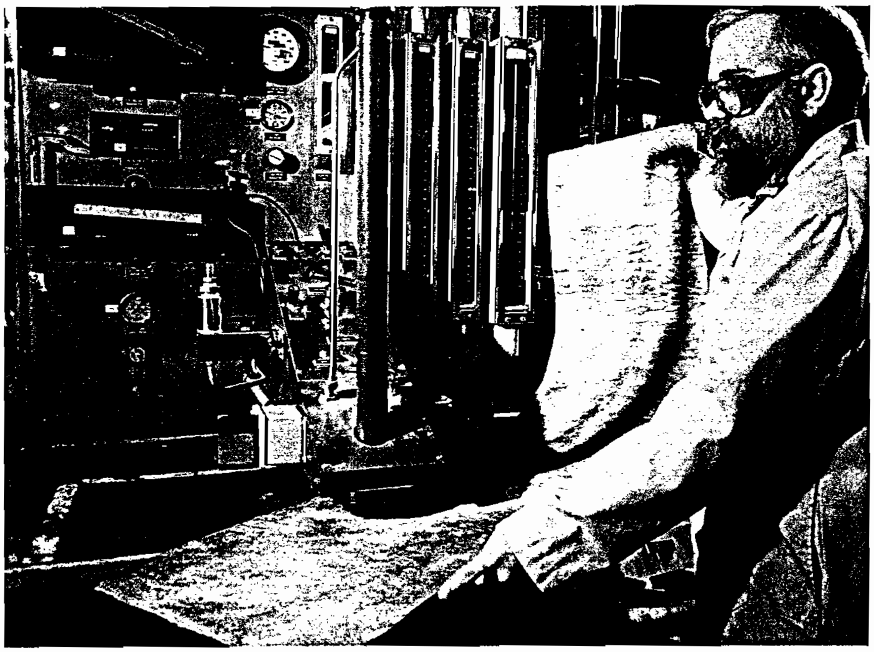


Sintering furnace at Cortland, NY

Reliability

To ensure the highest quality end product we monitor all incoming raw materials. Porous metal powder is analyzed, not only for its metallurgical composition, but also for particle size distribution, which is critical to the end product. In the case of woven wire mesh, metallurgical properties are monitored, as is the weave and wire diameter. Control of metallurgy and wire diameter are also vital to fiber metal filter media.

In the case of 316L materials, carbon content is checked before and after the sintering operation. Each production lot of material is bubble point tested to measure the maximum size of a hard spherical particle which would pass, as well as being tested for permeability, thickness, and carbon content.

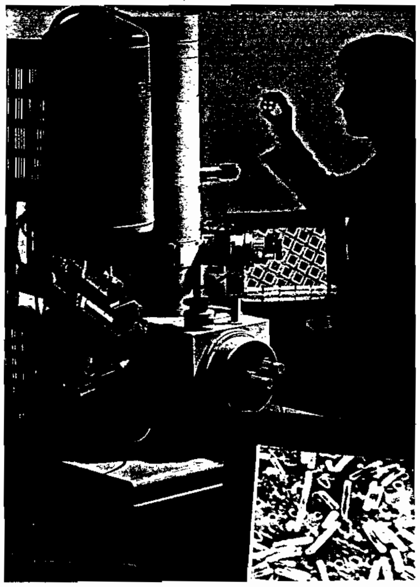


Bubble point testing metallic media

Technical Support

Pall Corporation is dedicated to providing quality products and services to our customers. We have a complete technical staff to review your application and recommend alloys, level of filtration, removal grade, and type of media appropriate for specific application conditions.

Pall also maintains a unique Scientific Laboratory and Services Department, staffed by Senior Scientists experienced in evaluating customer filtration applications and requirements, and supported by extensive laboratories and analytical tools. Their services are available to complement those of the design and production engineering staff at Pall Trinity Micro, as well as the other Pall companies.



Scanning electron microscope in SLS laboratory

PSS Medium

Pall PSS 316L Stainless Steel Medium is produced by a proprietary sintering process. No binders or other extraneous substances are introduced, nor is pre-compression of the powder employed prior to sintering. The result is metallic material with a lower pressure drop at a given flow rate and approximately 20% more open area per unit area than other sintered metals of similar efficiency. By controlling carbon content, the finished product qualifies as 316L grade, which is less susceptible to carbide precipitation at the metal's grain boundaries. Excellent corrosion resistance results; this ensures longer in-service life.

Pall PSS media are available in six standard grades with absolute removal ratings in liquid service from 55 micrometers (coarsest grade) to 5 micrometers (finest grade).

In addition to the standard 316L medium, most PSS grades can be furnished in the following alloys:

- Stainless Steel Type 304L, 310S, 347
- Inconel 600, 671
- Nickel 200
- Hastelloy X, Hastelloy B2, Hastelloy C276
- Carpenter 20

Applications

Various applications utilizing PSS medium include:

Chemical and Petrochemical Industries

- Catalyst activator/Regenerator off-gas
- Filtering industrial gases
- Filtering cryogenic fluids
- High temperature stack gas sampling

Pharmaceutical/Food and Beverage Industries

- Process and sterilizing steam filtration
- Beer and wine filtration

Industrial Processing

- Chromatography
- Fluidizing plates for coal gasification
- Fluid conditioning

PSS Medium

Features	Benefits
Mechanical strength	Reliability; long usable life
Temperature resistance	Variety of alloys can be produced to meet temperature requirements ranging from -450°F to 1700°F.
High durability	Assured chemical compatibility with process fluids and repeatedly cleanable.
Ability to withstand reverse flow	Lower maintenance and operating costs.
Uniform permeability	Offers low resistance to flow.

Technical Data

PSS Medium Removal Efficiency (in Microns)

	Removal Ratings				
	Liquid Service[1]			Gas Service[2]	
Media Grade	50%	99%	100%[3]	Weight % Removal	100%
PO5	0.5	3	5	>99.99	0.4
PO9	2	7	9	99.98	0.8
H	5	9	13	99.97	1.3
F	8	15	20	99.94	2.8
E	15	25	35	99.80	11
D	20	40	55	99.50	20

[1] Based on modified F2 efficiency test which measures removal efficiency by particle count. The 50% removal efficiency values should be used when comparing PSS efficiency data to other competitive sintered powder metal media.

[2] Weight percent removal data based on AC Fine Test Dust in air.

[3] Absolute retention ratings based on actual particle count data

PSS Medium Standard Thickness

Nominal Thickness (in.)	Actual Thickness Limits (in.)
1/16	.050/.075
1/8	.110/.140

[1] PSS grades PO5 and PO9 are available in nominal 1/16" thickness only, having actual thickness limits of .035/.055".

[2] Other thicknesses and closer tolerance are available on special order.

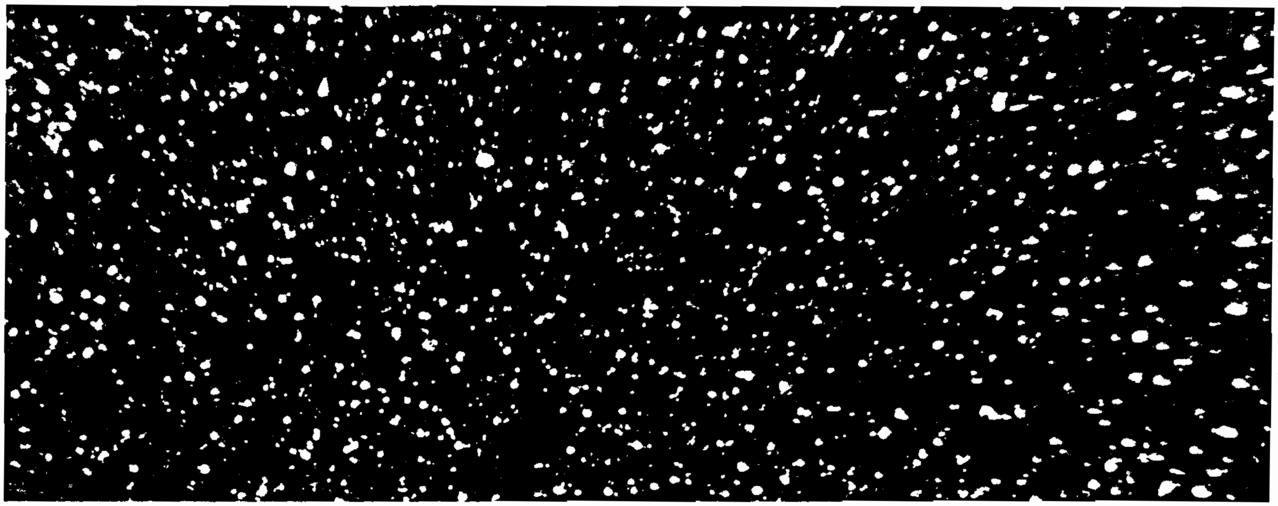
Flow Characteristics

PSS Medium

	Clean Pressure Drop	
	Gaseous Service	Liquid Service
Grade	Air Permeability[4] psid-ft^2/scfm	Water Permeability[5] psid-ft^2/gpm
1/8D	0.0025	0.0136
1/8E	0.0062	0.038
1/8F	0.0140	0.104
1/8H	0.0459	0.46
1/16D	0.0013	0.0068
1/16E	0.0045	0.019
1/16F	0.0083	0.052
1/16H	0.0250	0.23
P05	0.0835	0.85
P09	0.0634	0.27

[4] Pressure drop in psi obtained by multiplying value shown by actual gaseous flow rate desired (ACFM), ratio of viscosities $\frac{\text{actual cp}}{0.018}$, all divided by total filtration area (ft^2) of element selected.

[5] Pressure drop in psi obtained by multiplying value shown by actual flow desired in gpm, viscosity of liquid in centipoise (if other than 1 cp), all divided by total filtration area (ft^2) selected.



PSS Medium

H-Series PSS Medium

As a result of Pall's continuing efforts to improve processes and further develop powder metal products, our newest series of powder metal media is manufactured by a proprietary process utilizing tightly controlled particle distribution. The powder laydown and sintering techniques have been optimized to achieve an open matrix with increased void volume and an exceptionally high degree of uniformity over our standard PSS media. The result is a sintered powder metal medium that has been specifically optimized for the stringent requirements of the polymer industry.

The standard H-Series PSS medium is type 316L; other alloys are available upon request. This unique product is available in 15, 25 and 55 micrometers absolute removal ratings in liquid service, in disc form only, up to 12.5 inch diameter.

Applications

Typically polymer segment filters manufactured from H-Series PSS media which are ideally suited for feed filtration stages prior to the extrusion of thin base films such as:

- Polyester film for audio and video tape.
- Film for floppy discs for computer information storage.
- High performance polyethylene and polypropylene films for packaging.
- Also, small discs can be manufactured from our standard production medium for use in filtration of polyurethane plastic for the production of medical tubing.

H-Series PSS Medium

Features	**Benefits**
High degree of uniformity	Improved gel control
Greater void volume	Increased dirt holding capacity and longer on-stream life
Reduced system interruption	Total filtration cost for cleaning is greatly reduced

Technical Data

H-Series PSS Medium Removal Efficiency (in Microns)

Media Grade	Removal Ratings Liquid Service(1) 90%	99%	100%
H150	6.5	9	15
H250	10.5	18	25
H550	33	54	55

(1)Based on a modified F2 test which measures removal efficiency by particle count. The 90% removal efficiency values should be used when comparing H-Series PSS with competitive powder metal segment media.

H-Series PSS Medium Standard

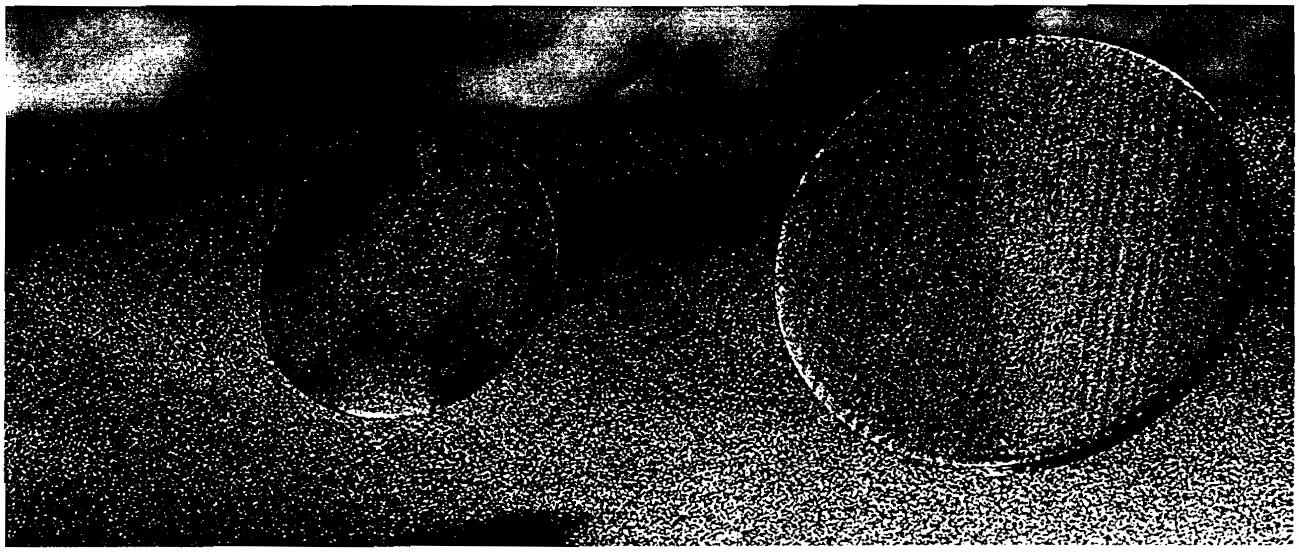
Diameter	Thickness Range
8"	.065 -.079"
12"	.075 -.086"

Flow Characteristics

H-Series PSS Medium

	Clean Pressure Drop	
	Gaseous Service	Polymer Service
Grade	Air Permeability psid-ft^2/scfm	Polymer Permeability(2) psid-ft^2/pph-poise
H150	0.00574	.00888
H250	0.00203	.00341
H550	0.00155	.00072

(2)The polymer permeability data are for filtration of Newtonian or near Newtonian polymer melts.



H-Series PSS Medium

S-Series PSS Medium

In response to increasing demand for greater dirt holding capacity and superior performance, S-Series PSS porous stainless steel cylinders have been developed. These high performance seamless cylinders are manufactured by a proprietary process, thus eliminating the undesirable effects of forming and longitudinal welding. This produces an increase in effective filter area over standard PSS media, which is sintered in a flat sheet form and requires rolling and welding to fabricate into cylindrical filter elements. In addition, the manufacturing technique results in a higher void volume,and lower resistance to flow than our flat sheet PSS medium. S-Series PSS filters offer high performance with economy of use.

Standard S-Series PSS cylinders are manufactured in Type 316L Stainless Steel and are available in 5 to 35 micrometers absolute removal rating in liquid service. Standard diameters available are 1/2" (12.7mm), 1-1/2" (38.1 mm), 2" (50.8 mm) and 2-3/8" (60.3 mm), with lengths to 20" (50.8 cm). Other diameters and alloys are available on special order. Other combinations or configurations can be produced to meet specific customer requirements.

Standard manufacturing tolerances apply to S-Series PSS cylinder dimensions. Specific application requirements should be reviewed prior to order placement to ensure proper installation of our products. If critical dimensional tolerances are required, please consult the factory.

Applications

Pall S-Series PSS cylinders are typically fabricated into filter elements to be [illegible] [illegible]al filtration, blowback and [illegible]wash applications in the following industries:

- Nuclear–Ra[illegible] [illegible]nerators
- Chemical–Jet pulse blowback for the recovery of solid catalyst
- Petrochemical–Fluid bed reactor off-gas systems in petrochemical plants and refineries

S-Series PSS Medium

Features	**Benefits**
No longitudinal weld seam	Increased effective filter area
High void volume	Increased dirt holding capacity and greater resistance to chemical and thermal stresses
High degree of uniformity with a narrow pore size distribution	Low differential pressure
	Precise removal efficiency and a longer economical life

Technical Data

S-Series PSS Medium Removal Efficiency (in Microns)

Removal Ratings

Media Grade	Liquid Service(1) 50%	Liquid Service(1) 90%	Liquid Service(1) 99%	Liquid Service(1) 100%(3)	Gaseous Service(2) Weight % Removal	Gaseous Service(2) 100%
S050	0.5	2	3	5	>99.99	0.4
S100	4	7	8	10	99.98	0.8
S200	7	10	14	20	99.94	2.8
S350	13	17	24	35	99.40	11

(1)Liquid removal efficiency ratings are based on a modified F2 test method and actual particle count data. The 50% removal values should be used when comparing PSS* S-Series efficiency data to other competitive sintered powder media.

(2)Air flow used for these data was 10-16cfm ft^2

(3)Absolute retention ratings based on actual particle count data

S-Series PSS Medium

Standard Available Nominal Wall Thickness
1/16"
1/8"

Flow Characteristics

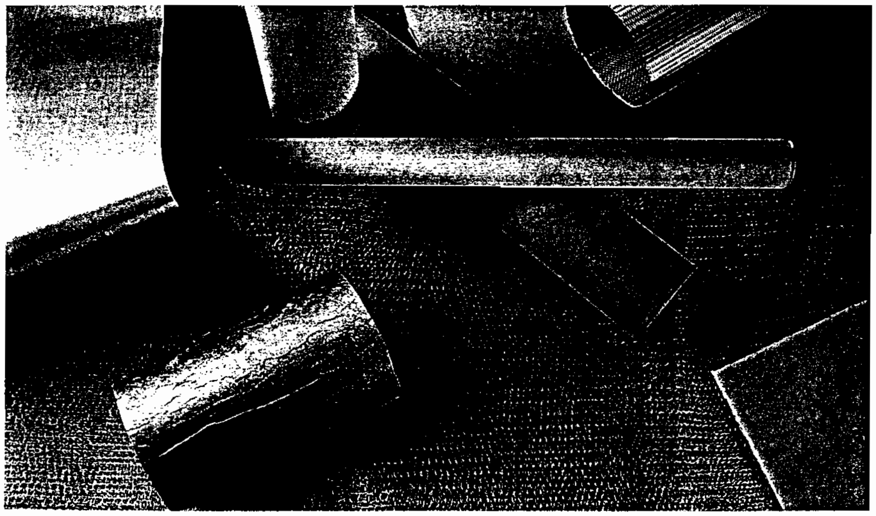
S-Series PSS Medium

Clean Pressure Drop

Grade	Gaseous Service: Air Permeability(3) psid-ft^2/scfm	Liquid Service: Water Permeability(4) psid-ft^2/gpm
S050	0.048	0.54
S100	0.016	0.21
S200	0.003	0.04
S350	0.001	0.01

(3)Pressure drop in psi obtained by multiplying value shown by actual gaseous flow rate desired (ACFM), ratio of viscosities $\frac{\text{actual cp}}{0.018}$, all divided by total filtration area (ft^2) of element selected.

(4)Pressure drop in psi obtained by multiplying value shown by actual flow desired in gpm, viscosity of liquid in centipoise (if other than 1 cp), all divided by total filtration area (ft^2) selected.



S-series PSS tubes

Rigimesh and Supramesh Media

Rigimesh medium is a sintered woven wire mesh product having the greatest permeability for comparable removal efficiency. Sintered in a high temperature vacuum furnace, the wires are bonded at every point of contact to produce an extremely strong metallic medium with wires that will not shift under stress; thus the pore size and integrity is continuously maintained. Since sintering increases mechanical strength, this patented Pall process permits the use of finer diameter wires in manufacturing the medium. The result is a filter with greater dirt holding capacity and permeability than that of an unsintered mesh of comparable removal rating.

We have the ability to sinter multi-layer composites of different meshes on special order, to meet application needs for precise flow, pressure drop, thickness, or strength.

Supramesh Medium is a combination of Rigimesh woven wire mesh with stainless steel powder sinter-bonded to its upstream surface. This results in a material that provides exceptionally fine depth filtration, complete freedom from media migration, and extremely low pressure drop.

Our standard alloy for both Rigimesh and Supramesh is type 304L stainless steel, with 316L and other alloys available on special order. Removal ratings for Rigimesh range from 18 to 450 micrometers absolute in liquid service. The standard Supramesh medium is available in 15 micrometers absolute, but we have the ability to customize this product to meet specific requirements.

Applications

Typical applications for which Rigimesh medium or Supramesh medium are the media of choice might be:

Chemical

- Catalyst/solids recovery backwash systems
- Cryogenic fluid filtration

Pharmaceutical

- Carbon/catalyst recovery from bulk pharmaceutical chemicals

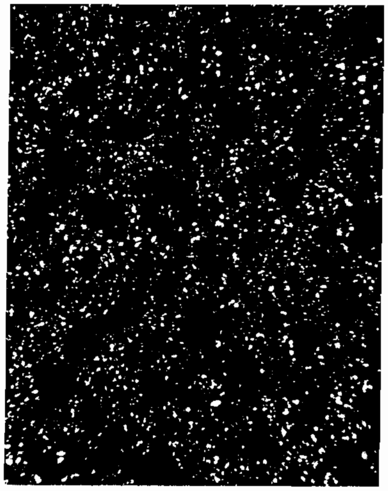
Rigimesh Medium

Features	Benefits
Controlled pore size with a sharper particle size cut off than depth filter media	Assured absolute particle retention
Finer sinter bonded woven wires	Long on-stream life

Supramesh Medium

Features	Benefits
High dirt holding capacity	Longer life before cleaning is required
Fine, pleatable depth filtration medium	Can achieve increased filter area within a small envelope

Cross sectional schematic of Supramesh medium



Supramesh Medium

Technical Data

Rigimesh/Supramesh Media Removal Efficiency (in Microns)

	Removal Ratings				
	Liquid Service(1)		Gas Service(2)		
Media Grade	98%	100%	98% Removal by Weight	100% Removal	Nominal Thickness (in.)
Supramesh					
Z	1.5	15	0.5	2	.011
Rigimesh					
K	5	18	3.5	13	.006
J	10	25	6	18	.006
M	17	45	11	25	.006
R	40	70	30	55	.011
S	70	105	50	85	.010
T	145	225	120	175	.014
A	300	450	250	350	.019

(1) Based on modified F2 efficiency test which measures removal efficiency by particle count.
(2) Weight percent removal data based on AC Fine Test Dust in air. Absolute retention ratings based on actual particle count data.

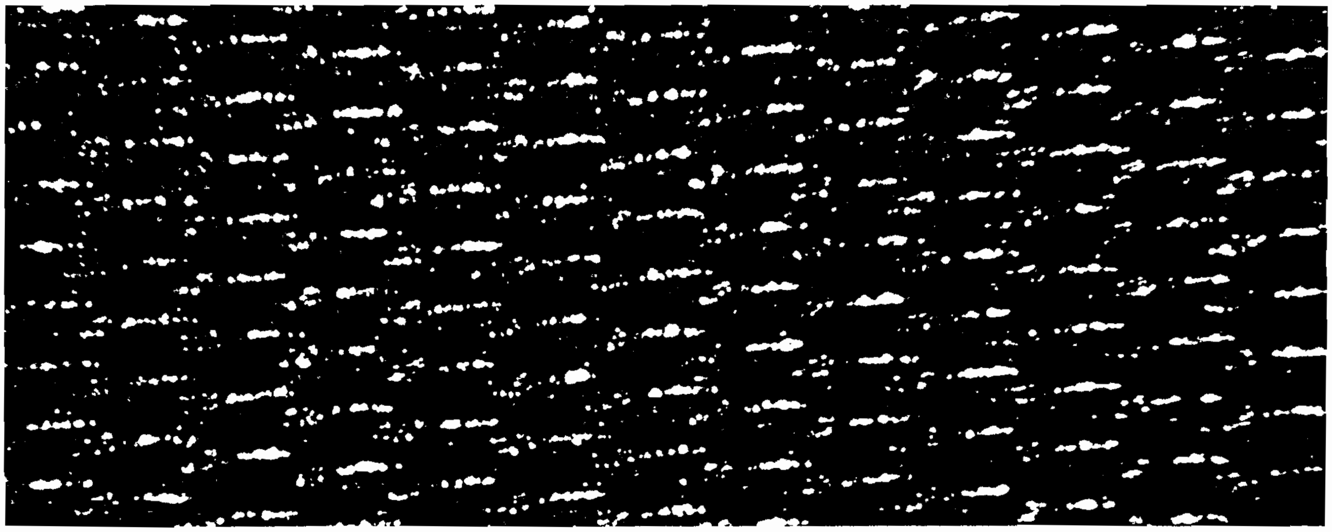
Flow Characteristics

Rigimesh Medium

	Clean Pressure Drop	
	Gaseous Service	Liquid Service
Grade	Air Permeability(3) psid-ft^2/scfm	Water Permeability(4) psid-ft^2/gpm
A	*	*
T	*	*
S	0.000055	0.00015
R	0.00009	0.0002
M	0.00018	0.0005
J	0.00029	0.0040
K	0.00085	0.0007
SUPRAMESH Z	0.0030	0.0333

(3) Pressure drop in psi obtained by multiplying value shown by actual gaseous flow rate desired (ACFM), ratio of viscosities $\frac{\text{actual cp}}{0.018}$, all divided by total filtration area (ft^2) of element selected.
(4) Pressure drop in psi obtained by multiplying value shown by actual flow desired in gpm, viscosity of liquid in centipoise (if other than 1 cp), all divided by total filtration area (ft^2) selected.
* Properties are not readable.

Cross sectional schematic of Rigimesh Medium



Rigimesh Medium

PMM Medium

A thin sintered matrix of stainless powder within the pore structure of sintered stainless steel woven wire mesh, PMM medium combines the best qualities of our PSS sintered powder and Rigimesh sintered woven wire mesh media. The fine powders provide excellent depth filtration down to 2 micrometers absolute in liquid service. The thin woven wire mesh support structure is exceptionally strong and the composite is quite ductile, permitting PMM porous metal membrane medium to be pleated into high area filter packs.

This medium has a smooth surface and excellent uniformity. It is, therefore, an excellent choice for solid separation and solids recovery applications. In both liquid and gas service, this filter medium will function as an exceptionally high performance septum.

Standard material of construction is all 316L Stainless Steel, but other alloys, such as Inconel 304, and 310 Stainless Steel are available on special order.

Applications

PMM filters are well suited for a wide range of gas and liquid applications including, but not limited to:

Industrial Processing

- Steam filtration, sanitizing, etc.
- Incinerators

Chemical Processing

- Fluid bed catalyst reactors
- Product dryers
- Emission control

Nuclear

- Waste disposal systems
- Condensate polishing systems

PMM Medium

Features	Benefits
Very fine removal efficiencies	Provides efficient cake formation and release for solids recovery applications
Thin, pleatable filter medium in a compact filter size	Provides higher surface area
Repeatedly cleanable	Economical choice for many prefiltration applications to reduce solids loading of final filters

Technical Data

PMM Medium Removal Efficiency (in Microns)

	Removal Ratings					
	Liquid Service(1)			Gaseous Service(2)		
Media Grade	90%	99%	100%	Weight % Removal	100%	Nominal Thickness (in.)
M020	0.1	0.5	2	>99.99	0.4	.0055
M050	0.6	2	5	99.99	0.6	.0055
M100	2	5	10	99.97	1.3	.0050
M150	5	9	15	99.96	2.5	.0060
M200	8	13	20	99.93	4.0	.0090
M250	10	16	25	99.90	9.0	.0090

(1) Based on modified F2 efficiency test, removal efficiency by particle count.
(2) Weight percent removal data based on AC Fine Test Dust in air. Absolute retention ratings based on actual particle count data.

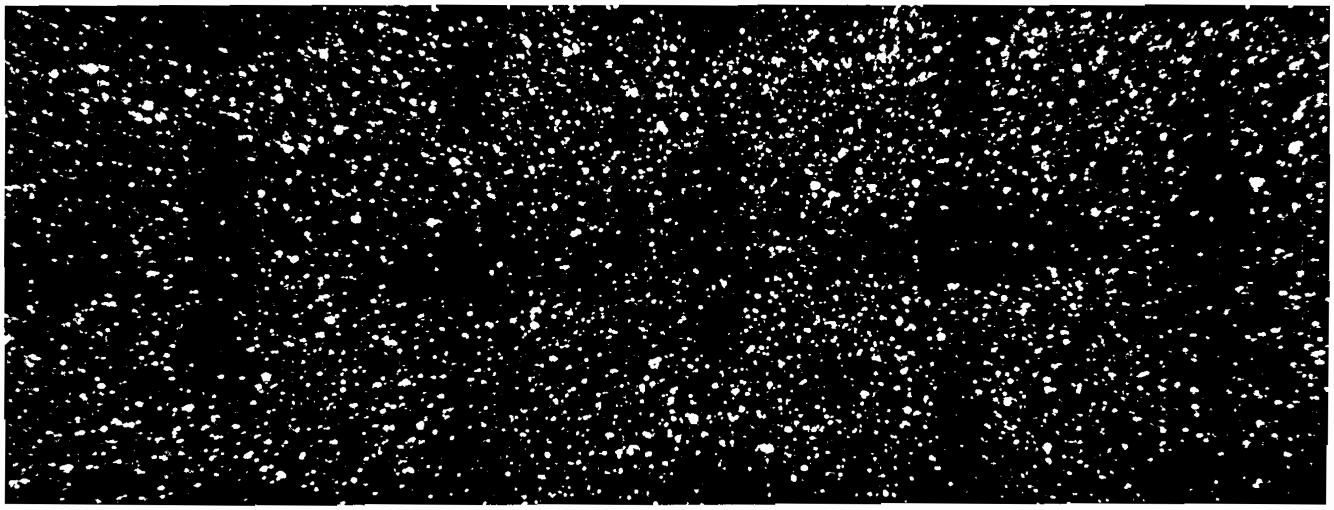
Flow Characteristics

PMM Medium

	Clean Pressure Drop	
	Gaseous Service	Liquid Service
Grade	Air Permeability(3) psid-ft^2/scfm	Water Permeability(4) psid-ft^2/gpm
M020	0.0943	0.870
M050	0.0581	0.490
M100	0.0442	0.280
M150	0.0139	0.170
M200	0.0114	0.070
M250	0.0029	0.020

(3)Pressure drop in psi obtained by multiplying value shown by actual gaseous flow rate desired (ACFM), ratio of viscosities $\frac{\text{actual cp}}{0.018}$, all divided by total filtration area (ft^2) of element selected.

(4)Pressure drop in psi obtained by multiplying value shown by actual flow desired in gpm, viscosity of liquid in centipoise (if other than 1 cp), all divided by total filtration area (ft^2) selected.



PMM Medium

PMF Medium

By employing extremely small diameter stainless steel fibers, PTM is able to produce media with absolute removal ratings that range from 2.5 micrometers to 40 micrometers absolute in liquid service. Pall's unique patented process uses extremely small diameter fibers, resulting in high void volume media with increased dirt capacity and long life. Because of the strength imparted by the sintering operation, PMF porous metal fiber medium can also be pleated into high area filter packs. Pall manufactures three standard types of PMF medium:

- **FH-Series**–High pressure (up to 1000 psi) (69 bar) pleatable media.
- **FL-Series**–Low pressure (up to 250 psi) (17.24 bar) pleatable media.
- **FS-Series**–High dirt holding capacity in a profiled pore structure for polymer segment applications.

316L is the standard material of construction.

Applications

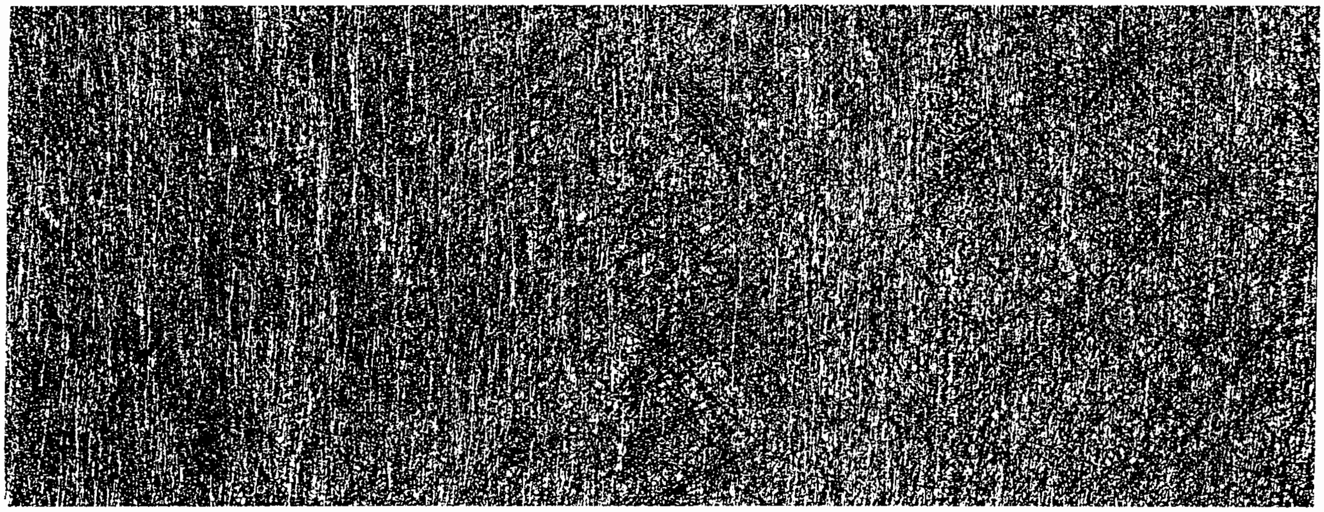
High pressure PMF medium has been optimized for polymer processing applications such as:

- Film and fiber extrusion
- Polypropylene melt filtration
- Polyester melt filtration

Low pressure PMF is typically used in the chemical processing and pharmaceutical industries where high area fine filtration is required.

PMF Medium

Features	Benefits
Superior uniformity and maximized dirt holding capacity	Longer on-stream life
Ability to maintain filtration performance qualities after repeated cleaning cycles	Economy and reliability of use before replacement is necessary



PMF Medium

Technical Data

PMF High Pressure Corrugatable Porous Metal Fiber Medium

FH Series PMF Medium Removal Efficiency (in Microns)

Media Grade	Removal Ratings Liquid Service(1) 90%	98%	99%	100%	Nominal Thickness (in.)
FH025	<1.0	<1.0	1.4	2.5	.014
FH050	0.5	1.0	2	5	.020
FH080	2	3	4	8	.015
FH100	5	7	8	10	.013
FH150	6	9	11	15	.015
FH200	8	12	14	20	.015
FH250	10	14	17	25	.015
FH300	12	18	20	30	.015
FH400	14	20	24	40	.015

(1) Liquid removal efficiency ratings are based on a modified F2 test method and actual particle count data. The 98% removal values should be used when comparing PMF grades to other competitive fiber metal media.

PMF Low Pressure Corrugatable Porous Metal Fiber Medium

FL Series PMF Medium Removal Efficiency (in Microns)

Media Grade	Removal Ratings Liquid Service(2) 90%	98%	99%	100%	Nominal Thickness (in.)
FL050	2	2.5	3	5	.011
FL080	3.5	4	5	7	.016
FL100	6	8	9	10	.014
FL150	7	9	11	15	.009
FL200	11	14	15	20	.012
FL250	13	18	19	25	.012

(2) Liquid removal efficiency ratings are based on a modified F2 test method and actual particle count data. The 98% removal values should be used when comparing PMF grades to other competitive fiber metal media.

Flow Characteristics

PMF Medium

Clean Pressure Drop

Grade	Gaseous Service: Air Permeability(3) psid-ft^2/scfm	Liquid Service: Water Permeability(4) psid-ft^2/gpm
FH025	0.0206	0.210
FH050	0.0047	0.050
FH080	0.0034	0.035
FH100	0.0019	0.020
FH150	0.0010	0.010
FH200	0.0006	0.006
FH250	0.0005	0.005
FH300	0.0004	0.004
FH400	0.0003	0.003
FL050	0.0032	0.030
FL080	0.0013	0.013
FL100	0.0009	0.009
FL150	0.0006	0.006
FL200	0.0003	0.003
FL250	0.0002	0.002

(3) Pressure drop in psi obtained by multiplying value shown by actual gaseous flow rate desired (ACFM), ratio of viscosities $\frac{\text{actual cp}}{0.018}$, all divided by total filtration area (ft^2) of element selected.

(4) Pressure drop in psi obtained by multiplying value shown by actual flow desired in gpm, viscosity of liquid in centipoise (if other than 1 cp), all divided by total filtration area (ft^2) selected.

Technical Data

PMF High Pressure Segment Style Porous Metal Fiber Medium

FS Series PMF Medium Removal Efficiency (in Microns)

Media Grade	Removal Ratings Liquid Service(1) 90%	98%	99%	100%	Nominal Thickness (in.)(2)
FS025	.5	.8	.9	2.5	.055
FS050	1.7	2.5	3	5	.046
FS075	2.5	4	5	7.5	.044
FS100	4.5	6	7	10	.043
FS150	6.5	8.5	10	15	.042
FS200	9	12	13	20	.042
FS300	14	18	19	30	.037

(1)Liquid removal efficiency ratings are based on a modified F2 test method and actual particle count data. The 98% removal values should be used when comparing PMF™ grades to other competitive fiber metal media.

(2)These thicknesses include upstream mesh and downstream support media which is required with all PMF™ FS Series medium.

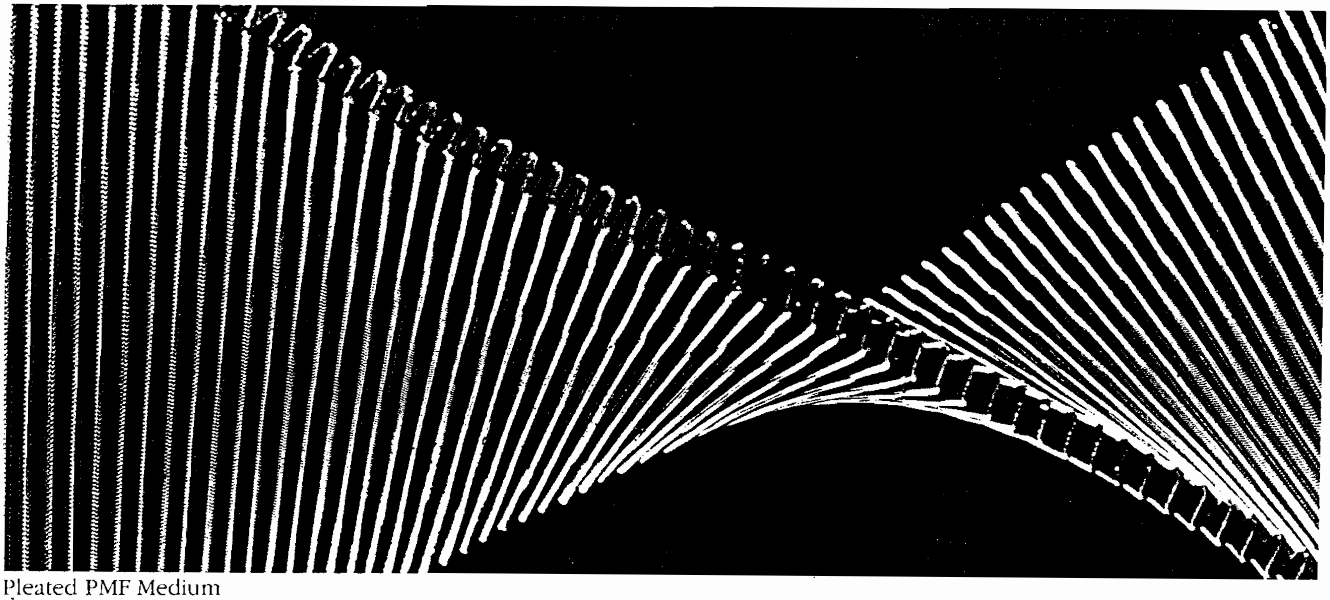
Flow Characteristics

PMF Medium

Grade	Clean Pressure Drop Gaseous Service Air Permeability(3) psid-ft^2/scfm	Polymer Service Polymer Permeability(4) psid-ft^2/pph-poise
FS025	0.0123	0.01025
FS050	0.0065	0.00632
FS075	0.0048	0.00422
FS100	0.0028	0.00340
FS150	0.0022	0.00159
FS200	0.0019	0.00140
FS300	0.0006	0.00062

(3)Pressure drop in psi obtained by multiplying value shown by actual gaseous flow rate desired (ACFM), ratio of viscosities $\frac{\text{actual cp}}{0.018}$, all divided by total filtration area (ft^2) of element selected.

(4)The polymer permeability data are for filtration of Newtonian or near Newtonian polymer melts.



Pleated PMF Medium

Applications and Markets

Pall Trinity Micro (PTM) supplies flat sheet and other media configurations, such as cut pieces, discs punched or machined from flat sheet material, and seamless cylinders. In addition, fabricated products, such as pleated cartridges, cylinders, and filtration systems employing metallic medium, are available. Pall and its subsidiaries have worldwide sales offices and factory trained distributors to address filter applications.

Principal applications and markets:

Pharmaceutical Manufacturing
- Biochemical and parenteral purification
- Crystal collection
- Steam filters

Quench Diffusor in the Manufacture of Synthetic Fibers

Gasoline and Heating Oil Manufacturing

Computer Ink Jet Printing

High Technology Battery Electrodes

Instrumentation
- Chromatography
- Pressure regulators

Wind Tunnels

Fluid Flow Control
- Distributor plates
- Fluid bed dryers
- Distillation trays
- Fluidization support frits

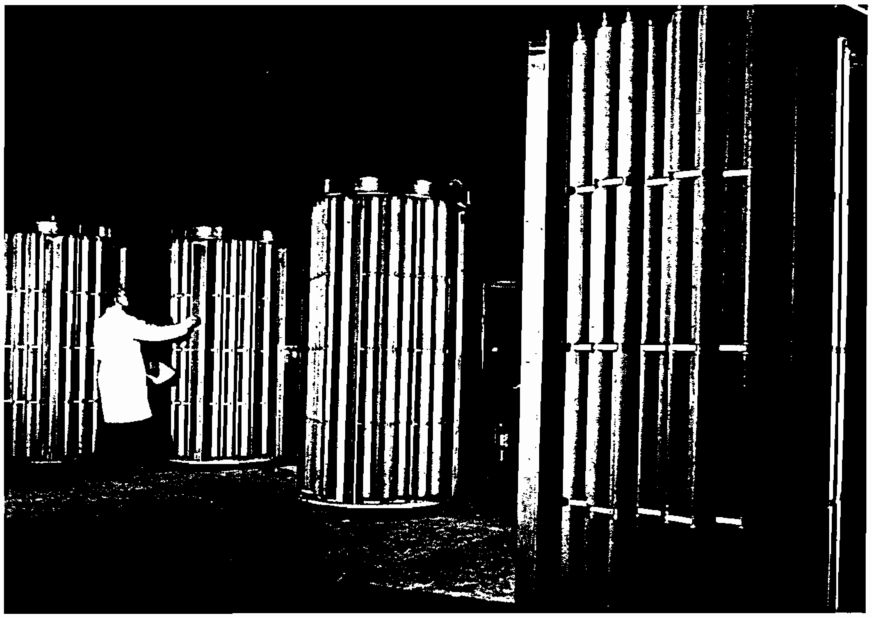
Polymer
- Film and fiber extrusion
- Polypropylene/Polyester Melt Filtration

Chemical and Petrochemical Industries
- Industrial gases
- Cyrogenic fluids
- High temperature stack gas sampling

Nuclear
- Radwaste
- Waste disposal systems

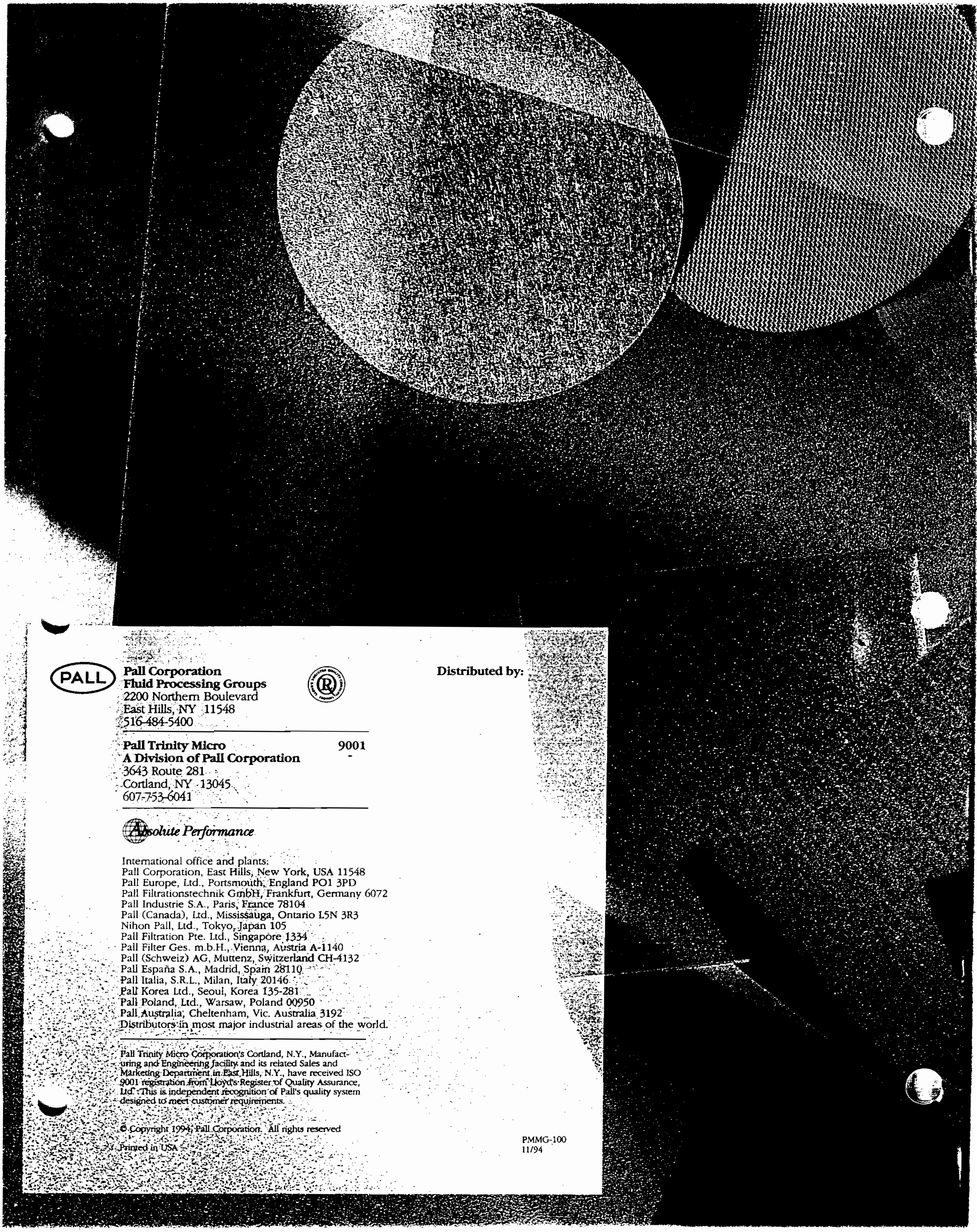
Sparging
- Beverage manufacturing
- Fermentation
- Waste water treatment
- Many other applications which require a strong, temperature-insensitive filter medium for specific environments.

We have the unique ability, aided by our extensive R&D resources, to produce special combinations of media, such as fiber metal coated S-Series PSS cylinders, PMM/Rigimesh composites, PMF/PMM composites, multi-layer sintered mesh composites, etc. With our manufacturing capabilities, we can create almost limitless combinations to meet specific application requirements.



PSS high temperature gas filters.

For further details, contact:
Pall Process Filtration Company or
Pall Ultrafine Filtration Company,
Divisions of Pall Corporation,
East Hills, NY 11548-1289,
516-484-5400.
Outside New York State,
call 1-800-645-6532.



Pall Corporation
Fluid Processing Groups
2200 Northern Boulevard
East Hills, NY 11548
516-484-5400

Distributed by:

Pall Trinity Micro
A Division of Pall Corporation
3643 Route 281
Cortland, NY 13045
607-753-6041

9001

Absolute Performance

International office and plants:
Pall Corporation, East Hills, New York, USA 11548
Pall Europe, Ltd., Portsmouth, England PO1 3PD
Pall Filtrationstechnik GmbH, Frankfurt, Germany 6072
Pall Industrie S.A., Paris, France 78104
Pall (Canada), Ltd., Mississauga, Ontario L5N 3R3
Nihon Pall, Ltd., Tokyo, Japan 105
Pall Filtration Pte. Ltd., Singapore 1334
Pall Filter Ges. m.b.H., Vienna, Austria A-1140
Pall (Schweiz) AG, Muttenz, Switzerland CH-4132
Pall España S.A., Madrid, Spain 28110
Pall Italia, S.R.L., Milan, Italy 20146
Pall Korea Ltd., Seoul, Korea 135-281
Pall Poland, Ltd., Warsaw, Poland 00950
Pall Australia, Cheltenham, Vic. Australia 3192
Distributors in most major industrial areas of the world.

Pall Trinity Micro Corporation's Cortland, N.Y., Manufacturing and Engineering facility and its related Sales and Marketing Department in East Hills, N.Y., have received ISO 9001 registration from Lloyd's Register of Quality Assurance, Ltd. This is independent recognition of Pall's quality system designed to meet customer requirements.

Printed in USA

PMMG-100
11/94

invented, and the first airborne filters using this revolutionary new material were introduced to the aircraft industry. This remarkable material, supported by superior filter designs, rapidly became and still is the most widely used filtration product in critical airborne applications.

Long range non-filtration programs using Rigimesh for such applications as increasing operating temperature limits of jet engines also began in 1955. Production of both jet and rocket engines using Rigimesh as a structural component began in 1962.

1956-1961

Unitized dry air systems – the first self-contained dry gas systems – were developed for the DEW line and later used on other important defense radar systems.

Custom designed insulation was developed for an atomic "sub-killer" submarine.

SUPRAMESH® an extremely fine material combining the merits of both Rigimesh and PSS® (porous stainless steel) was developed for extremely critical airborne use. The first filters were developed to meet MIL-F-8815, the latest filter specification. To our knowledge, ours are still the only filters proven to meet this specification.

DELTADYNE®–The industry's first high quality, lightweight device to indicate changes in differential pressure was introduced and rapidly came into wide use. The indicator has been followed by a broad line of switches and gauges based on the Deltadyne principle.

BELVALVE®, a new concept of improved reliability in relief valves, gained wide use.

Standard factory molded fiber glass products for assuring proper insulation and maximum economy on Naval vessels were introduced.

1962 and the IMMEDIATE FUTURE

Similar programs to the developments described in the 1956-1961 period are continuing on a broad scale. The principal development of 1962 is, however, of potentially as much significance as was Rigimesh.

It has been recognized for some time that contaminants of the size of 10 microns or more cause serious problems in hydraulic systems. From the time of our development of Rigimesh this problem was effectively solved and a major contribution had been made to the advancement of sophisticated hydraulic systems.

Concepts of filtration change with increased knowledge, and new problems are discovered as others are solved.

Recently engineers have recognized that particles in the range of 0.1 to 5 microns are a cause of serious problems, including undue wear of expensive hydraulic system components.

With growing awareness of the critical nature of this problem our development organization accelerated completion of a type of ULTIPOR (previously mentioned under industrial products) that would assure removal of all particles 3 microns and larger (as well as nearly all smaller particles) while at the same time permitting the large volume flow of fluid needed to service aerospace systems.

Using ULTIPOR we were recently the successful bidder on a contract to refit all Air Force ground service carts for the most widely used hydraulic fluid. This order was completed just at the end of the 1962 fiscal year—months ahead of the delivery date set for us by the Air Force—and many units are already in use.

This is truly a superior product which has generally been recognized as such, and is being ordered by important customers throughout the country. As a result we have assumed a leading position in ground support as well as airborne filtration.

More potential aerospace uses of ULTIPOR are being developed. For example two different airborne versions are being tested: one on commercial planes in U.S., the other on military planes in England.

Installation of Ultipor at Air Force base—one of 1500 such disposable element filters recently rushed to the Air Force for installation on all hydaulic fluid ground service carts.

consumer products

As was mentioned in the discussion of our corporate philosophy, one of our areas of development is in Consumer Markets related to our industrial capabilities.

Although we have the benefit of the long term experience of our Canadian subsidiary in some aspects of consumer product distrihution, this is the area of our least sophistication, and we have no doubt that we will go down a blind path or two before we reach the center of the maze.

Nevertheless, we have such a promising line of products in this field that we are confident of a good start and steady growth.

1960

This was the year we entered the consumer field with the acquisition of Hollinger Machine Co., Ltd. of Montreal, Canada.

1961

Hollinger completed development of improved water and chemical feed pumps, and developed water treatment plants for institutions and small municipalities. It also prepared for entry into the sale of packaged sewage disposal plants for similar customers. Initial sales of both water treatment and sewage disposal plants have since been made.

Late in the year Pall engineering completed development and began field testing of its first consumer product – sePall*. This device, designed for the protection of small marine engines, purifies fuel not only by filtration of fine contaminants, but also by separating water from the fuel and automatically ejecting it from the system. This solves one of the most common causes of engine wear and failure. sePall reached the market late in the 1962 boating season and had modest sales, but got enthusiastic reception and re-orders from the dealers who were established.

1962 and the IMMEDIATE FUTURE

Developed in 1962 and proven both in our laboratory and by United States Testing Co. is another member of the ULTIPOR family which may be one of Pall Corporation's most significant developments. This product is a bacteriologically sterile filter of relatively low cost and long life. Capable of freeing water completely from bacteria, the household ULTIPOR is important not only for use in under-developed areas, but for the approximately 6,000,000 American families who have individual water supplies, and are in danger of suffering from the alarming increase in water pollution you may have read about in the newspapers.

Along with ULTIPOR we have developed a broad line of water treatment cartridges, fitting in a common housing, to cope with other problems such as over-chlorination, taste and odors, hardness and turbidity. It is expected that this line will reach the market in the first half of fiscal 1963.

In a companion development, Hollinger has produced a novel purifying pump which, by injection of silver ions, has a bacteriacidal effect on the effluent water. This purifying pump has been successfully tested under the surveillance of provincial authorities in Quebec, and in a university laboratory. However, the future of this product in the United States is uncertain until and unless certain government regulations are clarified in current discussions with the Public Health Service and the Food and Drug Administration.

During the 1962 fiscal year, development of the Pall line of devices to detect smoke and explosive or poisonous gases neared completion. These devices have potential use in applications ranging from warning of the presence of gasoline fumes on pleasure boats to the protection of workers in man-holes. They are unique in that, unlike other gas detectors, the Pall products are completely non-electrical, and thus avoid need for any power supply and the accompanying explosion hazard; they are also less expensive than other devices.

Making sePall fuel-water separator installation on boat. This newly devised Pall product removes water and contaminants from marine fuel systems.

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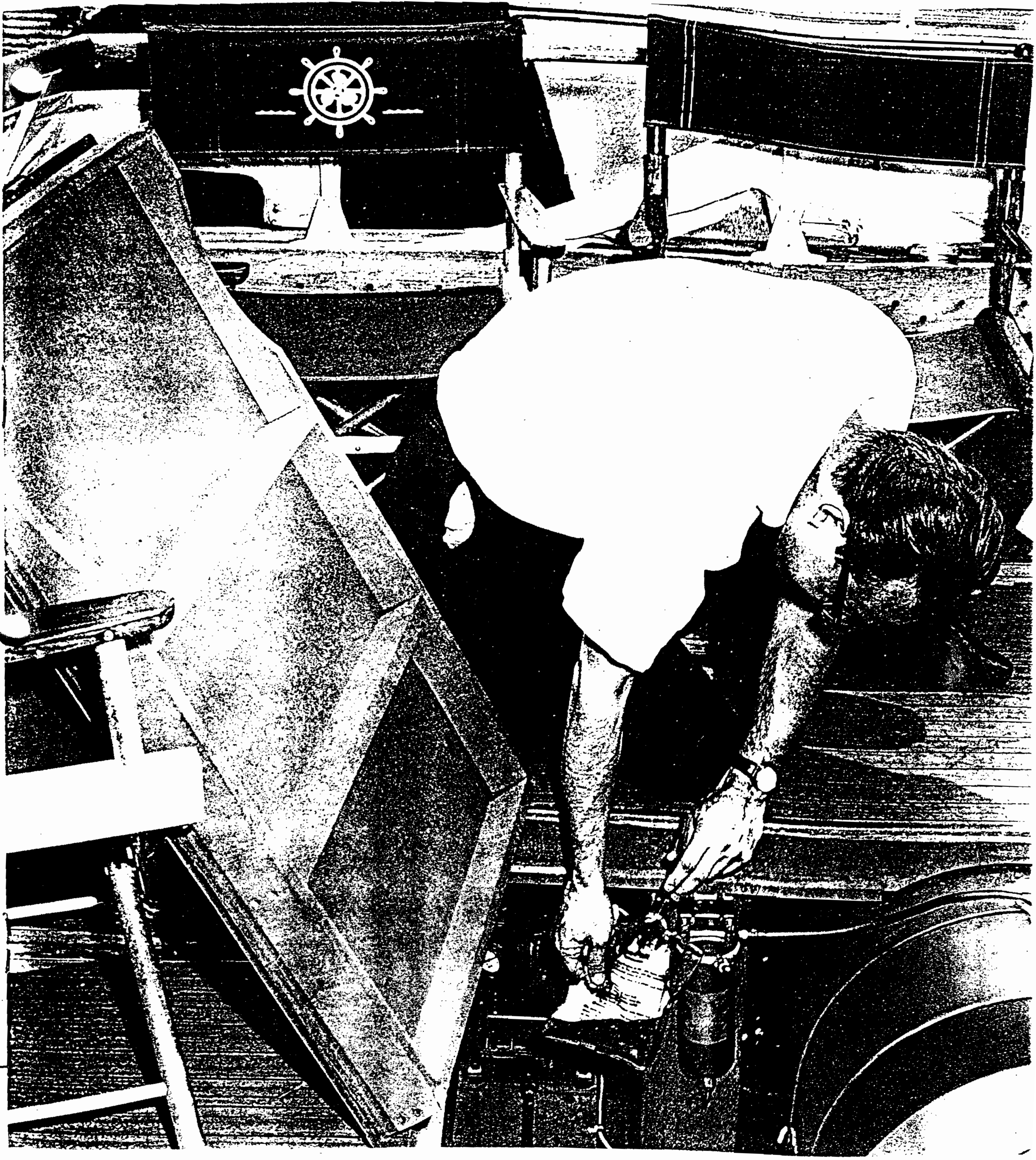
*Trademark of the Pall Corporation



extension of our markets

1962 was an important year of preparation for increased marketing in all of our product lines and in widespread geographic areas.

Throughout our early history our products were sold primarily by the sheer force of technical superiority and service. During the recent past we have increasingly emphasized marketing, as well as licensing and joint ventures, while still further increasing technical efforts.

INDUSTRIAL MARKETING

From our early days, our relatively limited but widely used line of porous stainless steel filters was marketed through a Glen Cove based sales engineering department, keynoted by the ability to solve the customer's problem in high temperature, high pressure and corrosive process industry application. Through news releases, satisfied customers and word-of-mouth spreading of our reputation for superior products and engineering, this line grew in use. Pall filters were sold to the chemical, pharmaceutical, petrochemical, atomic energy, distilling and other industries in which we still set standards and serve as principal supplier.

With our acquisition of Trinity Equipment Corporation in May, 1961, we not only added Trinity's well-known lines of air and gas drying equipment and thermowells and thermocouples to our industrial line, but also brought in a widespread organization of industrial sales representatives.

This organization is now giving far greater market coverage to our older products, and enabling us to introduce new products on a broad scale.

Through our new United Kingdom subsidiaries, Lloyd & Hillman, Ltd. and Pall-Ulster, Ltd., marketing of our industrial lines in the Common Market, United Kingdom and British Commonwealth will be expanded. Although we have had some sales in these areas in the past, they have generally resulted only from specifications by U. S. engineering firms. For practical purposes, these may be considered virgin territories for our international marketing effort.

Our expansion in these new markets will take place through our own sales organization and manufacturers' representatives; in addition, cooperative arrangements such as joint ventures and licensing are under consideration. These activities will be supported by both our manufacturing facilities in the United Kingdom and by exports from our American plants.

Considering another aspect of our industrial marketing, Fibrous Glass Products, Inc., with its new glass fiber plant now in operation, is in the process of expanding its industrial sales organization. It has already increased its coverage of the important appliance industry, and for the first time is working with the automotive industry. Joint venture and licensing proposals outside the United States are being considered.

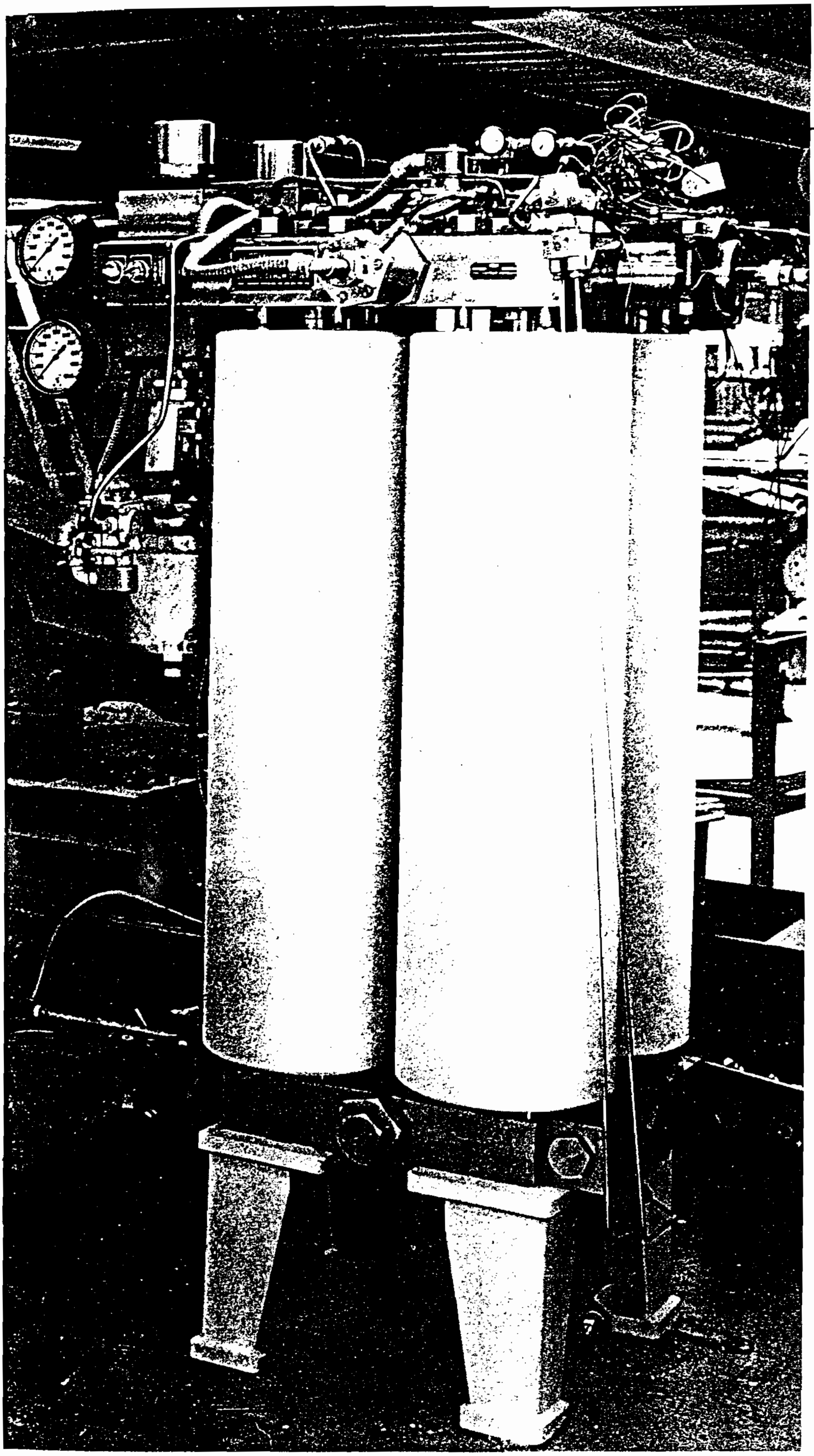
Fibrous has entered into an arrangement to supply fibrous glass acoustic ceiling tiles to Baldwin-Ehret-Hill, Inc. — a highly respected and well known manufacturer and distributor in this large market.

AEROSPACE & DEFENSE MARKETING

We consider our marketing organization for the aerospace and submarine fields to be excellent. Insofar as the aerospace industries are concerned, we are extensively selling airborne and ground support filtration equipment for civilian and military aircraft, missiles and space vehicles.

This sales organization has recently added fibrous glass, differential pressure devices, and disposable filters to its activities. The Trinity gas drying line also has considerable application in this market, and has been widely used but has not hitherto benefited from an aggressive sales campaign. Trinity systems are being integrated into our defense marketing.

Pictured is a gas purification system for use on a space vehicle complex. This results from a joint effort of our divisions. No other organization in the country was found capable of meeting the stringent



Unique gas purification system a p vehicle launching complex. Our con capabilities in fields of dehumidifica filtration and instrumentation made pioneer project possible.

specifications. Trinity gas dryers, a Pal developed oil vapor removal system, an Pall differential pressure gauges are al used in this system.

In addition to our direct sales activities we have successfully been working for some time with representative-licensees on NATO and MAP programs in Canada and Belgium. These organizations — Jarry Hydraulics Limited of Montreal, Canada and Avions Fairey of Gosselies, Belgium — are leaders in their fields and represent us in the sale of filter elements. They are licensed to produce filter housings, and do produce those which get into large quantity production.

We were very pleased near the end of the fiscal year to reach an agreement with The Fairey Company (parent of Avions Fairey) for a similar arrangement to cover the United Kingdom, Common Market, and British Commonwealth. In addition, we recently established representation in Scandanavia which has already resulted in significant orders.

These arrangements have gone a long way toward giving us outstanding coverage in the aerospace industries of the Free World.

CONSUMER MARKETING

We entered the consumer market with our acquisition of Hollinger Machine Co., Ltd. in 1960. The well known line of Hollinger water conditioning equipment is sold throughout Canada through their direct to consumer and dealer organizations. More recently Hollinger engineering and Pall engineering in Glen Cove have developed a series of products for use by the homeowner in treating domestic water supplies, as mentioned on page 14. Test marketing of some of these products has begun, as has the development of a field sales organization to serve this large potential market.

sePall, small fuel-water separators for

pleasure boat engines, described on page 14, reached the market late in the 1962 boating season. Nationwide distribution is now set up for this product.

Distribution has also been organized for our new line of gas detection devices. As described on page 14, these have application for consumer and industrial use to warn of the presence of smoke and explosive or poisonous gases.

Consumer products accounted for about 5% of sales in fiscal 1961, 7% in 1962, and are expected to grow in importance in the coming years.

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extension of facilities

A corollary to expansion of markets and product development is the improvement and addition of manufacturing facilities. Expansion into foreign markets to be of optimum success requires plants or licensees in other countries as well as increased emphasis on exports. We are following all of these courses.

Of equal importance is a continuing emphasis on development of new and improved processes and production techniques. Much of the equipment used in these processes is designed and built by us, giving us capabilities not available to our competitors. Such equipment includes special sintering furnaces, high production wire weaving equipment, thermowell manufacturing equipment, fibrous glass molding equipment, ULTIPOR manufacturing equipment and a whole series of items for the manufacture of metal filters.

1946-1950

During this period Pall developed its first production sintering furnace for the manufacture of porous stainless steel; developed techniques and equipment for welding and forming the new material; and acquired its first permanent home.

1951-1955

Additions to plant continued. Sintering capability was increased. It became possible to manufacture an 18" x 72" sheet of porous metal as opposed to the previous 9" x 27".

The first equipment for the manufacture of airborne filters was designed and installed.

1956-1961

During this period the Glen Components plant was built and equipped, giving us for the first time a precision machining operation of large capacity and the ability to develop improved and more efficient metal working and finishing techniques. Substantial laboratory and specialized manufacturing facilities were provided, and for the first time two large capacity sintering furnaces were available for production.

We entered into fine wire weaving, and with the manufacture of our own looms substantially improved upon generally available equipment.

Trinity moved into a new 40,000 square foot plant fitted with the latest improvements in production equipment for their products.

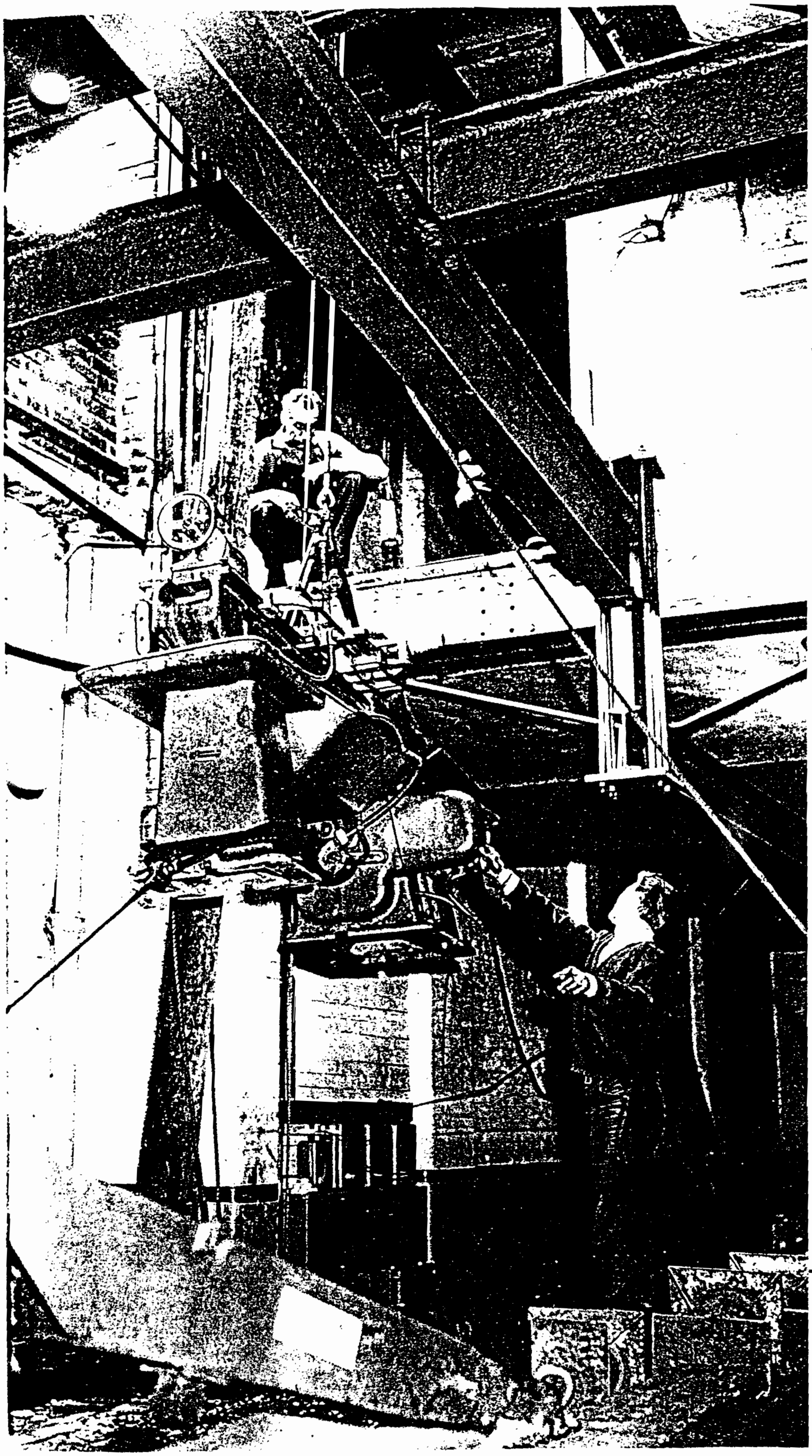
Fibrous Glass Products designed equipment for the manufacture of glass fibers from sand and other raw materials, and began construction of their modern plant.

1962 and the IMMEDIATE FUTURE

Production lines for ULTIPOR and EPOCEL elements were completed and went on stream in time to complete large orders in the 1962 fiscal year. Preparations have been made for increasing these facilities as our industrial and household disposable filter volume increases.

To our knowledge we have developed the most automated paper filter lines in the industry.

Additional metallurgical equipment was added to our laboratory. The latest ad-



vances in cleaning facilities and a new "white room" were added to our environmentally controlled production facilities. A controlled environment facility for producing critical flexible thermocouples was added at the Trinity plant.

Four United States and two European companies have manufactured fibrous glass wool for many years. The new Fibrous Glass plant, now on stream, is the first new entrant to successfully join them. This has been a notable accomplishment by Pall engineering. Fibrous Glass Products is also continuing improvements in its molding operations.

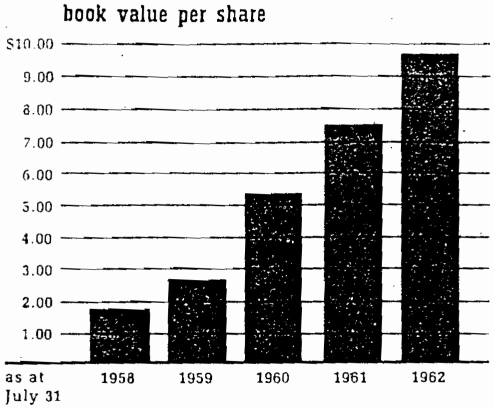
Pall-Ulster has acquired land in Northern Ireland and its new plant is scheduled for completion late in the 1963 fiscal year. In the interim we are in production in leased premises, where we are already using the first of a battery of 96" wide looms. Pall-Ulster has now accomplished doubling the production capacity of generally available equipment.

Lloyd & Hillman, with its volume almost doubling that of the previous year, moved into a new plant in London just at the end of the 1962 fiscal year. With the cooperation of Glen Components and Trinity Equipment, Lloyd & Hillman is about to begin using the latest equipment and techniques in thermowell manufacture. Our British subsidiary is also preparing for manufacture of the Trinity gas dryer line which is expected to be in production in England by the middle of fiscal 1963.

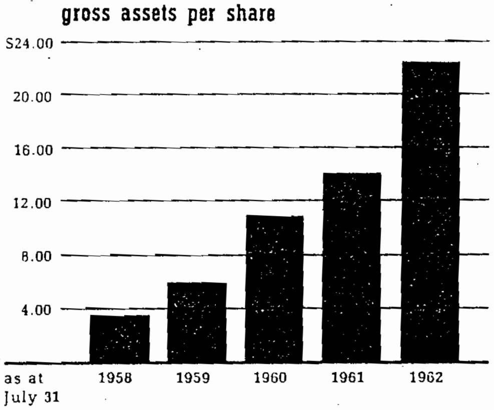
Accompanying these major changes is a continuing program of process and manufacturing improvement in all plants.

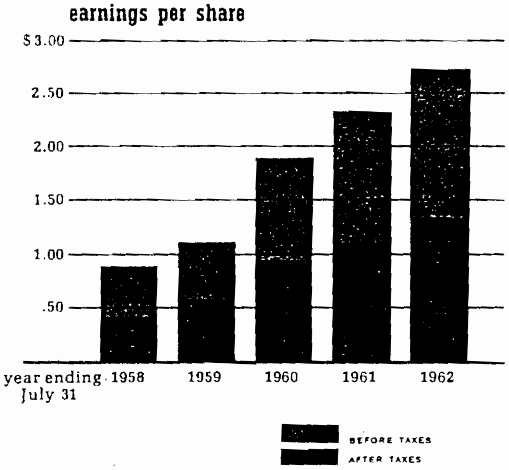
Lloyd & Hillman, our British subsidiary, moves into new quarters in London. This rapidly growing engineering and manufacturing operation, along with our Northern Ireland subsidiary, Pall-Ulster, Ltd., gives us a marketing and production base for sales in Britain, the Commonwealth, and the Common Market.

financial structure


book value per share

Aurora 7 spacecraft is inspected in NASA hangar at Cape Canaveral after historic 3-orbit flight by Cmdr. Scott Carpenter. Pall filters contributed to the reliability of this project.


gross assets per share


earnings per share

In our earlier outline of management philosophy, one cardinal point was deferred for discussion in this section. That point – to operate profitably! All management parameters are determined by this aim.

It seems to us that a stockholder in any company should know what the management's conception of profitable operation is and how the management expects to achieve such an operation.

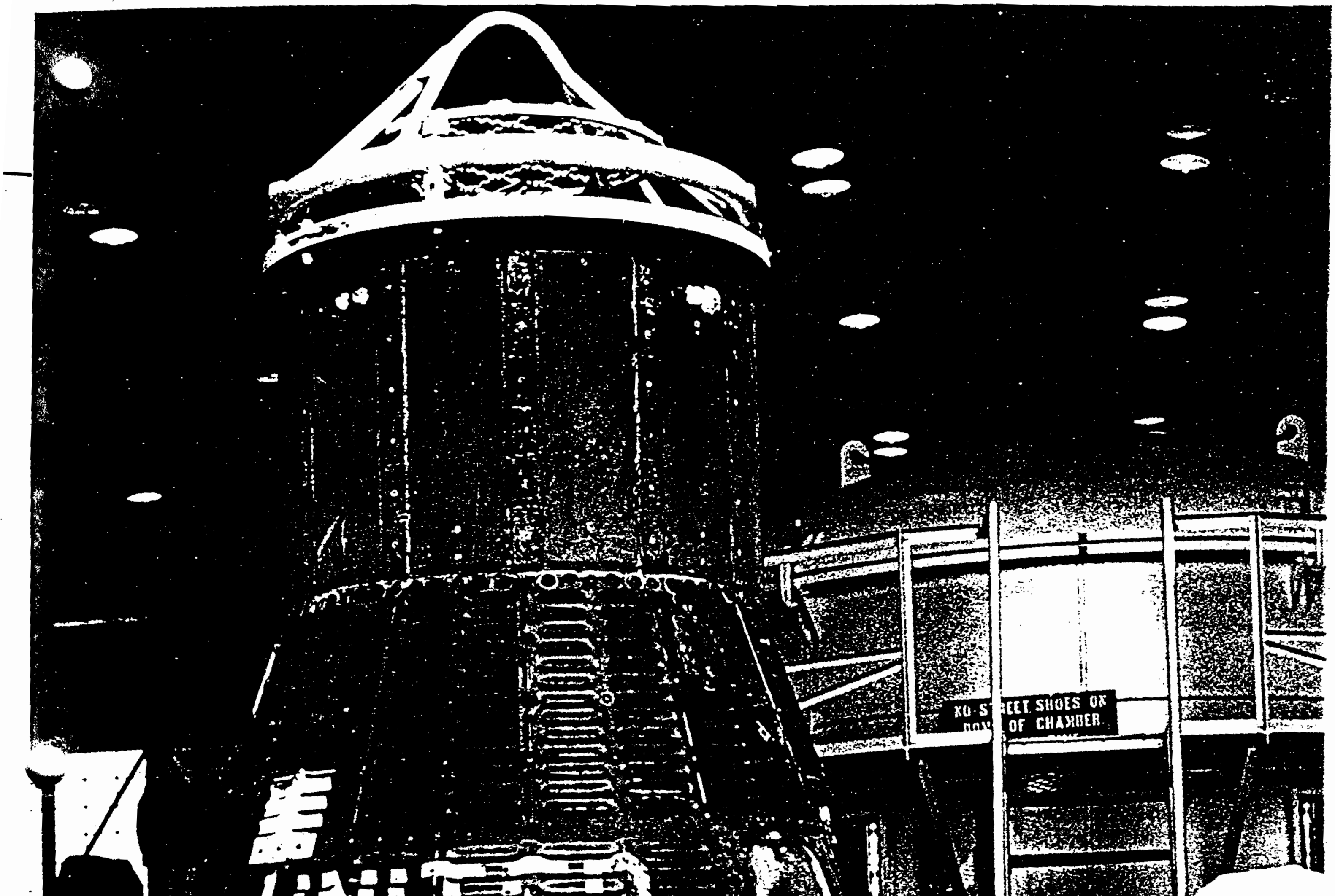
Our conception of profit is an adequate return on equity—the stockholder's ownership in the company. Any new investment or venture is weighed by the likelihood that within a reasonable period of time it will earn at least a return of 15% on the equity invested in it.

As a corollary to this, our conception of growth is growth in earnings per share – for obviously no other growth, unless it is in preparation for this, is of any value to the stockholder.

A stockholder who joined us in November, 1957, when we became a public company, had this result for each 100 shares* he owned at the start:

Year ended July 31	*Equity*	*Dividends Declared*	*Earnings*
1958	$174.00	$18.75	$42.00
1959	267.00	30.00	56.00
1960	455.00	30.00	81.00
1961	751.00	30.00	110.00
1962	972.00	35.00	133.00

*Adjusted for 2-for-1 stock split in June 1959.


UNITED
STATES
OF CHAMBER

EXHIBIT

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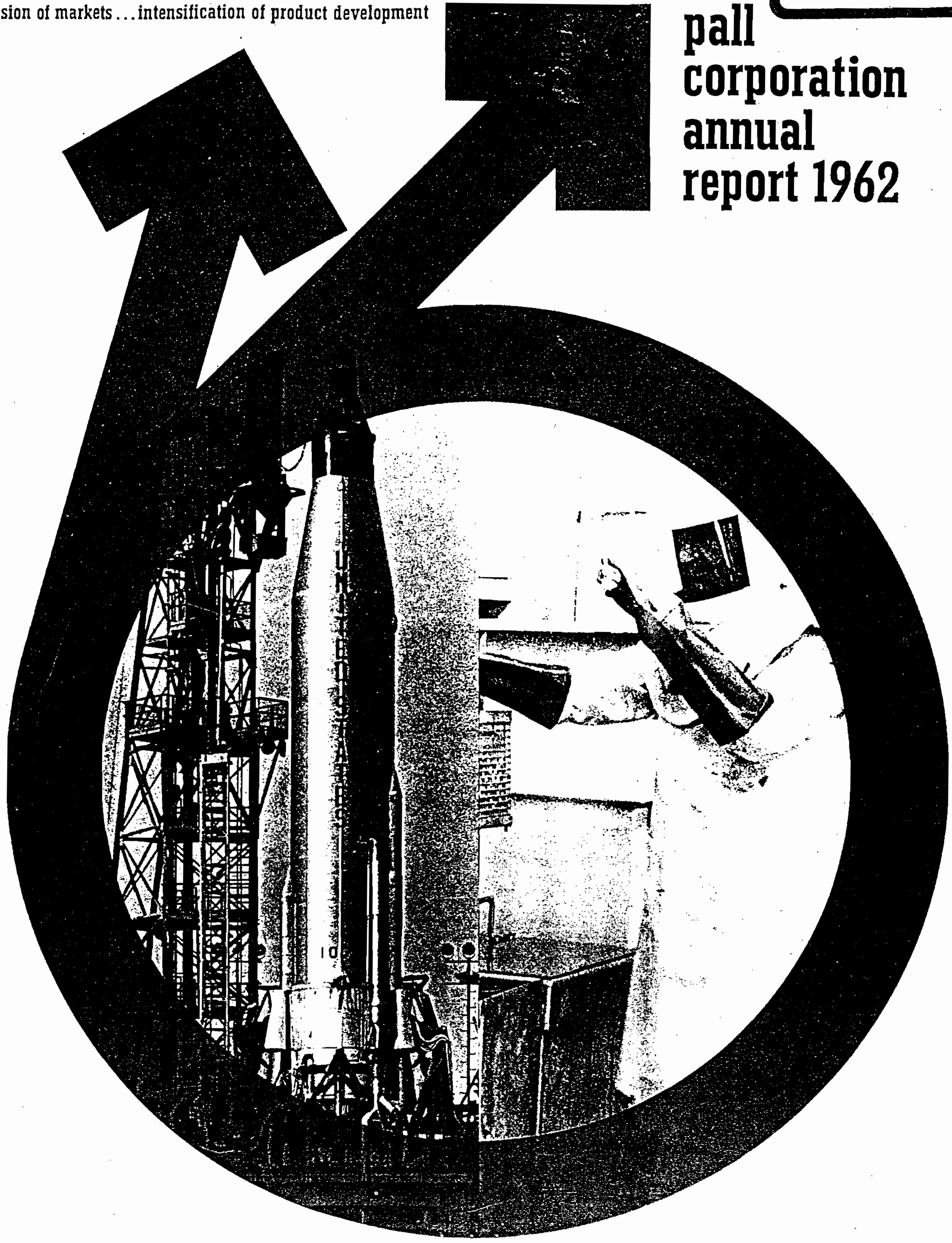
extension of markets . . . intensification of product development

pall corporation annual report 1962

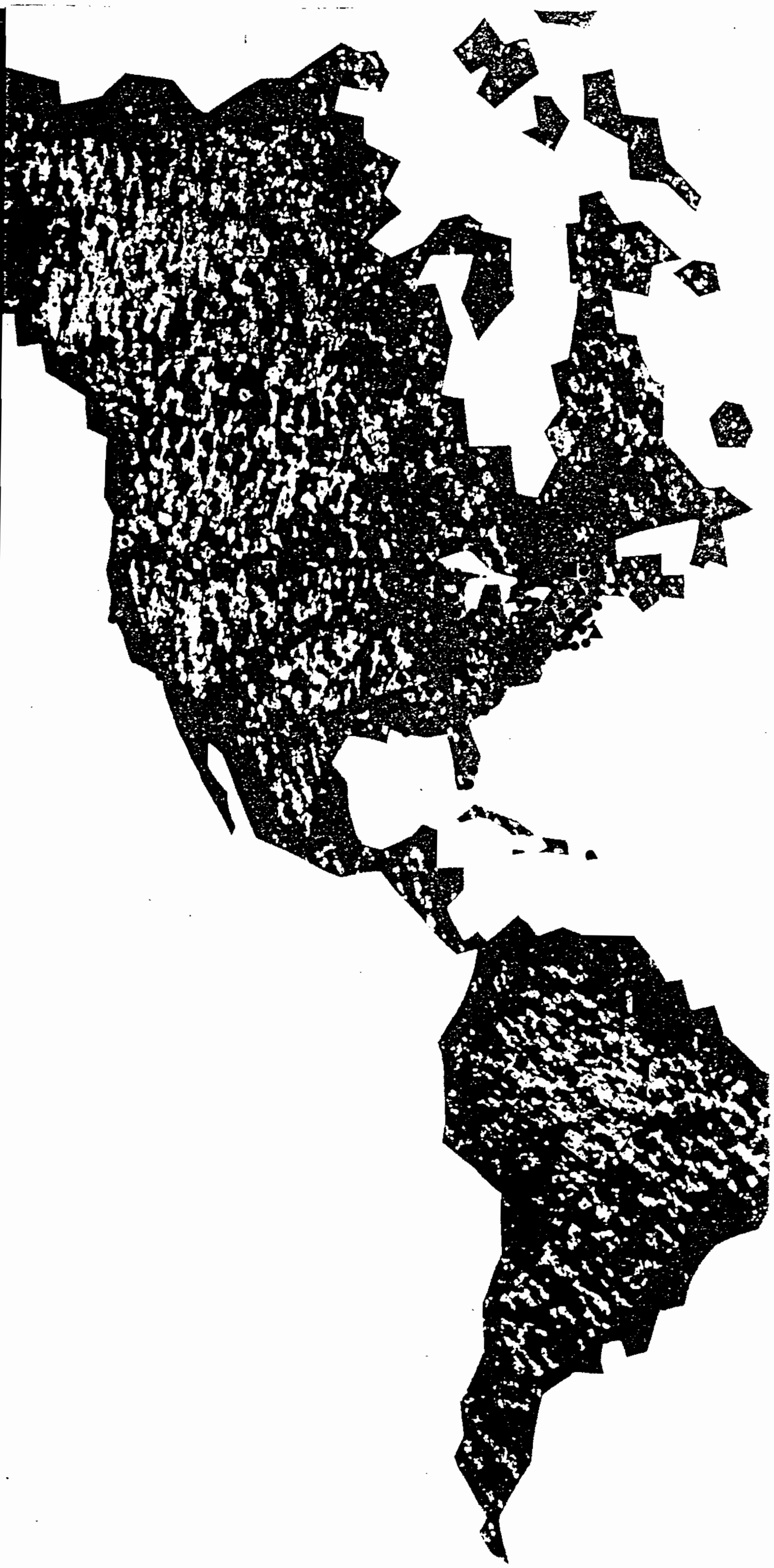


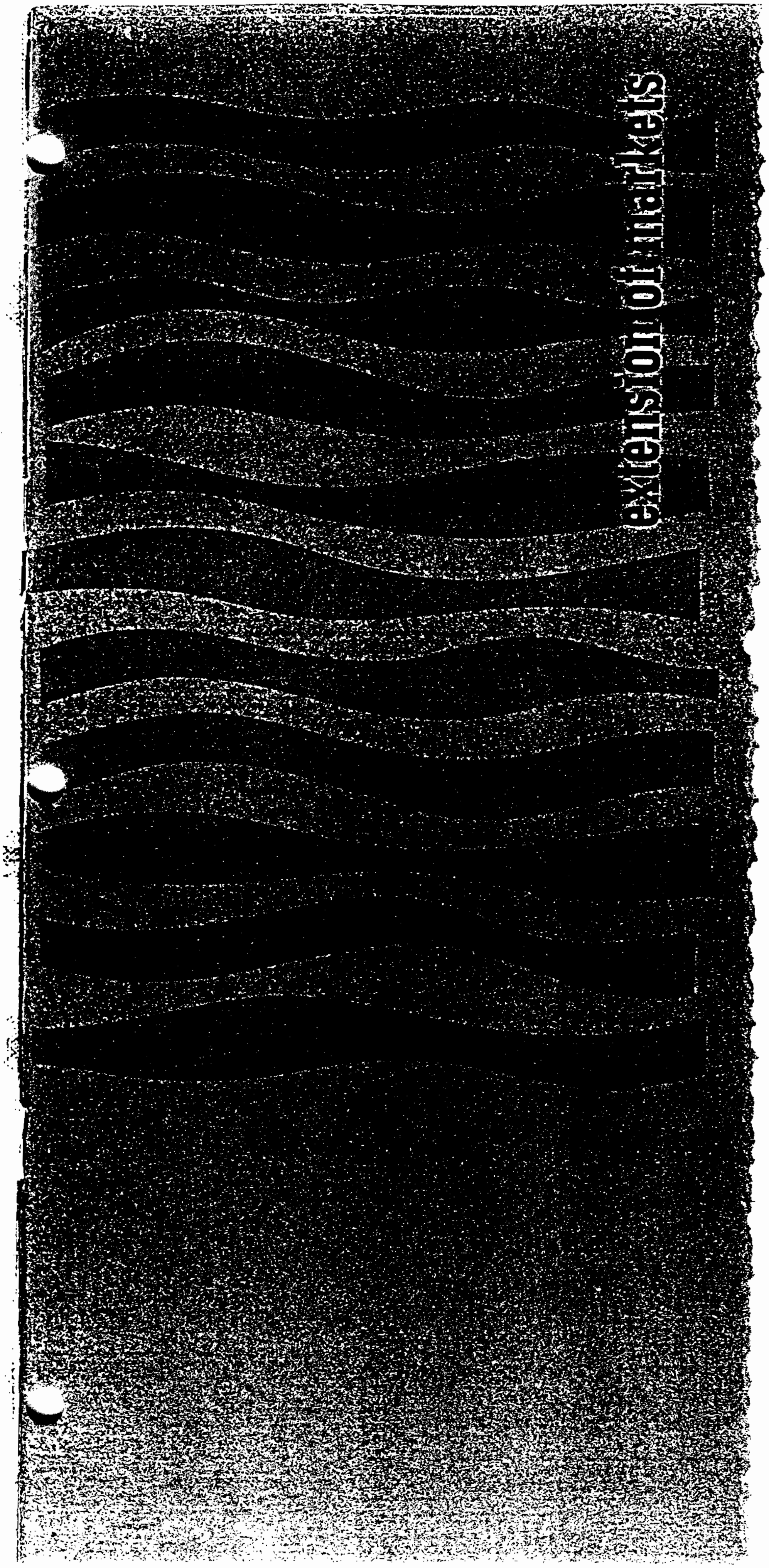
Men, nations and organizations either grow or decline. The life processes of man continue to be extended, but within fairly predictable limits. The metabolism of nations and organizations, however, is susceptible to perpetuation.

Those who guide nations and companies must be ever alert that full maturity—completion of development—is never reached, for decline must inevitably follow.

This great nation has survived many crises and grown stronger on a constant rejuvenation of ideas and aims, and on an ever increasing awareness of its responsibilities.

We of Pall Corporation intend to maintain our corporate youth and metabolism by a program of growth through EXTENSION of our activities with new and existing products into hitherto uncovered geographic areas, and INTENSIFICATION of our services and sales activity in the areas and markets we now serve.





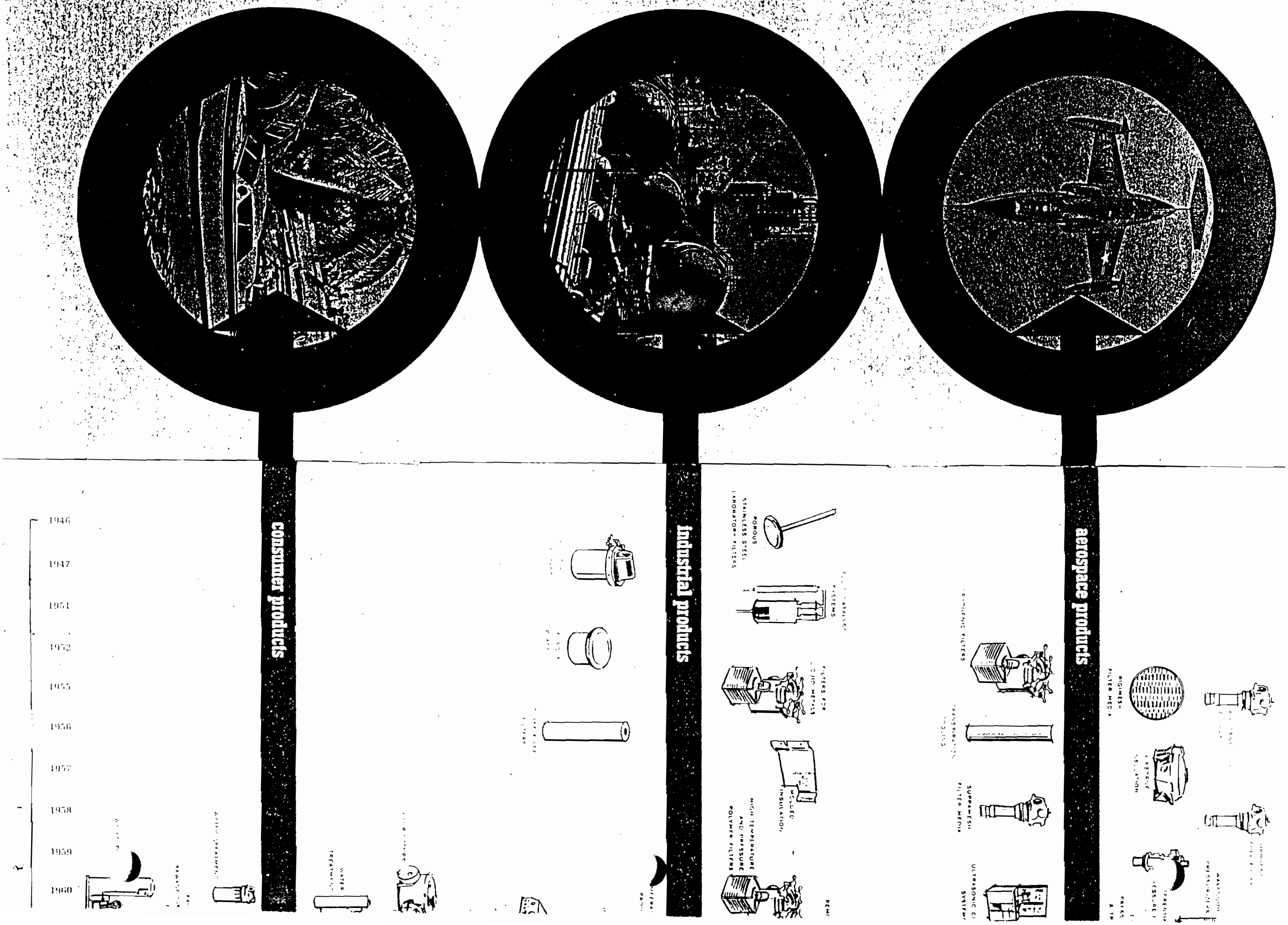
extension of markets

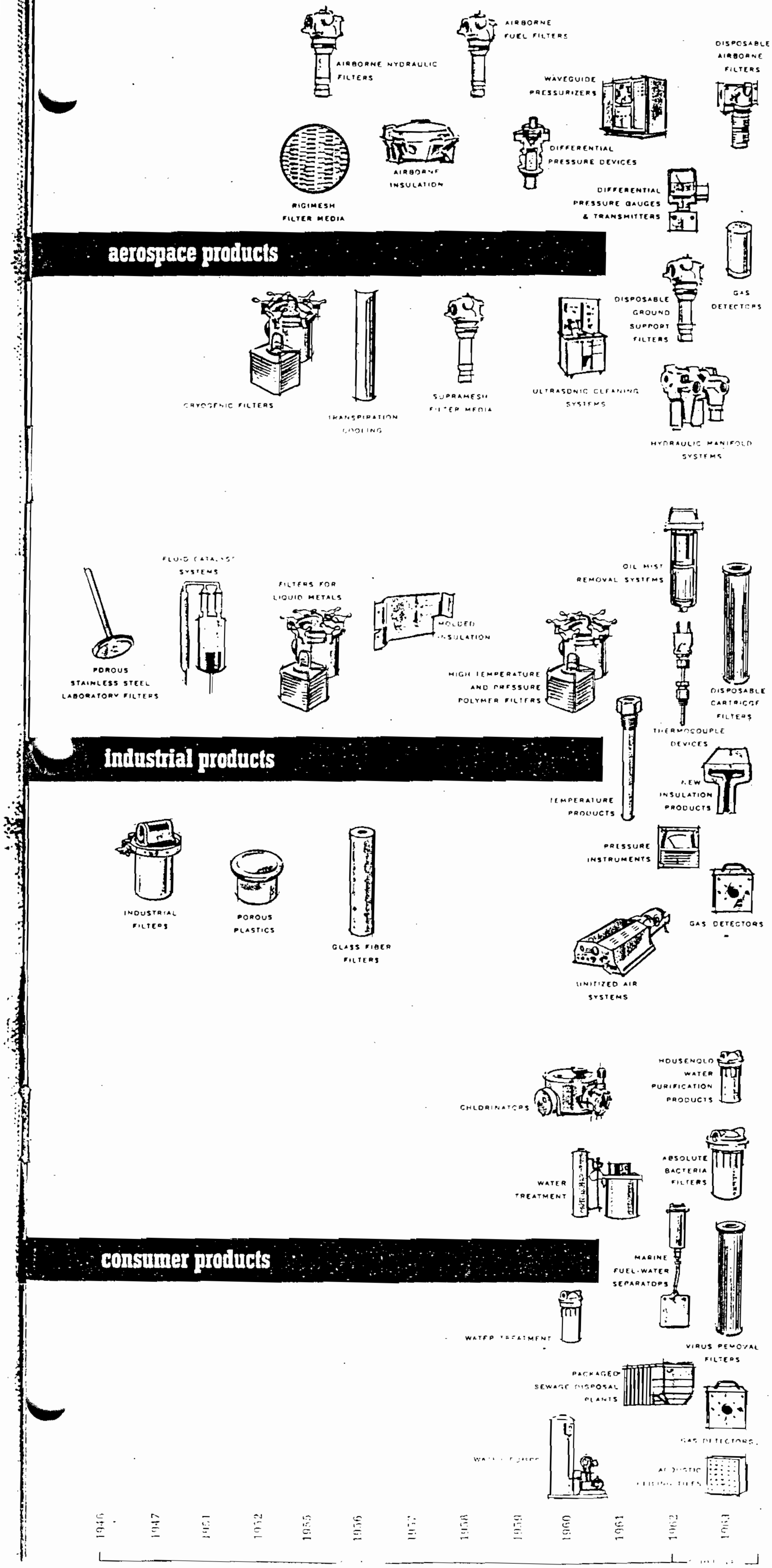
MANUFACTURING PLANTS ▲

LICENSEES ■

SALES REPRESENTATIVES ●

intensification of product development





MANUFACTURING PLANTS ▲

LICENSEES ■

SALES REPRESENTATIVES ●

dear stockholder:

We can fairly report that the year ended July 31, 1962 was a good year for Pall Corporation.

"Good" is a many faceted word:
Sales and earnings rose to $13,850,056 and $734,713 from $11,323,605 and $593,563 respectively in the prior year. At the same time, earnings per share rose to $1.33 on 552,252 shares from $1.10 on 538,638 shares.

Reflecting the new level of activity, dividends were increased 33⅓% to the present quarterly rate of 10¢ per share in April 1962.

The groundwork for further development of our markets was laid with new plants in London, England; Lurgan, Northern Ireland; and Mountaintop, Pa., along with expansion of our facilities in Glen Cove.

Our successful licensing-representation relationship with Avions Fairey in Gosselies, Belgium was extended with their parent organization, the well-known Fairey Company of England. Training programs have begun with them for full coverage of the aerospace industries in the United Kingdom, Common Market, and the British Commonwealth. Representation in the Scandinavian aerospace industry was also arranged with New York-based Transaero Corporation.

Our development efforts have led to improved manufacturing techniques and new products in the fields of water treatment, gas detection, fluid systems and insulation, and to an entirely new product line of disposable filters for aerospace, industrial and consumer use.

Our network of manufacturers' representatives and distributors both in and out of the United States has been and continues to be broadened and strengthened, in a program to bring in new markets and increase our coverage in existing ones.

Our employees found many new advancement opportunities, continued steady employment, and increased provisions for their security and health.

Our future may not be without disappointments and plateaus where we must pause to consolidate our gains, but it is clear that the coming years are full of promise for a succession of great strides forward.

As in past years, this report will be seen by many new employees, stockholders and customers who are reading a Pall Corporation Annual Report for the first time. For their benefit our history will be briefly recounted.

Very truly yours,

David B Pall

DAVID B. PALL, *President*

fiscal highlights

	Year ended July 31	
	1962	1961
Consolidated Net Sales	$13,850,056	$11,323,605
Earnings before Taxes on Income	$ 1,515,267	$ 1,254,562
Taxes on Income	$ 780,554	$ 660,999
Earnings after Taxes	$ 734,713	$ 593,563
Per Share Outstanding at Year End	$ 1.33	$ 1.10
Depreciation Deducted from Earnings	$ 315,035	$ 223,611
Cash Provided from Operations	$ 1,049,748	$ 817,174
Per Share Outstanding at Year End	$ 1.90	$ 1.52
Dividends Declared per Class A Share (note 2)	35¢	30¢
Total Assets at End of Year	$12,334,688	$ 7,534,491
Investment in Plant and Equipment	$ 4,999,756	$ 2,719,288
Working Capital	$ 3,219,671	$ 3,287,762
Stockholders' Equity	$ 5,366,055	$ 4,046,499
Shares Outstanding at End of Year (note 3)	552,252	538,638
Equity per share	$ 9.72	$ 7.51

Note 1: All financial data in this report include the operations and condition of Trinity Equipment Corporation for the fiscal year ended July 31, 1960 and subsequent years. Trinity was acquired in May, 1961.

Note 2: Regular quarterly dividends of $0.075 per share were declared in October 1961 and January 1962 and of $0.10 per share in April and July 1962.

Note 3: Includes 283,002 Class A Shares and 269,250 Class B Shares. Class B Shares receive dividends of 1% per share of the dividend on Class A Shares. For substantially all other purposes the two classes are alike. Class B Stock may be converted into Class A Stock on a share for share basis.

Class A Shares are traded on the American Stock Exchange under the symbol PLL.

1946-1962 the extent of our growth

Less than 10% of this year's sales were of items in our original line—and 50% of this year's sales were of products not in our line five years ago!

Of what significance is this?

We are now in a time of economic uncertainty, rapid technological advancement and rising domestic and international competition. It is not possible to stand still, nor is it possible to depend on the momentum of past accomplishments to carry one forward.

Industries will either advance or fall back. A pre-condition to advancement is a state of mind—a philosophy—that is conducive to forward strides.

The cardinal points of our corporate philosophy are:

1. to build and maintain a superior technical and management organization
2. to engage only in activities we thoroughly understand
3. to be venturesome (but not reckless)
4. to look for fields of expansion where others in the industry are technologically weak and where rapid and continued change is likely
5. to enter some relatively untried fields where a product appears to be lacking altogether and where a substantial market looks likely
6. to explore consumer markets related to our industrial capabilities
7. to know our production costs
8. to emphasize manufacturing improvement along with product development
9. to intensify and expand our sales efforts.

diversification—or not?

We were recently interviewed by a magazine as a successful example of diversification—a description we disavowed.

If diversification means variegation, and has the connotation of activity in unrelated areas, we shun diversification!

We rather think in terms of new products and markets in our own field — the control of fluids and environments; intensification of product development in existing and related fields; and a continuing effort to integrate and improve our manufacturing facilities.

intensification of product development

Both the inside front cover and the discussion of corporate philosophy in this report have given you a brief view of our development programs and their effect.

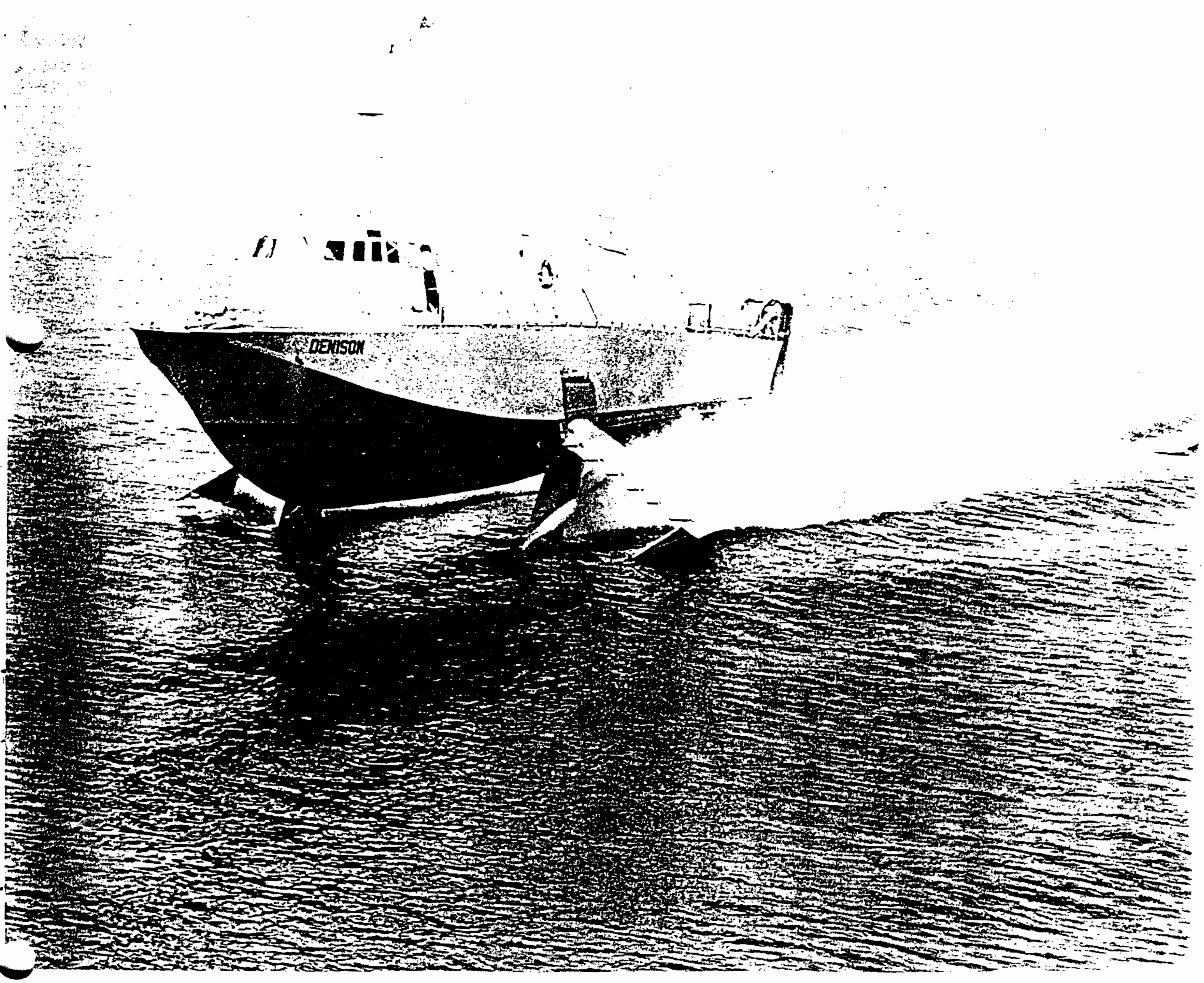
With the coming of the space age, myriads of papers have been written and much importance has been attached to the amount of research and development effort expended. R & D has become as common a household term as aspirin and in many companies both are needed in equal quantities. An improperly controlled or inefficient R & D program can be worse than none at all.

It is essential that development programs be selected with great care and then diligently followed with the clear aim of results in profitable products. Control of such programs is, and from the very start has been, a top management function of Pall Corporation. These programs are primarily oriented toward products which require a high degree of technical skill for their manufacture. We live in a highly competitive society and a successful new product is almost certain to bring on competition. It is axiomatic that if such a product is too easy to make, destructive price competition will follow rapidly.

Pall Corporation has historically spent between 5 and 10% of sales on development of products and processes. This expenditure has resulted through the years in many notable developments of products in our field of interest.

Although we do not rely on patents to maintain our position in the industry, our developments have resulted in patents covering all of our basic porous materials and a number of processes and types of equipment.

Grumman hydrofoil boat during trial run on Long Island Sound. Hydraulic, fuel and lube oil systems are protected by Pall filters.



DENISON

industrial products

Since World War II the process industries (chemical, pharmaceutical, food processing, petroleum, distilling, metallurgical, power and petrochemical) and the atomic energy and electronic industries have increasingly used closer controls, finer tolerances and new extremes of temperature and pressure.

> *Automated systems must respond with certainty to changes in pressure, temperature and flow, or whole plants may be shut down.*
>
> *Molten metals must be freed of microscopic particles for atomic energy use.*
>
> *Pneumatic control systems, common to nearly all industry, require an air supply free of moisture, oil, and other contaminants.*
>
> *Means for preventing loss to the atmosphere of expensive or noxious catalysts used in petrochemical production are essential.*
>
> *Potable liquids and parenteral drugs must be clarified or sterilized before human intake.*

In these and many other fields technological advance has been accompanied by an increased demand for products of the kind made by Pall Corporation and has pointed the direction of our product development:

1946-1950

During this period PSS® (porous stainless steel), an entirely new filter medium, was introduced with the expectation that existing filter maufacturers would put it into immediate use. The filter industry, however, failed to recognize the importance of the new development. As a result Pall Corporation developed and introduced porous stainless steel laboratory filters, and then full scale industrial filters. Many new filter designs of an improved nature gained rapid acceptance from industrial users.

It was also during this same general period that Trinity Equipment Corporation developed a broad line of precision machined, corrosion resistant thermowells for the protection of temperature sensing devices, and established itself as the leader and first full line manufacturer in its field.

1951-1955

Trinity acquired and substantially improved a line of dehumidification equipment to satisfy growing demands for moisture free air and gas systems.

Pall Corporation, continuing to intensify its development and engineering program, introduced Porous Teflon* and Kel-F† for filtration of extreme corrosives.

The first application of PSS for large scale catalyst retention systems was made.

During this period new high quality films made of extremely high temperature, viscous, contamination-sensitive polymers were being developed in this country and only close cooperation of Pall engineering with the engineering departments of large chemical companies made the process possible. It is interesting to note that with our increasing activity in Europe we have now been sought out to help solve similar problems there with Pall equipment.

1956-1961

The HEAT-LES** compressed air dryer, the most notable advance in gas drying in 25 years, was introduced.

Glas-Kleer disposable glass fiber filters were put on the market for limited applications.

Molded, engineered glass fiber products were introduced to the appliance, electronic and other industries.

Deltadyne pressure and differential pressure switches based on new engineering concepts, were introduced.

Petrosorb, the first adequate answer to removal of dangerous oil vapors from compressed gas systems, was placed in use.

1962 and the IMMEDIATE FUTURE—

Fiscal 1962 was a particularly productive year in industrial product development. Some of the developments listed below have already been sold in small quantity.

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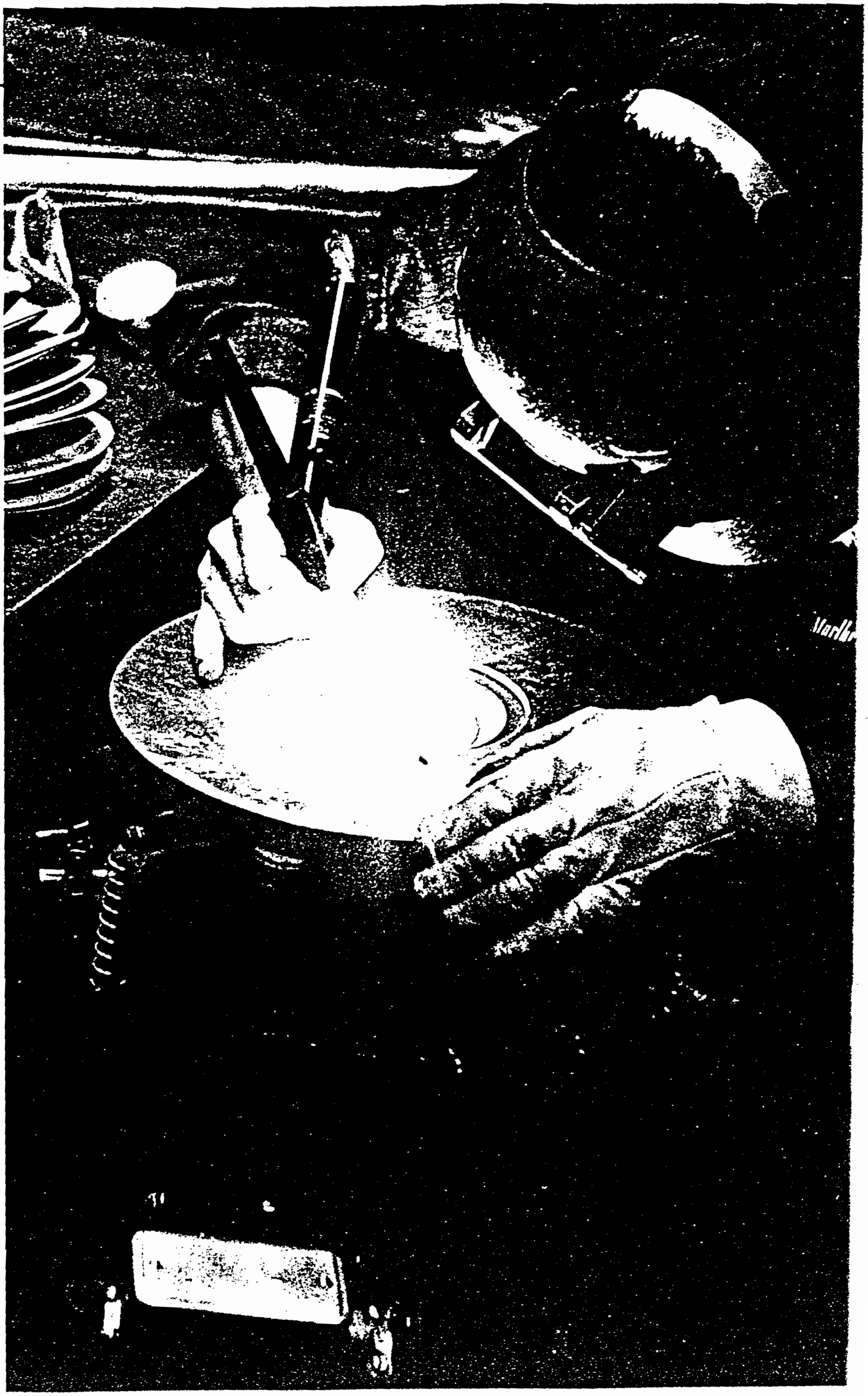
*Trademark of Dupont
†Trademark of Minnesota Mining & Mfg. Co.
**Trademark of Pall Corporation

Welding Porous Stainless Steel ilter segments at Glen Cove lant.



ULTIPOR* – A New Family of Filters

For many years there has been a great need – one which is constantly increasing – for filters which can remove extremely fine contaminants, including bacteria and even viruses. This need exists not only in such obvious places as drug manufacture, but is also a major problem in the production of semi-conductors and among industrial users of many fluids.

The problem is not only to remove such incredibly small particles with absolute certainty but to do so in a manner which is economically feasible for large scale application.

Until now, the only available methods were adaptations of hard to handle laboratory techniques using fragile materials and expensive equipment. These do not permit either high throughput rates or adequate time on stream. In addition it is not always possible to pre-test these materials to be certain of absolute removal ratings.

This dash (-) is 1,000 microns long. A particle 25 microns in size is too small to be seen with the naked eye. Typical bacteria may be ⅓ of a micron in size or 3,000 times smaller than the dash shown above! We are now in initial production of a standard line of disposable filters which will remove such bacteria quantitatively and at the same time economically – with both excellent throughput and onstream life.

In advanced stages of development is a still finer filter which will remove viruses 75,000 times smaller than the dash to which we have been referring!

Variations of ULTIPOR have application as defense and consumer products and will be referred to in those sections.

CARTRIDGE FILTERS

For many years our Micro Metallic Division has been the acknowledged leader in high quality, custom designed, porous stainless steel filters. While many catalogue items are now in this line, we have not until now entered the large disposable (throw-away) filter market.

Filter "Cartridges" made of many mate-

Deltadyne switches being inspected at Glen Cove plant.

rials and mainly in a standard size of 10 inches long and 2¾ inches in diameter are used throughout industry for clarifying many liquids and gases. During the first quarter of our 1963 fiscal year we will be on the market with the broadest line of such cartridges in industry.

What is of significance is that our new line is composed entirely of proprietary materials, most of which have not heretofore been available to the customer. These items not only will offer longer life and higher quality filtration, but will also cover virtually the entire range of flow, temperature, pressure, particle size removal and corrosion conditions found in industry.

A key item in this new line is our Epocel* disposable paper filter element. A high area, corrosion resistant product, Epocel is a completely new advance in paper filters and is not produced by any other manufacturer.

ADVANCED GAS DRYERS

Compressed air, nitrogen, hydrogen and other gases are widely used throughout industry for such diverse applications as operation of pneumatic controls, conveying powdered or granular materials by fluidizing, pressurizing waveguides and coaxial cables, clarifying controlled atmospheres in manufacturing processes and many others. These gases must be freed of water and oil vapors which normally contaminate them. Water is normally removed by passing the gas through a desiccant bed which adsorbs the vapors. In time, the desiccant becomes saturated. To provide a constant flow of dry gas the desiccant beds are periodically regenerated in equipment such as our Trinity dryers. Until 1957 the regeneration process was accomplished by the introduction of heat. In that year Trinity introduced the first automatic system which operated without an external heat source. This was a great step forward and represented the last notable advance in gas drying equipment. We are now engaged in a further research and development program which we believe will add importantly to Trinity's growth potential.

WATER SOFTENER VALVES

The single most serious service problem in the widespread home water softening equipment industry is caused by failure of a multiport control valve. Unable to find an adequate valve for their own water softener production, our Canadian subsidiary, Hollinger Machine Co., Ltd., has developed and extensively tested a new valve, for which patent application has been made. This new valve is not only superior in performance, but also lower in cost. We expect that this new valve—which is corrosion and abrasion resistant, and has a minimum of moving parts—will not only be used on Hollinger equipment but will also be sold to other manufacturers in the United States and Canada.

OTHER DEVELOPMENTS

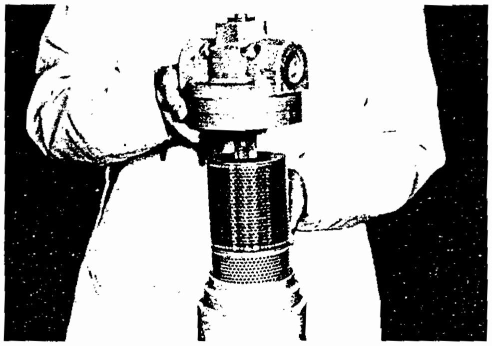
Among our other industrial equipment developments are:

New improved miniature thermocouples for temperature measurement.

A new thermal conductivity meter which for the first time makes it possible to take almost instantaneous measurements of insulation efficiency.

A new type of horizontal plate filter (the first in our line) which is more economical than others available on the market.

A new device to remotely indicate changes in differential pressure, flow, and fluid level in a process system.



Ultipor Triphane® Filter containing new ultra-fine, high area disposable filter element.

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*Trademark of Pall Corporation

aerospace and defense products

There is an axiom in the space vehicle industry: "If a part can fail, it will fail!" The entire defense industry, constantly increasing in sophistication and complexity, is becoming ever more aware of this.

Pall Corporation has been a leader in the development of parts that will not fail. As sophistication and the need for reliability have increased, so has the demand for products such as ours. We entered this market when we found in 1954 that airborne systems with contamination-sensitive servomechanisms, pumps and other vital parts were in trouble for lack of adequate filters. Existing suppliers offered no solution. In a very short time Pall engineering and production solved the major filtration problems and revolutionized airborne filtration.

From the time of the 1649 Constellation and the F-100 (the commercial and military aircraft being built when we entered the field) to the Boeing 727 and F110 (the latest commercial and military aircraft), and from the Vanguard and Atlas to the Saturn and Minuteman, we have been the leading supplier of airborne filters.

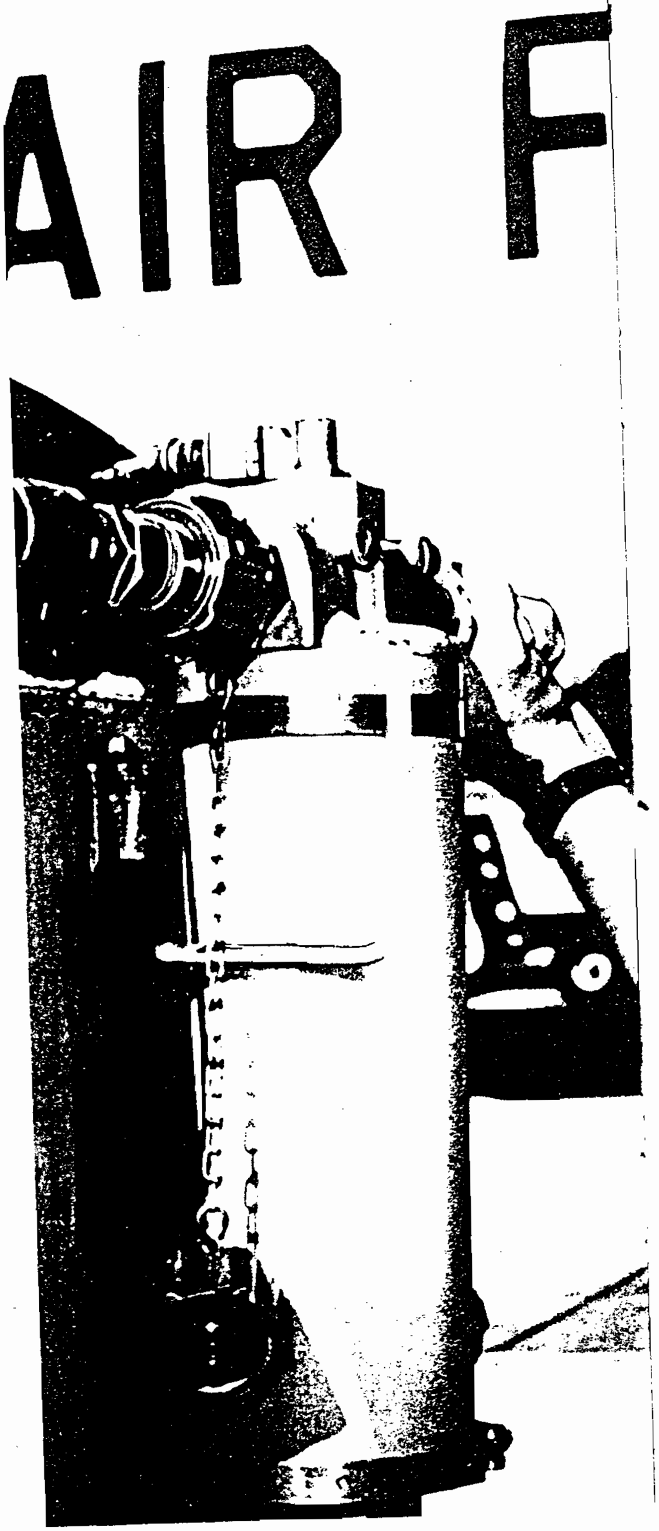
In a similar fashion Pall filters have been used to protect atomic submarine hydraulic and pneumatic systems from the time of the Nautilus.

We have a proud history of making material contributions to the solution of critical needs in our defense systems. A few examples follow:

> *Slight contamination of fluids in airborne hydraulic systems may result in a landing gear failure or cause a missile to go off course.*
>
> *Inadequate drying of compressed air may knock out a key radar system.*
>
> *Sonar radiation may be damaging to personnel without proper insulation.*
>
> *Positive response to small changes in pressure in high pressure systems is essential in safe aircraft operations.*

1955

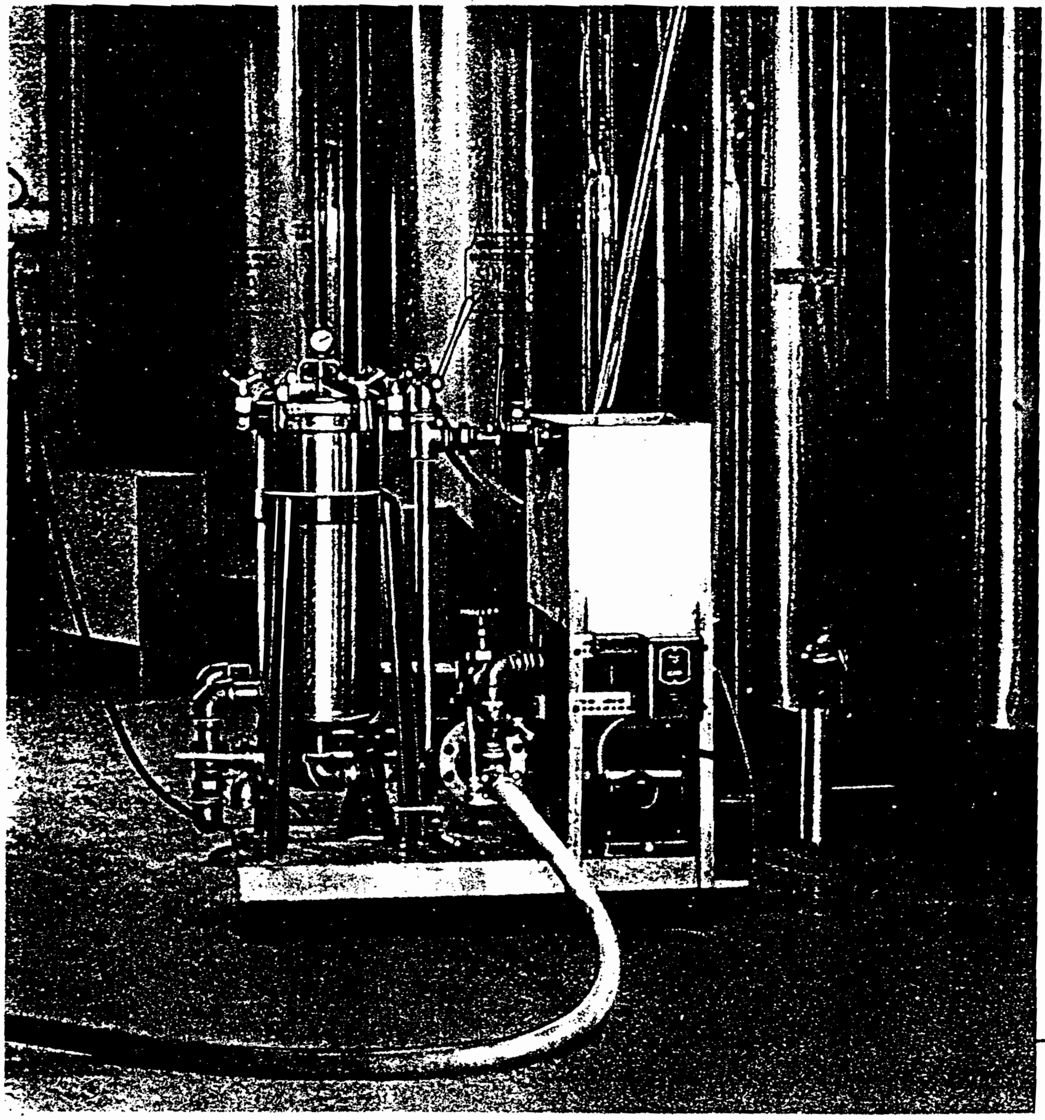
This was the year of our major entry into the defense and aerospace markets. RIGIMESH® sintered fine wire cloth was



consolidated statement of earnings

	Year Ended July 31	
	1962	1961
Net sales	$13,850,056	$11,323,605
Cost of sales	8,058,412	7,256,805
Gross profit on sales	5,791,644	4,066,800
Selling, general and administrative expenses	4,345,182	2,842,623
Earnings from operations	1,446,462	1,224,177
Rent and miscellaneous income	68,805	30,385
Earnings before provision for federal and state income taxes	1,515,267	1,254,562
Provision for federal and state income taxes	780,554	660,999
Earnings — for the year ended July 31	$ 734,713	$ 593,563

The comments contained in the accompanying Notes to Consolidated Financial Statements are an integral part of these statements and should be read in conjunction herewith.



CONSOLIDATED STATEMENT OF RETAINED EARNINGS

	Year Ended July 31	
	1962	1961
Balance, beginning of fiscal year	$ 1,760,373	$ 883,148
Adjust:		
Retained earnings of subsidiary at acquisition date		343,610
Balance, beginning of fiscal year — adjusted	1,760,373	1,226,758
Add:		
Earnings for the year ended July 31	734,713	593,563
Prior years' adjustments		11,024
	2,495,086	1,831,345
Deduct:		
Cash dividend — class A stock	97,569	70,142
Cash dividend — class B stock	945	830
Stock issuance costs	388	
	98,902	70,972
Retained Earnings — July 31	$ 2,396,184	$ 1,760,373

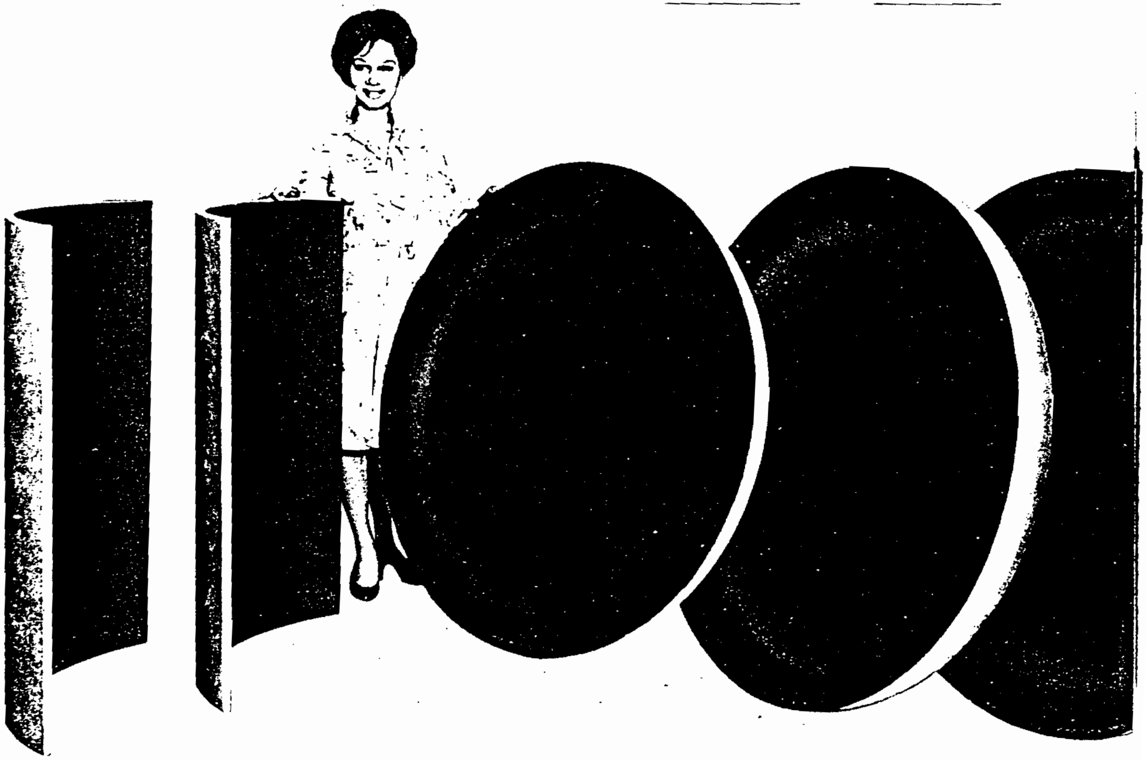
CONSOLIDATED CAPITAL IN EXCESS OF PAR VALUE

	Year Ended July 31	
	1962	1961
Balance, beginning of fiscal year	$ 1,747,488	$ 824,255
Adjust: Capital in excess of par value of Trinity Equipment Corporation and subsidiary, August 1, 1960		42,739
Balance, beginning of fiscal year — adjusted	1,747,488	866,994
Add: Capital in excess of par value arising from:		
issuance of shares of Class A stock of $1.00 par value	480,000	744,908
cancellation of 175,000 shares of $1.00 par value common stock of Trinity Equipment Corporation		175,000
issuance of 5,485 shares of Trinity Equipment Corporation $1.00 par value stock, held in treasury, to Schuster & Co. for services in connection with acquisition		53,386
issuance of 2,600 shares of class A stock of $1.00 par value in acquisition of subsidiaries	127,925	
exercise of options for 1,014 shares of class A stock of $1.00 par value	10,545	
capital grant — Ministry of Commerce, Northern Ireland	52,780	
	2,418,738	1,840,288
Deduct: Charges to capital in excess of par value arising from:		
cancellation of 10,240 shares of Trinity Equipment Corporation of $1.00 par value stock held in treasury — at cost		2,735
issuance of 27,460 shares of Pall Corporation class A stock of $1.00 par value for the net assets of Trinity Equipment Corporation		27,460
financial and other expenses in connection with the acquisition of Trinity Equipment Corporation	1,119	62,605
	1,119	92,800
Capital in Excess of Par Value — At End of Fiscal Year July 31	$ 2,417,619	$ 1,747,488

Pall filters are widely used in the food processing field.

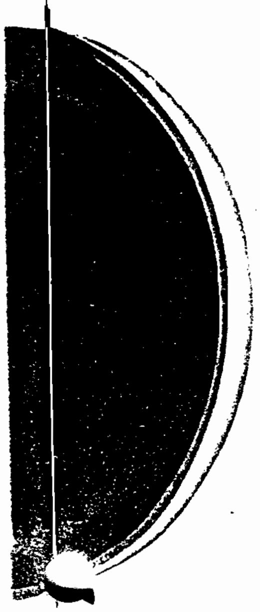
consolidated balance sheet

ASSETS	Year Ended July 31 1962	 1961
CURRENT ASSETS:		
Cash	$ 437,998	$ 418,635
Accounts receivable, less estimated uncollectibles	3,225,468	1,910,048
Other receivables and advances, less estimated uncollectibles	178,489	93,155
Notes receivable	350,000	
Prepaid expenses	117,745	61,878
Merchandise inventory	3,730,962	3,005,164
TOTAL CURRENT ASSETS	8,040,662	5,488,880
FIXED ASSETS – AT COST:		
Land	65,331	45,902
Buildings, machinery, equipment, etc., (less accumulated depreciation of $1,039,325 and $770,851, respectively, at July 31, 1962 and July 31, 1961)	3,895,100	1,902,535
TOTAL FIXED ASSETS	3,960,431	1,948,437
OTHER ASSETS:		
Unamortized financial expenses	57,000	61,934
Deferred charges and deposits	78,580	30,922
Cost of investment in subsidiary in excess of net assets at date of acquisition (net of amortization of $20,619 and $8,632, respectively, at July 31, 1962 and July 31, 1961)	176,429	4,316
Other intangibles	21,584	
Research and development	1	1
Patent rights	1	1
TOTAL OTHER ASSETS	333,595	97,174
TOTAL ASSETS	$12,334,688	$ 7,534,491



LIABILITIES AND STOCKHOLDERS' EQUITY	Year Ended July 31 1962	1961
CURRENT LIABILITIES:		
Notes payable – banks	$ 2,082,197	
Accounts payable	1,241,624	$ 1,087,073
Accrued expenses and taxes payable	576,814	365,486
Withheld income taxes payable	96,168	72,678
Federal and state income taxes payable	683,888	566,547
Current portion of long-term debt	111,731	89,079
Dividends payable	28,569	20,255
TOTAL CURRENT LIABILITIES	4,820,991	2,201,118
LONG-TERM DEBT:		
6¾% note due in annual installments to 1975	800,500	867,000
5⅛% subordinated convertible note due in annual installments, 1967 to 1976	1,000,000	
5½% note due in annual installments to 1966	42,858	57,144
6% subordinate debentures due in 1976	150,100	200,000
3% mortgage payable in annual installments to 1977	154,184	162,730
TOTAL LONG-TERM DEBT	2,147,642	1,286,874
TOTAL LIABILITIES	6,968,633	3,487,992
STOCKHOLDERS' EQUITY:		
Class A stock, par value of $1.00 per share, 1,000,000 and 600,000 shares authorized, 283,002 and 267,338 shares, respectively, issued and outstanding as at July 31, 1962 and July 31, 1961	283,002	267,338
Class B stock, par value of $1.00 per share, 269,250 and 271,300 shares, respectively, authorized, issued and outstanding as at July 31, 1962 and July 31, 1961	269,250	271,300
Capital in excess of par value	2,417,619	1,747,488
Retained earnings	2,396,184	1,760,373
TOTAL STOCKHOLDERS' EQUITY	5,366,055	4,046,499
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$12,334,688	$ 7,534,491

The comments contained in the accompanying Notes to Consolidated Financial Statements are an integral part of these statements and should be read in conjunction herewith.



Fibrous glass insulation, produced for Saturn rocket, is shaped in strikingly modern design.

notes to consolidated financial statements

NOTE 1 – CONSOLIDATION OF STATEMENTS

The statements of Pall Corporation are presented in consolidation with its subsidiaries, all wholly-owned.

The operations of Lloyd & Hillman, Ltd., London, England (the net assets of which were acquired on March 13, 1962 for 2,100 shares of Class A stock of Pall and $105,618.75 in cash) are consolidated from that date.

Intercompany transactions, including unrealized profits in inventories, have been eliminated.

NOTE 2 – ACCOUNTS AND NOTES RECEIVABLE

Installment accounts receivable of Canadian subsidiaries in the amount of $343,962 have been assigned to secure $334,364 of notes payable – bank.

Under the terms of an agreement between Pall, L. O. Koven and Brother, Inc., Koven Fabricators, Inc. and Gustav H. Koven, Pall has advanced $350,000 to Koven, of which $50,000 is repayable on October 16, 1962 and the balance on February 1, 1963. The advances are evidenced by notes and secured by a second mortgage on the real property, plant and equipment of Koven Fabricators, Inc. located at East Dickerson Street, Dover, New Jersey.

NOTE 3 – MERCHANDISE INVENTORY

Merchandise inventory was taken under our supervision and was priced at the lower of cost (on the first-in first-out basis) or market. Raw materials, including materials entering into work in process and finished goods, were priced on the basis of average cost. Charges for labor and overhead included in finished goods are based mainly on cost.

Opening and closing merchandise inventories used in the computation of cost of sales for the year ended July 31, 1962 are as follows:

	July 31,1961	July 31,1962
Raw materials	$1,352,632	$1,890,980
Work in process	1,056,169	1,123,681
Finished goods	596,363	716,301
TOTAL	$3,005,164	$3,730,962

NOTE 4 – FIXED ASSETS

The amount at which fixed assets are stated in the consolidated balance sheet represents cost, after accumulated depreciation.

The fixed assets and respective accumulations of depreciation are as follows:

	Cost	Accumulated Depreciation	Net
Machinery, equipment and improvements	$3,270,736	$ 647,574	$2,623,162
Office furniture and equipment	214,099	98,571	115,528
Transportation equipment	120,526	47,031	73,495
Buildings	1,329,064	246,149	1,082,915
Land	65,331		65,331
	$4,999,756	$1,039,325	$3,960,431

Equipment and improvements in the course of construction and installation, in the amount of $890,203 are included in 'machinery, equipment and improvements' above.

NOTE 5 – LONG-TERM DEBT

Under the terms of the agreement with The Prudential Insurance Company of America dated May 5, 1960, Pall Corporation is required to amortize the 6⅜% note payable in installments of $66,500 annually for each of the first fourteen years of the term and $69,000 on May 1, 1975. The agreement places certain restrictions on the creation of additional indebtedness and on various other corporate actions, including the payment of dividends. At July 31, 1962, retained earnings subject to such restrictions amount to $1,717,891.

Under the terms of the agreement with the Continental Assurance Company dated November 30, 1961, Pall Corporation is required to amortize the 5⅛% note payable in installments of $50,000 semi-annually starting June 1, 1967. The unpaid balance of the note will be due on December 1, 1976.

The debentures are callable at 105% for the first three years and thereafter the premium declines on a straight-line basis to zero in the fifteenth year. The loan is non-callable at any time during the first four years unless the market price of the Company's Class A stock is 150% of the conversion price.

The debentures are convertible at the option of the holder into shares of Class A stock at a conversion price per share of $62.00 until June 2, 1969 and $68.00 thereafter until December 1, 1976. Accordingly, 16,129 shares of Class A stock have been reserved for this purpose.

The loan is subordinate to the promissory note payable to The Prudential Insurance Company of America.

Under an agreement dated February 15, 1956, as amended July 19, 1956, relating to the 5½% note payable, Trinity Equipment Corporation is required to maintain consolidated (Trinity and Trincor) net assets at no less than 200% of the unpaid principal and interest on the note and additional retained earnings of $104,919 at July 31, 1962, are not available for cash dividends or redemption of subordinated debentures.

The 6% subordinated debentures require sinking fund payments equal to 20% of Trinity and Trincor consolidated net income to be made on or before March 31 of each year. Whenever the balance in the sinking fund is $5,000 or more, the funds shall be used to retire the debentures.

The 3% mortgage payable is secured by land and buildings of Trinity Equipment Corporation at Cortland, New York amounting to $246,320 at July 31, 1962.

NOTE 6 – CONVERTIBILITY OF STOCK

Since December 2, 1958 shares of Class B stock have been convertible, at the option of the holders thereof, into Class A stock on a share for share basis. Accordingly, 269,250 shares of Class A stock have been reserved for this purpose.

NOTE 7 – DIVIDENDS

Under the provision of the amendments to the certificate of incorporation dated November 12, 1957, any dividend declared on Class B stock shall be in an amount per share equal to 1% of the amount per share of the dividend then being declared or paid on the Class A stock.

NOTE 8 – CONTINGENCIES AND COMMITMENTS

Pall Corporation and its subsidiaries may be subject to renegotiation of government contracts and subcontracts performed since August 1, 1956. With respect to all periods up to July 31, 1960 the Renegotiation Board has stated its intention not to take any action in the absence of unusual circumstances or subsequent indications of excess profits. In view thereof, no provisions have been made for this contingency for these years, nor for the current year, since no precedent is available. In the opinion of management, operating results reported upon would not be materially affected.

Canadian subsidiaries are contingently liable for balances of customers' paper discounted in the amount of $449,54[illegible]

Under the terms of an agreement with the Ministry of Commerce of Northern Ireland, Pall-Ulster, Ltd. is contingently liable in the amount of $52,780 for grants received on capital expenditures, if disposed of within five years.

Pall Corporation is committed to acquire the land and building now nearing completion in Mountaintop, Penna., to house its fibrous glass operation. In this connection, Pall will assume mortgages of $639,800.

NOTE 9 – STOCK OPTION PLAN

During 1959 the Company promulgated a stock option plan under the terms of which the president is authorized to grant stock options to key executives and supervisory employees (excluding the president) to purchase not more than 15,000 shares of Class A stock of the Company at not less than 95% of its fair market value at the date of granting the option. Similarly on November 20, 1961 an additional 10,000 shares were made available.

During the fiscal year ended July 31, 1962, options were granted for 7,950 shares of stock, and 1,014 shares were issued in connection with the exercise of options previously granted, thereby increasing the balance of optioned stock from 14,000 shares at August 1, 1961, to 20,936 shares at July 31, 1962. The balance of optioned stock at July 31, 1962 is as follows:

Date	No. of Shares	Price Per Share	Exercisable	Expiring
Oct. 1, '59	1,986	$11.40	After Oct. 1, '61	Oct. 1, '64
Dec. 15, '60	10,900	$26.37	After Dec. 15, '62	Dec. 15, '65
Feb. 1, '61	100	$32.54	After Feb. 1, '63	Feb. 1, '66
Jan. 30, '62	500	$43.59	After Jan. 30, '64	Jan. 30, '67
Jun. 21, '62	7,450	$22.21	After Jun. 21, '64	Jun. 21, '67

The Company makes no charge against income with respect to the above options.

auditor's report

ROBBINS, GREENE & SOSNOFF
CERTIFIED PUBLIC ACCOUNTANTS
745 FIFTH AVENUE
NEW YORK 22, N. Y.

Board of Directors,
Pall Corporation
30 Sea Cliff Avenue
Glen Cove, New York

We have examined the consolidated balance sheet of Pall Corporation and its subsidiaries as at July 31, 1962 and the related consolidated statements of earnings, retained earnings and capital in excess of par value for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying consolidated balance sheet and related consolidated statements of earnings, retained earnings and capital in excess of par value present fairly the financial position of Pall Corporation and its subsidiaries as at July 31, 1962 and the results of operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

New York, New York
September 24, 1962

ROBBINS, GREENE & SOSNOFF

pall corporation, glen cove, new york

DIRECTORS
Dr. David B. Pall, *Chairman*
Abraham Krasnoff
Donald M. Harris, *Attorney, Finch & Schaefler*
Hugh Samson, *Partner, L. F. Rothschild & Co.*
Jerome S. Shulman, *Partner, Teplin & Shulman, Attorneys*

OFFICERS
Dr. David B. Pall, *President*
Abraham Krasnoff, *Executive Vice President & Treasurer*
Chesterfield F. Seibert, *Vice President – Engineering*
President, Trinity Equipment Corp.
Bennett Krakauer, *Vice President – Operations*
Sidney Krakauer, *Vice President–*
Fibrous Glass & Porous Plastics
President,
Fibrous Glass Products, Inc.
Henry Petronis, *Vice President – Manufacturing*
President, Glen Components Corp.
and Hollinger Machine Co., Ltd.
George R. Feeley, *Vice President – Marketing*
Joseph A. Whitwell, *Vice President – Sales Development*
Maurice C. Hardy, *Managing Director, Lloyd & Hillman, Ltd.*
Michael Sultan, *Managing Director, Pall-Ulster, Ltd.*
David Rosenberg, *President, Vector Labs Corp.*
Edward Feeley, *President, Trincor Corporation*
Solomon Musikant, *Vice President, Fibrous Glass Products, Inc.*
Sydney Sheinberg, *Vice President, Hollinger Machine Co., Ltd.*
Stanley Wernick, *Controller-Secretary*
Donald M. Harris, *Assistant Secretary*

GENERAL COUNSEL
Carter, Ledyard & Milburn, New York, N.Y.
McKenna & Co., London, England

PATENT COUNSEL
Watson, Leavenworth, Kelton & Taggart, New York, N.Y.

GOVERNMENT CONTRACTS COUNSEL
Gilinsky & Mishkin, New York, N.Y.

AUDITORS
Robbins, Greene & Sosnoff, New York, N. Y.

REGISTRAR AND TRANSFER AGENT
The Franklin National Bank of Long Island,
South-Shore Office, Rockville Centre, L.I., N.Y.

corporate structure

MANUFACTURING DIVISIONS
Aircraft Porous Media, Inc.
Fibrous Glass Products, Inc.
Glen Components Corp.
Hollinger Machine Co., Ltd.
Lloyd & Hillman, Ltd.
Micro Metallic Division
Pall-Ulster, Ltd.
Porous Plastic Filter Co., Inc.
Trinity Equipment Corporation
Vector Labs Corp.

SALES AND REAL ESTATE DIVISIONS
Glen Properties, Inc.
Micro Filter Sales Corp.
Micro Metallic Nassau Co., Inc.
Trincor Corporation

TORS
vid B. Pall, *Chairman*
am Krasnoff
d M. Harris, *Attorney, Finch & Schaefler*
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e S. S[illegible]an, *Partner, Teplin & Shulman, Attorneys*

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nna & Co., London, England

NT COUNSEL
n, Leavenworth, Kelton & Taggart, New York, N.Y.

RNM[illegible] CONTRACTS COUNSEL
ky & Mishkin, New York, N.Y.

TORS
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& Hillman, Ltd.
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Equipment Corporation
r Labs Corp.

S AND REAL ESTATE DIVISIONS
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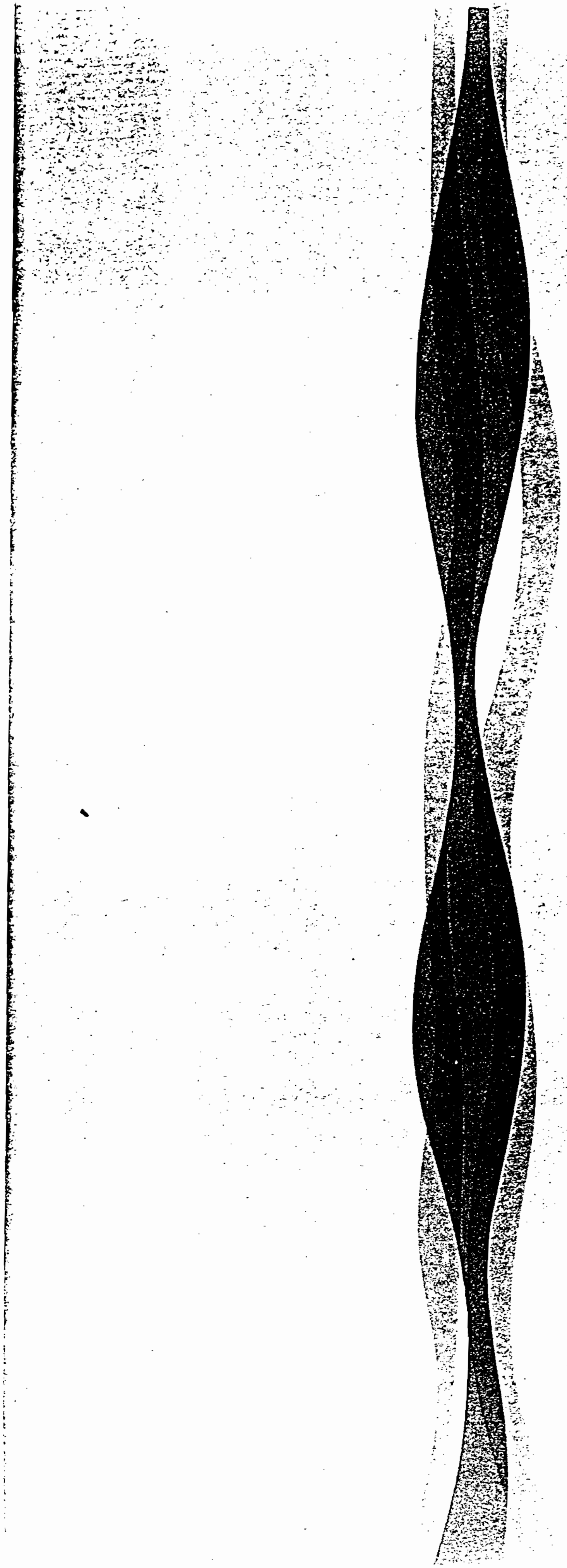
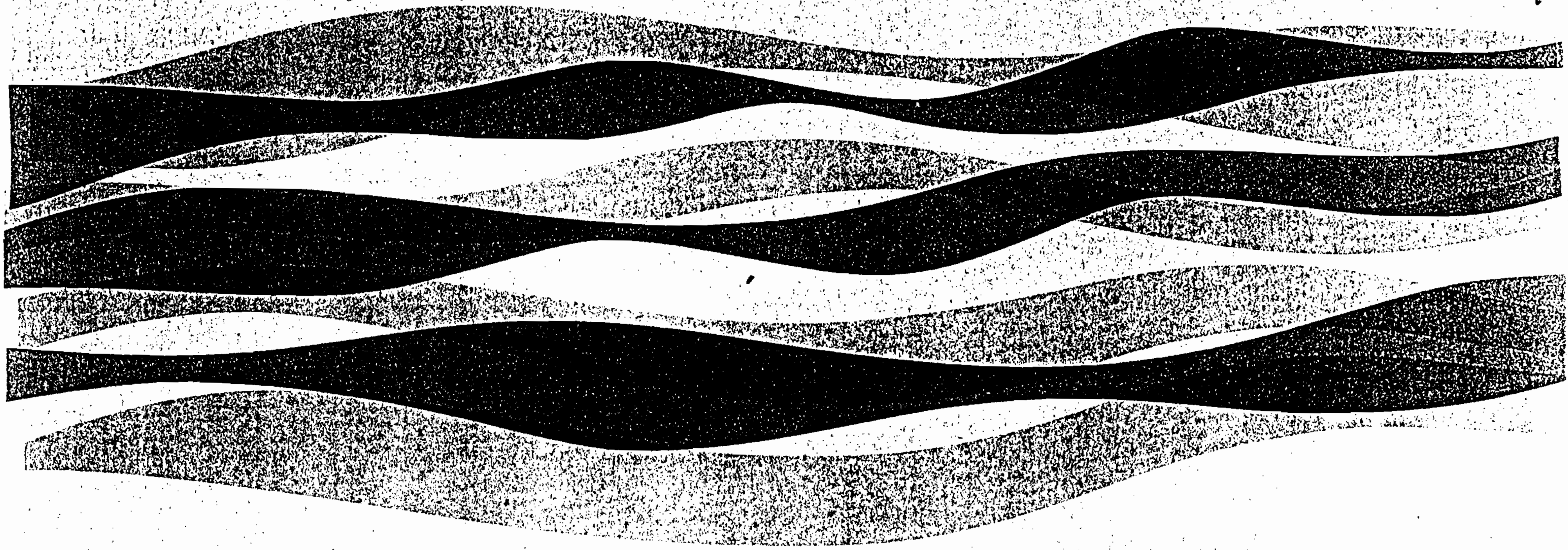
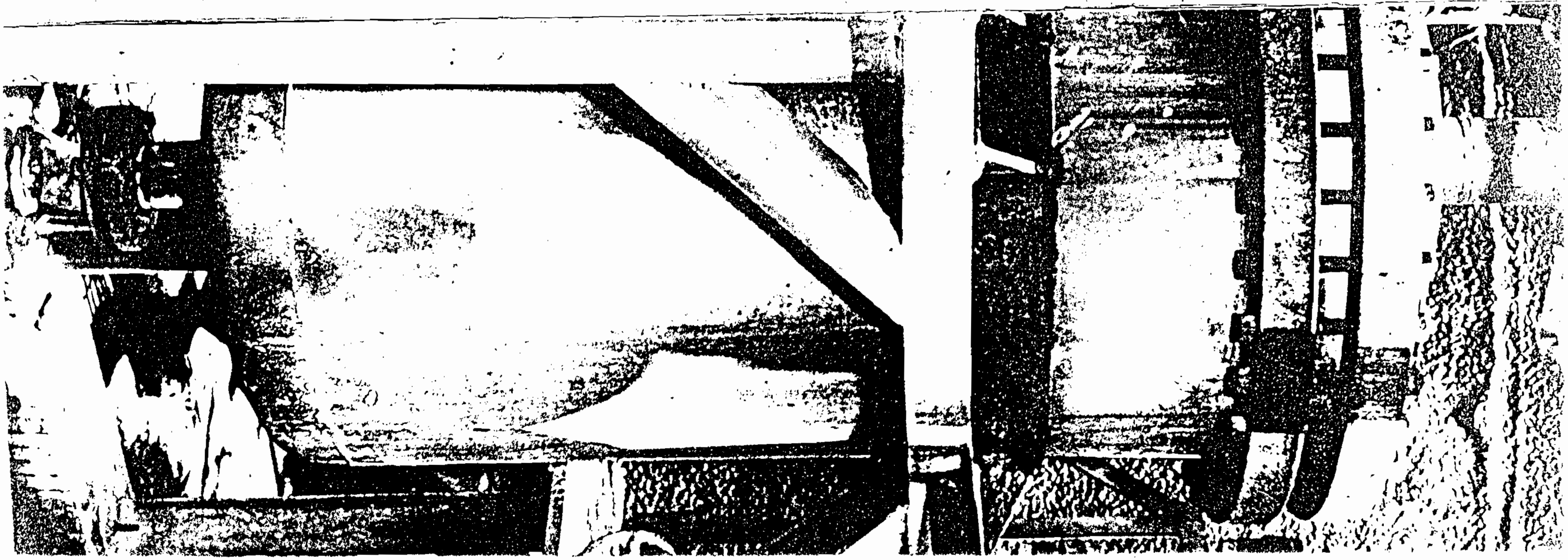
r Corporation



filtration for a trickle . . .

...or a current.





pall corporation, glen cove, new york

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Micro Metallic Nassau Co., Inc.
Trincor Corporation

EXHIBIT

K

ANNUAL REPORT 1963

PALL CORPORATION

CONTENTS

FISCAL HIGHLIGHTS

	Year Ended July 31 1963	 1962
Consolidated Net Sales	**$15,748,950**	$13,850,056
Earnings before Taxes on Income	**$ 1,824,525**	$ 1,515,267
Taxes on Income	**$ 950,074**	$ 780,554
Earnings after Taxes	**$ 874,451**	$ 734,713
Per Share Outstanding at Year End	**$ 1.42**	$ 1.33
~~Per Average Share Outstanding during 1963 (note 4)~~	~~$ 1.55~~	
Depreciation Deducted from Earnings	**$ 544,910**	$ 315,035
Cash Provided from Operations	**$ 1,419,361**	$ 1,049,748
Per Share Outstanding at Year End	**$ 2.30**	$ 1.90
Dividends Declared per Class A Share (note 2)	**40¢**	35¢
Total Assets at End of Year	**$16,157,267**	$12,334,688
Investment in Plant and Equipment	**$ 7,339,933**	$ 4,999,756
Working Capital	**$ 6,526,653**	$ 3,288,231
Stockholders' Equity	**$ 8,076,673**	$ 5,366,055
Shares Outstanding at End of Year (note 3)	**616,277**	552,252
Equity per Share	**$ 13.11**	$ 9.72

Note 1: All financial data in this report include the operations and condition of Pall Trinity Micro Corporation formerly Trinity Equipment Corporation for the fiscal year ended July 31, 1960 and subsequent years. PTM was acquired in May, 1961.

Note 2: Regular quarterly dividends of $0.10 per share were declared in October 1962 and January, April and July 1963.

Note 3: Includes 350,077 Class A Shares and 266,200 Class B Shares. Class B Shares receive dividends of 1⁄6 per share of the dividend on Class A Shares. For substantially all other purposes the two classes are alike. Class B Stock may be converted into Class A Stock on a share for share basis. Class A Shares are traded on the American Stock Exchange under the symbol PLL.

Note 4: Earnings per average share outstanding during 1963 was computed by accounting for 61;627 new shares issued June 3, 1963 (in connection with a rights offering) only for the period these shares were actually outstanding. Any other shares issued during the year were considered to be outstanding for the entire period. On this basis such average shares outstanding amounted to 564,443.

DEAR STOCKHOLDER:

First, please let me give you a word about the format of this report. The booklet you are reading contains, in addition to my comments, the fiscal highlights of your company's operations for the years ended July 31, 1962 and 1963, along with financial statements and other statistical information. Enclosed with it is information and proxy material in connection with our annual meeting.

"Pall Corporation: 1963-64," the brochure which encloses this report, is a more detailed description of Pall Corporation and its products, facilities and capabilities. It is intended as a multi-purpose vehicle to introduce the company to its ever-growing number of stockholders, employees and customers, to interested government agencies and other groups. Where appropriate, other information, such as facilities lists or personnel information, may be inserted in place of this report.

The year ended July 31, 1963 was our eighth consecutive record year in sales and earnings. Sales were up from $13,850,056 to $15,748,950—by our standards a relatively modest 14% increase. Earnings rose from $734,713 to $874,451.

A successful rights offering was completed on June 3, 1963, and 61,627 new shares were issued at that time. Accounting for these shares for the two months during which the proceeds were available to us and considering any other shares issued during the year to be outstanding for the entire period gave us 564,443 average shares outstanding during 1963 and resulted in earnings of $1.55 per average share outstanding during 1963. Earnings per share on the total number of shares outstanding at the year end was $1.42 as compared to $1.33 per share last year and such total shares outstanding at year end were 616,277 and 552,252 respectively.

Fiscal 1963 was as much a year of preparation as it was one of advancement. We expended major management and development efforts on new products, facilities, marketing areas and organizational development, along with major investment in facilities and inventories for new product lines.

A brief review of new organizational developments follows. You will find more detailed descriptions of products and facilities in "Pall Corporation: 1963-64." As you read you will see that if we have one constancy—it is change. Change is a corollary of growth and as we plan continued growth, we must lay the groundwork for change.

> Pall Trinity Micro Corporation was formed by merging our two principal U.S. industrial product operations. Both the facilities and management of the former Micro Metallic ~~Division are now located~~ in the Trinity plant in Cortland, N. Y. The PTM product line was expanded to include our new cartridge filter line, including ULTIPOR® and EPOCEL® filter elements, and another first—our new all-pneumatic gas dryer. Disposable filter manufacturing facilities, until now in existence only in Glen Cove, will soon be in operation in Cortland. We sincerely believe that PTM now has the country's leading capabilities in engineering, production and service for industrial fluid clarification.
>
> Aircraft Porous Media, Inc. in Glen Cove, occupied the former Micro plant and also established a Western Division

at the plant of our new subsidiary, Mectron Industries, in South El Monte, California. Mectron, a small but highly competent engineering and manufacturing company, provides not only support for the Western operations of APM but also adds new capabilities in miniature filters and hydraulic components. During the past 18 months APM has added a position of leadership in ground support filtration to its long recognized supremacy in airborne filtration.

Hollinger Machine Co. Ltd. in Montreal, completed its reorganization from a completely direct-to-consumer operation to a broad line manufacturer of water and sewage treatment equipment. Hollinger now also houses our small Canadian instrumentation and control operation, Vector Labs Corp. and, in addition, provides support in Canada for the PTM line.

Pall-UK Ltd. with manufacturing and engineering facilities in London was organized to direct European operations of the PTM lines along with those of its sister company, Lloyd & Hillman Ltd. Pall-UK has prepared for increased activity on the Continent with a licensee in Italy for part of its line, with sales representatives in Italy, Scandinavia and Holland, and with its own office in Germany.

Pall-Ulster Ltd. of Belfast, Northern Ireland and its related companies in Shannon, Ireland and London and offices in Germany and New York, is rapidly expanding its manufacture of woven wire cloth for sale in the U.K. and the U.S., and is preparing for marketing in other areas. During 1964 Pall-Ulster will be a major supplier of APM. We believe that this, together with the extensive precision machining facilities of Glen Components Corp. in Glen Cove, makes APM the most highly integrated aerospace filter manufacturer in the free world.

Fibrous Glass Products, Inc. has installed a highly automated line and begun production of some insulation products for its joint venture with Baldwin-Ehret-Hill, Inc. This important step not only joins FGP with a long established, successful manufacturer and distributor in the construction market but also gives us automated facilities for many of our specialty glass fiber products.

In various stages of planning are new facilities on the European continent, in Mexico and in the United States, as well as a new product line in the field of industrial fluid handling. The status of these and other programs will be reported at the time of our annual meeting in November.

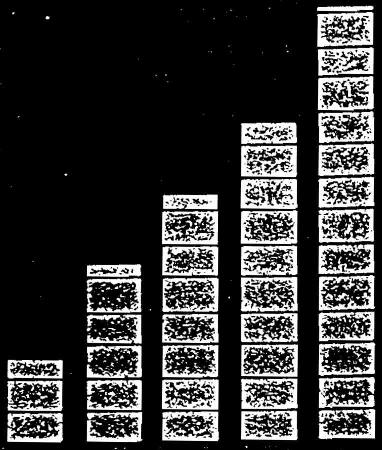
We hope you will enjoy reading "Pall Corporation: 1963-64"—we will continue to do our best to keep you as fully informed as we can.

Very truly yours,

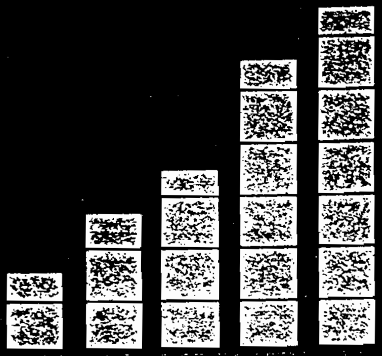
David B Pall

David B. Pall, President

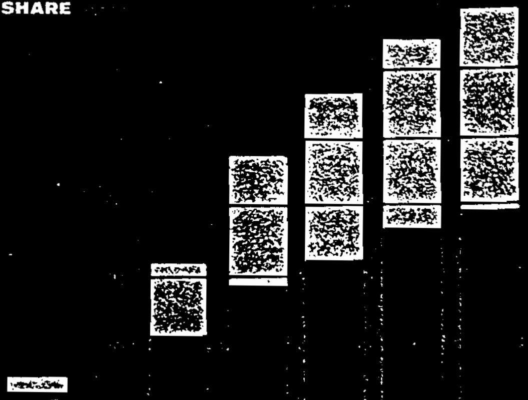
BOOK VALUE PER SHARE



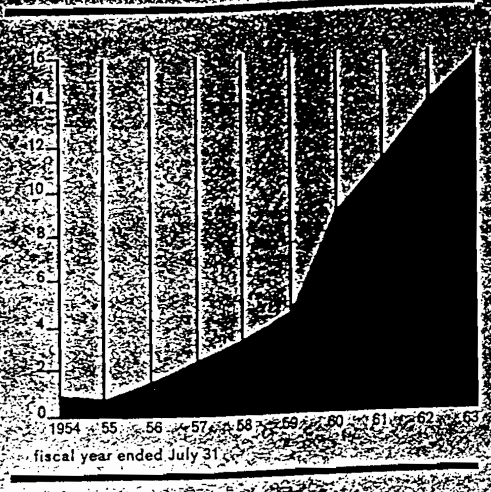
GROSS ASSETS PER SHARE



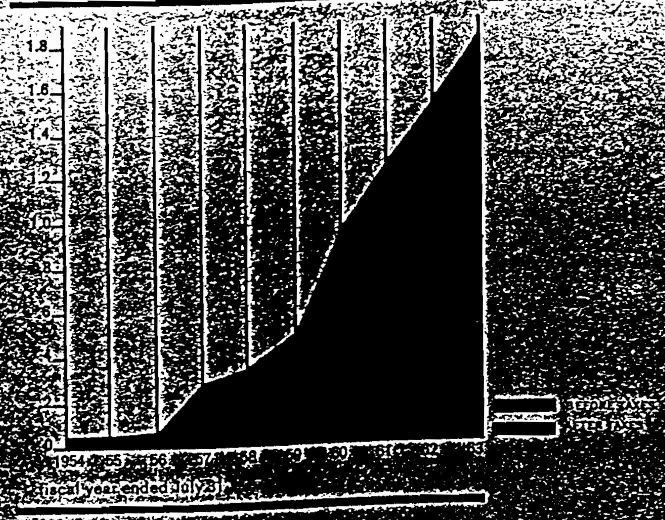
EARNINGS PER SHARE



SALES (in millions)



EARNINGS (in millions)



A stockholder who joined us in November, 1957, when we became a public company, had this result for each 100 shares* he owned at the start:

Year Ended July 31	Equity	Dividends Declared	Earnings
1958	$174.00	$18.75	$42.00
1959	267.00	30.00	56.00
1960	455.00	30.00	81.00
1961	751.00	30.00	110.00
1962	972.00	35.00	133.00
1963	1,311.00	40.00	142.00

*Adjusted for 2-for-1 stock split in June 1959

CONSOLIDATED STATEMENTS OF EARNINGS

	Year Ended July 31	
	1963	1962
Net sales	$15,748,950	$13,850,056
Cost of sales	9,306,491	8,058,412
Gross profit on sales	6,442,459	5,791,644
Selling, general and administrative expenses	4,667,230	4,345,182
Earnings from operations	1,775,229	1,446,462
Miscellaneous income	49,296	68,805
Earnings before provision for federal and state income taxes	1,824,525	1,515,267
Provision for federal and state income taxes	950,074	780,554
Earnings—for the year ended July 31	$ 874,451	$ 734,713

CONSOLIDATED STATEMENTS OF RETAINED EARNINGS

	Year Ended July 31	
	1963	1962
Balance, beginning of fiscal year	$2,396,184	$1,760,373
Add: Earnings for the year ended July 31	874,451	734,713
	3,270,635	2,495,086
Deduct:		
Cash dividend—Class A Stock	121,008	97,569
Cash dividend—Class B Stock	1,068	945
Stock issuance costs		388
	122,076	98,902
Retained Earnings at end of fiscal year	$3,148,559	$2,396,184

The comments contained in the accompanying Notes to Consolidated Financial Statements are an integral part of these statements and should be read in conjunction herewith.

CONSOLIDATED CAPITAL IN EXCESS OF PAR VALUE

	Year Ended July 31 1963	Year Ended July 31 1962
Balance, beginning of fiscal year	$2,417,619	$1,747,488
Add: Capital in excess of par value arising from:		
issuance of shares of Class A Stock of $1.00 par value	1,728,830	480,000
issuance of shares of Class A Stock of $1.00 par value in acquisition of subsidiaries and assets	24,300	127,925
exercise of options for shares of Class A Stock of $1.00 par value	19,156	10,545
capital grant—Ministry of Commerce, Northern Ireland	173,174	52,780
	4,363,079	2,418,738
Deduct: Charges to capital in excess of par value arising from:		
expenses in connection with the issuance of shares of Class A Stock of $1.00 par value	51,242	
financial and other expenses in connection with the acquisition of Pall Trinity Micro Corporation formerly called Trinity Equipment Corporation		1,119
	51,242	1,119
Capital in Excess of Par Value—at end of fiscal year	$4,311,837	$2,417,619

The comments contained in the accompanying Notes to Consolidated Financial Statements are an integral part of these statements and should be read in conjunction herewith.

CONSOLIDATED BALANCE SHEETS

assets	July 31 1963	July 31 1962
CURRENT ASSETS:		
Cash	$ 897,819	$ 437,998
Accounts receivable, less estimated uncollectible	3,246,688	2,881,506
Installment accounts receivable—Canadian subsidiaries—assigned to secure notes payable—bank—contra	283,626	343,962
Other receivables and advances	247,904	178,489
Notes receivable		350,000
Prepaid expenses	150,108	117,745
Merchandise inventory	5,159,846	3,730,962
TOTAL CURRENT ASSETS	9,985,991	8,040,662
FIXED ASSETS—AT COST:		
Land	82,390	65,331
Buildings, machinery, equipment, etc., (less accumulated depreciation of $1,519,703 and $1,039,325, respectively, at July 31, 1963 and July 31, 1962)	5,737,840	3,895,100
TOTAL FIXED ASSETS	5,820,230	3,960,431
OTHER ASSETS:		
Unamortized financial expenses	53,417	57,000
Deferred charges and deposits	123,009	78,580
Cost of investment in subsidiaries in excess of net assets at date of acquisition (net of amortization of $43,871 and $20,619, respectively, at July 31, 1963 and July 31, 1962)	155,732	176,429
Other intangibles (net of amortization of $2,698 at July 31, 1963)	18,886	21,584
Research and development	1	1
Patent rights	1	1
TOTAL OTHER ASSETS	351,046	333,595
TOTAL	$16,157,267	$12,334,688

PALL CORPORATION and subsidiaries

liabilities and stockholders' equity

	July 31	
	1963	1962
CURRENT LIABILITIES:		
Notes payable—banks		$ 1,747,833
Notes payable—bank—secured by assignment of installment accounts receivable—contra	$ 269,049	334,364
Accounts payable	1,242,594	1,241,624
Accrued expenses and taxes payable	921,009	576,814
Withheld income taxes payable	112,391	96,168
Federal and state income taxes payable	708,106	615,328
Current portion of long-term debt	171,181	111,731
Dividends payable	35,008	28,569
TOTAL CURRENT LIABILITIES	3,459,338	4,752,431
LONG-TERM DEBT:		
6⅜% note due in annual installments, 1968 to 1975	867,000	800,500
5⅞% note due in annual installments to 1977	1,400,000	
5¼% subordinated convertible note due in semi-annual installments, 1967 to 1976	1,000,000	1,000,000
5½% note due in annual installments to 1966	28,572	42,858
6% subordinated debentures due in 1976	137,500	150,100
3% mortgage payable in monthly installments to 1977	145,379	154,184
5½% mortgage payable in monthly installments to 1981	298,888	
2½% mortgages payable in monthly installments to 1982	292,756	
6¾% first debenture payable in annual installments to 1978	242,200	
TOTAL LONG-TERM DEBT	4,412,295	2,147,642
TOTAL LIABILITIES	7,871,633	6,900,073
DEFERRED CREDITS	205,058	68,560
MINORITY INTEREST IN CONSOLIDATED SUBSIDIARY	3,903	
STOCKHOLDERS' EQUITY:		
Class A Stock, par value of $1.00 per share, 1,000,000 shares authorized, 350,077 and 283,002 shares, respectively, issued and outstanding as at July 31, 1963 and July 31, 1962	350,077	283,002
Class B Stock, par value of $1.00 per share, 266,200 and 269,250 shares, respectively, authorized, issued and outstanding as at July 31, 1963 and July 31, 1962	266,200	269,250
Capital in excess of par value	4,311,837	2,417,619
Retained earnings	3,148,559	2,396,184
TOTAL STOCKHOLDERS' EQUITY	8,076,673	5,366,055
TOTAL	$16,157,267	$12,834,688

The comments contained in the accompanying Notes to Consolidated Financial Statements are an integral part of these statements and should be read in conjunction herewith.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—CONSOLIDATION OF STATEMENTS

The statements of Pall Corporation are presented in consolidation with its subsidiaries, wholly owned except for Pall G.m.b.H., Frankfurt, Germany, which is seventy-five per cent owned. The acquisition of Pall Trinity Micro Corporation (formerly Trinity Equipment Corporation) was accounted for on the basis of a pooling of interests. Other acquisitions have been accounted for as purchases. Intercompany transactions, including unrealized profits in inventories, have been eliminated.

The Consolidated Balance Sheet as at July 31, 1963 includes the following United States dollar amounts in respect of the consolidated foreign subsidiaries:

Current assets	$1,242,881
Net fixed assets	1,181,[illegible]
Intangibles and other assets	254,[illegible]
Current liabilities	750,31[illegible]

The Consolidated Statement of Earnings for the year ended July 31, 1963 includes the net income of consolidated foreign subsidiaries in the amount of U.S. $[illegible]. Foreign exchange loss reflected in income amounted to U.S. $[illegible].

Foreign currency amounts have been translated into United States dollars on bases which conform to accepted accounting practice. Current assets, current liabilities, intangibles and other assets were translated at exchange rates in effect at the balance sheet date which were $2.80 to the pound sterling, $.93 to the Canadian dollar and $.25 to the deutschmark.

Net fixed assets were translated at the foreign exchange rates in effect at the dates such assets were acquired.

Income and expense items, except for depreciation which has been translated on the basis at which fixed assets are carried, were translated at average foreign exchange rates, which were $2.80 to the pound sterling, $.93 to the Canadian dollar and $.25 to the deutschmark, for the year ended July 31, 1963.

NOTE 2—INSTALLMENT ACCOUNTS RECEIVABLE

As at July 31, 1963 installment accounts receivable of Canadian subsidiaries in the amount of $283,626 have been assigned to secure Notes Payable—Bank in the amount of $269,049.

NOTE 3—INVENTORY

Inventory was generally priced at the lower of cost (on the first-in, first-out basis) or market. Raw materials, including materials entering into work in process and finished goods, were priced on the basis of average cost. Charges for labor and overhead included in finished goods are based mainly on cost.

Opening and closing inventories used in the computation of cost of sales for the year ended July 31, 1963 are as follows:

	July 31, 1962	July 31, 1963
Raw materials	$1,890,980	$2,453,291
Work in process	1,123,681	1,815,920
Finished goods	716,301	890,635
Total	$3,730,962	$5,159,846

NOTE 4—FIXED ASSETS

The amounts at which fixed assets are stated in the Consolidated Balance Sheets represent cost, after accumulated depreciation. Provisions for depreciation of property have been calculated approximately as follows: buildings—25 to 45 years, chiefly declining balance; machinery, equipment and furniture—5 to 10 years, chiefly straight line; and transportation equipment—3 to 5 years, chiefly declining balance.

The fixed assets and respective accumulations of depreciation are as follows:

	Cost	Accumulated Depreciation	Net
Machinery, equipment and improvements	$4,648,856	$ 997,117	$3,651,739
Office furniture and fixtures	271,895	124,782	147,113
Transportation equipment	147,671	66,808	80,863
Buildings	2,189,121	330,996	1,858,125
Land	82,390		82,390
Total	$7,339,933	$1,519,703	$5,820,230

Renewals and betterments are charged to property accounts while cost of maintenance and repairs is charged to income as incurred. When properties are retired or otherwise disposed of, the cost thereof and the applicable accumulated depreciation are removed from the respective accounts and the resulting profit or loss is recorded in earnings.

NOTE 5—LONG-TERM DEBT

Under the terms of the agreement with The Prudential Insurance Company of America dated May 5, 1960, and amended November 30, 1962, Pall Corporation is required to amortize the 6¼% Note as follows: $39,500 on May 1, 1968, $66,500 on May 1, 1969 and on each May 1 thereafter to and including May 1, 1974, and $428,500 on May 1, 1975. The agreement places certain restrictions on the creation of additional indebtedness and on various other corporate actions, including the payment of dividends. Under the amendment dated November 30, 1962, retained earnings not subject to such restriction amount to $2,323,673 at July 31, 1963.

Under the terms of the agreement with The Prudential Insurance Company of America dated November 28, 1962, Pall Corporation is required to amortize the 5¾% Note in annual installments of $100,000 commencing November 1, 1963 and concluding November 1, 1977. The agreement places certain restrictions on corporate action identical with those imposed under the 6¼% Note.

Under the terms of the agreement with Continental Assurance Company dated November 30, 1961, Pall Corporation is required to amortize the 5¼% Subordinated Convertible Note in installments of $50,000 semi-annually starting June 1, 1967. The unpaid balance of the Note will be due on December 1, 1976. The Note is subordinated to the 6¼% Note payable to The Prudential Insurance Company of America. The Note is callable at 105% for the first three years and thereafter the premium declines on a straight line basis to zero in the fifteenth year. The Note is not callable at any time during the first four years unless the market price of the Pall Class A Stock is 150% of the conversion price. The Note is convertible at the option of the holder into shares of Class A Stock at a conversion price per share of $58.79 until June 2, 1969 and $64.15 thereafter until December 1, 1976. Accordingly, 17,010 shares of Class A Stock have been reserved for this purpose.

Under an agreement dated February 15, 1956, as amended July 1, 1960, relating to the 5½% Notes, Pall Trinity Micro Corporation is required to maintain consolidated (Pall Trinity Micro and Trincor) net assets at no less than 200% of the unpaid principal and interest on the Notes. Additional retained earnings of the Company of $104,919 at July 31, 1963 are not available for cash dividends or redemption of the 6% Subordinated Debentures.

The 6% Subordinated Debentures require sinking fund payments equal to 20% of Pall Trinity Micro Corporation and Trincor consolidated net income to be made on or before March 31 of each year. Whenever the balance in the sinking fund is $5,000 or more, the funds shall be used to retire Debentures.

The 6% mortgage payable is a lien on the land and buildings of Pall Trinity Micro Corporation at Cortland, New York, having a net book value of $231,848 at July 31, 1963.

The 5½% First Mortgage due September 30, 1981 is being amortized by monthly payments of $2,251.77, applicable first to interest and then to principal. The 2½% Second Mortgage due September 30, 1981 is being amortized by monthly payments of $1,040.77 applicable first to interest and then to principal. The 2½% Third Mortgage due May 31, 1982 is being amortized by monthly payments of $693.85 applicable first to interest and then to principal. These three mortgages are liens on land, buildings and equipment located at Mountaintop, Pennsylvania having a net book value of $1,829,738 at July 31, 1963.

The First Debenture is a lien on the land and buildings of Lloyd & Hillman Limited at 45 Balfe Street, King's Cross, London and on the land and buildings of Pall Ulster Limited at Lurgan, Northern Ireland, said property having a net book value of $284,018. The debenture bears interest for one year at 8¼% and thereafter at 6½% per annum and is due in annual installments to July 31, 1978 as follows: five fixed annual installments of $7,000 each, followed by nine fixed annual installments of $14,000 each, with a final installment of $88,200 on July 31, 1978.

The aggregate amounts of annual maturities of the debt described above for each of the five years commencing August 1, 1963 are as follows: year ended July 31, 1964, $171,181; 1965, $174,865; 1966, $176,098; 1967, $213,098; and 1968, $303,935. These amounts include an estimate of maturities for the 6% Subordinated Debentures.

NOTE 6—CONVERTIBILITY OF STOCK

Since December 2, 1958, shares of Class B Stock have been convertible at the option of the holders thereof into Class A Stock on a share-for-share basis. Accordingly, 266,200 shares of Class A Stock were reserved for this purpose.

NOTE 7—DIVIDENDS

Under the provisions of the amendments to the certificate of incorporation dated November 12, 1957, any dividend declared on

Class B Stock shall be in an amount per share equal to 1/[illegible] of the amount per share of the dividend then being declared or paid on the Class A Stock.

NOTE 8—CONTINGENCIES AND COMMITMENTS

Pall Corporation and its subsidiaries may be subject to renegotiation of government contracts and subcontracts performed since August 1, 1956. With respect to all periods up to July 31, 1961, the Renegotiation Board has stated its intention not to take any action in the absence of unusual circumstances or subsequent indications of excess profits. In view thereof, no provisions have been made for this contingency for these years, nor for the current year since no precedent is available. In the opinion of management, operating results reported upon would not be materially affected.

Canadian subsidiaries are contingently liable for balances of customers' paper discounted in the amount of $321,548.79.

Under the terms of an agreement with the Ministry of Commerce of Northern Ireland, Pall-Ulster Limited is contingently liable for grants in connection with the acquisition of capital assets, in the amount of $225,954 if such capital assets are disposed of within five years.

The Company is contingently liable under discount of the notes of L. O. Koven & Brother, Inc. in the total amount of $100,000 maturing in monthly installments from December, 1963 to December, 1965. In this connection, the Company holds a second mortgage on the real property, plant and equipment of Koven Fabricators, Inc. located at East Dickerson St., Dover, New Jersey.

Under the terms of the agreement covering the First Debenture described in Note 5, the Company's subsidiary, Lloyd & Hillman Limited has committed itself to build an office building costing not less than $70,000 on its land at Balfe Street, London.

NOTE 9—STOCK OPTION PLAN

During 1959 Pall promulgated a stock option plan under the terms of which the President is authorized to grant stock options to key executive and supervisory employees (excluding the President) to purchase not more than [illegible],000 shares of Pall Class A Stock at not less than 95% of the market value at the date of granting the option. Similarly, on November 20, [illegible] an additional 10,000 shares were made available. The balance of the unexercised options at July 31, 1963 is as follows:

		Option Price		Market Price	
Date Granted	Number of Shares	Per Share	Total	Per Share	Total
October 1, 1959	[illegible]888	[illegible]	$[illegible]423.20	$12.00	$[illegible]656.00
December 15, 1960	10,800	26.37	284,796.00	27.75	299,700.00
February [illegible], 1961	100	[illegible]	3,254.00	34.25	3,425.00
January 30, 1962	[illegible]	[illegible]	21,795.00	35.875	22,937.50
June [illegible], 1962	[illegible]	[illegible]	65,464.50	23.375	74,143.75
Total	19,288		$279,732.40		$504,862.25

All options granted become exercisable two years after grant and expire five years after the date of grant. Options exercisable and exercised during the year ended July 31, 1963 are summarized as follows:

(a) Options which became exercisable:	
Number of shares	11,000
Option prices:	
Per share	$26.43(1)
Total	$290,687.00
Market prices at date options became exercisable:	
Per share	$38.00(1)
Total	$418,050.00
(b) Options which were exercised:	
Number of shares	1,698
Option prices:	
Per share	$12.28(1)
Total	$20,854.20
Market prices on dates exercised:	
Per share	$35.88(1)
Total	$60,926.74

(1) Represents weighted average of prices.

The Company makes no charge against income with respect to the above options.

NOTE 10—PENSION AND PROFIT SHARING TRUSTS

The Company, together with other employers whose employees are represented by Local 365 U.A.W.—C.I.O. has entered into a pension trust plan with the union, covering its employees in the bargaining unit. None of the officers or directors is entitled to any benefits under this pension plan.

The Company is obligated to pay to the pension trust fund at regular weekly intervals amounts equal to 8% of the total compensation paid to all employees subject to the plan for the applicable weekly period. On the basis of actuarial studies, the Company and the union are of the opinion that the rate of payment made by the Company will meet the full "current cost" of the plan (as that term is used by the Internal Revenue Service) for each year of the plan and that such rate will amortize the "past service" cost of the plan, both computed on a level funding basis, over a period in excess of the minimum period permitted by current regulations of the Internal Revenue Service, but not in excess of 40 years.

In the year ended July 31, 1963, the Company paid into the pension fund the sum of $58,628.

Pall Trinity Micro Corporation has obligated itself, under a union contract, to pay approximately $.05 per man hour on present terms to a pension trust fund for all employees subject to the plan. The cost for the fiscal year ended July 31, 1963 was $5,769.

During the fiscal year ended July 31, 1963 the Company's stockholders approved, and the Internal Revenue Service qualified, a retirement program consisting of a pension plan and a profit-sharing plan for non-collective bargaining employees of Pall and six of its domestic subsidiaries.

Under the Pension Plan, retirement benefits will be based upon wages and length of service and the entire cost of the Plan, determined on an actuarial basis, will be paid by the Company. Estimated past service costs will be paid over a period of 30 years at the rate of $9,153 per year.

Current year's accrual under this plan amounted to $39,765.

Under the Profit Sharing Plan, retirement benefits will be based upon wages and the Company's earnings. It is expected that Pall and the participating subsidiaries will contribute to the Plan 7½% of their combined net income before taxes (excluding capital gains and losses and income from investments) in excess of $500,000. However, the employers may contribute a lesser amount and will not contribute more than 15% of the aggregate compensation of all members nor more than the amount deductible for Federal income tax purposes. Salaried employees will be eligible for membership in the Plan. Contributions will be allocated among the members in proportion to their other compensation. A member will be permitted to contribute to his account up to 10% of his other compensation. Current year's accrual under this plan amounted to $98,299.

NOTE 11—DEFERRED CREDITS

Pall Corporation and certain of its subsidiaries qualify for the investment tax credit on [illegible] asset additions, as defined under Section 38 of the Revenue Act of 1962. The Company has elected to reflect the benefits of the investment tax credit in income over the useful life of the assets involved. Accordingly, deferred income, representing the investment tax credit and deferred income taxes [illegible] from application of the investment tax credit, have been included in the consolidated balance sheet in the amount of $[illegible],649 at July 31, 1963.

With respect to certain asset acquisitions for the fiscal year ended July 31, 1963, the Company has elected to depreciate on an accelerated basis for income tax purposes only. The resulting reduction in current year's tax liability of $[illegible] has been charged to operations and reflected as deferred income tax liability.

AUDITOR'S REPORT

ROBBINS GREENE & SOSNOFF
CERTIFIED PUBLIC ACCOUNTANTS
[illegible] FIFTH AVENUE
NEW YORK 20, N.Y.

Board of Directors
Pall Corporation
30 Sea Cliff Avenue
Glen Cove, New York

We have examined the consolidated balance sheets of Pall Corporation and its subsidiaries as at July 31, 1963 and 1962 and the related consolidated statements of earnings, retained earnings and capital in excess of par value for the years then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Accounts of foreign subsidiaries and of one domestic subsidiary, all included in the consolidated financial statements, were examined by other Certified Public Accountants or their equivalents and in all cases unqualified opinions were rendered. Our examination included the review of all such statements and it is our opinion that generally accepted accounting procedures were followed in connection with the preparation of these statements. We have therefore accepted such statements for the purpose of consolidation as though the examinations had been made by us.

In our opinion, the accompanying consolidated balance sheets and related consolidated statements of earnings, retained earnings and capital in excess of par value present fairly the financial position of Pall Corporation and its subsidiaries as at July 31, 1963 and 1962 and the results of operations for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

New York, New York
September 25, 1963

ROBBINS, GREENE & SOSNOFF

PALL CORPORATION, GLEN COVE, NEW YORK

EXHIBIT

L

In re: Pall Corporation)
30 Sea Cliff Avenue)
Glen Cove, NY)
DEC Site No. 13053B)

AFFIDAVIT OF JOHN. A. FARRIS

John A. Farris, being duly sworn, deposes and says:

1. My name is John A. Farris. I am Vice President for Government Programs at Pall Corporation. My office is presently located at 2200 Northern Boulevard, East Hills, New York 11548.

2. I have been employed with Pall Corporation for 40 years. During that time I have worked in design and engineering, field programs, liaison engineering or troubleshooting, marketing and sales. I have a degree in mechanical engineering from the University of New Mexico, worked for General Electric Corporation for a brief period and served in U.S. Air Force during the Korean War prior to coming to Pall Corporation in 1956. I have first hand, personal knowledge of the matters discussed below.

3. I went to work for Pall Corporation in November 1956. At that time the company was located at 30 Sea Cliff Avenue, Glen Cove, New York. There was one building at the site, the Pall Building, and all of Pall Corporation was located within this building. I worked primarily with Aircraft Porous Media, Inc. a subsidiary of Pall Corporation that engineered, designed and manufactured filters and filtration systems for the aerospace industry, Pall Corporation's largest market at the time.

4. I remained at the 30 Sea Cliff Avenue site until 1968 when Dr. Pall, founder and then President of Pall Corporation, and Abraham Krasnoff, at the time the company's Executive Vice President and Treasurer, asked me to work on developing a market for our Industrial Hydraulics (IH) Division. The IH Division was located in Grand Rapids, Michigan and was an outgrowth of Aircraft Porous Media. It was formed to take the hydraulic and lubrication filtration technology developed for the aerospace industry and transfer it to the mobile equipment, machine tool and other industrial sectors.

5. One of my first projects upon coming to Pall Corporation in 1956 was to design and engineer an automatic pleater. Back then, the filter media Pall Corporation used were sintered porous metal sheets or sintered woven wire mesh sheets. These sheets were cut to size and in the case of the sintered woven wire mesh, pleated to form the filter element. When I first arrived at Pall Corporation, all pleating was done by hand, a labor intensive and time consuming process.

6. In or around 1957, Pall Corporation became concerned that its filters and filtration systems contained unwanted particulate matter that might contaminate the liquid or gases being filtered. The particle size routinely captured by Pall Corporation's filters at the time was in the range of five microns and larger. A micron is 1/25,000 of an inch. A particle 25 microns in diameter is too small to see with the naked eye. Thus, the contaminants we were concerned with were extremely small.

7. Pall Corporation has very high standards and the very top management of the company was disturbed by the possibility that the company's filters could be adding unwanted particulate matter to its customers' processes. For this reason, Dr. Pall and Abe Krasnoff asked

Erwin Kirnbauer, a staff scientist, and me to analyze each step of Aircraft Porous Media's manufacturing process, from receipt of the basic material to the point the final filter was assembled, packaged and shipped, to determine how to minimize contamination in the product. The study began in or around 1958 and lasted until 1959 or 1960. Thereafter, we continued to monitor product cleanliness and the manufacturing process and where appropriate, suggested improvements. The basic manufacturing process remained about the same as it was in 1958 until 1968 when I left for Grand Rapids.

8. Aircraft Porous Media's manufacturing process began with a basic filter media known as RIGIMESH. RIGIMESH was a sintered woven wire cloth produced in sintering furnaces located at 30 Sea Cliff Avenue. The sintering furnaces operated in a range exceeding 1000 degrees Fahrenheit, in a reducing atmosphere, and the RIGIMESH that we began with was free of all organic contaminants.

9. The integrity of the RIGIMESH received on the shop floor was tested using a "bubble point" test. During the bubble point test the RIGIMESH was submerged in a medium consisting of either alcohol or surfactants and water. Pressure was applied from the bottom side and the media was observed to find the first point at which a bubble came through. This process allowed us to determine the largest diameter pore in the RIGIMESH and thus, its suitability as a filtration medium.

10. Following the bubble point test, the RIGIMESH was dried atmospherically. Masking tape was then placed on one side of the filter media to facilitate handling and avoid contamination. The media was then cut to size using an shearer, the sized sheet was pleated and the ends were swaged. Next, sodium hydroxide was used to remove the masking tape and the

two ends of the pleated sheet were spot welded to form a cylinder. A perforated core was inserted into the cylinder for support, rings placed around the outside and the unit heliarc welded to seal it. It was bubble pointed again, this time using alcohol as the test fluid. Oversized holes detected during this test were repaired with an epoxy resin.

11. Each filter was assembled in a housing and when the customer requested, tested, using test stands replicating as closely as possible specified conditions. Because our filters were manufactured principally for use in hydraulic applications, the fluid most often used in this testing was a Mil-H-5606, hydraulic oil. Thereafter, depending on the customer's specifications, the filters either would be packaged and shipped containing hydraulic oil, or degreased and then packaged and shipped.

12. At various stages during the manufacturing process, the filter element, component parts or assemblies were degreased. Prior to welding, metal components and parts were cleaned in a vapor degreaser. Also, although Glen Components, Inc., a subsidiary of Pall Corporation, provided a large portion of the metal parts we needed, we also purchased parts from outside vendors. In some instances, these parts were degreased by the vendor, but if not, we would run them through a vapor degreaser. I do not recall which solvent was used in the degreaser.

13. We also used several small ultrasonic cleaners to degrease filters, parts and housings. To the best of my recollection, these ultrasonic cleaners had an aqueous based cleaning bath.

14. The practice at 30 Sea Cliff Avenue was for all waste solvents to be placed in safety cans and drums and shipped off-site for disposal. Although I am aware of this policy, I do

not have firsthand experience with it. However, I can state unequivocally that in the 11 years that I worked at 30 Sea Cliff Avenue, I never saw anyone dump chemical wastes in the yard or down the drains. Nor did I ever hear that this had happened or see any evidence that this may have been done.

John A. Farris

STATE OF NEW YORK

Nassau COUNTY

I, the undersigned, a Notary Public in and for the said State and County, do hereby certify that John A. Farris personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal this the 6th day of December 1996.

Janice McCullough

Notary Public

My Commission Expires:

April 15, 1997

(NOTARIAL SEAL OR STAMP)

JANICE McCULLOUGH
Notary Public, State of New York
No. 4980128
Qualified in Nassau County
Commission Expires April 15, 1997

EXHIBIT

M

In re: Pall Corporation
30 Sea Cliff Avenue
Glen Cove, NY
DEC Site No. 13053B

AFFIDAVIT OF BERNARD SILVERWATER

Bernard Silverwater, being duly sworn, deposes and says:

1. My name is Bernard Silverwater. I currently reside at 72 Mitchell Avenue, Plainview, New York 11803. I am a retired officer of various divisions of Pall Corporation, having worked there for 38 years and eight months. During that time I worked exclusively at Pall Corporation's facilities located at 30 Sea Cliff Avenue, Glen Cove, New York, Northern Blvd. East Hills, New York and the conference center in Glen Cove. I have first hand, personal knowledge of the matters discussed below.

2. I began working for Pall Corporation in 1957 as a project engineer with Aircraft Porous Media, Inc., a subsidiary of Pall Corporation that manufactured filters and filtration systems for the aerospace industry. Aircraft Porous Media was located in the Pall Building, the large building at 30 Sea Cliff Avenue.

3. In 1957, the Pall Building was the only building located at 30 Sea Cliff Avenue except for a small building in the back occupied by Precision Machine Corp. (a machine shop). Sometime in 1958, a third building was constructed at that site and was used by Glen Components, Inc., a subsidiary of Pall Corporation that supplied the machined parts we used to

manufacture filters and filtration systems. At one point, Glen Components supplied roughly 70 percent of the parts we needed; the rest came from outside vendors including Precision Machine Corp. which moved. The Glen Components Building is now owned by August Thomsen.

4. At Pall Corporation a project engineer was responsible for designing the filters and filtration systems our customers requested and thereafter supervising the manufacturing of these products. This activity included engineering the filter, writing the job sheets, placing the orders, evaluating the quality tests and following the product through production to correct any problems.

5. In 1962 I became the Assistant Chief Mechanical Engineer at Aircraft Porous Media. In this capacity I had my own projects like those described above but also was responsible for supervising other project engineers and the projects they worked on. I stayed in this job until 1967 when I became Chief Engineer of Aircraft Porous Media. I later became Vice President of Engineering and a few years after that Vice President & Technical Director for Aircraft Porous Media which had moved its machining, assembly and testing to Pinellas Park, Florida in the early 70s.

6. Pall Corporation's filters are used for fluid clarification. Clarification is the removal of particles from a gas or liquid stream consisting in very small part of the particles being removed. Clarification should be distinguished from bulk solid collection which is another form of filtration where the particles being removed constitute a large portion of the liquid or gas stream.

7. The size of particles removed by Pall Corporation's filters range from 10 microns and above, to a fraction of a micron. A micron is 1/25,000 of an inch. A particle 25 microns in

diameter is too small to see with the naked eye.

8. One of the basic materials used by Aircraft Porous Media to manufacture filter elements and filters during the 60's was RIGIMESH. RIGIMESH is a filter media. It consists of various weaves and layers of fine woven stainless steel wire cloth that is sintered to form a porous metal sheet. Sintering is the process of heating a metal in a very narrow temperature range near its melting point so that adjacent strands or particles of the metal fuse together, but do not melt. Sintering also is used to produce porous stainless steel (PSS), another metal filter media developed by Pall Corporation. Unlike RIGIMESH which is made from woven wire cloth, however, PSS is made from metal powders that are sintered to form porous metal sheets. These sheets can be formed, welded and machined like regular sheet metal.

9. Pall Corporation designed, manufactured and operated sintering furnaces at the 30 Sea Cliff Avenue facility. It also developed and operated looms to produce the fine wire cloth that was sintered to manufacture the RIGIMESH. For a time, output from these looms accounted for approximately 40 percent of Aircraft Porous Media's requirements for fine wire cloth. The remaining requirements were satisfied from imports, mainly from Europe.

10. The fine wire cloth or mesh coming to the 30 Sea Cliff facility from an outside source was degreased before being sintered. This degreasing was done to remove contaminants and was accomplished by immersing the wire mesh into a tank of liquid and vapor phases of perchloroethylene, or perchlorethane, removing it and allowing it to dry atmospherically.

11. Machined parts brought to Aircraft Porous Media from outside sources also were degreased prior to use. In this instance, the parts were run through a vapor degreaser located on the shop floor in the Pall Building. Perchloroethylene or perchlorethane was the solvent used in

the vapor degreaser.

12. At various other stages in the manufacturing of a filter, the element, housing or parts would require cleaning and various means were employed. The filter media, the RIGIMESH, removed from the furnace was cleaned in ultrasonic units. Partially completed filter elements and field contaminated filter elements were cleaned in a HIPS unit. HIPS stands for hyper intense proximal scanning, and is an ultrasonic cleaner designed by Pall Corporation in cooperation with Cavitron Ultrasonics, Inc. The unit used, among other liquids, mainly an aqueous/detergent solution.

13. The RIGIMESH was subjected to a variety of mechanical manipulations including shearing, bending, pleating, swaging and welding. Following these steps, it was run through a vapor degreaser to remove contaminants before rings and end caps were welded or brazed to the media to make a filter element.

14. The integrity of each assembled filter element was tested in a bubble point test. In this test, the element was immersed in a tank of Solox 190, denatured alcohol. The person running the test then would identify the first bubble which represented the largest pore hole in the filter element. If the size of the hole was above specifications it would be repaired with an epoxy resin and bubble pointed again until specifications were achieved. All elements were bubble pointed in this fashion.

15. The structural integrity of each assembled filter was tested using the same fluid that would be used by the customer, whether it be JP-4, Mil. 5606 hydraulic oil, or lubricating oils or gases. Following the test the filter either would be packaged and shipped containing the fluid or without the fluid. If it were shipped without the fluid, or with a compatible preservative

fluid, the housing exterior would, in some instances, be cleaned. Typically, this cleaning would be by hand by immersing the unit in a tote box containing solvent or by using a rag that had been dipped in a tote box containing solvent. The solvent used for this purpose was petroleum ether and later Freon.

16. Testing filter assemblies and prototype filters was a significant part of Pall Corporation's operation. Test stands were located in the Pall Building. We also had a large test stand located on the north end of the Glen Components Building. This test stand had an above ground tank which held JP-4 that was circulated from the tank, through the filter being evaluated and then back into the tank. There were several points in this system where the various measurements could be taken. This test stand was used to evaluate large fuel/water separator filters; however, because that market did not develop, it was used only for a short time.

17. At no time during the years I was at the 30 Sea Cliff Avenue facility was it permissible for anyone to pour waste solvents out in the yard or down the drain. On a few occasions I heard about a employee pouring wastes down a drain and being harshly reprimanded. Beyond that, however, I never heard of any other incident where wastes chemicals were poured outside or down a drain. Indeed, it was my understanding at the time that solvents and other chemicals were to be disposed of properly and that we had a system for doing so. There were safety cans for waste chemicals, marked and located throughout the shop and labs. As I understand it, when these cans were full they were taken to the storage area behind the Pall Building and the contents poured or pumped into 55 gallon drums and then properly disposed of. It is also my understanding that wastes from the degreasers were handled in much the same manner.

18. Pall Corporation was a pioneer in the fluid clarification business. The business deals with micron and sub-micron levels of contamination. Wholesale dumping of chemical waste anywhere is simply inconsistent with the company's nature and philosophy.

Bernard Silverwater
Bernard Silverwater

STATE OF NEW YORK
COUNTY OF Nassau

I, the undersigned, a Notary Public in and for the said State and County, do hereby certify that personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal this the 16 day of December, 1996.

Judith Nerenberg
Notary Public

JUDITH NERENBERG
Notary Public, State of New York
No. 01NE5051066
Qualified in Nassau County
Commission Expires October 23, 1997

EXHIBIT

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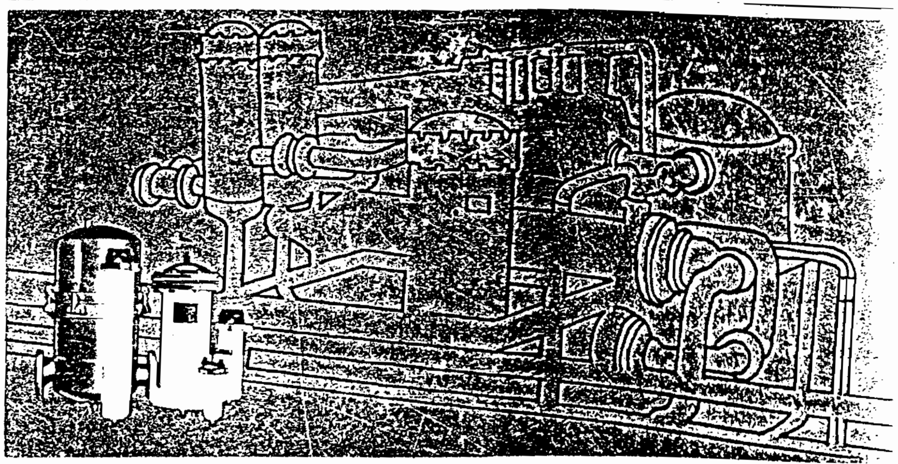
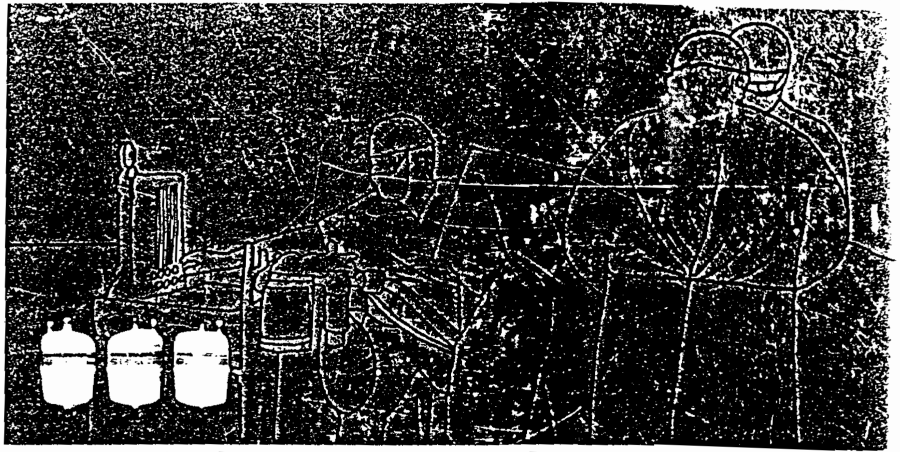
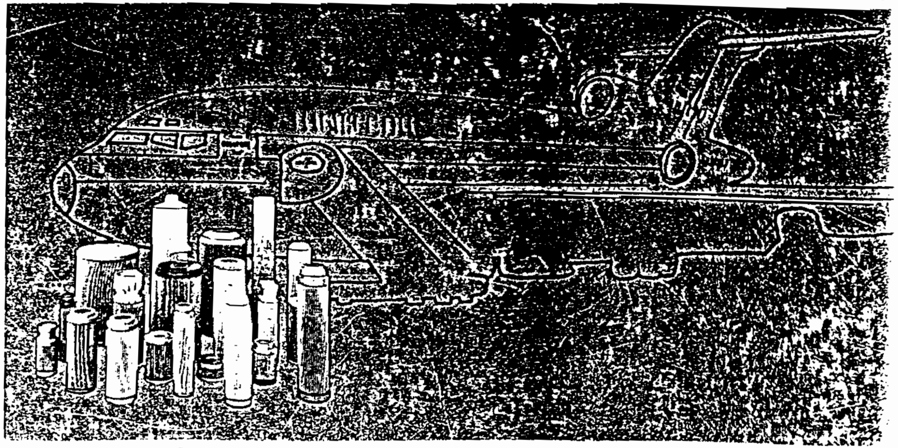
PALL CORPORATION ANNUAL REPORT 1971







Cover Story

Our covers show the considerable progress we have made in "packaging" our proprietary advanced technology in fluid clarification as standard products for large markets.

Front Cover

Numerous process industry installations are served by our standard line of fine and ultrafine filters in a variety of off-the-shelf container choices.

Our DFA disposable filter assembly comes with many types of filter media for hospital and pharmaceutical use.

We serve the international aerospace industry with a very broad line of standard and custom made filters for a wide range of fluids including drinking water, air, hydraulic oil, lubricating oil and fuel.

Back Cover

Our patented thermally accelerated marine sewage plants are in growing use on civilian and military ships.

Our standard line of 3 micron absolute abrasive wear particle removal filters is gradually finding application in the large mobile equipment and machine tool markets.

Compressed air and gas purification in which we have long been a leader is served by standard as well as custom built filter and gas dryer lines.

Annual Stockholders' Meeting

Monday, November 22, 1971 2:30 P.M.
Harrison House of Glen Cove
Glen Cove, L.I., N.Y.

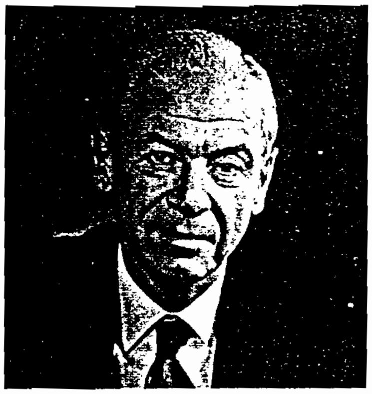
PALL CORPORATION Glen Cove, Long Island, New York 11542

Contents

Ecological Action

The text of this annual report is printed on 100% recycled waste paper. This means the reusing of 3,000 lbs. of waste paper which would otherwise have been burned or buried—thus adding to environmental pollution.

Like many other citizens, both private and corporate, Pall Corporation is concerned with the increasingly grave problem of environmental pollution. We show this concern professionally in the pollution control products we produce and in anti-pollution measures in our manufacturing operations. And we are also pleased, as a corporate citizen, to effectively express this concern through another channel, by the use of recycled paper in printing this report.



David B. Pall, Chairman

Abraham Krasnoff, President

Fiscal Highlights

for the years ended July 31

	1971	1970
Consolidated Net Sales	$24,548,638	$26,715,568
Earnings before Taxes on Income and Extraordinary Charges	$ 558,553	$ 453,775
Taxes on Income	$ 264,156	$ 224,874
Earnings Before Extraordinary Charges	$ 294,397	$ 228,901
Per Average Share Outstanding	$ 0.27	$ 0.21
Extraordinary Charges ($0.31 and $0.10 per share, respectively)	$ (342,544)	$ (112,478)
Earnings (loss)	$ (48,147)	$ 116,423
Per Average Share Outstanding	$ (0.04)	$ 0.11
Depreciation and Amortization Deducted from Earnings	$ 998,668	$ 950,998
Cash Provided from Operations	$ 1,293,065	$ 1,179,899
Dividends Declared per Class A Share	—	$ 0.24
Total Assets at End of Year	$27,761,807	$28,519,623
Gross Investment in Plant and Equipment	$13,941,271	$13,785,187
Working Capital	$11,360,196	$11,215,894
Stockholders' Equity	$12,069,821	$12,071,276
Average Shares Outstanding	1,100,958	1,098,432
Equity per Share	$ 10.96	$ 10.99

Note 1: The extraordinary charges in 1971 of $342,544 ($655,209 before taxes) consist of the cost of a plant relocation ($353,000), a gain on the sale of an investment ($49,353), and a loss on the sale of realty ($38,897). The extraordinary charge in 1970 of $112,478 ($223,478 before taxes) resulted from termination costs incurred in the winding up of the Company's airborne air conditioning operations.

Note 2: During the fiscal year ended July 31, 1970, regular quarterly dividends of $0.08 per share were declared in October 1969, and January and April 1970. In July 1970, the payment of dividends was suspended.

Note 3: At July 31, 1971, outstanding shares included 982,180 Class A Shares and 121,098 Class B Shares. If future dividends are declared, Class B Shares will receive dividends of 1% per share of the dividend on Class A Shares. For substantially all other purposes, the two classes are alike. Class B Stock may be converted into Class A Stock on a share-for-share basis. Class A Shares are traded on the American Stock Exchange under the symbol PLL A.

Dear Stockholder

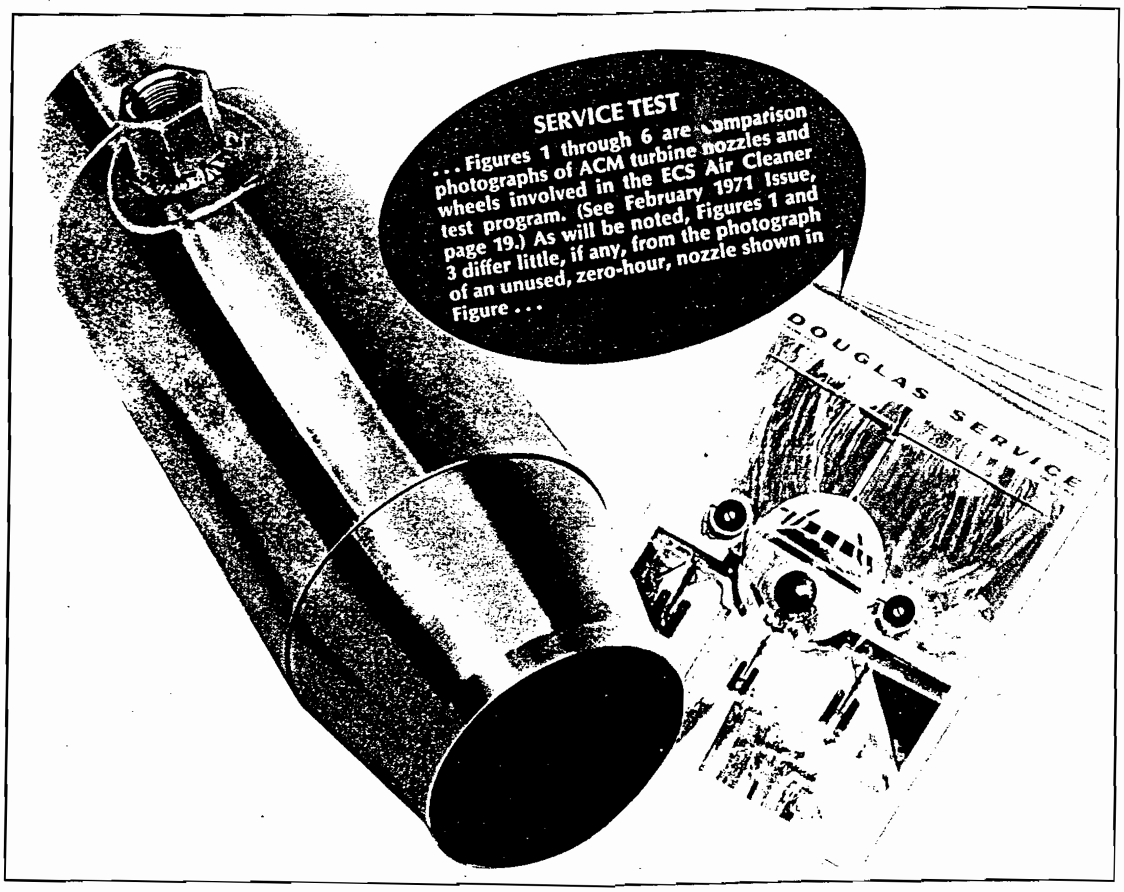
In spite of "stagflation"—that unfortunate combination of rampant inflation and general business stagnation—particularly in our major markets in the United States and the United Kingdom, we managed in the year ended July 31, 1971, to make some important progress toward our goals of eliminating overdependence on aerospace, and of returning to a period of continuing growth.

The basic strategies involved in accomplishing these goals are to "package" our high technology in fluid clarification as standard products for large markets, and to avoid dependence on any one cyclical market or any one government budget.

The tactics involved to accomplish these strategies include:

1 Identification of large markets and applications for our products.
2 Development, design and production of standard, but proprietary, lines of products—mainly ultrafine filter elements and their containers and appurtenances—for use in these markets.
3 Improvement of manufacturing.
4 Disposition of low potential or unprofitable lines.
5 Establishment of strong distribution channels and of supportive services for each market.
6 Internationalization of operations.

A good start has been made on all of these—much more remains to be done—but we are clearly moving toward success. Some of our accomplishments in fiscal 1971 follow.



We are placing particular emphasis on products for and service to commercial airlines, where considerable growth potential exists despite the industry's present depressed level. Our Centrisep® Air Cleaners remove abrasive, wear causing dirt from hot, main engine "bleed air" which is used to power auxiliary equipment. The McDonnell Douglas Company has recently reported favorably on the effectiveness of these devices in their monthly house organ, "Douglas Service."

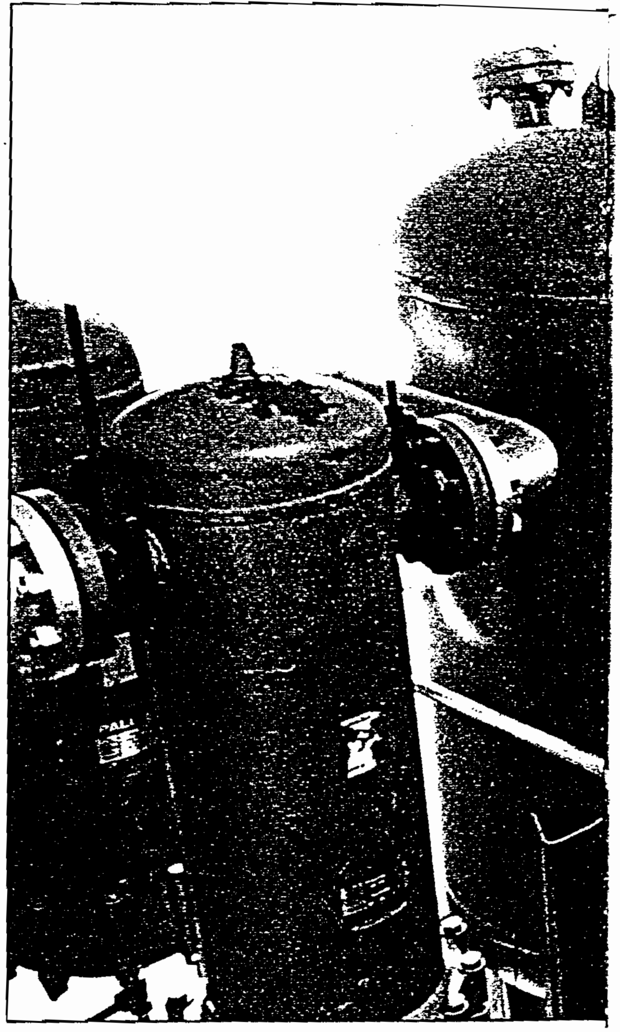
Markets Identified – Standard Products Developed

Aerospace: Our aerospace filter business has historically been mainly in the supply of relatively fine pore sized, cleanable, metal filters to protect hydraulic systems from jamming with dirt particles on the order of 10 to 25 microns in size. (40 microns is about the size of particle which can be seen by the unaided eye.)

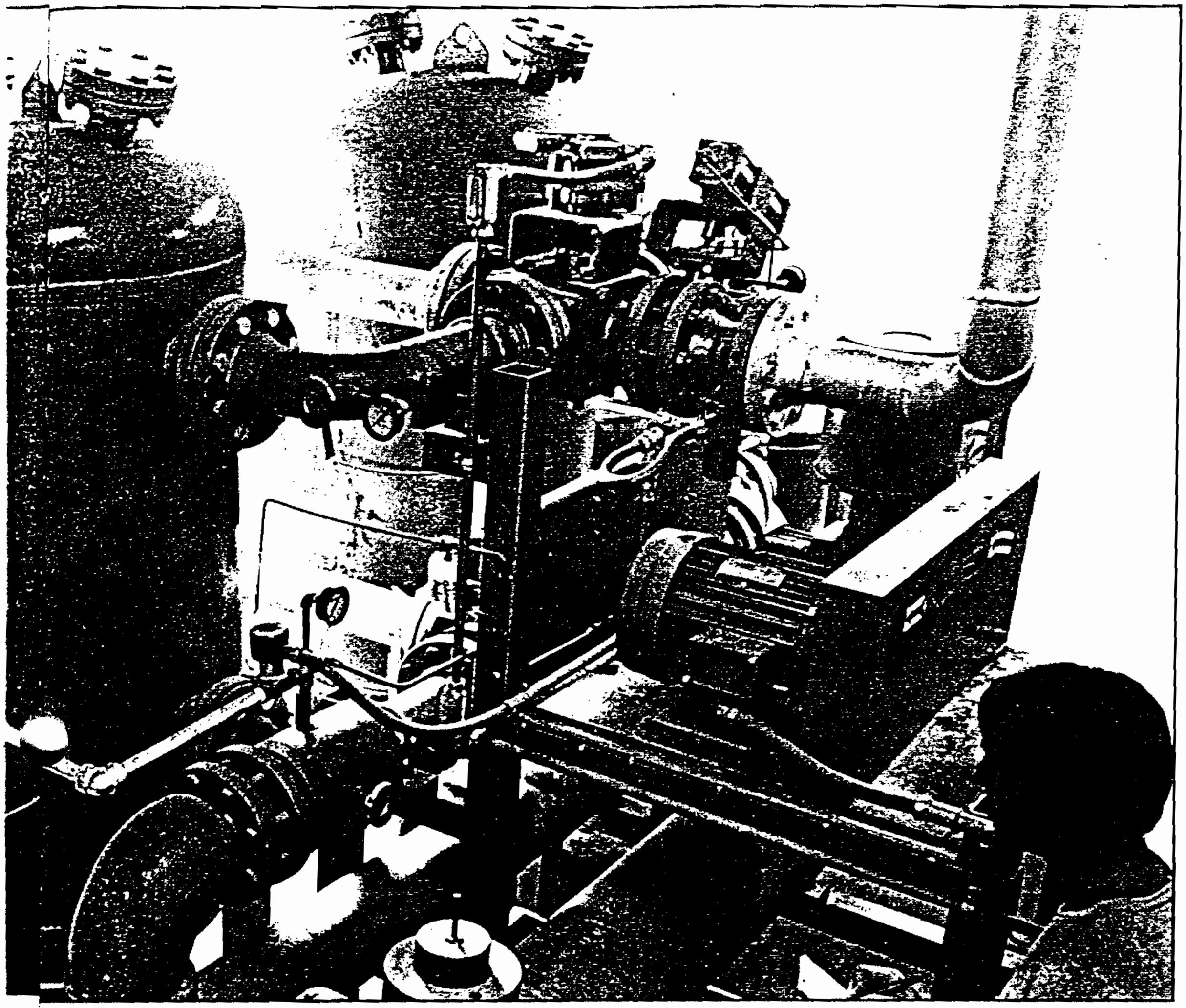
Although the aerospace market continued its dizzying decline last year (we hope it has now about hit bottom) we have identified three fluid clarification applications with good growth potential. All are in production—all are proprietary—and all offer the promise of restoring growth and better profitability to our aerospace business, even if the industry itself remains at a depressed level.

The first of these constitutes a line of ultrafine (3 and 5 micron rather than 10 to 25 micron) pore sized hydraulic oil filter elements which, by removing the contamination that lodges between close tolerance moving surfaces, actually eliminate wear and increase life, and time between overhauls. These filters, made of proprietary papers produced on our own Fourdrinier equipment, are disposable. They thus eliminate the need for costly maintenance labor and equipment. Most of the major new aircraft programs use such disposable filters. Even more important, we succeeded, during last year, in demonstrating the efficacy of these filters to many military and commercial aircraft operators with the result that toward the year end a considerable amount of retrofit business took place.

The second area of aerospace growth potential is in fine and ultrafine (ranging from 40 down to 3 microns) high temperature, disposable, lubricating oil filters for both commercial and military jet engines. This market, which has been a relatively small one for us, has been served by coarser metal filters and strainers. We believe that the potential of this business is as great as our total present aircraft volume. After almost three years of testing, our filters are now in production for a number of engines. We expect more to come during fiscal 1972. Again, we have provided a means of helping to extend equipment life and mean time between overhauls, with potentially great rewards.



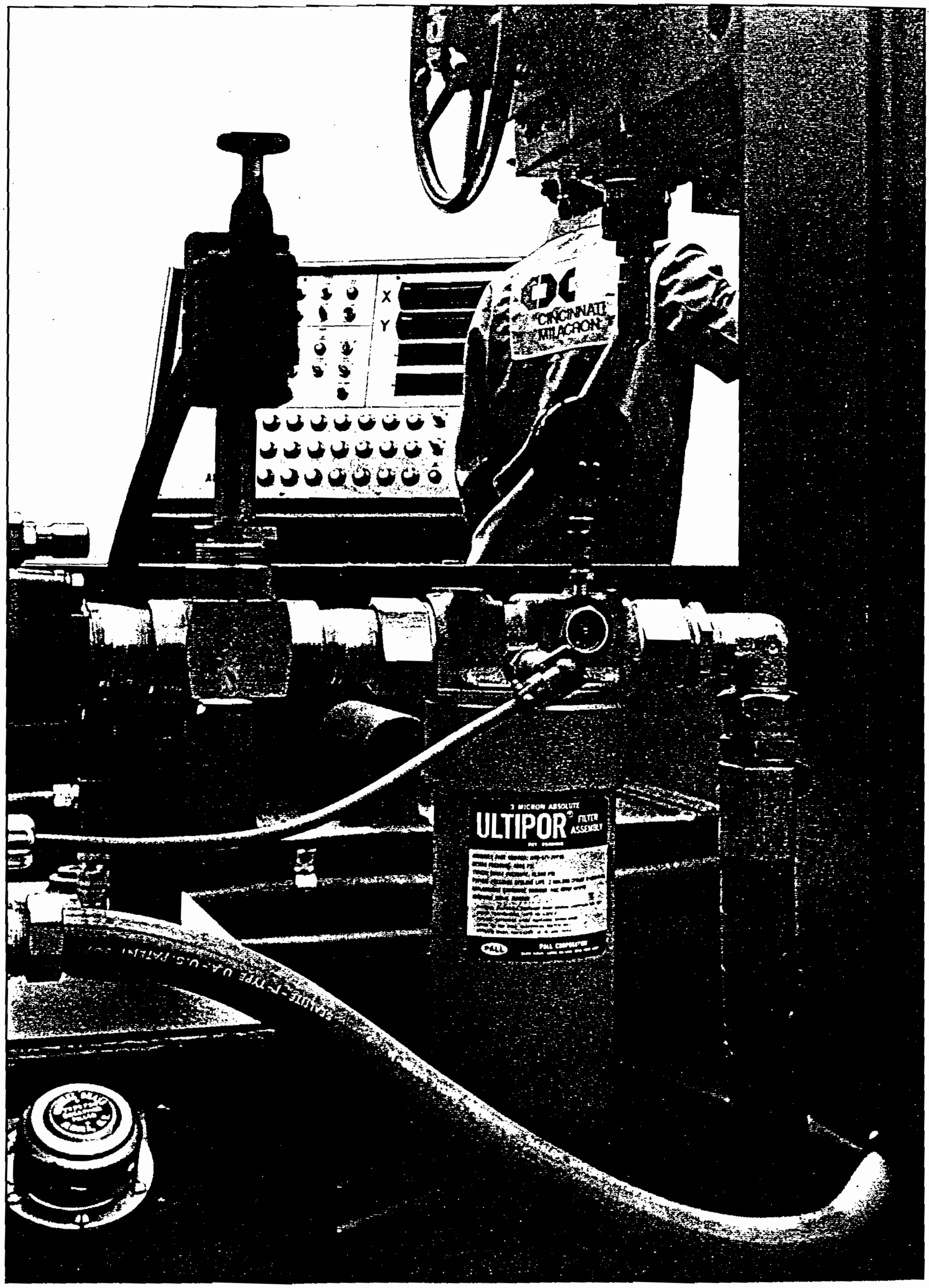
The third application is the purification of air by means of inertial separation devices, which cause entrained dirt to be thrown to the side of the flowing air stream, and then provide means for ejecting the dirt from the stream. We have become the major supplier of such devices for use in protecting helicopter engines from the clouds of dirt they frequently churn up. In addition we have been applying such devices to remove abrasive, wear caus-



Our gas dryers are widely used in a multitude of industrial applications to remove moisture from compressed air, hydrogen, nitrogen and other gases. Typical of these applications is this installation at New Jersey Natural Gas Company, Long Branch, N.J. Here Pall Dryers are removing moisture from the reserve storage tanks. This moisture, if left unattended in the tanks, would cause freeze-ups during the winter months. Oil and dirt are also removed from these systems by air filters.

ing particles from so called "Engine Bleed Air" which is taken from different stages of jet engines to do many kinds of work, such as driving air conditioning machines and pressurizing bearing seals. Here again, a number of applications went into production in the latter part of fiscal 1971. The potential is good.

Processing Industries: We are well known for providing many kinds of metal and disposable filters for high temperature viscous polymers, for corrosive chemicals, and for other difficult fluids. More recently we have found considerable opportunity for the use of standard configurations of our proprietary filters in a variety of applications in the purifi-



Our efforts to convert the machine tool industry to a new filtration technology have shown slow but continual progress during the industry depression of the past year. The Heald Machine Division of Cincinnati Milacron has cut downtime on its Acracenter vertical N/C machining centers by about 90% since switching to Pall Ultipor® 3 micron absolute disposable filters. Other large machine tool manufacturers and users are finding similar outstanding results.

cation of those two most nearly universal fluids—water and air. Both are used in myriad processes. Air, in addition to being a process gas, is frequently used to supply motive power. Coming from a compressor, air has in it a variety of kinds of contamination, including oil droplets and vapors, water in a number of forms, bacteria of many kinds and dirt of great variety. Water has an even more astounding collection of contaminants, often of unpredictable kinds. Two noteworthy developments of standard air filters were undertaken last year. Completed just at the year end was a line of oil and dirt removal cartridges for the far flung compressed air market. We believe this line supplies a need not now adequately met. Our products are highly efficient and economical, and are packaged for ready handling and distribution by non-technical dealers. Accompanying this development is a newly designed line of standard desiccant air dryers—also suitable to be sold by relatively non-technical distributors. This supplements our broad gas dryer line which is sold through technical representatives.

The other important air filtration development is of a completely different kind. Here the need is to provide a continuous flow of sterile air to large fermenters used in the manufacture of drugs, enzymes, certain acids, and other products. After long test programs on small units, a growing number of large scale users in several countries have selected our pretested, compact filters—which can take rugged treatment, including the shock of repeated steam sterilization while in place —over more difficult to use, less versatile and easily damaged membranes. We are also replacing commonly used, bulky, and unreliable glass fiber columns.

These two air filtration developments promise to become major additions to our process equipment business.

We have been doing a considerable amount of water filtration business for a variety of purposes. We have been particularly successful in competing against traditionally used membranes in such markets as electronic component manufacture where so called "Ultimate Water" of very high purity is needed in the production process.

These filters, mainly of bacteria grade, with absolute particle retention capabilities of about ⅓ of a micron, require very special construction and specially designed containers if they are to be used in systems such as pharmaceutical manufacture, where repeated steam sterilization is required. A new line of such products was partly in production at the year end and was already in successful use in a number of important pharmaceutical plants. A more complete line of such filters in so called "Sanitary" housings will be on the market during the first half of fiscal 1972.

Near completion and to be added to the new water filter line as its premier product is a rugged, high capacity, pretested, steam sterilizable, 0.2 micron absolute filter cartridge which will give bacteriologically sterile water and other liquids economically. Cold sterilization at the 0.2 micron level now requires costly and uncertain filtration through asbestos pads or through expensive and hard to use membranes. Our new 0.2 micron absolute cartridge will eliminate the uncertainty and much of the cost.

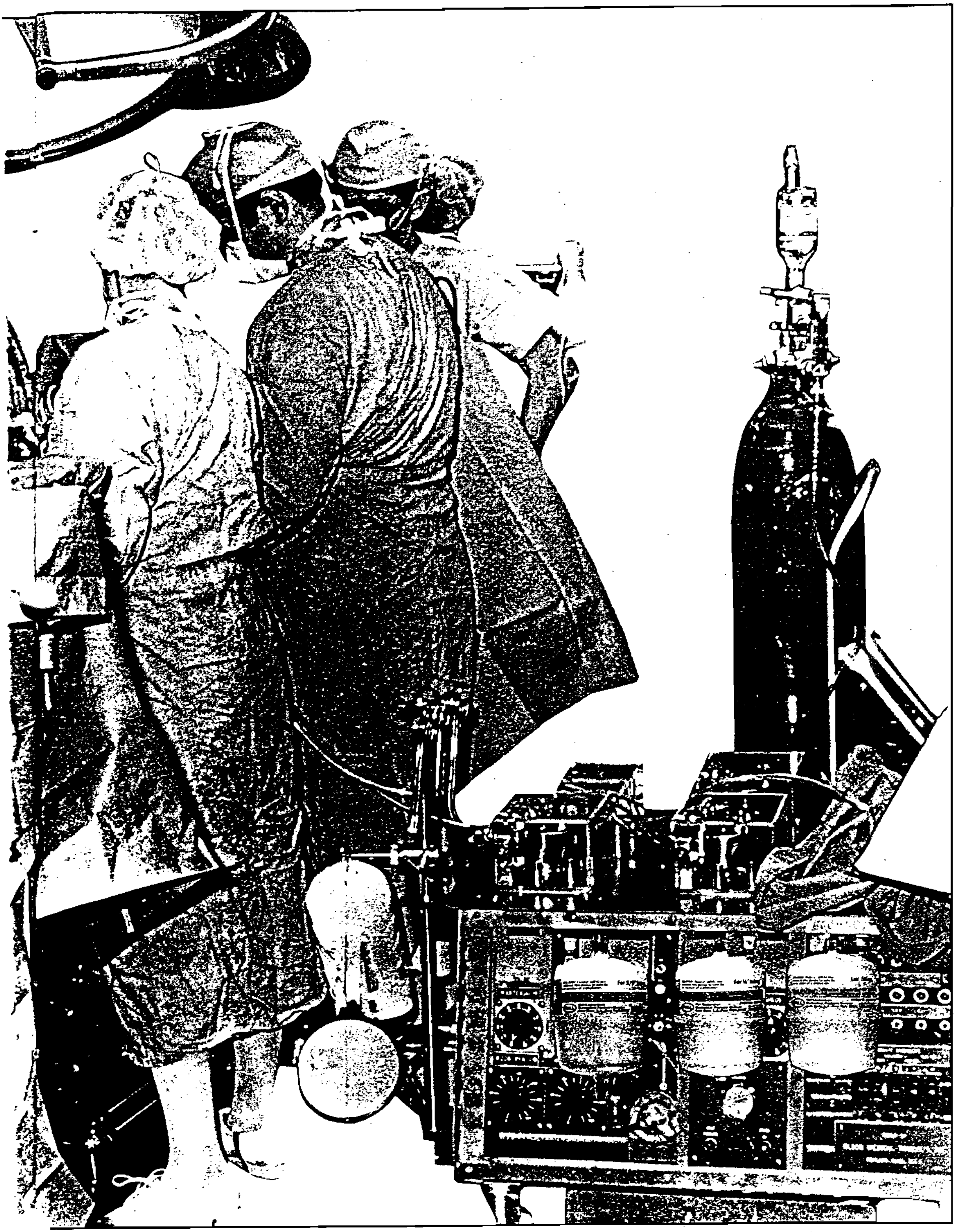
Industrial Equipment: As you very likely already know, our main emphasis in the very large markets of machine tools, material handling equipment, farm equipment and mobile equipment is to sell our revolutionary 3 micron absolute hydraulic oil filters which have been proven to save many times their cost in wear and downtime reduction. Only slow progress is being made in developing this business during the current period of recession, but the markets have been clearly identified—as have a number of new products to meet high volume needs. Among these are "Spin-on" filters similar to those used for lubricating oil in your automobile. However, in our case their use is for hydraulic oil, in many kinds of mobile equipment.

Because our proprietary filter media have much more flow capacity than conventional media of equivalent pore size, we are able to handle any given flow-pore size combination in a smaller housing. A new line of such smaller, lighter weight, competitively priced housings will be available (as will some "Spin-ons") during the second quarter of fiscal 1972. In addition to its great potential with 3 micron filter elements, the new compact filter line will enable us to offer the user, who is for some reason not ready for ultrafine filtration, a way to accomplish relatively fine filtration more economically than at present.

Biomedical: We were set back in this promising market when we relied too much and too long on one potential customer to bring out a series of our products. Two products, now successfully in clinical use, are leading to a number of new devices with good growth potential.

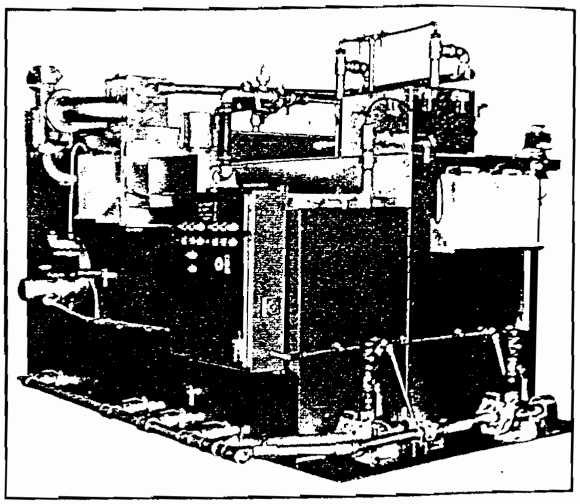
Our disposable gas sterilization filter, incorporated in Ohio Medical's anesthesia administration set, is in widespread use. Two other gas sterilization filters, which are designed to protect inhalation therapy patients from infection, are well along in development. They are expected to be on the market late in fiscal 1972. One of these filters is also expected to be applied to purify oxygen used to oxygenate blood in open-heart surgery.

Our well accepted blood filter, which protects open-heart surgery patients from vital organ and other damage previously caused by gas and solid particle emboli which occur during the operation, has led to other configurations for use in massive tranfusions, and for certain other procedures. Some of these are already in use. Others, with large potential, are expected to be ready by the end of fiscal 1972. A number of other needed devices of substantial potential for the extracorporeal circuit (used in open-heart surgery) as well as for patient protection against certain types of fluid carried contamination, have been identified. These are likely to take more than another year to reach the market.



The ability of our new Ultipor® Blood Filter to remove damaging particles during open-heart surgery has led to its widespread acceptance and use by prominent surgeons. This and other products now in use or in development give us the expectation of good growth in the hospital field.

Governmental enforcement of pollution control regulations could result in substantial business for our patented, thermally accelerated shipboard sewage treatment plants. These units enjoy a reputation for providing an effluent far exceeding the standards of the best land based plants.

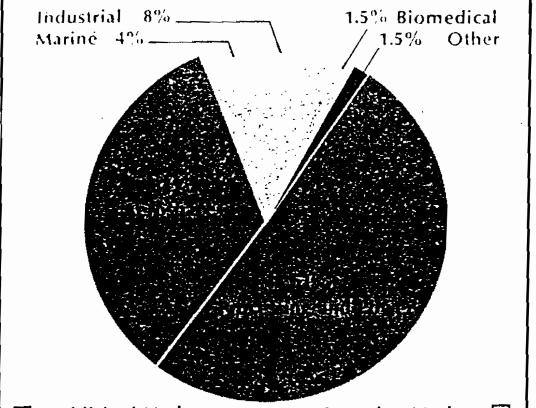


The move of our principal aerospace filter manufacturing facility from Glen Cove, N.Y. to St. Petersburg, Fla., is expected to result in substantial economies. The new 62,000 square foot plant is already serving customers with an ever broadening line of ultrafine disposable hydraulic and lube oil filters, as well as other fluid clarification products.

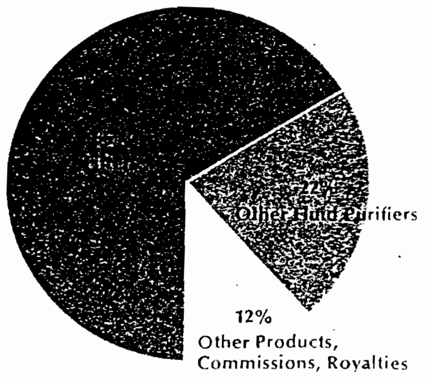
Environmental Control: We are engaged in two lines of activity here. One is in removing airborne and liquid borne radioactive particles from atomic power plant effluents. In the U.S., to serve this market effectively, it was necessary to set up systems and techniques to qualify for the coveted "N" stamp which gives us the right to provide pressure vessels for use in nuclear power stations. This was accomplished in fiscal 1971, and along with our proven filter cartridges, opens new potential for us.

Our other environmental control activity is in shipboard sewage treatment. At the year end we were engaged in solving problems on our contract for plants for the Navy's LHA-1 (General Purpose Amphibious Assault Vessel.) These problems were connected with extremely stringent vibration requirements.

Sales by Market (continuing lines)



Sales by Product
(continuing lines)



However, extensive testing on plants built for this program, including some conducted by the National Sanitation Foundation, showed, once again that our patented, thermally accelerated system gives an excellent effluent, far exceeding the standard of the best land based plants. There is need for smaller plants —for workboats, tugboats and barges. Such plants require further development work, which is expected to be completed by the end of fiscal 1972. Fiscal 1971 saw the larger plants considerably improved, with general acceptance in the shipbuilding industry wherever there is pollution control enforcement.

1971 Activities to Improve Manufacturing

The major change in 1971 was the move of our principal aircraft filter manufacturing facility from Glen Cove, New York to St. Petersburg, Florida. The $675,000 (less $322,000 tax savings) cost of this move, for which a special charge was made in fiscal 1971, will be recovered many times over as the new, better organized, better laid out plant grows in activity. Full production is expected by the end of our first quarter, October 31, 1971. Improvement in earnings will be realized only later in fiscal 1972 as old, higher cost inventories are consumed and replaced by more efficient production.

Another important change involving aerospace activity was the installation in 1971 of filter and air cleaner manufacturing and testing facilities in our Portsmouth, England plant. This facility, now fully approved by the cognizant authorities, is already supplying the growing European aircraft industry.

A move toward long term company wide improvement of earnings will be the installation of new semi-automated filter element production lines, the first of which is expected to be in production in St. Petersburg by the end of October. Other such lines will

The self-escalating chain reaction of wear that occurs as a result of contamination in all modern hydraulic systems whether on machine tools, earth-moving equipment or farm tractors, can be sharply reduced by Pall Ultipor® 3 micron absolute filters. Our Fluid Power Distributors employ a simple test to convince customers of this phenomenon.

1

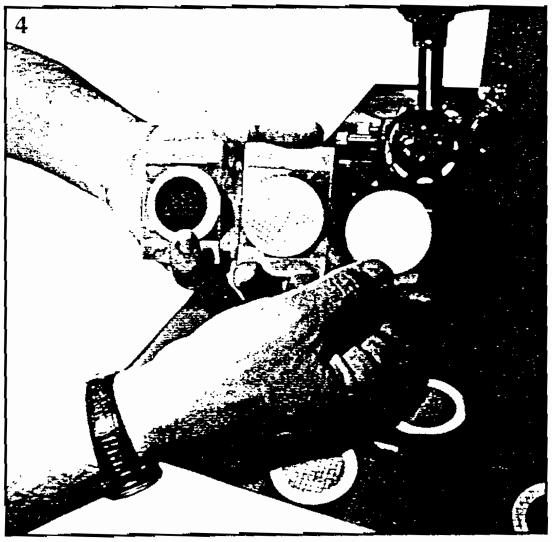
Harley Ostergood, Service Manager of J. M. Grimstad, Pall's distributor in Milwaukee, views a customer's industrial pump showing evidence of wear.

2

Sample of fluid from the pump is drawn through a laboratory membrane to check for abrasive contaminants.

3

Microscope analysis of laboratory membrane determines the relative amount of abrasive contaminants.



4

Sample from customer's fluid (left), sample filtered through our Ultipor® 3 micron absolute filter (center) and new membrane tell the story.

follow in our two other major filter element manufacturing facilities in Cortland, New York and Portsmouth, England.

Other major manufacturing improvements in 1972 will involve new processes and new equipment for the manufacture of both sintered metal and disposable filter media.

Disposition of Low Growth Lines: The winding up of our airborne heat exchange and air conditioning business was completed early in fiscal 1971, taking us out of an activity that is likely to be depressed for years to come.

Continuing in our program to dispose of our operations which appear to have inadequate long term growth, we sold our United States thermocouple and thermowell business for $850,000 cash, as well as additional income contingent on the sales of the purchaser.

Disposition of these two lines gave us a temporary reduction in our sales base, but also resulted in a considerably lower breakeven point, and in improved liquidity.

Establishment of New Distribution Channels and Supportive Service in 1971

Aerospace: Major moves here involved the establishment of our own direct sales group in Europe backed by a highly competent engineering and quality control group and, as indicated earlier, a fully approved manufacturing facility. All of this was accomplished in a remarkably short time and at modest cost, and now puts us in a position to exploit new opportunities in Europe.

On the other side of the earth, in Japan, where we are extremely well represented by Sumitomo, one of Japan's great companies, we entered into a license arrangement with one of their subsidiaries for production of some of our aircraft hardware. We are in a good position to grow with the reviving Japanese aircraft industry.

Processing Industries: Among our important moves in selling to the major processing market was our establishment, early in the year in Britain and Germany, of market specialists in key areas—such as Pharmaceuticals, Food and Beverages, Polymer Manufacturing and Nuclear Power. These people back direct sales people and agents with special market knowledge and planning, and are the key men in coordination of field sales people with the appropriate engineering groups at the plants. A similar format was adopted in North America at the end of fiscal 1971.

Also during fiscal 1971 a series of distributors specializing in the process industries was established in most major Western European countries. A substantial increase in volume from the continent is expected in fiscal 1972.

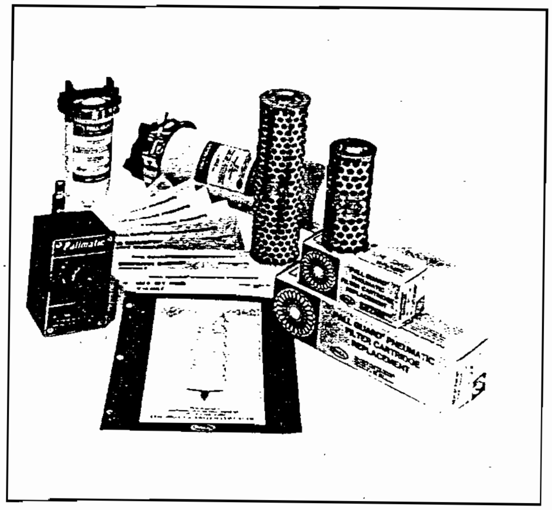
Sales to Eastern Europe, although growing, are presently made mainly through our German and British contracting and equipment customers. Direct sales to this very large market will begin in fiscal 1972.

We plan to open a French Engineering and Sales office during the first half of fiscal 1972 to exploit the substantial process industry potential there.

To penetrate the large compressed air market with the new cartridge line which was discussed earlier, a system of distributors and dealers is being organized. This will start to be operative in a number of regions late in the first quarter of fiscal 1972. Selling of similar products to certain outstanding pneumatic equipment supply companies for marketing under their own brand names is also being done, and more is being considered.

Industrial Equipment: To support our missionary campaign to the large but difficult to penetrate industrial and mobile equipment market, a stepped-up advertising and public relations program was instituted in April. To back up these promotions and our national distributor organization, a team of fourteen "Filter Application Specialists"—all expert in selling our ultrafine hydraulic filters—was organized in June. We expect increasing benefit from this multipronged campaign as fiscal 1972 progresses. Applications in a number of automotive plants have already resulted from this activity.

In Japan, and in much of Europe, hydraulic distributors were appointed and were trained late in the year. In Europe and in the United States, brand naming arrangements are being considered with major hydraulic companies to supplement our own distribution.



Completed just at year's end was a line of efficient, economical, fine filters to safeguard pneumatic system from oil, water, dirt and sludge. Packaged for easy off-the-shelf sales through non-technical dealers, these units are expected to find applications in a myriad of processes involving the use of compressed air.

Biomedical: The most important move in this market was the establishment of broad based direct contact by our small, but highly skilled group of marketing and engineering personnel with major hospitals and physicians around the country. This enabled us to proceed with product development and clinical testing of our blood filters in a very short period of time. We expect other products to benefit similarly.

At this time we still expect to enter into distribution arrangements with appropriate major hospital supply companies as our products are developed. We are, however, maintaining our own market investigation effort.

We concluded an agreement in June with Johnson & Johnson to distribute our disposable blood filter for use in open-heart surgery. We are very pleased to be associated with this outstanding company.

Environmental Control: Key agencies for sale of our marine sewage treatment plants were established in the United States and in Japan. Direct sales continue in Canada. A market survey in Europe was instituted at the year end. The excellent performance of our plants lends promise to this market as, and if, enforcement of anti-pollution measures increases.

Distribution to the atomic power industry has long been established and no changes took place in fiscal 1971.

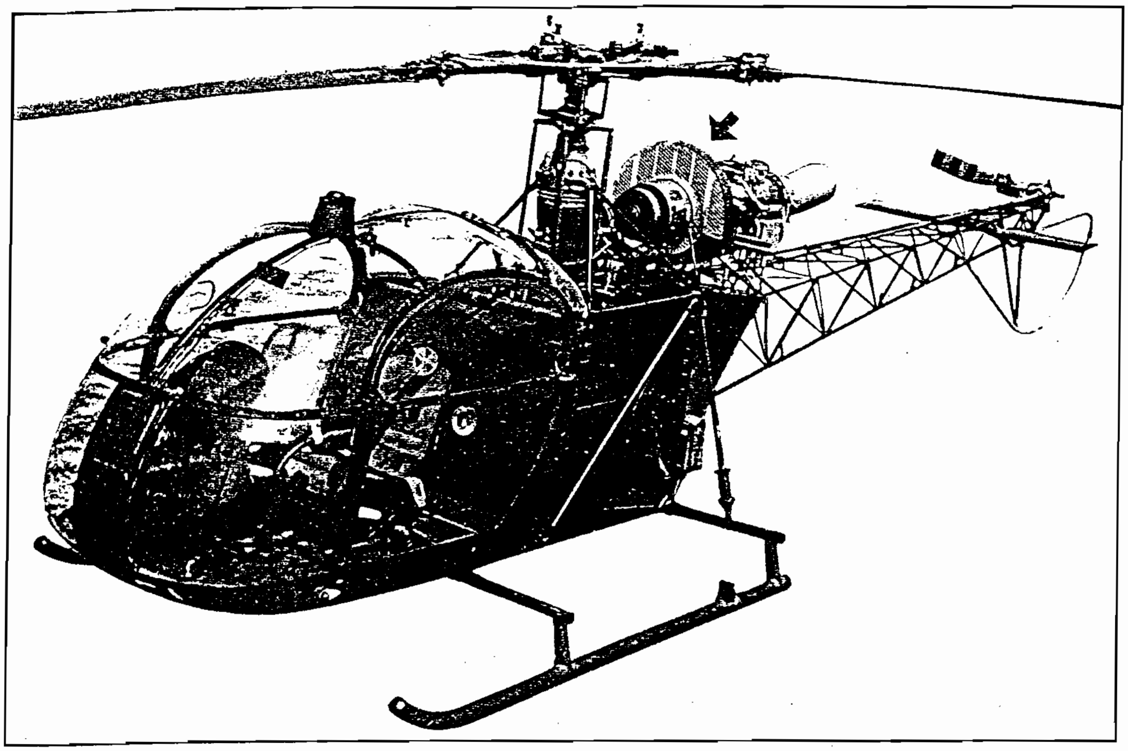
Internationalization of Operations: 1971 saw a continuation of our efforts in this direction. With the establishment of aircraft filter capabilities, our European operations now produce and distribute most major Pall lines other than sewage plants and biomedical products for patient use.

Certain filter element manufacturing is now carried on in Mexico with a resultant increase in business starting late in the year.

We are working on improvement of our distribution in Canada where major products other than filter elements are now being produced.

In fiscal 1971 these direct foreign operations amounted to more than 25% of sales of continuing operations.

As compared to 1970, fiscal 1971 saw a somewhat lower volume of business. This was due to a further considerable decline in aircraft business, a temporary drop in the biomedical area and a decline in the industrial market—largely as a result of the General Motors strike. The latter two resulted in a decline of $600,000. Both are expected to be up in 1972. In spite of this, earnings were up modestly. As you will see from the following sales summary, the trend of U.S. non-aerospace business has been very good, as has direct foreign business. The drop in 1971 U.S. non-aerospace business entirely results from the biomedical and industrial equipment drop of



1971 saw a continuation of our international growth. Pall Centrisep® Air Cleaners (right photo) protect the engines of this helicopter, produced by Societe Nationale Industrielle Aerospatiale, France's foremost airframe manufacturer. Typical of applications in pharmaceutical companies throughout the world is this one in a CIBA plant (left photo) where Pall bacteria removal filters are used in the production of medicinal tablets.

$600,000. U.S. process and marine sales increased $500,000. Canada and Mexico, suffering from the U.S. economic malaise, dropped $600,000 in sales, with Europe increasing by $750,000.

SALES FOR FISCAL YEARS ENDED JULY 31
(000's OMITTED)

Continuing Lines	1967	1968	1969	1970	**1971**
U.S. Aerospace	$12,700	$10,800	$10,400	$ 8,500	**$ 7,500**
Other U.S. Markets	5,900	6,900	8,500	9,900	**9,800**
Direct Foreign Operations	3,500	3,800	4,300	5,700	**5,900**
Total Continuing Lines	22,100	21,500	23,200	24,100	**23,200**
Discontinued Lines	3,300	3,700	3,000	2,600	**1,300**
TOTAL	$25,400	$25,200	$26,200	$26,700	**$24,500**

It is important to note that in spite of the drop in aerospace and biomedical sales, disposable filters and their housings rose to a high of $8,500,000 from $7,100,000 in 1970, and amounted to about 37% of sales of continuing lines.

With a prolonged capital goods recession, a relatively low opening shippable backlog, plant shutdowns for vacations in August, and delays in the LHA program, 1972 will be off to a slow start, although at this writing we expect each quarter to show an improvement over 1971.

The new products, new marketing efforts, and improved manufacturing facilities which we have described in some detail will contribute to sales and earnings as the year progresses.

Very truly yours,

David B Pall

David B. Pall, Chairman

Abraham Krasnoff

Abraham Krasnoff, President

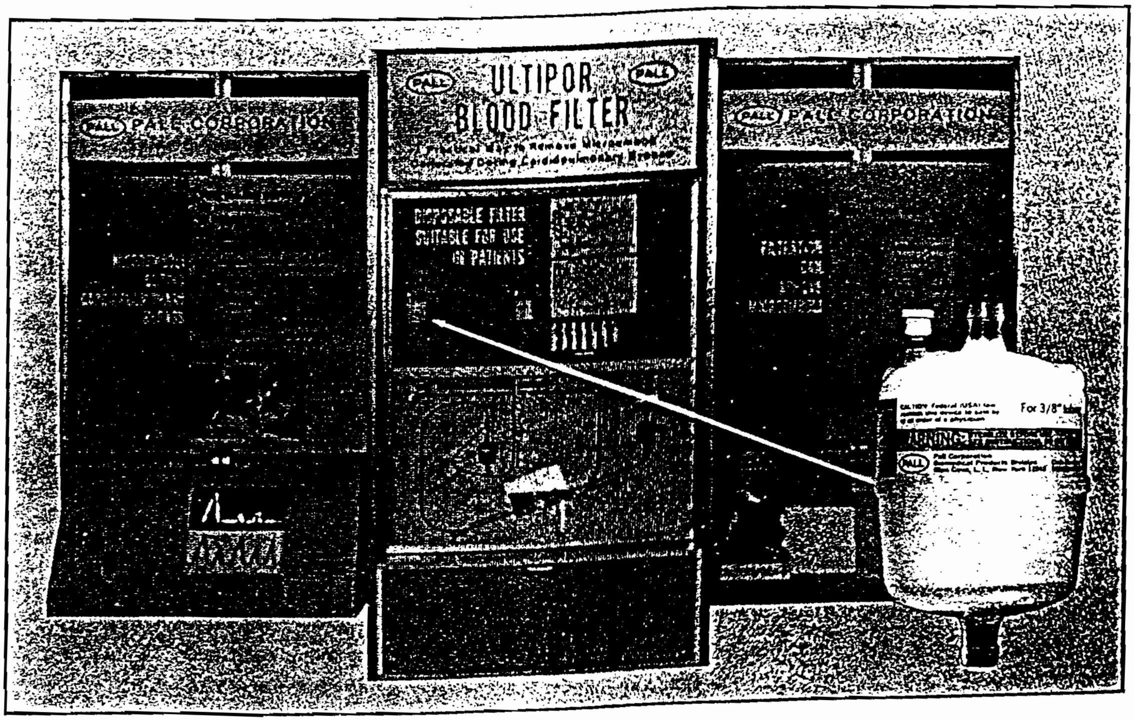
Ten Year Financial Summary

for the years ended July 31

	1971	1970	1969
Net Sales	**$24,549,000**	$26,716,000	$26,229,000
Earnings Before Taxes and Extraordinary Charges-Credits	**559,000**	454,000	876,000
Earnings Before Extraordinary Charges-Credits*	**294,000**	229,000	406,000
Depreciation and Amortization	**999,000**	951,000	926,000
Cash Provided from Operations	**1,293,000**	1,180,000	1,332,000
Working Capital	**11,360,000**	11,216,000	11,292,000
Total Assets	**27,762,000**	28,520,000	26,021,000
Gross Investment in Plant and Equipment	**13,941,000**	13,785,000	12,841,000
Long-Term Debt	**6,674,000**	6,954,000	6,806,000
Stockholders' Equity	**12,070,000**	12,071,000	12,115,000
Average Shares Outstanding	**1,101,000**	1,098,000	1,062,000
Earnings Before Extraordinary Charges-Credits Per Share	$ **0.27**	$ 0.21	$ 0.38
Dividends Per Class A Share	—	0.24	0.32
Stockholders' Equity Per Share	**10.96**	10.99	11.41
Gross Assets Per Share	**25.22**	25.96	24.51

*Before extraordinary charges-credits: 1971, charge of $342,544; 1970, charge of $112,478; 1968, credit of $45,617; 1966, credit of $75,122; 1965, charge of $362,262; 1964, credit of $734,592.

Note 1: Outstanding shares and per share figures are adjusted to reflect the three-for-two stock split which took place in December 1963.

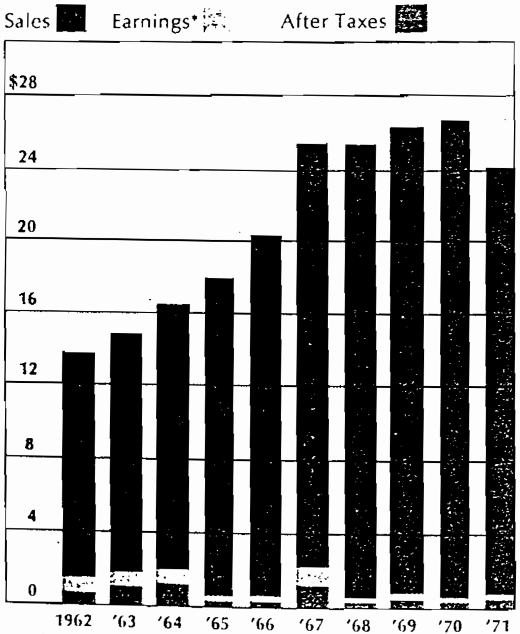


The photo shows our traveling scientific exhibit demonstrating the functions and benefits of the Pall extracorporeal blood filter. It has been enthusiastically received at key medical symposia. The exhibit was prepared under the direction of Russel H. Patterson, Jr., M.D., Chief of Neurosurgery, New York Hospital—Professor of Neurosurgery, Cornell Medical Center, New York.

1968	1967	1966	1965	1964	1963	1962
$25,221,000	$25,378,000	$20,096,000	$17,991,000	$16,040,000	$14,819,000	$13,542,000
532,000	2,182,000	551,000	491,000	1,984,000	1,752,000	1,429,000
234,000	1,077,000	175,000	203,000	1,004,000	807,000	649,000
909,000	846,000	768,000	737,000	717,000	561,000	297,000
1,143,000	1,923,000	943,000	940,000	1,721,000	1,368,000	946,000
11,803,000	8,874,000	7,587,000	6,329,000	6,174,000	6,287,000	3,069,000
24,461,000	24,779,000	21,717,000	20,215,000	18,544,000	16,096,000	12,333,000
11,398,000	10,838,000	9,901,000	9,547,000	7,655,000	7,176,000	4,926,000
8,412,000	5,673,000	5,860,000	4,302,000	4,092,000	4,535,000	2,258,000
10,553,000	10,183,000	9,175,000	9,337,000	9,668,000	7,978,000	5,325,000
1,014,000	937,000	936,000	934,000	933,000	847,000	833,000
$ 0.23	$ 1.15	$ 0.19	$ 0.22	$ 1.08	$ 0.95	$ 0.78
0.32	0.32	0.32	0.32	0.307	0.267	0.233
10.40	10.86	9.81	10.00	10.36	9.42	6.40
24.11	26.43	23.21	21.65	19.87	19.00	14.81

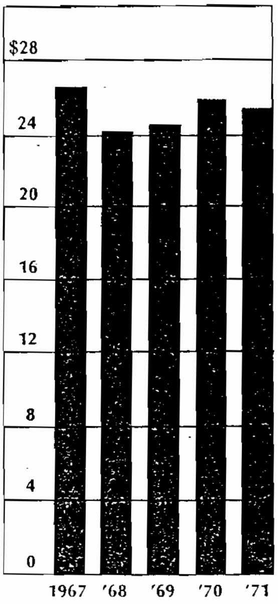
Note 2: The operations and position of Integral Motor Pump Division, Pall Trinity Micro Corporation, Robil Wire & Cable Corp. and Russell Associates, Inc. are included on the basis of a pooling of interests starting two years prior to the dates of acquisition. Integral was acquired in September 1963, Pall Trinity Micro was acquired in May 1961, Robil was acquired in July 1967 and Russell was acquired in June 1969. The operations of Fibrous Glass Products, Inc., whose assets and business were sold in July 1964, are excluded for a period starting two years before disposition.

Sales and Earnings
(in millions)

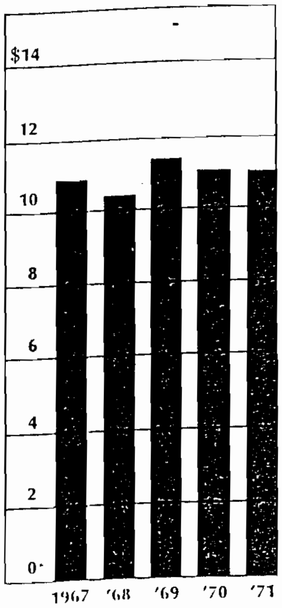


*Before extraordinary charges-credits.

Gross Assets Per Share



Book Value Per Share



Consolidated Statements of Earnings

for the years ended July 31

	1971	1970
Net sales	$24,548,638	$26,715,568
Cost of sales	15,757,375	17,623,098
Gross profit on sales	8,791,263	9,092,470
Selling, general and administrative expenses	8,260,083	8,660,898
Earnings from operations	531,180	431,572
Miscellaneous income	27,373	22,203
Earnings before provision for federal and state income taxes	558,553	453,775
Provision for federal and state income taxes	264,156	224,874
Earnings before extraordinary charges	294,397	228,901
Extraordinary charges	(342,544)	(112,478)
Earnings (loss)	$ (48,147)	$ 116,423
Earnings (loss) per share*:		
Earnings before extraordinary charges	$ 0.27	$ 0.21
Extraordinary charges	(0.31)	(0.10)
Earnings (loss)	$ (0.04)	$ 0.11

Depreciation and amortization charges included in Cost of sales and Selling, general and administrative expenses amounted to $998,668 and $950,998 for the years ended July 31, 1971 and 1970, respectively.

*Earnings per share are based on the average aggregate number of shares of Class A Stock and Class B Stock outstanding during the period. Exercise of outstanding options and conversion of the Company's convertible debt would not result in any material dilution.

Consolidated Statements of Capital in Excess of Par Value

for the years ended July 31

	1971	1970
Balance, beginning of fiscal year	$ 5,455,255	$ 5,390,785
Add:		
Issuance of 2,150 shares of Class A Stock in 1971 and 1,140 shares in 1970 pursuant to stock options	25,542	13,474
Conversion of $19,000 and $59,000, respectively, of 6¼% convertible subordinated debentures into 950 and 2,950 shares, respectively, of Class A Stock net of related unamortized debenture expense	18,050	50,996
Capital in excess of par value at end of fiscal year	$ 5,498,847	$ 5,455,255

The comments contained in the accompanying Notes to Consolidated Financial Statements are an integral part of these statements and should be read in conjunction herewith.

Consolidated Statements of Retained Earnings

for the years ended July 31

	1971	1970
Balance, beginning of fiscal year	$5,515,843	$5,627,963
Add: Earnings (loss) for the year ended July 31	(48,147)	116,423
	5,467,696	5,744,386
Deduct:		
Cash dividends—Class A and Class B Stock	—	228,543
Retained earnings at end of fiscal year	$5,467,696	$5,515,843

Consolidated Statements of Changes in Financial Position

for the years ended July 31

	1971	1970
Sources of Working Capital:		
Operations:		
Earnings before extraordinary charges	$ 294,397	$ 228,901
Depreciation and amortization	998,668	950,998
Deferred income taxes	27,212	35,835
Working capital provided from operations, exclusive of extraordinary charges	1,320,277	1,215,734
Extraordinary charges	(342,544)	(112,478)
Cost of non-current investment sold	113,500	—
Working capital provided from operations	1,091,233	1,103,256
Increase in long-term debt	360,000	955,500
Disposals of fixed assets	543,283	70,603
Proceeds of capitalized leases	33,295	87,463
Reduction in other assets, etc.	15,459	6,489
Issuance of stock pursuant to stock options	27,692	14,614
Issuance of stock upon conversion of debentures	19,000	59,000
Working capital provided	2,089,962	2,296,925
Use of Working Capital:		
Acquisitions of fixed assets	1,304,932	1,337,836
Reduction of long-term debt	621,728	747,599
Reduction of debt upon conversion of debentures	19,000	59,000
Cash dividends	—	228,543
Working capital used	1,945,660	2,372,978
Increase (Decrease) in Working Capital	$ 144,302	$ (76,053)
Changes in Working Capital by Element:		
Increase (decrease) in:		
Cash	$ 44,565	$ 37,195
Accounts receivable	(542,014)	807,681
Other receivables and advances	176,168	(25,932)
Prepaid expenses	(47,745)	47,803
Merchandise inventory	(15,426)	1,335,392
Decrease (increase) in:		
Notes payable	570,933	(2,283,648)
Accounts payable	60,821	(291,642)
Accrued expenses, taxes and sundry liabilities	(267,335)	23,075
Federal and state income taxes payable	(24,013)	222,188
Current portion of long-term debt	188,348	51,835
Increase (Decrease) in Working Capital	$ 144,302	$ (76,053)

Consolidated Balance Sheets
as of July 31

Assets	1971	1970
Current Assets:		
Cash	$ 736,778	$ 692,213
Accounts receivable, net of estimated uncollectibles of $86,342 at July 31, 1971 and $98,771 at July 31, 1970	5,748,089	6,290,103
Other receivables and advances	309,657	133,489
Prepaid expenses	169,172	216,917
Merchandise inventory	11,668,676	11,684,102
Total Current Assets	18,632,372	19,016,824
Fixed Assets—at Cost:		
Land	330,730	286,728
Buildings, machinery, equipment, etc. (less accumulated depreciation of $5,436,940 and $5,053,401, respectively)	8,173,601	8,445,058
Total Fixed Assets	8,504,331	8,731,786
Other Assets:		
Investments and receivables—long-term	30,963	145,817
Deferred charges, deposits, etc.	244,896	266,387
Intangibles (less accumulated amortization of $257,114 and $247,550, respectively)	349,245	358,809
Total Other Assets	625,104	771,013
Total	$27,761,807	$28,519,623

Notes to Consolidated Financial Statements
July 31, 1971

The financial statements as at and for the year ended July 31, 1970 are included for comparative purposes only. Reference should be made to the Company's previously issued annual report for the Auditor's Opinion and notes pertaining to those financial statements.

Note 1—Consolidation of Statements The statements of Pall Corporation are presented in consolidation with its subsidiaries, all wholly-owned. Intercompany transactions and unrealized profits in inventories have been eliminated.

The Consolidated Balance Sheet at July 31, 1971 includes the following United States dollar amounts in respect of the consolidated foreign subsidiaries:

Current assets	$5,427,722
Net fixed assets	2,612,062
Intangibles and other assets	72,479
Current liabilities	2,227,627
Long-term debt	513,600
Capitalized lease obligations	1,327,805
Unrealized gain on foreign exchange	79,907

Foreign currency amounts have been translated into United States dollars on bases which conform to accepted accounting practice. Assets and liabilities (with the exception of fixed assets, which were translated at exchange rates in effect at dates of acquisition)

Liabilities and Stockholders' Equity	1971	1970
Current Liabilities:		
Notes payable	$ 3,096,399	$ 3,667,332
Accounts payable	1,804,841	1,865,662
Accrued expenses, taxes and sundry liabilities	1,555,605	1,288,270
Federal and state income taxes payable	219,879	195,866
Current portion of long-term debt	595,452	783,800
Total Current Liabilities	7,272,176	7,800,930
Long-Term Debt	6,673,754	6,954,482
Other:		
Capitalized lease obligations	1,327,805	1,294,510
Deferred income taxes	338,344	311,132
Unrealized gain on foreign exchange	79,907	87,293
Stockholders' Equity:		
Class A Stock, par value $1.00 per share, 1,700,000 shares authorized, 982,180 and 969,335 shares, respectively, issued and outstanding	982,180	969,335
Class B Stock, par value $1.00 per share, 121,098 and 130,843 shares, respectively, authorized, issued and outstanding	121,098	130,843
Capital in excess of par value	5,498,847	5,455,255
Retained earnings	5,467,696	5,515,843
Total Stockholders' Equity	12,069,821	12,071,276
Total	$27,761,807	$28,519,623

The comments contained in the accompanying Notes to Consolidated Financial Statements are an integral part of these statements and should be read in conjunction herewith.

were translated at exchange rates in effect at July 31, 1971 which were $2.40 to the pound sterling, $0.98 to the Canadian dollar, $0.275 to the Deutschemark and $0.08 to the Mexican peso. Income and expense items were translated at average foreign exchange rates in effect during the year. Unrealized gain on foreign exchange of $79,907 has been deferred in the accompanying balance sheet.

Note 2—Extraordinary Charges Extraordinary charges are summarized as follows:

Costs incurred in connection with relocating the Company's principal aircraft filter manufacturing operation from Glen Cove, New York to St. Petersburg, Florida, net of tax effect of $322,000	$(353,000)
Gain on sale of investment, net of tax effect of $29,140	49,353
Loss on sale of realty, net of tax effect of $19,805	(38,897)
Net extraordinary charge	$(342,544)

Note 3—Cost of Investment in Subsidiaries in Excess of Net Tangible Assets at Date of Acquisition Intangible assets include unamortized cost of investment in Die-Draulic, Inc. of $284,692 at July 31, 1971. This represents the difference between the purchase

price and the Company's equity in the underlying net tangible assets at the date of acquisition, and is not being amortized, since in the opinion of management there has been no diminution in its value.

Note 4—Inventory Inventory was generally priced at the lower of cost (on the first-in first-out basis) or market. Raw materials, including materials entering into work in process and finished goods, were priced on the basis of average cost. Charges for labor and overhead included in finished goods are based mainly on cost.

Closing and opening inventories used in the computation of cost of sales for the year ended July 31, 1971 are as follows:

	July 31 1971	July 31 1970
Raw materials and components	$ 5,916,141	$ 6,059,671
Work in process	2,780,265	2,816,216
Finished goods	2,972,270	2,808,215
TOTAL	$11,668,676	$11,684,102

Note 5—Fixed Assets The amounts at which fixed assets are stated in the Consolidated Balance Sheet represent cost, after accumulated depreciation. Provisions for depreciation of property have been calculated approximately as follows: buildings—25 to 50 years, chiefly declining balance; machinery, equipment and furniture—5 to 10 years, chiefly straight-line; and transportation equipment—3 to 5 years, chiefly declining balance.

The fixed assets and respective accumulations of depreciation are as follows:

	Cost	Accumulated Depreciation	Net
Machinery, equipment and improvements	$ 7,326,702	$3,813,627	$3,513,075
Office furniture and fixtures	816,356	417,678	398,678
Transportation equipment	201,620	72,663	128,957
Buildings (1)	5,265,863	1,132,972	4,132,891
Land	330,730	—	330,730
TOTAL	$13,941,271	$5,436,940	$8,504,331

(1) Includes real estate with a book value of approximately $1,336,000 at July 31, 1971 utilized pursuant to capitalized lease obligations (see Note 7).

Note 6—Long-Term Debt

	Due Within One Year	Due After One Year
6⅜% Promissory Note due as follows: $66,500 on May 1, 1972 and on each May 1 thereafter to and including May 1, 1974; and $428,500 on May 1, 1975. The note agreement requires the Company to maintain consolidated working capital (as defined) at not less than $10,350,000 ($10,750,000 after July 31, 1972), and places certain restrictions on the creation of additional indebtedness and on various other corporate actions, including the payment of dividends. At July 31, 1971 the amount of consolidated retained earnings subject to restriction was $5,326,539 and consolidated working capital as defined was $10,869,041	$ 66,500	$ 561,500
5⅞% Promissory Note due in annual installments of $100,000 to November 1, 1977. The note agreement places certain restrictions on corporate actions identical with those imposed under the 6⅜% note	100,000	600,000
6¼% Convertible Subordinated Debentures due June 1, 1983. The indenture issued during 1968 requires the Company to redeem annually on June 1 in each of the years 1976 to 1982 inclusive, one-ninth of the Debentures outstanding on March 31, 1976, and places certain restrictions on the creation of additional indebtedness and on various other corporate actions, including the payment of dividends. At July 31, 1971 the amount of consolidated retained earnings subject to restriction pursuant to the indenture was $5,138,368. The Debentures are convertible into Class A Stock at a price of $20.00 per share. Accordingly, 125,100 shares of Class A Stock were reserved for this purpose at July 31, 1971	—	2,502,000
5⅛% Subordinated Convertible Note dated November 30, 1961 due in semi-annual installments of $50,000. The unpaid balance will be due on December 1, 1976. The note is subordinated to the 6⅜% Promissory Note and bears certain restrictions. The note		

agreement provides for the conversion of the note into Class A Stock at a price of $37.55 per share, subject to adjustment in certain circumstances. Accordingly, 14,648 shares of Class A Stock were reserved for this purpose at July 31, 1971	100,000	450,000
Note payable (interest at ¾% above prime rate) in quarterly installments of $50,000 to January 1, 1975 with balance of $800,000 due April 1, 1975. The note agreement places certain restrictions on corporate actions similar to those imposed under the 6⅜% note	200,000	1,300,000
Mortgages payable at interest rates from 3% to 8½% are liens on land, buildings and equipment having a net book value of $1,457,329 at July 31, 1971	128,952	900,254
Term loan (interest at 1½% over First National City Bank, London base rate) due $180,000 on December 31, 1973 and $180,000 on December 31, 1974	—	360,000
TOTAL	$595,452	$6,673,754

Note 7—Capitalized Lease Obligations During the year ended July 31, 1967 the Company sold its plant at Portsmouth, England. This property was then leased back from the purchaser for ninety-nine years. Under the provisions of the lease, the Company is to pay a basic annual rental of $45,748, and is to pay all expenses relating to the property. The basic rent may be increased in the fourteenth year under certain conditions.

At July 31, 1971 the Company had completed construction of an extension to the above mentioned plant. The costs incurred for this construction amounted to $833,919. Under the terms of an agreement entered into for the purposes of financing this construction, the Company had received $833,919 in construction loans. The basic annual rental for the plant addition is approximately $79,000.

For accounting purposes, the Company has treated these transactions as financing arrangements and has reflected the sales price net of the amortization portion of payments made as a liability. Depreciation on the Company's leasehold interest in the property has been provided for based on its estimated useful life.

Note 8—Convertibility of Stock Since December 2, 1958 shares of Class B Stock have been convertible, at the option of the holders thereof, into Class A Stock on a share-for-share basis. Accordingly 121,098 shares of Class A Stock were reserved for this purpose. During the year ended July 31, 1971, 9,745 shares of Class B Stock were converted into Class A Stock.

Note 9—Dividends Under a provision of the certificate of incorporation as amended: (i) no dividend shall be declared or paid on either class of stock unless at the same time a dividend is declared or paid (as the case may be) on the other class of stock, and (ii) any cash dividend declared on Class B Stock shall be in an amount per share equal to 1% of the amount per share of the dividend then being declared or paid on the Class A Stock. No dividends have been declared or paid during the year ended July 31, 1971.

Note 10—Contingencies and Commitments Pall Corporation and its subsidiaries may be subject to renegotiation of government contracts and subcontracts performed since August 1, 1956. With respect to all periods up to July 31, 1970, the Renegotiation Board has stated its intention not to take any action in the absence of unusual circumstances or subsequent indications of excess profits. In view thereof, no provisions have been made for this contingency for any past years, nor for the current year, since no precedent is available. In the opinion of management, operating results reported upon would not be materially affected.

The Company and its subsidiaries lease certain facilities (other than facilities covered under capitalized leases; see note 7) under long-term leases expiring up to 15 years after July 31, 1971 and annual rentals under such leases amount to approximately $79,000. Total rental commitments under these leases aggregate approximately $444,000.

The Company is contingently liable on a $200,000 note which it received upon the sale of an investment (see Note 2) and which was discounted.

Note 11—Stock Option Plan The Pall Corporation 1966 Qualified Stock Option Plan was approved by stockholders at the annual meeting held in November 1966 and provides for the issuance of a maximum of 45,000 shares of the Company's Class A Stock to certain officers and employees of the Company and its subsidiaries.

The balance of unexercised optioned stock as at July 31, 1971 was as follows:

Date Granted	No. of Shares	Option Price Per Share	Option Price Total
Sept. 9, 1966	19,170	$12.88	$246,910
Oct. 11, 1966 to Sept. 23, 1969	2,700	$12.19-$16.69 range	$ 40,937

All options expire five years from the date of grant and are exercisable in equal annual increments over that period. Options exercisable at July 31, 1971 were for 20,510 shares.

Options for 19,170 shares, exercisable at $12.88 per share, expired on September 9, 1971.

Options exercised during the year ended July 31, 1971 are summarized below:

Number of shares	2,150
Option Prices:	
Per Share	$12.88
Total	$27,692

The Company makes no charge against income with respect to options.

Note 12—Pension and Profit Sharing Plans The total cost of Pension and Profit Sharing Plans in effect for the year ended July 31, 1971 was $232,269. Aggregate amounts in pension and retirement funds exceeded the actuarially computed value of vested benefits at July 31, 1971. The aggregate liability for unfunded past service costs under the Pension Plan is estimated to be $87,974 at July 31, 1971. Past service costs are being funded over a 30 year period.

Note 13—Deferred Income Taxes Deferred income taxes result principally from the use, for tax purposes only, of an accelerated depreciation method.

Note 14—Interest Expense Interest expense amounted to $841,823 and $837,775 for the fiscal years ended July 31, 1971 and 1970, respectively.

Auditor's Opinion

JONICK, ROBBINS, GREENE & SOSNOFF
CERTIFIED PUBLIC ACCOUNTANTS
521 Fifth Avenue, New York, N.Y. 10017

Board of Directors,
PALL CORPORATION
30 Sea Cliff Avenue
Glen Cove, New York

We have examined the consolidated balance sheet of Pall Corporation and its subsidiaries as at July 31, 1971 and the related consolidated statements of earnings, retained earnings, capital in excess of par value, and changes in financial position, for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the above-mentioned financial statements present fairly the financial position of Pall Corporation and its subsidiaries as at July 31, 1971 and the results of operations and changes in financial position for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

New York, New York
October 1, 1971

Jonick, Robbins, Greene & Sosnoff

Officers

Dr. David B. Pall
Chairman of the Board
Abraham Krasnoff
President
Chesterfield F. Seibert
Senior Vice President
Sidney Krakauer
Vice President
Nicholas Nickolaus
Vice President
Henry Petronis
Vice President
Maurice G. Hardy
Director of European Operations
Stanley Wernick
Treasurer-Secretary
Donald M. Harris
Assistant Secretary

Directors

Dr. David B. Pall
Chairman
Abraham Appel
Albert H. Haas
Donald M. Harris
Abraham Krasnoff
Jerome S. Stillman
Alan B. Slifka

Corporate Headquarters

Glen Cove, New York 11542
Tel. 516 671-4000
TWX 510 223-0606
Telex 01-26329

Principal Plants

Glen Cove and Cortland, New York,
St. Petersburg, Florida,
South El Monte, California,
Grand Rapids, Michigan, Putnam,
Connecticut, Montreal, Canada,
Portsmouth, England, Mexico, D.F.,
Frankfurt, Germany

General Counsel

Carter, Ledyard & Milburn
New York, N.Y.
McKenna & Co.
London, England

Patent Counsel

Janes & Chapman
New York, N.Y.

Government Contract Counsel

Gilinsky, Stillman & Mishkin
New York, N.Y.

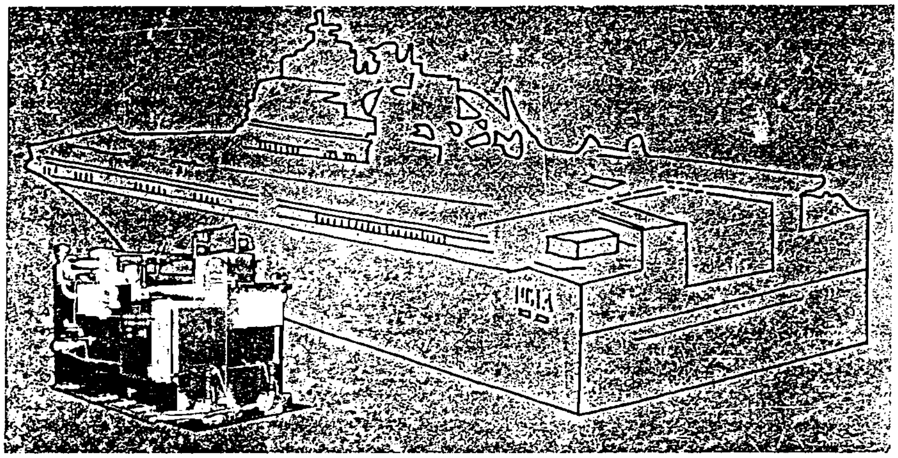
Auditors

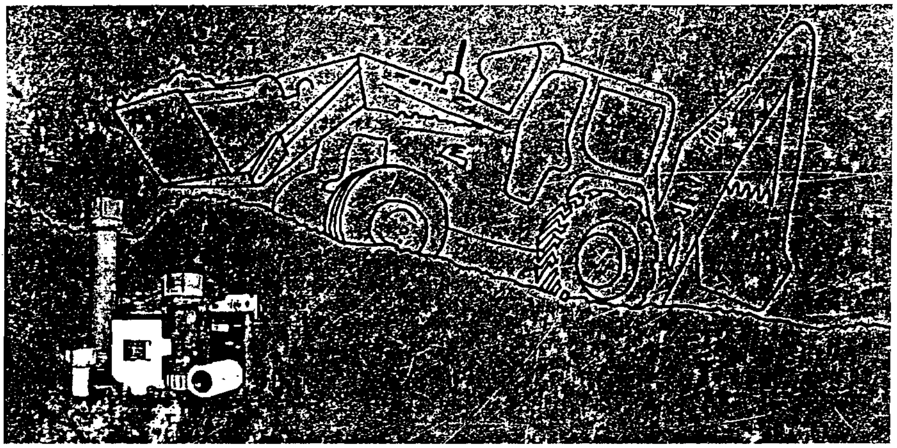
Jonick, Robbins, Greene & Sosnoff
New York, N.Y.

Registrar and Transfer Agent

Franklin National Bank
Corporate Trust Department
95 Wall St., New York, N.Y. 10005

PALL CORPORATION Glen Cove, Long Island, New York 11542





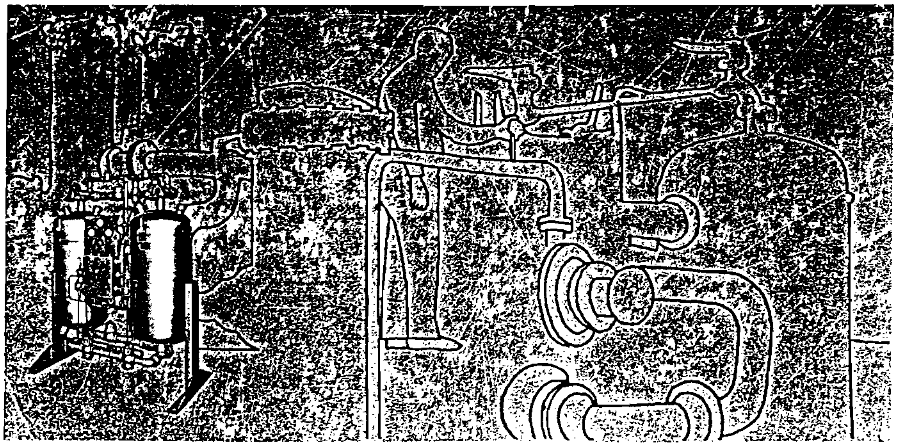


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EXHIBIT
O

In re: Pall Corporation)
30 Sea Cliff Avenue)
Glen Cove, NY)
DEC Site No. 13053B)

AFFIDAVIT OF ROGELIO A. PESSINA

Rogelio A. Pessina, being duly sworn, deposes and says:

1. My name is Rogelio A. Pessina. I am also referred to as Roger. I am Staff Chemist/Scientist in one of three research and development laboratories presently operated by Pall Corporation at the 30 Sea Cliff Avenue facility in Glen Cove, New York. I also work in the equipment calibration laboratory at Pall Corporation's facility in East Hills, New York. I have been employed in Pall Corporation's research laboratories for over 38 years. I have a degree in Chemistry from the National University in Rosario, Argentina. The matters discussed below are based on first hand, personal knowledge and are to the best of my recollection.

2. I came to Pall Corporation in 1958. At the time, there was one medium size laboratory which employed four people at the 30 Sea Cliff Avenue facility. In the early years, research and development at Pall Corporation focused on porous metals an RIGIMESH. Later, in and around 1959, our efforts began to include identifying fibers and other materials that potentially could be used as filter medium. We would develop the medium and then test its strength, integrity and removal efficiency under conditions simulating the intended end use. Among the materials we evaluated were various glass fibers, clay, potassium titanate, cellulosic

fibers, asbestos fibers and nylon membranes. We also researched adhesives, like phenolic, epoxy resin and latex, for use in bonding fibers and filters parts.

3. In 1967, a second laboratory was created which employed 2 persons. I was working in this lab. This second laboratory basically took over the research and development function described above, identifying fibers that had potential use as filtration media, developing the media and then testing its utility. The first laboratory became more of a testing or demonstration laboratory where prototype filters and filtration systems were developed and evaluated. This performance testing always had been conducted in the first laboratory but with the creation of the second laboratory and the transfer of certain functions to it, performance testing became a larger part of what the first laboratory did.

4. To a large extent, filters produced by Pall Corporation in the late 1950s and early 1960s were used in the aerospace industry and were designed for the filtration of fuels and oils, particularly hydraulic oil. As such, we used a large volume of Mil-H-5606 hydraulic oil in the laboratory to simulate actual conditions. Following a test involving hydraulic oil, metal components and parts would be degreased by dipping them into a tote box containing a cleaning solution. We used petroleum ether for this purpose. Chlorinated solvents were not used.

5. Waste petroleum ether was placed in 5 or 10-gallon safety cans located in the laboratory. These cans were shaped like milk cans, colored red, and marked as "waste" petroleum ether. They had a number of special safety features, including a spring loaded top that caused the top to keep closed, and an airtight seal on and around the opening at the top so no vapors would escape when the container was closed.

6. No chlorinated solvents were used in the first laboratory. Small amounts of

tetrachloroethylene (PCE) and trichloroethylene (TCE) were used in the second laboratory, which again, came on line in 1967. At this time, Pall Corporation was evaluating hydrophobic filter media. TCE or PCE were used to dissolve or dilute a RTV silicone base to make a solution. The filter media, which was hydrophilic, would be dipped into the solution to produce a hydrophobic filter media. In researching this process we used small quantities of PCE or TCE on the scale of 400 milliliters per solution. Once the process was ready to be used on a production scale, it was assigned to PallFlex, a subsidiary of Pall Corporation in Connecticut.

7. Waste TCE and PCE was generated in researching the hydrophobic process when not all of the mixture of solvent and RTV silicone was absorbed into the filter media or when the RTV silicone and solvent were not mixed in the correct proportions. This waste was place into 5-gallon, red safety cans in the second laboratory. Waste solvents were not poured down the sink. Indeed, everyone knew that the waste cans were for the waste solvents and I have a vivid recollection of stopping and reprimanding one new employee who on one occasion was about to pour petroleum ether into the sink.

8. Whenever a waste can in the laboratory can became full we would call a porter who would remove the can and replace it with an empty can. It is my understanding that the porter would take the full waste can to the storage area at the back of the 30 Sea Cliff building and empty the contents into 55-gallon drums. These drums were taken away by a vendor.

9. During the 38 years I have been at Pall Corporation I have never seen anyone dispose of chemical wastes in the yard, nor have I ever heard of this being done. From very early on, Pall Corporation had a system for handling waste chemicals involving the use of safety cans. Failing to follow that system would have violated the company's procedures.

10. During the 38 years I have been with Pall Corporation I have never seen persons pouring solvents down a sink for disposal, other than that one time noted above involving a new employee. We did put small amounts of inorganics in the sink such as dilute nitric acid or sodium hydroxide, but the company had a system for handling waste solvents and we were supposed to follow it. As far as I know, we did.

Rogelio A. Pessina

Rogelio A. Pessina

STATE OF NEW YORK

COUNTY OF Nassau

I, the undersigned, a Notary Public in and for the said State and County, do hereby certify that personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal this the 20th day of January, 1997

1997.

LAURIE E. STRAND
NOTARY PUBLIC, State of New York
No. 5000488
Qualified in Nassau County
Commission Expires 8/17/19 98

Laurie E. Strand

Notary Public

My Commission Expires: 8/17/98

EXHIBIT

P

In re: Pall Corporation)
30 Sea Cliff Avenue)
Glen Cove, NY)
DEC Site No. 13053B)

AFFIDAVIT OF DAVID CARSON

David Carson, being duly sworn, deposes and says:

1. My name is David Carson. I am a Staff Scientist at Pall Corporation. My work address is 25 Harbor Park Drive, Port Washington, NY 11050. I have worked for Pall Corporation for 38 years and have first hand, personal knowledge of the matters discussed below.

2. I went to work for Pall Corporation in April 1958. I was hired as a laboratory technician and later became the Assistant Laboratory Manager. I worked in the research and development laboratory located at 30 Sea Cliff Avenue in Glen, Cove New York. At the time this laboratory was the only research and development laboratory at the 30 Sea Cliff facility. In or around 1968 a second laboratory was set up at the 30 Sea Cliff facility; however, I worked exclusively in the first laboratory.

3. The first laboratory was essentially a test lab where the characteristics of filter media, filter elements and prototype filtration systems were tested for internal review or to demonstrate the performance of a product or potential product for a customer or potential customer. One test we used measured the particle removal efficiency of a filter. This test was conducted by adding a known amount of "AC" fine test dust to Mil-H-5606 hydraulic oil. The hydraulic oil was then run through a hydraulic test stand incorporating the filter being evaluated.

The amount of dust removed was determined in accordance with our test procedures or customer specifications. We also performed a variation of this test in which we would run Mil-H-5606 hydraulic oil through a flat sheet of media to determine the removal efficiency of the media itself.

4. We also performed bubble point tests. In this test filter elements or media were emersed in a solution of Solox 190 (ethyl alcohol) or isopropyl alcohol. We then applied pressure from the bottom side and identified the first point a bubble appeared. This test would tell us the largest pore in the filter media. Pore size is an indicator of filter efficiency.

5. Following tests involving hydraulic oil, the metal filters, elements and parts would have to be degreased. To do this degreasing we immersed the article into a tub or tote box containing petroleum ether. No other solvent was used for this purpose.

6. Contaminated petroleum ether was always placed in 5 or 10 gallon red safety cans that were placed in the lab. These cans looked like milk cans, had a handle on one side and were spring loaded so that the top could not become dislodged without locking the cover in the open position. The tops also were sealed to make them vapor tight.

7. Whenever a safety can became full we contacted a porter. The porter would come to the lab and take the can. As I understand it, the porter would bring the safety can to the storage shed behind the 30 Sea Cliff Avenue building where the contents were transferred into 55 gallon drums. A clean safety can was either brought at the time the porter came to pick up the full one or shortly thereafter.

8. Petroleum ether was never poured down a sink in the laboratory. We did, on occasion, pour dilute nitric acid down the sink. Nitric acid was used to remove resin from filter

elements.

9. For a time, our laboratory also used small ultrasonic cleaners to degrease metal parts. We used varsol as the bath liquid. As with the petroleum ether, spent varsol was placed in safety cans and later transferred to 55 gallon drums.

10. The major chemicals used in our laboratory were Mil-H-5606 hydraulic oil, alcohols and petroleum ether.

11. At no time did I observe anyone pour any solvent down any sink at Pall Corporation or in the yard. Nor did I see or hear about any person pouring waste chemicals out in this fashion.

David Carson

David Carson

STATE OF NEW YORK

COUNTY OF Nassau

I, the undersigned, a Notary Public in and for the said State and County, do hereby certify that personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal this the 26th day of November, 1996.

Notary Public

My Commission Expires:

MICHAEL J. FORZANO
Attorney And Counselor At Law, State of New York
Notary Public No. 4844675
Qualified in Nassau County
Commission Expires October 31, 1997

EXHIBIT

Q

In re: Pall Corporation)
30 Sea Cliff Avenue)
Glen Cove, NY)
DEC Site No. 13053B)

AFFIDAVIT OF ZOLTAN DOMAN

Zoltan Doman, being duly sworn, deposes and says:

1. My name is Zoltan Doman. I am a former officer of Pall Corporation, having worked there for 34 years. Although officially retired, I continue to provide consulting services to Pall Corporation and am in my office at 30 Sea Cliff Avenue, Glen Cove, New York at least 2 days a week. I have first hand, personal knowledge of the matters discussed below.

2. I was hired by Pall Corporation in 1959 after escaping from Hungary on foot with my wife and two children following the uprising against the Hungarian Communist Government. Before this time, I had been a researcher and teacher of mechanical engineering at the State University in Budapest.

3. My first position with the Pall Corporation was in the Mechanical Lab as a research engineer. In 1962 or 1963, I became the director of the Mechanical Lab for Corporate Research and Development.

4. The Mechanical Lab was located in the Pall Building, the larger of the two buildings located at 30 Sea Cliff Avenue in Glen Cove. There were three people in the laboratory not including myself -- a machinist and two technicians. It was our job to design, engineer and manufacture prototype filters, filtration systems, machines and products. We

would also test these prototype products to determine their suitability for the intended use. We did not engage in production and were strictly a research and development activity.

5. The Mechanical Lab had a variety of equipment which we used in our research and development activities. We had a small machine shop consisting of a lathe, milling machine, drill press, and grinders to develop prototype filters and make small parts. We also had a variety of testing or simulation equipment which we used to evaluate prototype filters and filtration systems. We designed and manufactured most of this testing equipment ourselves. Thus, not only did we design and manufacture the prototype products being tested, but we also designed and manufactured the means to test them.

6. The Mechanical Lab had a number of test stands where a variety of tests would be performed. For example, at one test stand we would determine the flow rate and removal efficiency of a filter element or filter. We also could determine the level of pressure a system or filter could withstand. We also had electronic vibrators to simulate the vibration level that would be encountered in the intended application, such as on a airplane or rocket. Using these tests we could evaluate the integrity of our filters given the stresses likely to be encountered.

7. Behind the Glen Components building, the building now owned by August Thomsen, we had a very large test stand. We used this test stand to test large fluid-water separators. The test stand was a closed system and the JP-4 fuel we used in the test was cycled through the prototype filters and then back into a holding tank. This test stand allowed us to determine removal efficiency, flow rates and other characteristics of the filters being tested, but was only used for a short time.

9. With exception of freon, chlorinated solvents were not used in the Mechanical

Lab. Freon was placed in stationary tanks in the laboratory and parts that needed to be degreased were either dipped into the tank or rags were partially soaked and used to degrease the part or component requiring cleaning. Waste freon was disposed of in safety cans located in the laboratory and removed by porters when full.

10. During the entire time I was at Pall Corporation, I never saw anyone dump chlorinated solvents down a drain or in the yard. Nor did I ever hear of anyone doing so.

Zoltan Doman

Zoltan Doman

STATE OF NEW YORK

COUNTY OF Nassau

I, the undersigned, a Notary Public in and for the said State and County, do hereby certify that personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal this the 25th day of November, 1996.

Maryann L Holthausen

Notary Public

My Commission Expires:

8/17/98

(NOTARIAL SEAL OR STAMP)

MARYANN L HOLTHAUSEN
Notary Public, State of New York
No. 5000571
Qualified in Nassau County
Commission Expires 8/17/19 98

#2

EXHIBIT

R

FEBRUARY, 1992

Pall Corporation
Soil and Groundwater
Laboratory Results

H2M LABS, INC.

575 Broad Hollow Road, Melville, N Y 1174
(516) 694-3040 FAX (516) 694-4122

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2P

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 008

Matrix: (soil/water) SOIL Lab Sample ID: 9202513

Sample wt/vol: 5.100 (g/mL) G Lab File ID: P8039

Level: (low/med) LOW Date Received: 1/23/92

% Moisture: not dec. 13. Date Analyzed: 1/23/92

Column: (pack/cap) CAP Dilution Factor: .98

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	6.	U
67-64-1	Acetone	30.	
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-4122

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW2P

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 008

Matrix: (soil/water) SOIL Lab Sample ID: 9202513

Sample wt/vol: 5.100 (g/mL) G Lab File ID: P8038

Level: (low/med) LOW Date Received: 1/23/92

% Moisture: not dec. 13. Date Analyzed: 1/23/92

Column: (pack/cap) CAP Dilution Factor: .98

CONCENTRATION UNITS:
Number TICs found: 1 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	9.71	8.	J
2.				
3.				
4.				
5.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

MW3P24

Lab Name: H2M
Contract: NYSDEC

Lab Code: H2M
Case No.: CRO
SAS No.:
SDG No.: 008

Matrix: (soil/water) SOIL
Lab Sample ID: 9202266

Sample wt/vol: 4.300 (g/mL) G
Lab File ID: P8033

Level: (low/med) LOW
Date Received: 1/22/92

% Moisture: not dec. 22.
Date Analyzed: 1/23/92

Column: (pack/cap) CAP
Dilution Factor: 1.15

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	15.	U
74-83-9	Bromomethane	15.	U
75-01-4	Vinyl Chloride	15.	U
75-00-3	Chloroethane	15.	U
75-09-2	Methylene Chloride	7.	U
67-64-1	Acetone	71.	
75-15-0	Carbon Disulfide	7.	U
75-35-4	1,1-Dichloroethene	7.	U
75-34-3	1,1-Dichloroethane	13.	
540-59-0	1,2-Dichloroethene (total)	7.	U
67-66-3	Chloroform	7.	U
107-06-2	1,2-Dichloroethane	7.	U
78-93-3	2-Butanone	15.	U
71-55-6	1,1,1-Trichloroethane	7.	U
56-23-5	Carbon Tetrachloride	7.	U
108-05-4	Vinyl Acetate	15.	U
75-27-4	Bromodichloromethane	7.	U
78-87-5	1,2-Dichloropropane	7.	U
10061-01-5	cis-1,3-Dichloropropene	7.	U
79-01-6	Trichloroethene	7.	U
124-48-1	Dibromochloromethane	7.	U
79-00-5	1,1,2-Trichloroethane	7.	U
71-43-2	Benzene	7.	U
10061-02-6	trans-1,3-Dichloropropene	7.	U
75-25-2	Bromoform	7.	U
108-10-1	4-Methyl-2-Pentanone	15.	U
591-78-6	2-Hexanone	15.	U
127-18-4	Tetrachloroethene	7.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	U
108-88-3	Toluene	18.	
108-90-7	Chlorobenzene	7.	U
100-41-4	Ethylbenzene	16.	
100-42-5	Styrene	7.	U
1330-20-7	Xylene (total)	170.	

H2M LABS, INC.

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(516) 694-3040 FAX (516) 694-4122

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MW4P1-3

Lab Name: H2M
Contract: NYSDEC
Lab Code: H2M
Case No.: CRO
SAS No.:
SDG No.: 008
Matrix: (soil/water) SOIL
Lab Sample ID: 9202265
Sample wt/vol: 5.000 (g/mL) G
Lab File ID: P8035
Level: (low/med) LOW
Date Received: 1/22/92
% Moisture: not dec. 27.
Date Analyzed: 1/23/92
Column: (pack/cap) CAP
Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14.	U
74-83-9	Bromomethane	14.	U
75-01-4	Vinyl Chloride	14.	U
75-00-3	Chloroethane	14.	U
75-09-2	Methylene Chloride	7.	U
67-64-1	Acetone	29.	
75-15-0	Carbon Disulfide	7.	U
75-35-4	1,1-Dichloroethene	7.	U
75-34-3	1,1-Dichloroethane	4.	J
540-59-0	1,2-Dichloroethene (total)	40.	
67-66-3	Chloroform	7.	U
107-06-2	1,2-Dichloroethane	7.	U
78-93-3	2-Butanone	14.	U
71-55-6	1,1,1-Trichloroethane	7.	U
56-23-5	Carbon Tetrachloride	7.	U
108-05-4	Vinyl Acetate	14.	U
75-27-4	Bromodichloromethane	7.	U
78-87-5	1,2-Dichloropropane	7.	U
10061-01-5	cis-1,3-Dichloropropene	7.	U
79-01-6	Trichloroethene	7.	U
124-48-1	Dibromochloromethane	7.	U
79-00-5	1,1,2-Trichloroethane	7.	U
71-43-2	Benzene	7.	U
10061-02-6	trans-1,3-Dichloropropene	7.	U
75-25-2	Bromoform	7.	U
108-10-1	4-Methyl-2-Pentanone	14.	U
591-78-6	2-Hexanone	14.	U
127-18-4	Tetrachloroethene	7.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	U
108-88-3	Toluene	24.	
108-90-7	Chlorobenzene	7.	U
100-41-4	Ethylbenzene	7.	U
100-42-5	Styrene	7.	U
1330-20-7	Xylene (total)	7.	U

H2M LABS, INC.

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW4P13

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 008

Matrix: (soil/water) SOIL Lab Sample ID: 9202265

Sample wt/vol: 5.000 (g/mL) G Lab File ID: P8035

Level: (low/med) LOW Date Received: 1/22/92

% Moisture: not dec. 27. Date Analyzed: 1/23/92

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
Number TICs found: 8 (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	1.57	20.	J
2.	109-66-0	Pentane (ACN)(DOT)(8CI9CI)	1.89	20.	J
3.	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.37	40.	J
4.	- -	UNKNOWN	3.19	90.	J
5.	- -	UNKNOWN HYDROCARBON	3.52	30.	J
6.	- -	UNKNOWN HYDROCARBON	6.51	200.	J
7.	- -	UNKNOWN HYDROCARBON	10.30	1000.	J
8.	- -	UNKNOWN	14.91	200.	J
9.					
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FORM I VOA-TIC

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWSP45

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 008

Matrix: (soil/water) SOIL Lab Sample ID: 9202264

Sample wt/vol: 1.000 (g/mL) G Lab File ID: P8034

Level: (low/med) LOW Date Received: 1/22/92

% Moisture: not dec. 11. Date Analyzed: 1/23/92

Column: (pack/cap) CAP Dilution Factor: 5.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	56.	U
74-83-9	Bromomethane	56.	U
75-01-4	Vinyl Chloride	56.	U
75-00-3	Chloroethane	56.	U
75-09-2	Methylene Chloride	28.	U
67-64-1	Acetone	56.	U
75-15-0	Carbon Disulfide	28.	U
75-35-4	1,1-Dichloroethene	28.	U
75-34-3	1,1-Dichloroethane	28.	U
540-59-0	1,2-Dichloroethene (total)	75.	
67-66-3	Chloroform	28.	U
107-06-2	1,2-Dichloroethane	28.	U
78-93-3	2-Butanone	56.	U
71-55-6	1,1,1-Trichloroethane	28.	U
56-23-5	Carbon Tetrachloride	28.	U
108-05-4	Vinyl Acetate	56.	U
75-27-4	Bromodichloromethane	28.	U
78-87-5	1,2-Dichloropropane	28.	U
10061-01-5	cis-1,3-Dichloropropene	28.	U
79-01-6	Trichloroethene	28.	U
124-48-1	Dibromochloromethane	28.	U
79-00-5	1,1,2-Trichloroethane	28.	U
71-43-2	Benzene	28.	U
10061-02-6	trans-1,3-Dichloropropene	28.	U
75-25-2	Bromoform	28.	U
108-10-1	4-Methyl-2-Pentanone	56.	U
591-78-6	2-Hexanone	56.	U
127-18-4	Tetrachloroethene	30.	
79-34-5	1,1,2,2-Tetrachloroethane	28.	U
108-88-3	Toluene	210.	
108-90-7	Chlorobenzene	740.	
100-41-4	Ethylbenzene	600.	
100-42-5	Styrene	28.	U
1330-20-7	Xylene (total)	4400.	E J

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 1174
(516) 694-3040 FAX (516) 694-4122

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWSP46

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 008

Matrix: (soil/water) SOIL Lab Sample ID: 9202264

Sample wt/vol: 1.000 (g/mL) G Lab File ID: P8034

Level: (low/med) LOW Date Received: 1/22/92

% Moisture: not dec. 11. Date Analyzed: 1/23/92

Column: (pack/cap) CAP Dilution Factor: 5.00

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	107-83-5	Pentane, 2-methyl- (8CI9CI)	3.19	2000.	J
2.	- -	UNKNOWN HYDROCARBON	6.51	9000.	J
3.	- -	UNKNOWN HYDROCARBON	6.92	1000.	J
4.	4127-47-3	Cyclopropane, 1,1,2,2-tetram	7.62	2000.	J
5.	- -	UNKNOWN HYDROCARBON	10.06	3000.	J
6.	- -	UNKNOWN HYDROCARBON	11.16	7000.	J
7.	- -	TRIMETHYLCYCLOHEXANE(ISOMER)	11.70	2000.	J
8.	- -	UNKNOWN HYDROCARBON	14.96	3000.	J
9.	103-65-1	Benzene, propyl- (8CI9CI)	15.44	8000.	J
10.	526-73-8	Benzene, 1,2,3-trimethyl- (8	15.73	8000.	J
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H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLK

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 008

Matrix: (soil/water) WATER Lab Sample ID: 9202267

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P8048

Level: (low/med) LOW Date Received: 1/22/92

% Moisture: not dec. 100. Date Analyzed: 1/24/92

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	3.	BJ
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY-IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELDBLK

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 008

Matrix: (soil/water) WATER Lab Sample ID: 9202267

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P8048

Level: (low/med) LOW Date Received: 1/22/92

% Moisture: not dec. 100. Date Analyzed: 1/24/92

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLK

Lab Name: H2M　　Contract: NYSDEC

Lab Code: H2M　　Case No.: CRO　　SAS No.:　　SDG No.: 008

Matrix: (soil/water) WATER　　Lab Sample ID: 9202268

Sample wt/vol: 5.000 (g/mL) ML　　Lab File ID: P8049

Level: (low/med) LOW　　Date Received: 1/22/92

% Moisture: not dec. 100.　　Date Analyzed: 1/24/92

Column: (pack/cap) CAP　　Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)		

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H2M LABS, INC.

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No

Matrix: (soil/water) WATER Lab Sample ID: 9

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P80

Level: (low/med) LOW Date Received:

% Moisture: not dec. 100. Date Analyzed: 1

Column: (pack/cap) CAP Dilution Factor:

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. (
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1(3)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134067

Sample wt/vol: 4.100 (g/mL) G Lab File ID: P7504

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 10. Date Analyzed: 12/ 3/91

Column: (pack/cap) CAP Dilution Factor: 1.22

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14.	U
74-83-9	Bromomethane	14.	U
75-01-4	Vinyl Chloride	14.	U
75-00-3	Chloroethane	14.	U
75-09-2	Methylene Chloride	7.	U
67-64-1	Acetone	14.	U
75-15-0	Carbon Disulfide	7.	U
75-35-4	1,1-Dichloroethene	7.	U
75-34-3	1,1-Dichloroethane	7.	U
540-59-0	1,2-Dichloroethene (total)	7.	U
67-66-3	Chloroform	7.	U
107-06-2	1,2-Dichloroethane	7.	U
78-93-3	2-Butanone	14.	U
71-55-6	1,1,1-Trichloroethane	7.	U
56-23-5	Carbon Tetrachloride	7.	U
108-05-4	Vinyl Acetate	14.	U
75-27-4	Bromodichloromethane	7.	U
78-87-5	1,2-Dichloropropane	7.	U
10061-01-5	cis-1,3-Dichloropropene	7.	U
79-01-6	Trichloroethene	7.	U
124-48-1	Dibromochloromethane	7.	U
79-00-5	1,1,2-Trichloroethane	7.	U
71-43-2	Benzene	7.	U
10061-02-6	trans-1,3-Dichloropropene	7.	U
75-25-2	Bromoform	7.	U
108-10-1	4-Methyl-2-Pentanone	14.	U
591-78-6	2-Hexanone	14.	U
127-18-4	Tetrachloroethene	7.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	U
108-88-3	Toluene	7.	U
108-90-7	Chlorobenzene	7.	U
100-41-4	Ethylbenzene	7.	U
100-42-5	Styrene	7.	U
1330-20-7	Xylene (total)	7.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P1(3)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134067

Sample wt/vol: 4.100 (g/mL) G Lab File ID: P7504

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 10. Date Analyzed: 12/ 3/91

Column: (pack/cap) CAP Dilution Factor: 1.22

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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EPA SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

P2(38)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134068

Sample wt/vol: 1.700 (g/mL) G Lab File ID: P7505

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 11. Date Analyzed: 12/ 3/91

Column: (pack/cap) CAP Dilution Factor: 2.94

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	33.	U
74-83-9	Bromomethane	33.	U
75-01-4	Vinyl Chloride	33.	U
75-00-3	Chloroethane	33.	U
75-09-2	Methylene Chloride	17.	U
67-64-1	Acetone	74.	
75-15-0	Carbon Disulfide	17.	U
75-35-4	1,1-Dichloroethene	17.	U
75-34-3	1,1-Dichloroethane	17.	U
540-59-0	1,2-Dichloroethene (total)	17.	U
67-66-3	Chloroform	17.	U
107-06-2	1,2-Dichloroethane	17.	U
78-93-3	2-Butanone	33.	U
71-55-6	1,1,1-Trichloroethane	17.	U
56-23-5	Carbon Tetrachloride	17.	U
108-05-4	Vinyl Acetate	33.	U
75-27-4	Bromodichloromethane	17.	U
78-87-5	1,2-Dichloropropane	17.	U
10061-01-5	cis-1,3-Dichloropropene	17.	U
79-01-6	Trichloroethene	17.	U
124-48-1	Dibromochloromethane	17.	U
79-00-5	1,1,2-Trichloroethane	17.	U
71-43-2	Benzene	17.	U
10061-02-6	trans-1,3-Dichloropropene	17.	U
75-25-2	Bromoform	17.	U
108-10-1	4-Methyl-2-Pentanone	33.	U
591-78-6	2-Hexanone	33.	U
127-18-4	Tetrachloroethene	17.	U
79-34-5	1,1,2,2-Tetrachloroethane	17.	U
108-88-3	Toluene	17.	U
108-90-7	Chlorobenzene	17.	U
100-41-4	Ethylbenzene	17.	U
100-42-5	Styrene	17.	U
1330-20-7	Xylene (total)	17.	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P2(38)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134068

Sample wt/vol: 1.700 (g/mL) G Lab File ID: P7505

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 11. Date Analyzed: 12/ 3/91

Column: (pack/cap) CAP Dilution Factor: 2.94

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 18

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN HYDROCARBON	3.20	30.	J
2. - -	UNKNOWN HYDROCARBON	6.49	600.	J
3. - -	UNKNOWN CYCLIC CPD.	7.61	100.	J
4. - -	UNKNOWN CYCLIC CPD.	8.43	30.	J
5. - -	UNKNOWN HYDROCARBON	8.99	80.	J
6. - -	UNKNOWN CYCLIC CPD.	9.30	80.	J
7. - -	UNKNOWN CYCLIC CPD.	9.97	20.	J
8. - -	UNKNOWN HYDROCARBON	10.97	70.	J
9. - -	UNKNOWN HYDROCARBON	11.18	60.	J
10. - -	UNKNOWN CYCLIC CPD.	11.70	90.	J
11. - -	UNKNOWN HYDROCARBON	11.86	60.	J
12. - -	UNKNOWN HYDROCARBON	12.08	30.	J
13. - -	UNKNOWN	12.86	300.	J
14. - -	UNKNOWN	13.45	200.	J
15. - -	UNKNOWN HYDROCARBON	13.75	90.	J
16. - -	UNKNOWN HYDROCARBON	14.23	500.	J
17. - -	UNKNOWN HYDROCARBON	15.04	400.	J
18. - -	UNKNOWN CYCLIC CPD.	15.79	400.	J
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2(38) RE

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134068 RE

Sample wt/vol: 1.000 (g/mL) G Lab File ID: P7507

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 11. Date Analyzed: 12/ 3/91

Column: (pack/cap) CAP Dilution Factor: 5.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	56.	U
74-83-9	Bromomethane	56.	U
75-01-4	Vinyl Chloride	56.	U
75-00-3	Chloroethane	56.	U
75-09-2	Methylene Chloride	28.	U
67-64-1	Acetone	48.	J
75-15-0	Carbon Disulfide	28.	U
75-35-4	1,1-Dichloroethene	28.	U
75-34-3	1,1-Dichloroethane	28.	U
540-59-0	1,2-Dichloroethene (total)	28.	U
67-66-3	Chloroform	28.	U
107-06-2	1,2-Dichloroethane	28.	U
78-93-3	2-Butanone	56.	U
71-55-6	1,1,1-Trichloroethane	28.	U
56-23-5	Carbon Tetrachloride	28.	U
108-05-4	Vinyl Acetate	56.	U
75-27-4	Bromodichloromethane	28.	U
78-87-5	1,2-Dichloropropane	28.	U
10061-01-5	cis-1,3-Dichloropropene	28.	U
79-01-6	Trichloroethene	28.	U
124-48-1	Dibromochloromethane	28.	U
79-00-5	1,1,2-Trichloroethane	28.	U
71-43-2	Benzene	28.	U
10061-02-6	trans-1,3-Dichloropropene	28.	U
75-25-2	Bromoform	28.	U
108-10-1	4-Methyl-2-Pentanone	56.	U
591-78-6	2-Hexanone	56.	U
127-18-4	Tetrachloroethene	28.	U
79-34-5	1,1,2,2-Tetrachloroethane	28.	U
108-88-3	Toluene	28.	U
108-90-7	Chlorobenzene	28.	U
100-41-4	Ethylbenzene	28.	U
100-42-5	Styrene	28.	U
1330-20-7	Xylene (total)	28.	U

H2M LABS, INC.

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P2(38) RE

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134068 RE

Sample wt/vol: 1.000 (g/mL) G Lab File ID: P7507

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 11. Date Analyzed: 12/ 3/91

Column: (pack/cap) CAP Dilution Factor: 5.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 19

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	5.88	40.	J
2.	- -	UNKNOWN HYDROCARBON	6.13	30.	J
3.	- -	UNKNOWN HYDROCARBON	6.51	200.	J
4.	- -	UNKNOWN CYCLIC CPD.	7.61	100.	J
5.	- -	UNKNOWN HYDROCARBON	8.99	30.	J
6.	- -	UNKNOWN CYCLIC CPD.	9.97	80.	J
7.	- -	UNKNOWN CYCLIC CPD.	10.21	40.	J
8.	- -	UNKNOWN	10.75	30.	J
9.	- -	UNKNOWN HYDROCARBON	10.96	300.	J
10.	- -	UNKNOWN HYDROCARBON	11.20	1000.	J
11.	- -	UNKNOWN	11.69	500.	J
12.	- -	UNKNOWN	11.86	300.	J
13.	- -	UNKNOWN HYDROCARBON	12.06	100.	J
14.	- -	UNKNOWN	12.84	1000.	J
15.	- -	UNKNOWN	13.44	1000.	J
16.	- -	UNKNOWN HYDROCARBON	13.75	300.	J
17.	- -	UNKNOWN HYDROCARBON	14.21	2000.	J
18.	- -	UNKNOWN HYDROCARBON	15.03	2000.	J
19.	4291-79-6	Cyclohexane, 1-methyl-2-prop	15.79	2000.	J
20.					
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H2M LABS, INC.

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P3(43)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134069

Sample wt/vol: 4.500 (g/mL) G Lab File ID: P7506

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 6. Date Analyzed: 12/ 3/91

Column: (pack/cap) CAP Dilution Factor: 1.11

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	6.	U
67-64-1	Acetone	22.	
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P3(43)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134069

Sample wt/vol: 4.500 (g/mL) G Lab File ID: P7506

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 6 Date Analyzed: 12/ 3/91

Column: (pack/cap) CAP Dilution Factor: 1.11

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P4(30)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134070

Sample wt/vol: 1.000 (g/mL) G Lab File ID: P7516

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 9. Date Analyzed: 12/ 4/91

Column: (pack/cap) CAP Dilution Factor: 5.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	55.	U
74-83-9	Bromomethane	55.	U
75-01-4	Vinyl Chloride	55.	U
75-00-3	Chloroethane	55.	U
75-09-2	Methylene Chloride	27.	U
67-64-1	Acetone	35.	J
75-15-0	Carbon Disulfide	27.	U
75-35-4	1,1-Dichloroethene	27.	U
75-34-3	1,1-Dichloroethane	27.	U
540-59-0	1,2-Dichloroethene (total)	27.	U
67-66-3	Chloroform	27.	U
107-06-2	1,2-Dichloroethane	27.	U
78-93-3	2-Butanone	55.	U
71-55-6	1,1,1-Trichloroethane	27.	U
56-23-5	Carbon Tetrachloride	27.	U
108-05-4	Vinyl Acetate	55.	U
75-27-4	Bromodichloromethane	27.	U
78-87-5	1,2-Dichloropropane	27.	U
10061-01-5	cis-1,3-Dichloropropene	27.	U
79-01-6	Trichloroethene	27.	U
124-48-1	Dibromochloromethane	27.	U
79-00-5	1,1,2-Trichloroethane	27.	U
71-43-2	Benzene ✓	27.	U
10061-02-6	trans-1,3-Dichloropropene	27.	U
75-25-2	Bromoform	27.	U
108-10-1	4-Methyl-2-Pentanone	55.	U
591-78-6	2-Hexanone	55.	U
127-18-4	Tetrachloroethene	57.	
79-34-5	1,1,2,2-Tetrachloroethane	27.	U
108-88-3	Toluene	110.	
108-90-7	Chlorobenzene	27.	U
100-41-4	Ethylbenzene	29.	
100-42-5	Styrene	27.	U
1330-20-7	Xylene (total)	27.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P4(30)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134070

Sample wt/vol: 1.000 (g/mL) G Lab File ID: P7516

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 9. Date Analyzed: 12/ 4/91

Column: (pack/cap) CAP Dilution Factor: 5.00

Number TICs found: ~~20~~ 19 AA 1/4/92

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN HYDROCARBON	3.17	200.	J
2. - -	UNKNOWN HYDROCARBON	3.49	100.	J
3. - -	UNKNOWN HYDROCARBON	5.87	80.	J
4. - -	UNKNOWN HYDROCARBON	6.48	500.	J
5. - -	UNKNOWN CYCLIC CPD.	7.60	80.	J
6. - -	UNKNOWN HYDROCARBON	8.99	50.	J
7. - -	UNKNOWN HYDROCARBON	9.23	50.	J
8. - -	UNKNOWN HYDROCARBON	10.05	300.	J
9. - -	UNKNOWN HYDROCARBON	10.98	100.	J
10. - -	UNKNOWN HYDROCARBON	11.20	800.	J
11. - -	UNKNOWN	11.88	200.	J
12. - -	UNKNOWN HYDROCARBON	12.09	400.	J
~~13. - -~~	~~UNKNOWN~~	~~12.88~~	~~800.~~	~~J~~
14. - -	UNKNOWN HYDROCARBON	13.21	1000.	J
15. - -	UNKNOWN HYDROCARBON	13.94	500.	J
16. - -	UNKNOWN HYDROCARBON	14.21	900.	J
17. - -	UNKNOWN HYDROCARBON	15.06	2000.	J
18. - -	UNKNOWN HYDROCARBON	15.32	800.	J
19. - -	UNKNOWN	15.65	1000.	J
20. - -	UNKNOWN HYDROCARBON	16.14	7000.	J
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1/4/92 AA

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P5(27)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134071

Sample wt/vol: 4.000 (g/mL) G Lab File ID: P7513

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 10. Date Analyzed: 12/ 4/91

Column: (pack/cap) CAP Dilution Factor: 1.25

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14.	U
74-83-9	Bromomethane	14.	U
75-01-4	Vinyl Chloride	14.	U
75-00-3	Chloroethane	14.	U
75-09-2	Methylene Chloride	7.	U
67-64-1	Acetone	14.	U
75-15-0	Carbon Disulfide	7.	U
75-35-4	1,1-Dichloroethene	7.	U
75-34-3	1,1-Dichloroethane	7.	U
540-59-0	1,2-Dichloroethene (total)	7.	U
67-66-3	Chloroform	7.	U
107-06-2	1,2-Dichloroethane	7.	U
78-93-3	2-Butanone	14.	U
71-55-6	1,1,1-Trichloroethane	7.	U
56-23-5	Carbon Tetrachloride	7.	U
108-05-4	Vinyl Acetate	14.	U
75-27-4	Bromodichloromethane	7.	U
78-87-5	1,2-Dichloropropane	7.	U
10061-01-5	cis-1,3-Dichloropropene	7.	U
79-01-6	Trichloroethene	17.	
124-48-1	Dibromochloromethane	7.	U
79-00-5	1,1,2-Trichloroethane	7.	U
71-43-2	Benzene	7.	U
10061-02-6	trans-1,3-Dichloropropene	7.	U
75-25-2	Bromoform	7.	U
108-10-1	4-Methyl-2-Pentanone	14.	U
591-78-6	2-Hexanone	14.	U
127-18-4	Tetrachloroethene	110.	
79-34-5	1,1,2,2-Tetrachloroethane	7.	U
108-88-3	Toluene	7.	U
108-90-7	Chlorobenzene	7.	U
100-41-4	Ethylbenzene	7.	U
100-42-5	Styrene	7.	U
1330-20-7	Xylene (total)	7.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P5(27)

Lab Name: H2M   Contract: NYSDEC

Lab Code: H2M   Case No.: CRO   SAS No.:   SDG No.: 001

Matrix: (soil/water) SOIL   Lab Sample ID: 9134071

Sample wt/vol: 4.000 (g/mL) G   Lab File ID: P7513

Level: (low/med) LOW   Date Received: 11/27/91

% Moisture: not dec. 10.   Date Analyzed: 12/ 4/91

Column: (pack/cap) CAP   Dilution Factor: 1.25

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P6(26)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134072

Sample wt/vol: 1.000 (g/mL) G Lab File ID: P7514

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 6. Date Analyzed: 12/ 4/91

Column: (pack/cap) CAP Dilution Factor: 5.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	53.	U
74-83-9	Bromomethane	53.	U
75-01-4	Vinyl Chloride	53.	U
75-00-3	Chloroethane	53.	U
75-09-2	Methylene Chloride	27.	U
67-64-1	Acetone	40.	J
75-15-0	Carbon Disulfide	27.	U
75-35-4	1,1-Dichloroethene	27.	U
75-34-3	1,1-Dichloroethane	27.	U
540-59-0	1,2-Dichloroethene (total)	240.	
67-66-3	Chloroform	27.	U
107-06-2	1,2-Dichloroethane	27.	U
78-93-3	2-Butanone	53.	U
71-55-6	1,1,1-Trichloroethane	27.	U
56-23-5	Carbon Tetrachloride	27.	U
108-05-4	Vinyl Acetate	53.	U
75-27-4	Bromodichloromethane	27.	U
78-87-5	1,2-Dichloropropane	27.	U
10061-01-5	cis-1,3-Dichloropropene	27.	U
79-01-6	Trichloroethene	40.	
124-48-1	Dibromochloromethane	27.	U
79-00-5	1,1,2-Trichloroethane	27.	U
71-43-2	Benzene	27.	U
10061-02-6	trans-1,3-Dichloropropene	27.	U
75-25-2	Bromoform	27.	U
108-10-1	4-Methyl-2-Pentanone	53.	U
591-78-6	2-Hexanone	53.	U
127-18-4	Tetrachloroethene	1000.	
79-34-5	1,1,2,2-Tetrachloroethane	27.	U
108-88-3	Toluene	27.	U
108-90-7	Chlorobenzene	27.	U
100-41-4	Ethylbenzene	27.	U
100-42-5	Styrene	27.	U
1330-20-7	Xylene (total)	27.	U

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EPA SAMPLE NO.

P6(26)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134072

Sample wt/vol: 1.000 (g/mL) G Lab File ID: P7514

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 6. Date Analyzed: 12/ 4/91

Column: (pack/cap) CAP Dilution Factor: 5.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN HYDROCARBON	14.20	50.	J
2. - -	UNKNOWN HYDROCARBON	15.01	50.	J
3. - -	UNKNOWN	15.76	60.	J
4. - -	UNKNOWN HYDROCARBON	16.12	90.	J
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P7(25)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134073

Sample wt/vol: 3.700 (g/mL) G Lab File ID: P7515

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 25 Date Analyzed: 12/ 4/91

Column: (pack/cap) CAP Dilution Factor: 1.35

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	--------Chloromethane	18.	U
74-83-9	--------Bromomethane	18.	U
75-01-4	--------Vinyl Chloride	18.	U
75-00-3	--------Chloroethane	18.	U
75-09-2	--------Methylene Chloride	9.	U
67-64-1	--------Acetone	18.	U
75-15-0	--------Carbon Disulfide	9.	U
75-35-4	--------1,1-Dichloroethene	9.	U
75-34-3	--------1,1-Dichloroethane	9.	U
540-59-0	--------1,2-Dichloroethene (total)	9.	U
67-66-3	--------Chloroform	9.	U
107-06-2	--------1,2-Dichloroethane	9.	U
78-93-3	--------2-Butanone	18.	U
71-55-6	--------1,1,1-Trichloroethane	9.	U
56-23-5	--------Carbon Tetrachloride	9.	U
108-05-4	--------Vinyl Acetate	18.	U
75-27-4	--------Bromodichloromethane	9.	U
78-87-5	--------1,2-Dichloropropane	9.	U
10061-01-5	--------cis-1,3-Dichloropropene	9.	U
79-01-6	--------Trichloroethene	9.	U
124-48-1	--------Dibromochloromethane	9.	U
79-00-5	--------1,1,2-Trichloroethane	9.	U
71-43-2	--------Benzene	9.	U
10061-02-6	--------trans-1,3-Dichloropropene	9.	U
75-25-2	--------Bromoform	9.	U
108-10-1	--------4-Methyl-2-Pentanone	18.	U
591-78-6	--------2-Hexanone	18.	U
127-18-4	--------Tetrachloroethene	9.	U
79-34-5	--------1,1,2,2-Tetrachloroethane	9.	U
108-88-3	--------Toluene	9.	U
108-90-7	--------Chlorobenzene	9.	U
100-41-4	--------Ethylbenzene	9.	U
100-42-5	--------Styrene	9.	U
1330-20-7	--------Xylene (total)	9.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
P7(25)

Lab Name: H2M   Contract: NYSDEC

Lab Code: H2M   Case No.: CRO   SAS No.:   SDG No.: 001

Matrix: (soil/water) SOIL   Lab Sample ID: 9134073

Sample wt/vol: 3.700 (g/mL) G   Lab File ID: P7515

Level: (low/med) LOW   Date Received: 11/27/91

% Moisture: not dec. 25.   Date Analyzed: 12/ 4/91

Column: (pack/cap) CAP   Dilution Factor: 1.35

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 14

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN CYCLIC CPD.	7.61	30.	J
2.	- -	UNKNOWN HYDROCARBON	7.95	20.	J
3.	- -	UNKNOWN HYDROCARBON	8.17	30.	J
4.	- -	UNKNOWN CYCLIC CPD.	8.42	40.	J
5.	- -	UNKNOWN	8.89	90.	J
6.	- -	UNKNOWN	9.97	100.	J
7.	- -	UNKNOWN HYDROCARBON	10.56	50.	J
8.	- -	UNKNOWN HYDROCARBON	10.79	20.	J
9.	- -	UNKNOWN HYDROCARBON	10.98	100.	J
10.	- -	UNKNOWN HYDROCARBON	11.25	400.	J
11.	- -	UNKNOWN	11.70	100.	J
12.	- -	UNKNOWN	13.04	10.	J
13.	- -	UNKNOWN CYCLIC CPD.	13.43	80.	J
14.	- -	UNKNOWN CYCLIC CPD.	15.00	10.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P8(46)

Lab Name: H2M
Contract: NYSDEC

Lab Code: H2M
Case No.: CRO
SAS No.:
SDG No.: 001

Matrix: (soil/water) SOIL
Lab Sample ID: 9134074

Sample wt/vol: 2.100 (g/mL) G
Lab File ID: P7512

Level: (low/med) LOW
Date Received: 11/27/91

% Moisture: not dec. 9.
Date Analyzed: 12/ 3/91

Column: (pack/cap) CAP
Dilution Factor: 2.38

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	26.	U
74-83-9	Bromomethane	26.	U
75-01-4	Vinyl Chloride	26.	U
75-00-3	Chloroethane	26.	U
75-09-2	Methylene Chloride	13.	U
67-64-1	Acetone	47.	
75-15-0	Carbon Disulfide	13.	U
75-35-4	1,1-Dichloroethene	13.	U
75-34-3	1,1-Dichloroethane	13.	U
540-59-0	1,2-Dichloroethene (total)	13.	U
67-66-3	Chloroform	13.	U
107-06-2	1,2-Dichloroethane	13.	U
78-93-3	2-Butanone	26.	U
71-55-6	1,1,1-Trichloroethane	13.	U
56-23-5	Carbon Tetrachloride	13.	U
108-05-4	Vinyl Acetate	26.	U
75-27-4	Bromodichloromethane	13.	U
78-87-5	1,2-Dichloropropane	13.	U
10061-01-5	cis-1,3-Dichloropropene	13.	U
79-01-6	Trichloroethene	13.	U
124-48-1	Dibromochloromethane	13.	U
79-00-5	1,1,2-Trichloroethane	13.	U
71-43-2	Benzene	13.	U
10061-02-6	trans-1,3-Dichloropropene	13.	U
75-25-2	Bromoform	13.	U
108-10-1	4-Methyl-2-Pentanone	26.	U
591-78-6	2-Hexanone	26.	U
127-18-4	Tetrachloroethene	13.	U
79-34-5	1,1,2,2-Tetrachloroethane	13.	U
108-88-3	Toluene	13.	U
108-90-7	Chlorobenzene	13.	U
100-41-4	Ethylbenzene	13.	U
100-42-5	Styrene	13.	U
1330-20-7	Xylene (total)	13.	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P8(46)

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) SOIL Lab Sample ID: 9134074

Sample wt/vol: 2.100 (g/mL) G Lab File ID: P7512

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 9. Date Analyzed: 12/ 3/91

Column: (pack/cap) CAP Dilution Factor: 2.38

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIELDBLK

Lab Name: H2M   Contract: NYSDEC

Lab Code: H2M   Case No.: CRO   SAS No.:   SDG No.: 001

Matrix: (soil/water) WATER   Lab Sample ID: 9134075

Sample wt/vol: 5.000 (g/mL) ML   Lab File ID: P7435

Level: (low/med) LOW   Date Received: 11/27/91

% Moisture: not dec. 100.   Date Analyzed: 11/27/91

Column: (pack/cap) CAP   Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELDBLK

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) WATER Lab Sample ID: 9134075

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7435

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 100. Date Analyzed: 11/27/91

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN HYDROCARBON	6.44	9.	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLK

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) WATER Lab Sample ID: 9134076

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7436

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 100. Date Analyzed: 11/27/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

TRIPBLK

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 001

Matrix: (soil/water) WATER Lab Sample ID: 9134076

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7436

Level: (low/med) LOW Date Received: 11/27/91

% Moisture: not dec. 100. Date Analyzed: 11/27/91

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-1P

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204289

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3455

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/13/92

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	7.	J
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	1.	BJ
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	2.	J
75-34-3	1,1-Dichloroethane	11.	
540-59-0	1,2-Dichloroethene (total)	25.	
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	1 ~~8~~	J
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	12.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-1P

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204289

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3455

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/13/92

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-2P

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204288

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3440

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/12/92

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	130.	
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	2.	BJ
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	22.	
75-34-3	1,1-Dichloroethane	33.	
540-59-0	1,2-Dichloroethene (total)	620.	E
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	340.	E
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	2.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	85.	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	3.	J

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9E

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-2P

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204288

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3440

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/12/92

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	2.60	5.	J
2. 354-23-4	Ethane, 1,2-dichloro-1,1,2-trifluoro	3.12	200.	J
3. 76-13-1	Ethane, 1,1,2-trichloro-1,2,- 2trifluoro	3.47	400.	J
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-2P ~~RE~~ DL

9/31

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204288DL

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3470

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/13/92

Column: (pack/cap) CAP Dilution Factor: 20.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	200.	U
74-83-9	Bromomethane	200.	U
75-01-4	Vinyl Chloride	110.	J
75-00-3	Chloroethane	200.	U
75-09-2	Methylene Chloride	28.	BJ
67-64-1	Acetone	200.	U
75-15-0	Carbon Disulfide	100.	U
75-35-4	1,1-Dichloroethene	100.	U
75-34-3	1,1-Dichloroethane	100.	U
✓ 540-59-0	1,2-Dichloroethene (total)	2500.	
67-66-3	Chloroform	100.	U
107-06-2	1,2-Dichloroethane	100.	U
78-93-3	2-Butanone	200.	U
71-55-6	1,1,1-Trichloroethane	100.	U
56-23-5	Carbon Tetrachloride	100.	U
108-05-4	Vinyl Acetate	200.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
✓ 79-01-6	Trichloroethene	480.	
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
10061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	200.	U
591-78-6	2-Hexanone	200.	U
127-18-4	Tetrachloroethene	90.	J
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
1330-20-7	Xylene (total)	100.	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-2P ~~RE~~ DL

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204288DL

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3470

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/13/92

Column: (pack/cap) CAP Dilution Factor: 20.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	354-23-4	Ethane, 1,2-dichloro-1,1,2-tr fluoro	3.13	200.	J
2.	76-13-1	Ethane, 1,1,2-trichloro-1,2 2 trifluoro	3.47	500.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3P

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204290

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3444

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/13/92

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
✓ 75-01-4	Vinyl Chloride	120.	
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	BJ
67-64-1	Acetone	75.	B
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	6.	
75-34-3	1,1-Dichloroethane	13.	
✓ 540-59-0	1,2-Dichloroethene (total)	380.	E
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
✓ 79-01-6	Trichloroethene	65.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	4.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
✓ 127-18-4	Tetrachloroethene	24.	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	
108-90-7	Chlorobenzene	3.	J
100-41-4	Ethylbenzene	4.	J
100-42-5	Styrene	3.	J
1330-20-7	Xylene (total)	22.	

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EPA SAMPLE NO.

MW-3P

9E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204290

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3444

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/13/92

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 10

CAS NUMBER		COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWNALKENE	2.26	10.	J
2.	- -	UNKNOWN	2.60	7.	J
3.	354-23-4	Ethane, 1,2-dichloro-1,1,2-trifluoro	3.10	60.	J
4.	76-13-1	Ethane, 1,1,2-trichloro-1,2,2-trifluoro	3.42	10.	J
5.	- -	UNKNOWN	3.70	1000.	J
6.	- -	UNKNOWN ALKANE	5.56	10.	J
7.	- -	UNKNOWN PROPANE	6.98	9.	J
8.	- -	ETHYLMETHYLISOMER	12.15	7.	J
9.	- -	ETHYLMETHYLBENZENE(ISOMER)	12.22	5.	J
10.	- -	ETHYLMETHYLBENZENE(ISOMER)	12.71	6.	J
11.					
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H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-412

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-3P DL

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204290DL

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3468

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/13/92

Column: (pack/cap) CAP Dilution Factor: 5.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
✓ 75-01-4	Vinyl Chloride	100.	D
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	7.	BJ D
67-64-1	Acetone	74.	B D
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	11.	J D
✓ 540-59-0	1,2-Dichloroethene (total)	480.	D
67-66-3	Chloroform	25.	U
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon Tetrachloride	25.	U
108-05-4	Vinyl Acetate	50.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	57.	D
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	18.	J D
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
1330-20-7	Xylene (total)	25.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE N

MW-3P DL

Lab Name:H2M LABS INC. Contract:NYSDEC

Lab Code:H2M Case No.:. SAS No.:. SDG No.:013

Matrix: (soil/water) WATER Lab Sample ID:92042900L

Sample wt/vol: 5 (g/mL) mL Lab File ID: >U3468

Level: (low/med) LOW Date Received: 02/07/92

% Moisture:---- 100 Date Analyzed: 2/13/92

Column: CAP Dilution Factor: 1.00000

Number TICs found: 03

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.30	30.	
2. 354234	1,2-DICHLORO-1,1,2-TRIFLUORO -ETHANE	3.12	9.	
3.	UNKNOWN	3.70	240.	
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H2M LABS, INC.

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4P

Lab Name: H2M

Contract: NYSDEC

Lab Code: H2M

Case No.: CRO

SAS No.:

SDG No.: 013

Matrix: (soil/water) WATER

Lab Sample ID: 9204291

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V3445

Level: (low/med) LOW

Date Received: 2/ 7/92

% Moisture: not dec. 100.

Date Analyzed: 2/13/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
✓ 75-01-4	Vinyl Chloride	110.	
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	2.	BJ
67-64-1	Acetone	6.	BJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	8.	
✓ 540-59-0	1,2-Dichloroethene (total)	140.	
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
✓ 79-01-6	Trichloroethene	19.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	1.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
✓ 127-18-4	Tetrachloroethene	18.	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	2.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	4.	J

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E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-4P

Lab Name: H2M　Contract: NYSDEC

Lab Code: H2M　Case No.: CRO　SAS No.:　SDG No.: 013

Matrix: (soil/water) WATER　Lab Sample ID: 9204291

Sample wt/vol: 5.000 (g/mL) ML　Lab File ID: V3445

Level: (low/med) LOW　Date Received: 2/ 7/92

% Moisture: not dec. 100.　Date Analyzed: 2/13/92

Column: (pack/cap) CAP　Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 354-23-4	Ethane, 1,2-dichloro-1,1,2-tri fluoro	3.09	10.	J
2. - -	UNKNOWN	3.67	20.	J
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5P

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204292

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3446

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/13/92

Column: (pack/cap) CAP Dilution Factor: 1.00

	CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	74-87-3	Chloromethane	10.	U
	74-83-9	Bromomethane	10.	U
✓	75-01-4	Vinyl Chloride	590.	E
	75-00-3	Chloroethane	10.	U
	75-09-2	Methylene Chloride	2.	BJ
	67-64-1	Acetone	10.	U
	75-15-0	Carbon Disulfide	5.	U
	75-35-4	1,1-Dichloroethene	7.	
	75-34-3	1,1-Dichloroethane	10.	
✓	540-59-0	1,2-Dichloroethene (total)	670.	E
	67-66-3	Chloroform	5.	U
	107-06-2	1,2-Dichloroethane	5.	U
	78-93-3	2-Butanone	10.	U
	71-55-6	1,1,1-Trichloroethane	5.	U
	56-23-5	Carbon Tetrachloride	5.	U
	108-05-4	Vinyl Acetate	10.	U
	75-27-4	Bromodichloromethane	5.	U
	78-87-5	1,2-Dichloropropane	5.	U
	10061-01-5	cis-1,3-Dichloropropene	5.	U
✓	79-01-6	Trichloroethene	520.	E
	124-48-1	Dibromochloromethane	5.	U
	79-00-5	1,1,2-Trichloroethane	5.	U
	71-43-2	Benzene	5.	U
	10061-02-6	trans-1,3-Dichloropropene	5.	U
	75-25-2	Bromoform	5.	U
	108-10-1	4-Methyl-2-Pentanone	10.	U
	591-78-6	2-Hexanone	10.	U
✓	127-18-4	Tetrachloroethene	400.	E
	79-34-5	1,1,2,2-Tetrachloroethane	5.	U
	108-88-3	Toluene	3.	J
	108-90-7	Chlorobenzene	5.	U
	100-41-4	Ethylbenzene	5.	U
	100-42-5	Styrene	5.	U
	1330-20-7	Xylene (total)	5.	J

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EPA SAMPLE NO.

MW-5P

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M

Contract: NYSDEC

Lab Code: H2M

Case No.: CRO

SAS No.:

SDG No.: 013

Matrix: (soil/water) WATER

Lab Sample ID: 9204292

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V3446

Level: (low/med) LOW

Date Received: 2/ 7/92

% Moisture: not dec. 100.

Date Analyzed: 2/13/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 10

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	354-23-4	Ethane, 1,2-dichloro-1,1,2-trifluoro	3.11	100.	J
2.	76-13-1	Ethane, 1,1,2-trichloro-1,2,2 trifluoro	3.47	900.	J
3.	- -	UNKNOWN ALKANE	5.61	50.	J
4.	- -	UNKNOWN ALKANE	9.18	10.	J
5.	- -	UNKNOWN ALKANE	9.38	20.	J
6.	- -	UNKNOWN ALKANE	9.95	50.	J
7.	- -	UNKNOWN ALKANE	11.21	60.	J
8.	- -	UNKNOWN ALKANE	11.43	20.	J
9.	- -	UNKNOWN ALKANE	12.27	30.	J
10.	- -	UNKNOWN CYCLOHEXANE	12.88	10.	J
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12.					
13.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5P DL

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204292DL

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3478

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/14/92

Column: (pack/cap) CAP Dilution Factor: 200.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	2000.	U
74-83-9	Bromomethane	2000.	U
75-01-4	Vinyl Chloride	840.	J D
75-00-3	Chloroethane	2000.	U
75-09-2	Methylene Chloride	1000.	U
67-64-1	Acetone	2000.	U
75-15-0	Carbon Disulfide	1000.	U
75-35-4	1,1-Dichloroethene	1000.	U
75-34-3	1,1-Dichloroethane	1000.	U
540-59-0	1,2-Dichloroethene (total)	3500.	D
67-66-3	Chloroform	1000.	U
107-06-2	1,2-Dichloroethane	1000.	U
78-93-3	2-Butanone	2000.	U
71-55-6	1,1,1-Trichloroethane	1000.	U
56-23-5	Carbon Tetrachloride	1000.	U
108-05-4	Vinyl Acetate	2000.	U
75-27-4	Bromodichloromethane	1000.	U
78-87-5	1,2-Dichloropropane	1000.	U
10061-01-5	cis-1,3-Dichloropropene	1000.	U
79-01-6	Trichloroethene	1600.	D
124-48-1	Dibromochloromethane	1000.	U
79-00-5	1,1,2-Trichloroethane	1000.	U
71-43-2	Benzene	1000.	U
10061-02-6	trans-1,3-Dichloropropene	1000.	U
75-25-2	Bromoform	1000.	U
108-10-1	4-Methyl-2-Pentanone	2000.	U
591-78-6	2-Hexanone	2000.	U
127-18-4	Tetrachloroethene	880.	J D
79-34-5	1,1,2,2-Tetrachloroethane	1000.	U
108-88-3	Toluene	1000.	U
108-90-7	Chlorobenzene	1000.	U
100-41-4	Ethylbenzene	1000.	U
100-42-5	Styrene	1000.	U
1330-20-7	Xylene (total)	1000.	U

H2M LABS, INC.

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EPA SAMPLE NO.

MW-5P DL

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 013

Matrix: (soil/water) WATER Lab Sample ID: 9204292DL

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3478

Level: (low/med) LOW Date Received: 2/ 7/92

% Moisture: not dec. 100. Date Analyzed: 2/14/92

Column: (pack/cap) CAP Dilution Factor: 200.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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EXHIBIT

S

RIVKIN, RADLER & KREMER

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30 NORTH LASALLE STREET
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SANTA ROSA, CA 95402-6609
(707) 576-6033

CHARLOTTE A. BIBLOW
PARTNER
DIRECT DIAL
(516) 357-3249

January 6, 1992

VIA TELECOPY

Mary Anne Bartlett, Esq.
Pall Corporation
2200 Northern Blvd.
East Hills, New York 11548

Re: City of Glen Cove v. Photocircuits

Dear Mary Anne:

Attached you will find the results of the soil sample analyses taken from locations at Pall and August Thomsen. These results are from the split samples, which were given to C.A. Rich. We have not yet received the results form Photocircuits' consultant, who collected the sample. Please note that the chart lists only those chemicals which were found, but does not include those chemicals which were tested for but were not detected. For example, chloroform, trichloroethane and trichloroethene were tested on all the soil samples, but were found not to be present. The accompanying map will help you identify the specific locations for the samples.

As a follow-up to our discussion regarding the monitoring wells, we have been informed that H2M intends to install 4 shallow wells on Pall's property. H2M has been asked to produce a map with the proposed locations for these wells. We expect to receive this map at the end of this week. I will, of course, send along a copy to you.

Please feel free to call me if you have any questions.

Sincerely yours,

Charlotte Biblow

Charlotte Biblow

CB/lcs
cc: Stanley Pierce, Esq.

January 6, 1992 5:41pm

Summary of Volatile Organic Detections in Soil
Split Samples Collected by H2M Group

PALL CORPORATION
11/26/91

SAMPLE ID#	DETECTIONS	CONC. (ug/kg)
P1-3	No Detections	- - -
P2-38	Acetone	34 B
	Unknowns (total)	2910 J
P2-38MS	No Detections	
P2-38MSD	Acetone	50 B
P3-43	No Detections	- - -
P4-30	Tetrachloroethene	3 J
	Toluene	22
	Ethylbenzene	3 J
	Xylenes (total)	32
	Methylene Chloride	4 J
	Unknowns (total)	497 J
P5-27	Tetrachloroethene	4 J
P6-26	1,2-Dichloroethene (total)	9
	Tetrachloroethene	14
P7-25	Ethylbenzene	2 J
	Toluene	4 J
	Xylenes (total)	11
	Unknowns (total)	1273 J
P8-48	Ethylbenzene	4 J
	Toluene	9
	Xylenes (total)	26
	4-Mefyhyl-2-Pentanone	8 J
	Methylene Chloride	2 J
	Unknowns (total)	5.6 J
TRIP BLANK	Acetone	22 B
FIELD BLANK	Acetone	11 B
	Methylene Chloride	1 BJ

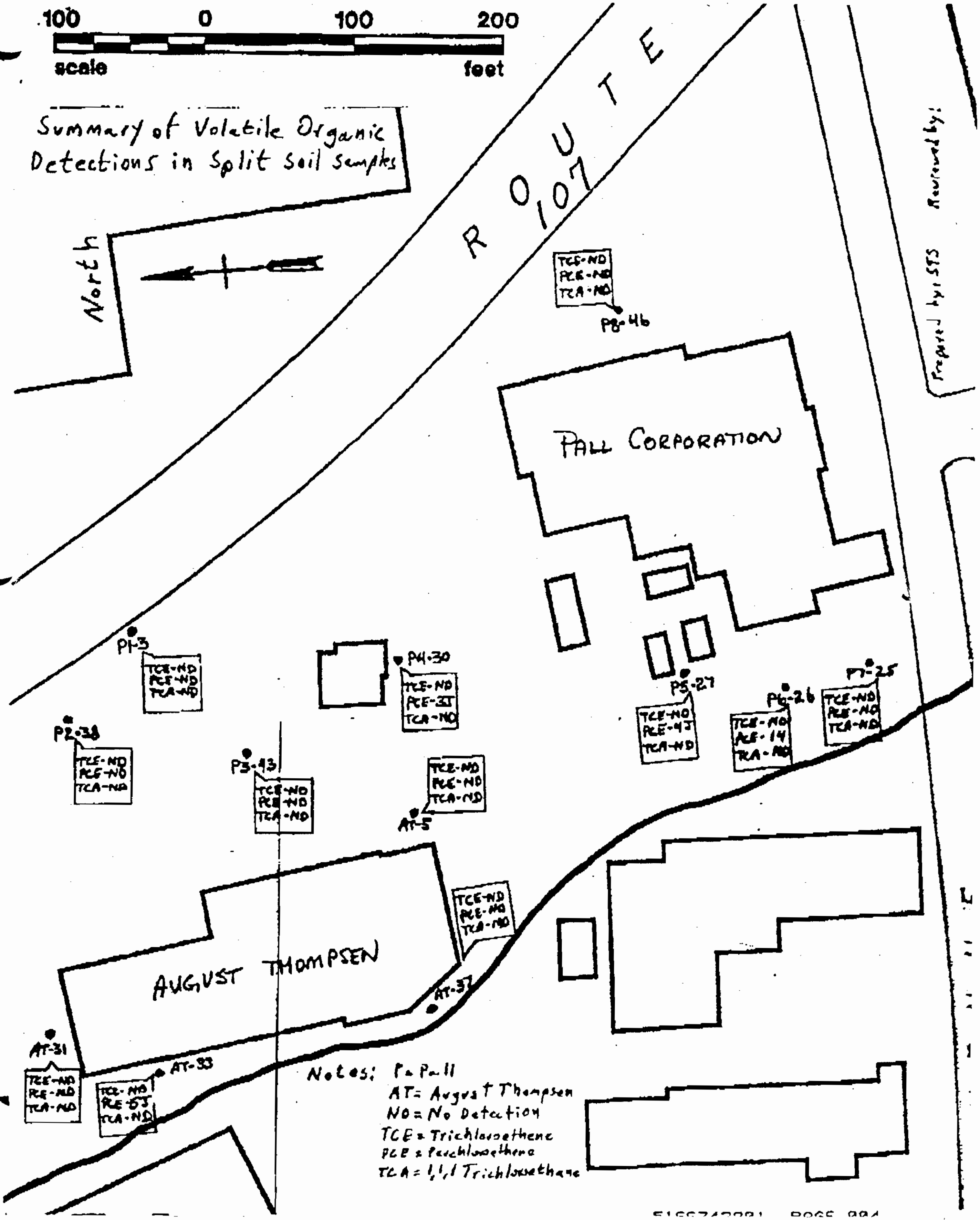
B - Indicates the analyte was found in the associated field/trip blank as well as the sample.
J - Indicates an estimated value.

Summary of Volatile Organic Detections in Soil
Split Samples Collected by H2M Group

AUGUST THOMSEN
11/25/91

SAMPLE ID#	DETECTIONS	CONC. (ug/kg)
AT-5	Methylene Chloride	17 B
AT-31	Unknowns (total)	31 J
AT-33	Methylene Chloride	20 B
	Tetrachloroethene	5 J
AT-37	Methylene Chloride	16 B
FIELD BLANK	Methylene Chloride	2 BJ
	Acetone	41 B
	2-Butanone	6 J
TRIP BLANK	Acetone	25 B

B - indicates the analyte was found in the associated field/trip blank as well as the sample.
J - indicates an estimated value.



Summary of Volatile Organic Detections in Split Soil Samples

Notes: P= Pall
AT= August Thompsen
ND= No Detection
TCE= Trichloroethene
PCE = Perchloroethene
TCA = 1,1,1 Trichloroethane

EXHIBIT
T

#4

FEB., 1992

Glen Cove Industrial Area
Soil and Groundwater Investigation
Soil and Groundwater Analysis
Summary of Detection Tables
Pall Corp., August Thomsen and Glen Cove Creek Samples

March 1992

Prepared for:

Rivkin, Radler & Kremer
EAB Plaza
Uniondale, New York

Prepared by:

CA Rich Consultants, Inc.
404 Glen Cove Avenue
Sea Cliff, New York 11579

CONFIDENTIAL: SUBJECT TO ATTORNEY/CLIENT PRIVILEGE

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists

March 30, 1992

Rivkin, Radler & Kremer
EAB Plaza
Uniondale, New York 11556-0111

Attention: Stanely Pierce, Esq.

Re: Summary of Detections Tables
Pall Corporation, August Thomsen and
Glen Cove Creek - Glen Cove, New York

Dear Dr. Pierce:

The following tables summarize soil and groundwater samples collected at the above referenced properties during January and February, 1992.

Page Number	Description
1	Summary of organic analysis for soil samples collected during monitoring well installation
2	Summary of organic analysis for groundwater samples - August Thomsen property
3	Summary of organic analysis for groundwater samples - Pall Corporation property
4	Summary of organic analysis for stream water samples - Glen Cove Creek
5	Summary of organic analysis for stream sediment samples - Glen Cove Creek
6	Summary of copper and lead analysis for August Thomsen, Pall Corporation and Glen Cove Creek water/sediment samples
7 & 8	TCLP analysis of drummed drill cuttings from Pall Corporation property
9 to 15	Hydrocarbon fingerprint analysis of soil from well MW-5P, Pall Corporation property

404 Glen Cove Avenue, Sea Cliff New York 11579 • Tel 516/674-3889 • FAX 516/674-3901

Figure Number	Description
1	Monitoring well location and water level location map
2	Distribution of 1,1,1-TCA in groundwater
3	Distribution of TCE in groundwater
4	Distribution of PCE in groundwater
5	Distribution of 1,2-DCE in groundwater
6	Distribution of vinyl chloride in groundwater

The figures are presented as both 8-1/2 by 11 inch pages and 2 foot by 3 foot blueprints. If you have any questions regarding these tables and figures, please do not hesitate to call our office.

Sincerely,

CA RICH Consultants, Inc.

Eric A. Weinstock
Project Manager

Attachments

Method Qualifiers for Organic CLP Protocol

Q Qualifier -	Specified entries and their meanings as follows:
U -	Indicates compound was analyzed for but was not detected. The sample quantitation limit is corrected for dilutions and the moisture content for soil samples. If a sample extract cannot be concentrated to the protocol - specific volume, this fact is also accounted for in reporting the sample quantitation limit. The number is the minimum attainable detected limits for the sample.
J -	Indicates an estimated value. The flag is used either when estimating concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
C -	This flag applies to pesticide results where the identification has been successfully confirmed.
B -	This flag is used when the analyte is found in the associated blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound.
E -	This flag identifies compounds whose concentrations exceeded the calibration range of the GC/MS instrument for that specific analysis.
D -	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
A -	This flag indicates that a TIC is a suspected aldol-condensation product.

SUMMARY OF ORGANIC ANALYSIS FOR SOIL SAMPLES COLLECTED DURING MONITORING WELL INSTALLATION

Pall Corporation

Glen Cove, New York.

		August Thomsen		Pall Corporation					Quality assurance samples						
	Well ID	**MW-1A**	**MW-2A**	**MW-1P**	**MW-2P**	**MW-3P**	**MW-4P**	**MW-5P**	FB-1/20	TB-1/20	TB-1/21	TB-1/22	FB-1/23	TB-1/23
	Depth	(2-4)	(2-4)	*	(2-4)	(2-4)	(1-3)	(4-6)						
	Date	1/23/92	1/23/92	*	1/22/92	1/21/92	1/20/92	1/20/92	1/20/92	1/20/92	1/21/92	1/22/92	1/23/92	1/23/92
	Units	ug/L	ug/L	*	ug/L	ug/L	ug/L	ug/L Diluted**	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter														
VOLATILE	ADL													
Vinyl Chloride	12	ND	ND	*	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	6	8	7	*	ND	ND	13 B	ND	ND	ND	ND	ND	6	4 J
Acetone	12	ND	ND	*	ND	ND	33	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (Total)	6	ND	ND	*	ND	ND	2J	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	6	ND	6	*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	6	1 J	ND	*	ND	1 J	3 J	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	6	ND	ND	*	ND	ND	ND	220 J	ND	ND	ND	ND	ND	ND
Xylenes (Total)	6	ND	ND	*	ND	10	ND	2000	ND	ND	ND	ND	ND	ND
Total Unknowns	N/A	ND	8.5 J	*	ND	7.2 J	ND	79000 J	6.8 J	9.6J	ND	ND	ND	ND

ADL - Aqueous detection limit as reported.
J - Quantitation is approximate due to limitations identified in the quality control review.
U - Indicates Not Detected at the reported concentration.
ND - Indicates No Detection.
N/A - Indicates Not Applicable.
FB - Field Blank
TB - Trip Blank
* - No Sample submitted to the Lab.
** - Detection level for sample MW-5P is greater than the ADL as this sample was diluted prior to analysis.

SUMMARY OF ORGANIC ANALYSIS FOR GROUNDWATER SAMPLES
Pall Corporation
Glen Cove, New York.

	August Thomsen					
Well ID	MW-1A	MW-1ADL	MW-2A	MW-2ADL	FB-2/6	TB-2/6
Date	2/6/92	2/6/92	2/6/92	2/6/92	2/6/92	2/6/92
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor	1.0	5.0	1.0	5.0	1.0	1.0
Parameter						
VOLATILE						
* Vinyl Chloride	97.0	73 D	140.0	120 D	ND	ND
Methylene Chloride	6B	20 DJ	5 B	25 D	12.0	13.0
Acetone	19B	50 U	12 B	50 U	31.0	9J
1,1-Dichloroethene	6.0	25 U	5 U	25 U	ND	ND
1,1-Dicloroethane	11.0	25 U	4 J	25 U	ND	ND
* 1,2-Dichloroethene (Total)	580 E	500 D	800 E	760 D	ND	ND
Chloroform	5U	25 U	23.0	22 DJ	ND	ND
TCA 1,1,1-Trichloroethane	11.0	25 U	5 U	25 U	ND	ND
* TCE Trichloroethene	470 E	380 D	63.0	56 D	ND	ND
Benzene	2 J	25 U	2 J	25 U	ND	ND
* PCE Tetrachloroethene	500 E	390 D	170.0	140 D	ND	ND
Toluene	5 U	25 U	14.0	25 U	ND	ND
TENTATIVELY IDENTIFIED COMPOUNDS						
Freon 113	2083 J	ND	260 J	110 J	ND	ND
Unknowns (total)	ND	832 J	50.6 J	ND	ND	ND

J - Quantitation is approximate due to limitations identified in the quality control review.

E - Identifies compounds whose concentrations exceeded the calibration range of the GC/MS instrument for that specific analysis.

U - Indicates Not Detected at the reported concentration.

ND - Indicates No Detection.

FB - Field Blank

TB - Trip Blank

MW-20P in the laboratory report is a duplicate of MW-5P

SUMMARY OF ORGANIC ANALYSIS FOR GROUNDWATER SAMPLES
Pall Corporation
Glen Cove, New York.

	Pall Corporation										
Well ID	MW-1P	MW-2P	MW-2PDL	MW-3P	MW-3PDL	MW-4P	MW-5P	MW-5PDL	MW-5P	MW-5PDL	TB-2/7
Date	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor	1.0	1.0	100.0	1.0	5.0	1.0	5.0	50.0	5.0	50.0	1.0
Parameter									(Duplicate)	(Duplicate)	
VOLATILE											
Vinyl Chloride	10 U	91.0	340 DJ	110.0	81 D	79.0	600.0	330 DJ	570.0	370 DJ	10 U
Methylene Chloride	2 BJ	5 U	160 BDJ	3 BJ	14 BDJ	2 BJ	24 BJ	160 BDJ	22 BJ	120 BDJ	12.0
Acetone	10 U	10 U	1000 U	47.0	50 U	10 U	50 U	500 U	50 U	500 U	10 U
1,1-Dichloroethene	5 U	16.0	500 U	5 U	25 U	5 U	25 U	250 U	25 U	250 U	5 U
1,1-Dicloroethane	12	30.0	500 U	12.0	25 U	6.0	25 U	250 U	25 U	250 U	5 U
* 1,2-Dichloroethene (Total)	29	2400 E	13000 D	610 E	490 D	140.0	3400 E	2300 D	3100 E	2600 D	5 U
Chloroform	5 U	5 U	500 U	5 U	25 U	5 U	25 U	250 U	25 U	250 U	5 U
TCA 1,1,1-Trichloroethane	5 U	5 U	500 U	5 U	25 U	5 U	25 U	250 U	25 U	250 U	5 U
TCE Trichloroethene	11	460 E	1800 D	57.0	50 D	15.0	1500 E	920 D	1400 E	1100 D	5 U
Benzene	5 U	1 J	500 U	5 U	25 U	5 U	25 U	250 U	25 U	250 U	5 U
PCE Tetrachloroethene	5 U	75.0	290 DJ	17.0	15 DJ	13.0	680.0	390 D	630.0	480 D	5 U
Toluene	5 U	5 U	500 U	5 U	25 U	5 U	25 U	250 U	25 U	250 U	5 U
TENTATIVELY IDENTIFIED COMPOUNDS											
Freon 113	ND	960 J	ND	57 J	ND	ND	3290 J	960 J	2900 J	1200 J	ND
Unknowns (total)	ND	28.5 J	3960 J	94.3 J	1548 J	11 J	27 J	19570 J	180 J	ND	ND

J - Quantitation is approximate due to limitations identified in the quality control review.
E - Identifies compounds whose concentrations exceeded the calibration range of the GC/MS instrument for that specific analysis.
U - Indicates Not Detected at the reported concentration.
ND - Indicates No Detection.
FB - Field Blank
TB - Trip Blank
MW-20P in the laboratory report is a duplicate of MW-5P

SUMMARY OF ORGANIC ANALYSIS FOR STREAM WATER SAMPLES
Pall Corporation
Glen Cove, New York.

Sample ID		SW-1	SW-2	SW-3	FB-2/6	TB-2/6
Date		2/6/92	2/6/92	2/6/92	2/6/92	2/6/92
Units		ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor		1.0	1.0	1.0	1.0	1.0
Parameter						
VOLATILE	ADL					
Vinyl Chloride	10	7 J	ND	ND	ND	ND
Methylene Chloride	6	3 J	4 J	6.0	12.0	13.0
Acetone	10	3 J	6 J	ND	31.0	9J
1,1-Dichloroethene	5	ND	ND	ND	ND	ND
1,1-Dicloroethane	5	ND	ND	ND	ND	ND
1,2-Dichloroethene (Total)	5	170.0	ND	19.0	ND	ND
Chloroform	5	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND
Trichloroethene	5	79.0	2 J	16.0	ND	ND
Benzene	5	ND	ND	ND	ND	ND
Tetrachloroethene	5	150.0	ND	2 J	ND	ND
Toluene	5	ND	ND	ND	ND	ND
TENTATIVELY IDENTIFIED COMPOUNDS						
Freon 113	N/A	21 J *	ND	ND	ND	ND
Unknowns (total)	N/A	5.6 J	ND	5.2 J	ND	ND

ADL - Aqueous detection limit as reported.
J - Quantitation is approximate due to limitations identified in the quality control review.
U - Indicates Not Detected at the reported concentration.
ND - Indicates No Detection.
N/A - Indicates Not Applicable.
FB - Field Blank
TB - Trip Blank
* - No Sample submitted to the Lab.

SUMMARY OF ORGANIC ANALYSIS FOR STREAM CHANNEL SEDIMENTS
Pall Corporation
Glen Cove, New York.

Sample ID		SS-1	SS-2	SS-3	FB-2/6	TB-2/6
Date		2/6/92	2/6/92	2/6/92	2/6/92	2/6/92
Units		ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor		1.0	1.0	1.0	1.0	1.0
Parameter						
VOLATILE	ADL					
Vinyl Chloride	13	ND	ND	ND	ND	ND
Methylene Chloride	6	19 B	7 B	15 B	12.0	13.0
Acetone	6	49.0	9 J	51.0	31.0	9J
1,1-Dichloroethene	7	ND	ND	ND	ND	ND
1,1-Dicloroethane	7	ND	ND	ND	ND	ND
1,2-Dichloroethene (Total)	6	6 J	ND	ND	ND	ND
Chloroform	6	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	6	ND	ND	ND	ND	ND
Trichloroethene	6	6 J	ND	ND	ND	ND
Benzene	6	ND	ND	ND	ND	ND
Tetrachloroethene	6	62.0	ND	ND	ND	ND
Toluene	6	ND	ND	ND	ND	ND
TENTATIVELY IDENTIFIED COMPOUNDS						
Freon 113	N/A	51 J	ND	ND	ND	ND
Unknowns (total)	N/A	43.9 J	ND	ND	ND	ND

ADL - Aqueous detection limit as reported.
J - Quantitation is approximate due to limitations identified in the quality control review.
U - Indicates Not Detected at the reported concentration.
ND - Indicates No Detection.
N/A - Indicates Not Applicable.
FB - Field Blank
TB - Trip Blank
* - No Sample submitted to the Lab.

SUMMARY OF DETECTED COPPER AND LEAD
Pall Corporation
Glen Cove, New York

Sample ID	Copper		Lead	
	Dissolved	Total	Dissolved	Total
Groundwater				
Units	ug/L	ug/L	ug/L	ug/L
August Thomsen				
MW-1A	11.4 B	123.0	4.5	37.3
MW-2A	7.1 B	10 B	3.0 U	5.0
Pall Corp				
MW-1P	9.8 B	8.4 B	3.0 U	7.3
MW-2P	18.2 B	181.0	6.9	118.0
MW-3P	10.1 B	306.0	7.4	169.0
MW-4P	5.0 U	16.8 B	3.0 U	3.1
MW-5P	5.0 U	154.0	3.0 U	72.5
MW-5P (duplicate)	5.0 U	132.0	3.0	66.2

Stream Sediments				
Units	-	mg/Kg	-	mg/Kg
SS-1	-	91.3	-	91.2
SS-2	-	20.7	-	74.6
SS-3	-	29.4	-	25.0

Stream Water				
Units	-	ug/L	-	ug/L
SW-1	-	30.0	-	3 U
SW-2	-	41.4	-	3.4
SW-3	-	57.2	-	22.3
FB-2/7	-	5.0 U	-	3.0 U

B = Compound detected below CRDL but above IDL.
U = Compound undetected at this detection limit.
FB = Field Blank
MW-20P in the laboratory report is a duplicate of MW-5P

nytest environmental inc

Drill cuttings

TCLP Results 2-J Sample ID: DC-1

Lab ID: 1116001

EPA Hazardous Waste Number	TCLP Contaminant	Regulatory levels (mg/l)	Practical Quantitation Limit (mg/l)	Found (mg/l)
D018	Benzene	0.50	0.05	ND
D019	Carbon tetrachloride	0.50	0.05	ND
D020	Chlordane	0.03	0.003	ND
D021	Chlorobenzene	100.0	10	ND
D022	Chloroform	6.0	0.6	ND
D023	o-Cresol	200	20	ND
D024	m-Cresol	200	20	ND
D025	p-Cresol	200	20	ND
D026	Cresol	200	20	ND
D016	2,4-D	10.0	1	ND
D027	1,4-Dichlorobenzene	7.5	0.75	ND
D028	1,2-Dichloroethane	0.5	0.05	ND
D029	1,1-Dichloroethylene	0.7	0.07	ND
D030	2,4-Dinitrotoluene	0.13	0.013	ND
D012	Endrin	0.02	0.002	ND
D031	Heptachlor(and its epoxide)	0.008	0.004	ND
D032	Hexachlorobenzene	0.13	0.013	ND
D033	Hexachloro-1,3-butadiene	0.5	0.05	ND
D034	Hexachloroethane	3.0	0.3	ND
D013	Lindane	0.4	0.04	ND
D014	Methoxychlor	10.0	1	ND
D035	Methyl ethyl ketone	200.0	20	ND
D036	Nitrobenzene	2.0	0.2	ND
D037	Pentachlorophenol	100.0	10	ND
D038	Pyridine	5.0	0.5	ND
D039	Tetrachloroethylene	0.7	0.07	ND
D015	Toxaphene	0.5	0.05	ND
D040	Trichloroethylene	0.5	0.05	ND
D041	2,4,5-Trichlorophenol	400.0	40	ND
D042	2,4,6-Trichlorophenol	2.0	0.2	ND
D017	2,4,5-TP (Silvex)	1.0	0.1	ND
D043	Vinyl chloride ✓	0.20	0.02	ND

ND = NONE DETECTED

nytest environmental inc

Drill cuttings

TCLP Results   2-J   Sample ID: DC-2
Lab ID: 1116002

EPA Hazardous Waste Number	TCLP Contaminant	Regulatory levels (mg/l)	Practical Quantitation Limit (mg/l)	Found (mg/l)
D018	Benzene	0.50	0.05	ND
D019	Carbon tetrachloride	0.50	0.05	ND
D020	Chlordane	0.03	0.003	ND
D021	Chlorobenzene	100.0	10	ND
D022	Chloroform	6.0	0.6	ND
D023	o-Cresol	200	20	ND
D024	m-Cresol	200	20	ND
D025	p-Cresol	200	20	ND
D026	Cresol	200	20	ND
D016	2,4-D	10.0	1	ND
D027	1,4-Dichlorobenzene	7.5	0.75	ND
D028	1,2-Dichloroethane	0.5	0.05	ND
D029	1,1-Dichloroethylene	0.7	0.07	ND
D030	2,4-Dinitrotoluene	0.13	0.013	ND
D012	Endrin	0.02	0.002	ND
D031	Heptachlor(and its epoxide)	0.008	0.004	ND
D032	Hexachlorobenzene	0.13	0.013	ND
D033	Hexachloro-1,3-butadiene	0.5	0.05	ND
D034	Hexachloroethane	3.0	0.3	ND
D013	Lindane	0.4	0.04	ND
D014	Methoxychlor	10.0	1	ND
D035	Methyl ethyl ketone	200.0	20	ND
D036	Nitrobenzene	2.0	0.2	ND
D037	Pentachlorophenol	100.0	10	ND
D038	Pyridine	5.0	0.5	ND
D039	Tetrachloroethylene	0.7	0.07	ND
D015	Toxaphene	0.5	0.05	ND
D040	Trichloroethylene	0.5	0.05	ND
D041	2,4,5-Trichlorophenol	400.0	40	ND
D042	2,4,6-Trichlorophenol	2.0	0.2	ND
D017	2,4,5-TP (Silvex)	1.0	0.1	ND
D043	Vinyl chloride	0.20	0.02	ND

ND = NONE DETECTED

nytest environmental inc

REPORT OF ANALYSIS

Log In No.: 11161

We find as follows:

Results in ppm (dry wt. basis):

Parameter(s)	Sample Identification
	MW-5P(C) (1116101)
Gasoline	10.0 U
# 2 Fuel Oil	10.0 U
Kerosene	10.0 U

ND = None Detected

nytest environmental inc

REPORT OF ANALYSIS

Log in No.: 11161

We find as follows:

Results in mg/kg (dry weight basis) except where noted:

Sample Identification	Parameter(s)
	Total Petroleum Hydrocarbons
1116101 MW-5P(C)	2250
Method Blank	<10.0
Method Detection Limit	10.0

Case Narrative

Log In No: 11161
Revised: 3/19/92

TPHC 310-14 Fraction

Sample MW-5P(C) (1116101) was analyzed using NYSDOH Method 310-14.

Analysis indicated presence of light petroleum distillate hydrocarbons from possible gasoline residue.

Nytest Environmental, Inc. has indicated that the chromatogram for soil sample MW-5P(C) contains organic compounds representative of both gasoline and # 2 fuel oil (diesel). The lighter compounds of each of these products are absent indicating that the product has been in the soil for a long period and has weathered over time.

Chromatogram

ample Name : 11161-01
ileName : c:\2700\data1\fe07013.raw
thod : fprint.ins
Time : 0.00 min
Factor: -1

End Time : 40.75 min
Plot Offset: 4 mV

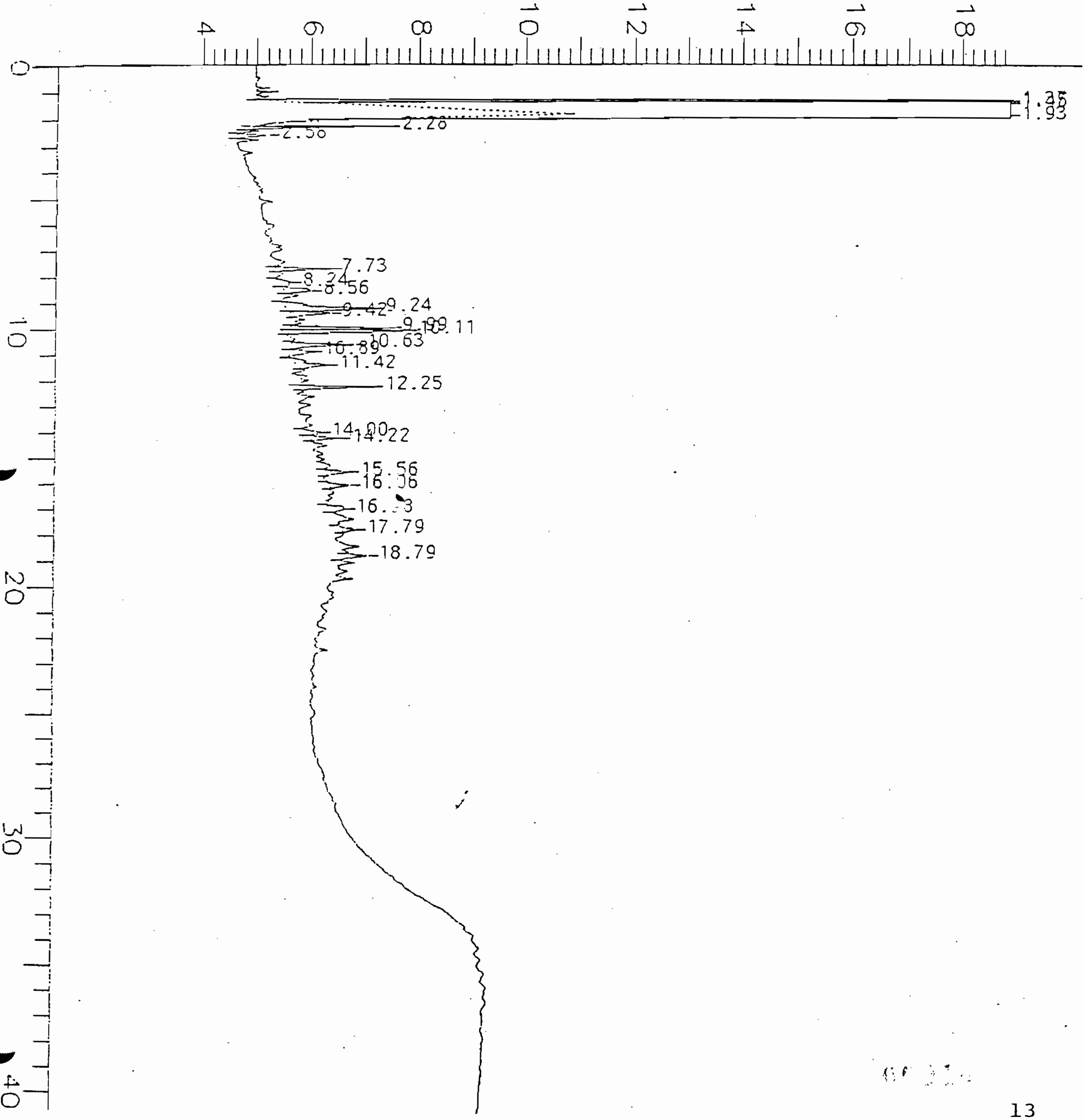
Sample #: MW-5P(C)
Date : 2/20/92 11:07
Time of Injection: 2/8/92 04:24
Low Point : 3.90 mV
Plot Scale: 15 mV

Page 1 of 1

High Point : 18.90 mV

A. Rich Consultan 01/22/92

Response [mV]

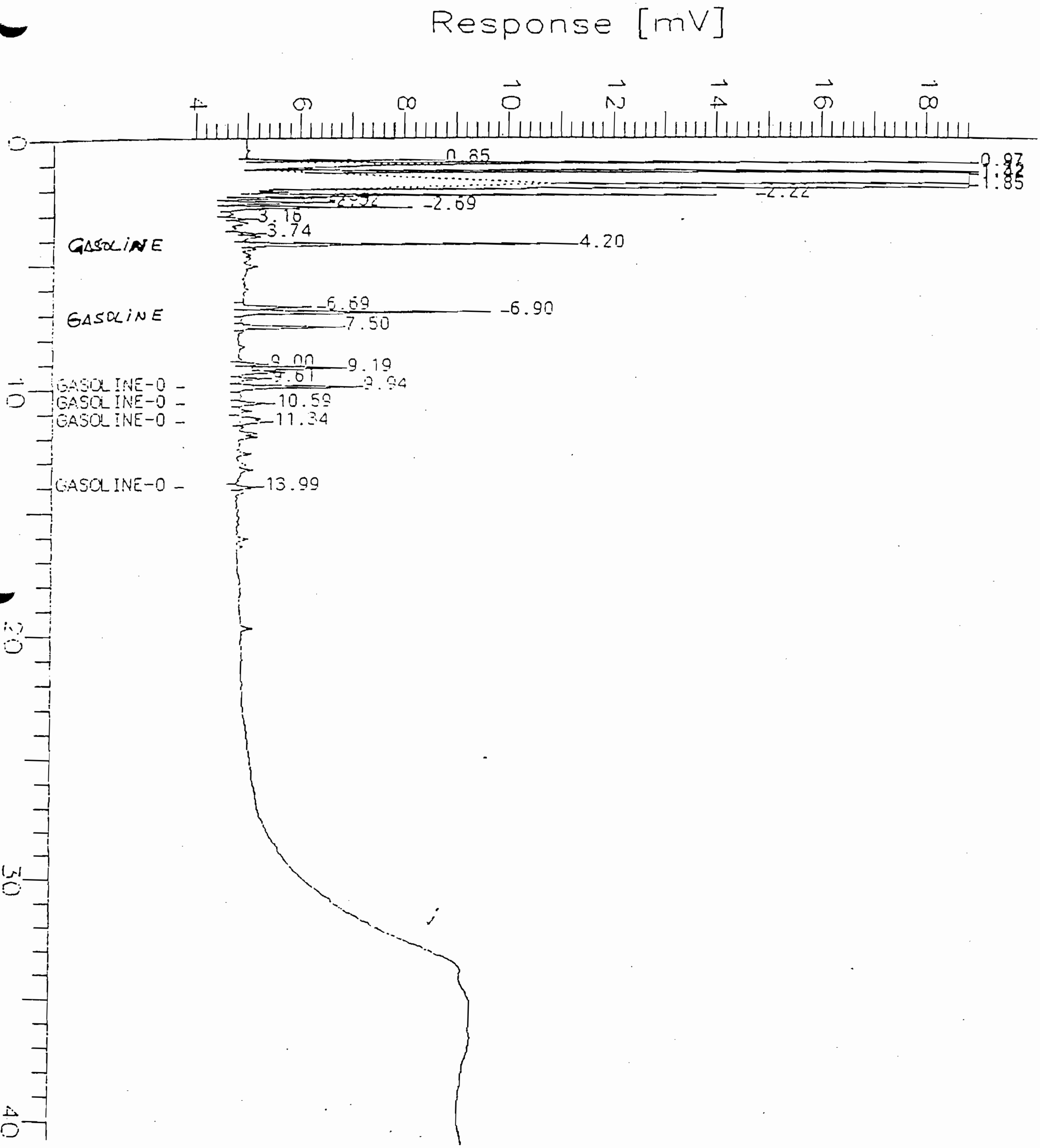


-Name : c:\2700\data1\fe07005.raw
d : fprint.ins
t Time : 0.00 min
ale Factor: -1

End Time : 40.75 min
Plot Offset: 4 mV

Date : 2/7/92 21:59
Time of Injection: 2/7/92 21:17
Low Point : 3.81 mV
Plot Scale: 15 mV

High Point : 18.81 mV

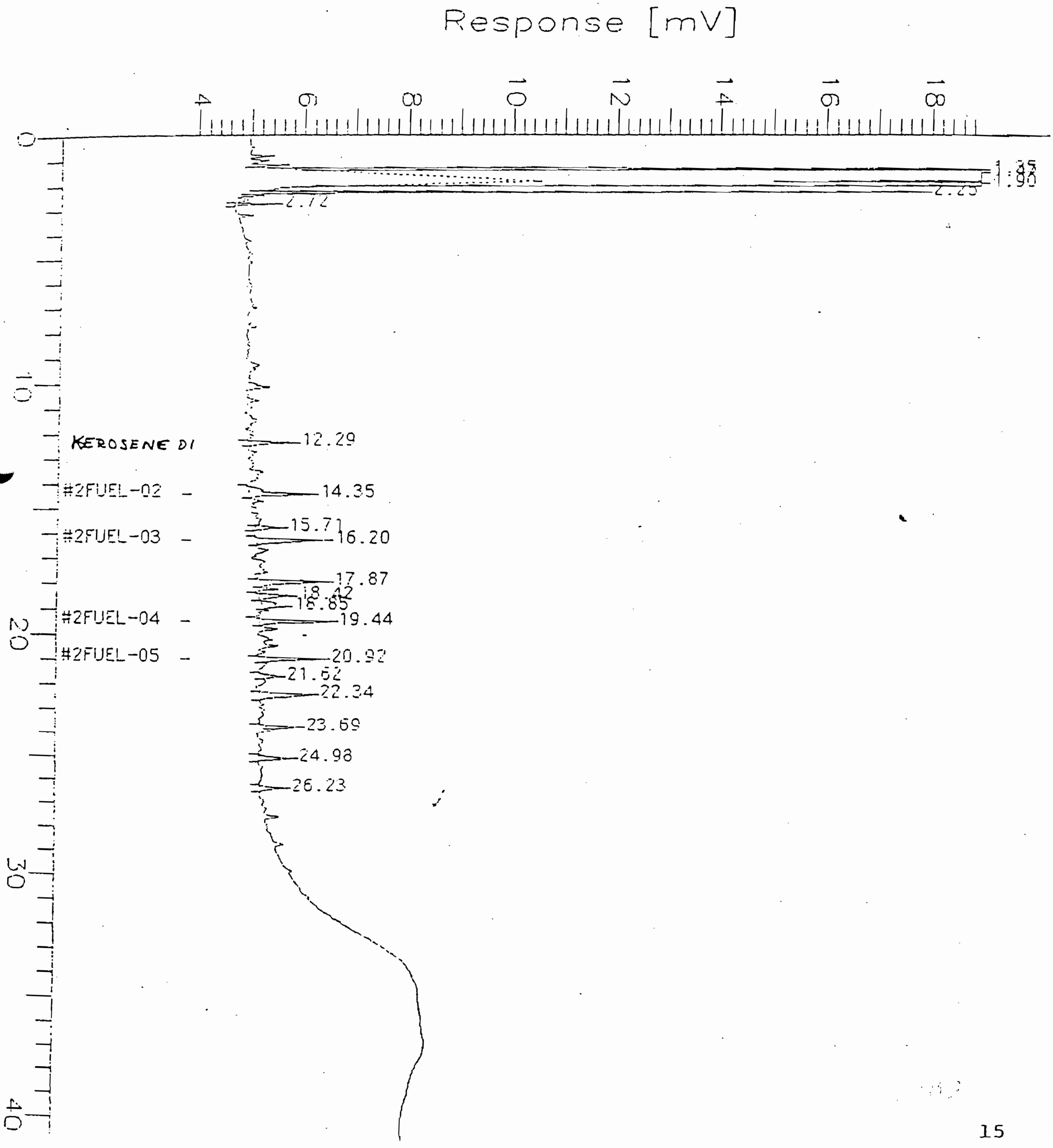


Chromatogram

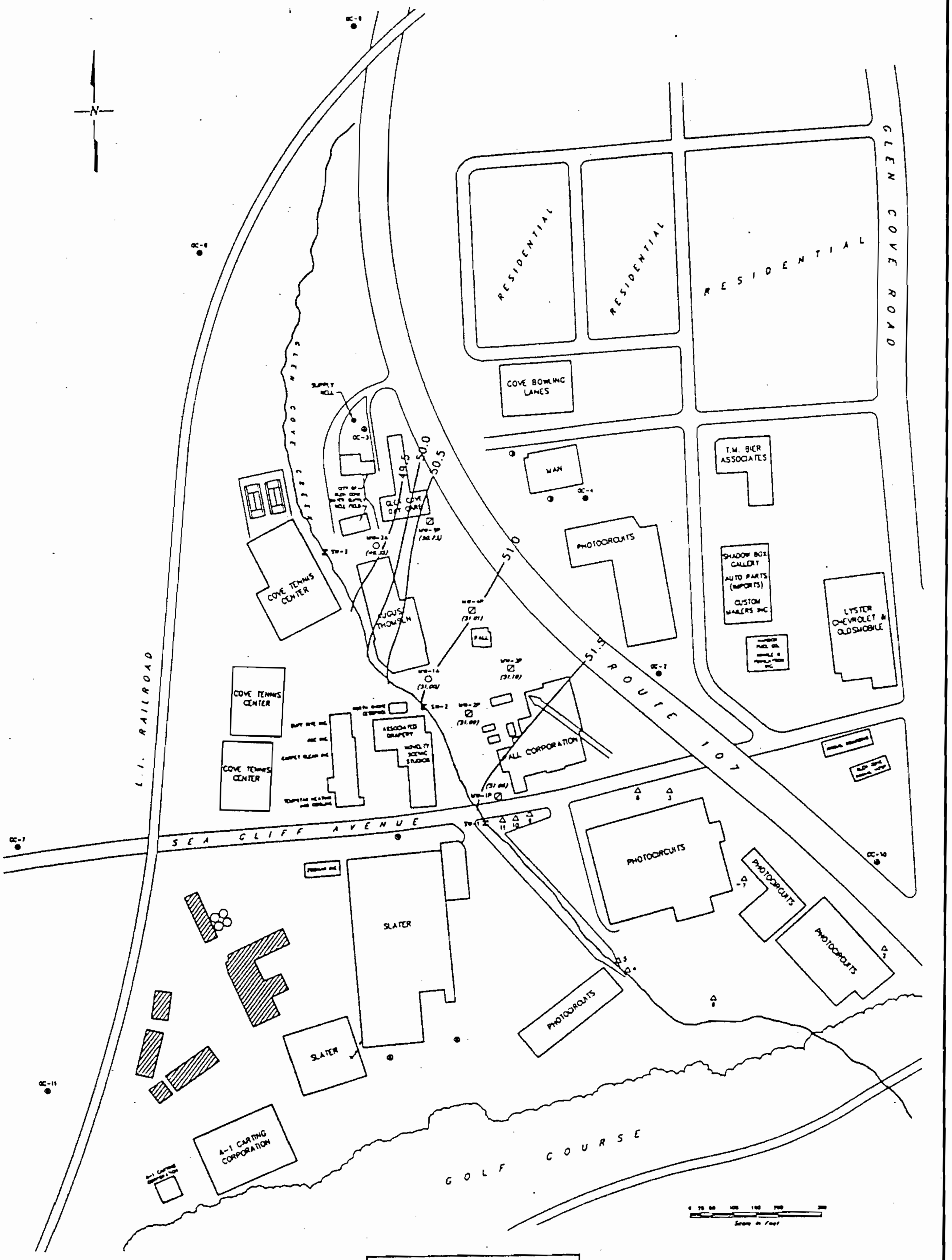
Name : #2 FUEL OIL 350 PPM
me : c:\2700\data1\fe07009.raw
hod : farint.ins
t Time : 0.00 min   End Time : 40.75 min
e Factor: -1   Plot Offset: 4 mV

Sample #:
Date : 2/8/92 01:29
Time of Injection: 2/8/92 12:48
Low Point : 3.93 mV   High Point : 18.93 mV
Plot Scale: 15 mV

Page 1 of 1



FIGURES



KEY

- ▨ DISPLAYS BY MONTE
  EPCO PLASTIC CORP.
  F&J PRECISION TOOLING
  MORRETO MASON SUPPLY
  NOREST CORVETTE SUPPLY CO.
  CRESCENT BEACH AUTOMOTIVE
  SEA CLIFF AUTO REPAIR
  SEA CLIFF IRON WORKS
  T & D TOWING CORP.
  NORTHCOUNTRY ATLANTIC
- ● NCDH MONITORING WELL LOCATION
- △ PHOTOCIRCUITS MONITORING WELL LOCATION
- ☒ PHOTOCIRCUITS MONITORING WELL LOCATION
- ○ AUGUST THOMSEN MONITORING WELLS
- ● SLATER MONITORING WELLS
- ◐ M&M MONITORING WELLS
- ■ STREAM SAMPLE LOCATIONS
- (31.00) GROUND WATER ELEVATION
- ⇒ GROUND WATER FLOW DIRECTION
- —— 51.0 GROUND WATER ELEVATION CONTOUR

WELL #	ELEV. TOC (FT.) RE-NO DATUM	DTW (FT.) 3/6-7/92	ELEV. W.T. (FT) 3/6-7/92
PALL CORP			
MW-1P	55.30	4.30	51.00
MW-2P	54.44	3.35	51.09
MW-3P	53.79	2.60	51.18
MW-4P	52.06	1.05	51.01
MW-5P	51.48	0.75	50.73
AUGUST THOMSEN			
MW-1A	52.76	1.76	51.00
MW-2A	50.30	0.96	49.34

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
404 Glen Cove Avenue, Sea Cliff, NY 11579

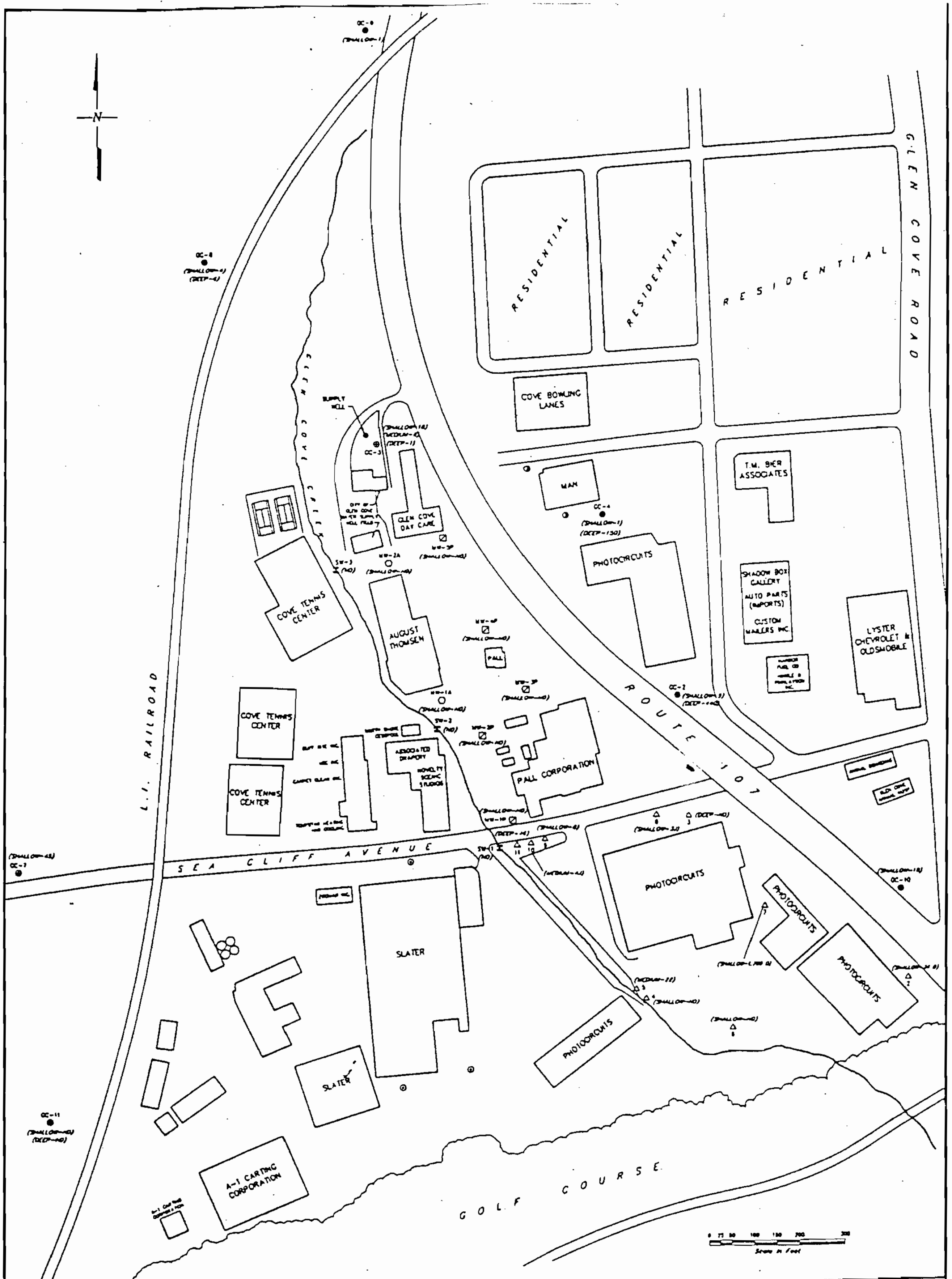
TITLE
PROPERTY, MONITORING WELL LOCATION
AND WATER LEVEL CONTOUR MAP

DATE 3/16/92
SCALE AS SHOWN

FIGURE 1
DRAWING NO. 13002-0A

GLEN COVE INDUSTRIAL AREA
GROUND WATER INVESTIGATION

DRAWN BY: J.J.S.
APPR. BY: E.W.



1,1,1 TRICHLOROETHANE (TCA) CONCENTRATIONS
IN GROUND WATER, PPB.

KEY

- ● NCDH MONITORING WELL LOCATION
- △ PHOTOCIRCUITS MONITORING WELL LOCATION
- ☒ PHOTOCIRCUITS MONITORING WELL LOCATION
- ○ AUGUST THOMSEN MONITORING WELLS
- ● SLATER MONITORING WELLS
- ◑ MAN MONITORING WELLS
- ■ STREAM SAMPLE LOCATIONS

NOTE: J = QUANTITATION IS APPROXIMATE DUE TO LIMITATION IDENTIFIED IN QUALITY CONTROL REVIEW

ND = NO DETECTION

D = COMPOUND ANALYZED AT A SECONDARY DILUTION FACTOR

WELL DEPTHS

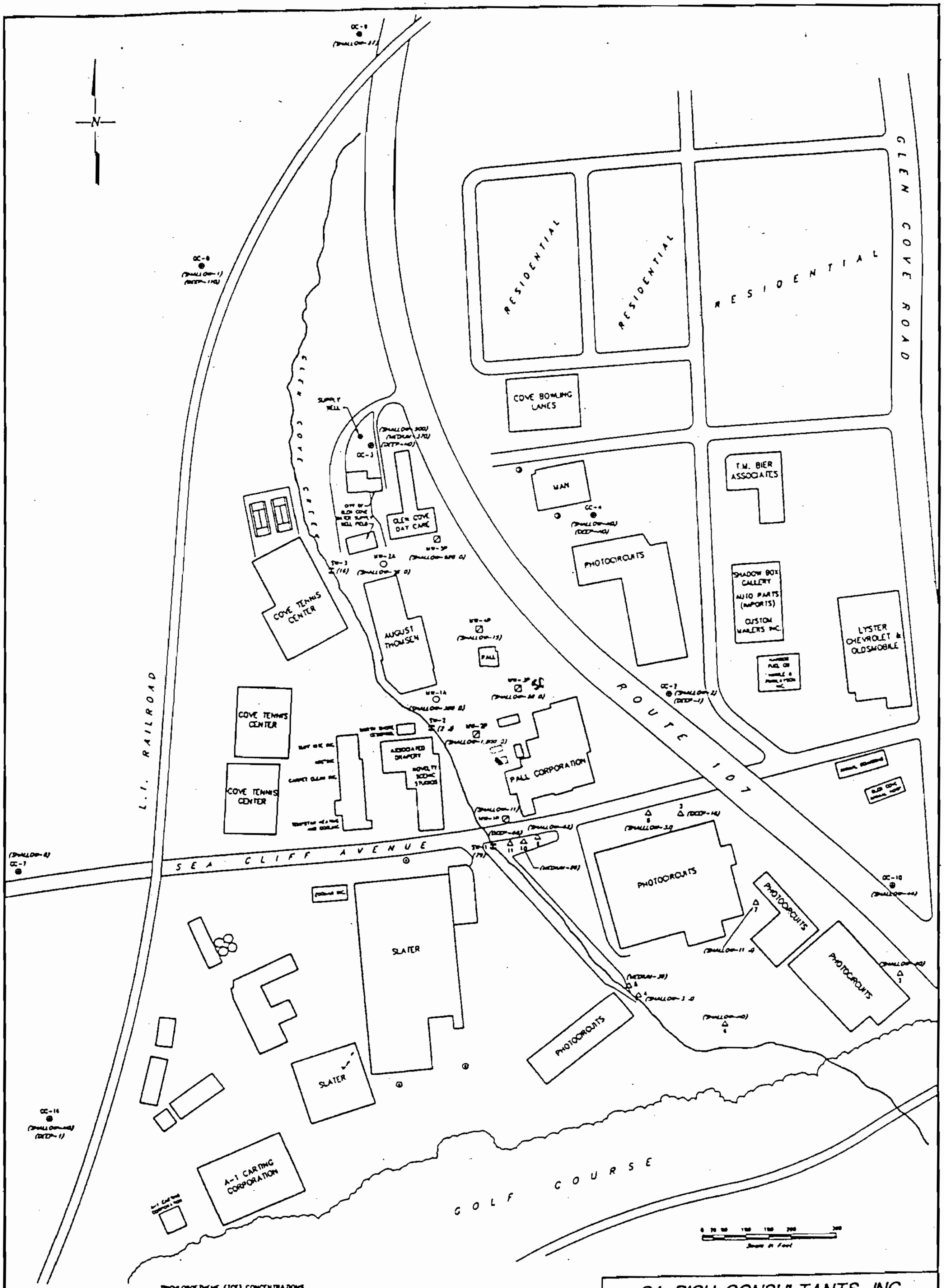
SHALLOW ≈ 10 - 25 ft.
MEDIUM ≈ 100 - 130 ft
DEEP ≈ 175 ft

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
404 Glen Cove Avenue, Sea Cliff, NY 11579

TITLE
DISTRIBUTION OF 1,1,1
TRICHLOROETHANE (TCA)
IN GROUND WATER

DATE 3/16/92
SCALE AS SHOWN
FIGURE 2
GLEN COVE INDUSTRIAL AREA
GROUND WATER INVESTIGATION
DRAWN BY: J.J.S.
DRAWING NO 13002-DA
APPR. BY E.W.



TRICHLOROETHENE (TCE) CONCENTRATIONS IN GROUND WATER, PPB.

KEY

- ● NCDH MONITORING WELL LOCATION
- △ PHOTOCIRCUITS MONITORING WELL LOCATION
- ☒ PHOTOCIRCUITS MONITORING WELL LOCATION
- ○ AUGUST THOMSEN MONITORING WELLS
- ● SLATER MONITORING WELLS
- ◐ MAN MONITORING WELLS
- ■ STREAM SAMPLE LOCATIONS

NOTE

J = QUANTITATION IS APPROXIMATE DUE TO LIMITATION IDENTIFIED IN QUALITY CONTROL REVIEW

ND = NO DETECTION

D = COMPOUND ANALYZED AT A SECONDARY DILUTION FACTOR

WELL DEPTHS

SHALLOW ≈ 10 - 25 ft.
MEDIUM ≈ 100 - 130 ft.
DEEP ≈ 175 ft.

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
404 Glen Cove Avenue, Sea Cliff, NY 11579

TITLE
DISTRIBUTION OF
TRICHLOROETHENE (TCE)
IN GROUND WATER

DATE 3/17/92

SCALE AS SHOWN

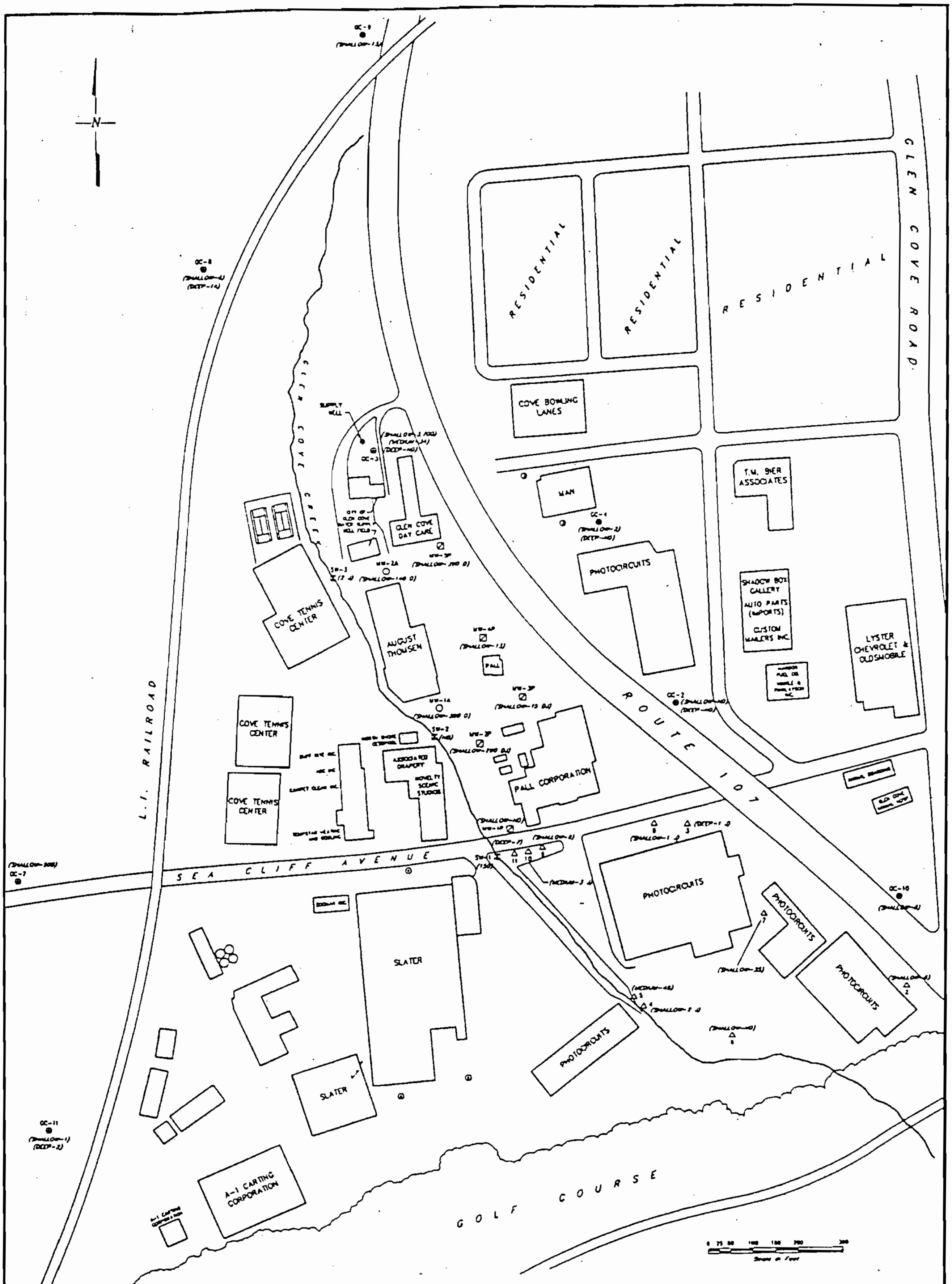
FIGURE 3

DRAWING NO 13002-DA

GLEN COVE INDUSTRIAL AREA
GROUND WATER INVESTIGATION

DRAWN BY J.J.S.

APPR BY E.W.



PERCHLOROETHENE (PCE) CONCENTRATIONS
IN GROUND WATER, PPB

KEY

- ● NCDH MONITORING WELL LOCATION
- △ PHOTOCIRCUITS MONITORING WELL LOCATION
- ☒ PHOTOCIRCUITS MONITORING WELL LOCATION
- ○ AUGUST THOMSEN MONITORING WELLS
- ◐ SLATER MONITORING WELLS
- ◎ MAN MONITORING WELLS
- ■ STREAM SAMPLE LOCATIONS

NOTE J = QUANTITATION IS APPROXIMATE DUE TO

ND = NO DETECTION

D = COMPOUND ANALYZED AT A SECONDARY DILUTION FACTOR

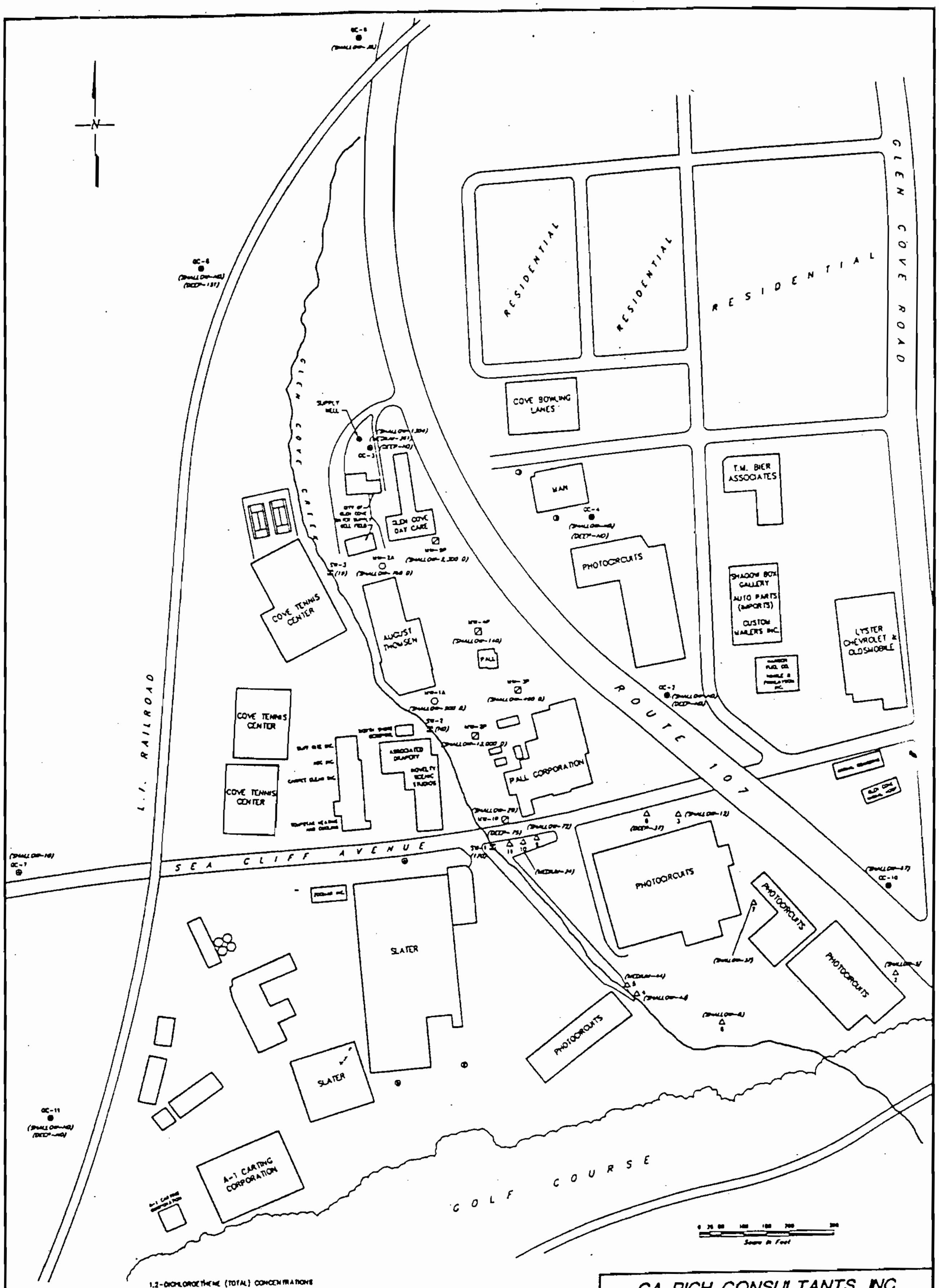
WELL DEPTHS

SHALLOW ≈ 10 - 25 ft.
MEDIUM ≈ 100 - 130 ft.
DEEP ≈ 175 ft.

CA RICH CONSULTANTS, INC.
Certified Ground-Water and Environmental Specialists
404 Glen Cove Avenue, Sea Cliff, NY 11579

TITLE DISTRIBUTION OF PERCHLOROETHENE (PCE) IN GROUND WATER	DATE 3/17/92
	SCALE AS SHOWN
FIGURE 4	DRAWN BY: J.J.S.
DRAWING NO 13002-0A	APPR. BY: E.W.

GLEN COVE INDUSTRIAL AREA
GROUND WATER INVESTIGATION



1,2-DICHLOROETHENE (TOTAL) CONCENTRATIONS IN GROUND WATER, PPB.

KEY

- ● NCDH MONITORING WELL LOCATION
- △ PHOTOCIRCUITS MONITORING WELL LOCATION
- ☒ PHOTOCIRCUITS MONITORING WELL LOCATION
- ○ AUGUST THOMSEN MONITORING WELLS
- ● SLATER MONITORING WELLS
- ◐ MAN MONITORING WELLS
- ■ STREAM SAMPLE LOCATIONS

NOTE: J = QUANTITATION IS APPROXIMATE DUE TO LIMITATION IDENTIFIED IN QUALITY CONTROL REVIEW

ND = NO DETECTION

D = COMPOUND ANALYZED AT A SECONDARY DILUTION FACTOR

WELL DEPTHS

SHALLOW = 10 - 35 ft.
MEDIUM = 100 - 130 ft.
DEEP = 175 ft.

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
404 Glen Cove Avenue, Sea Cliff, NY 11579

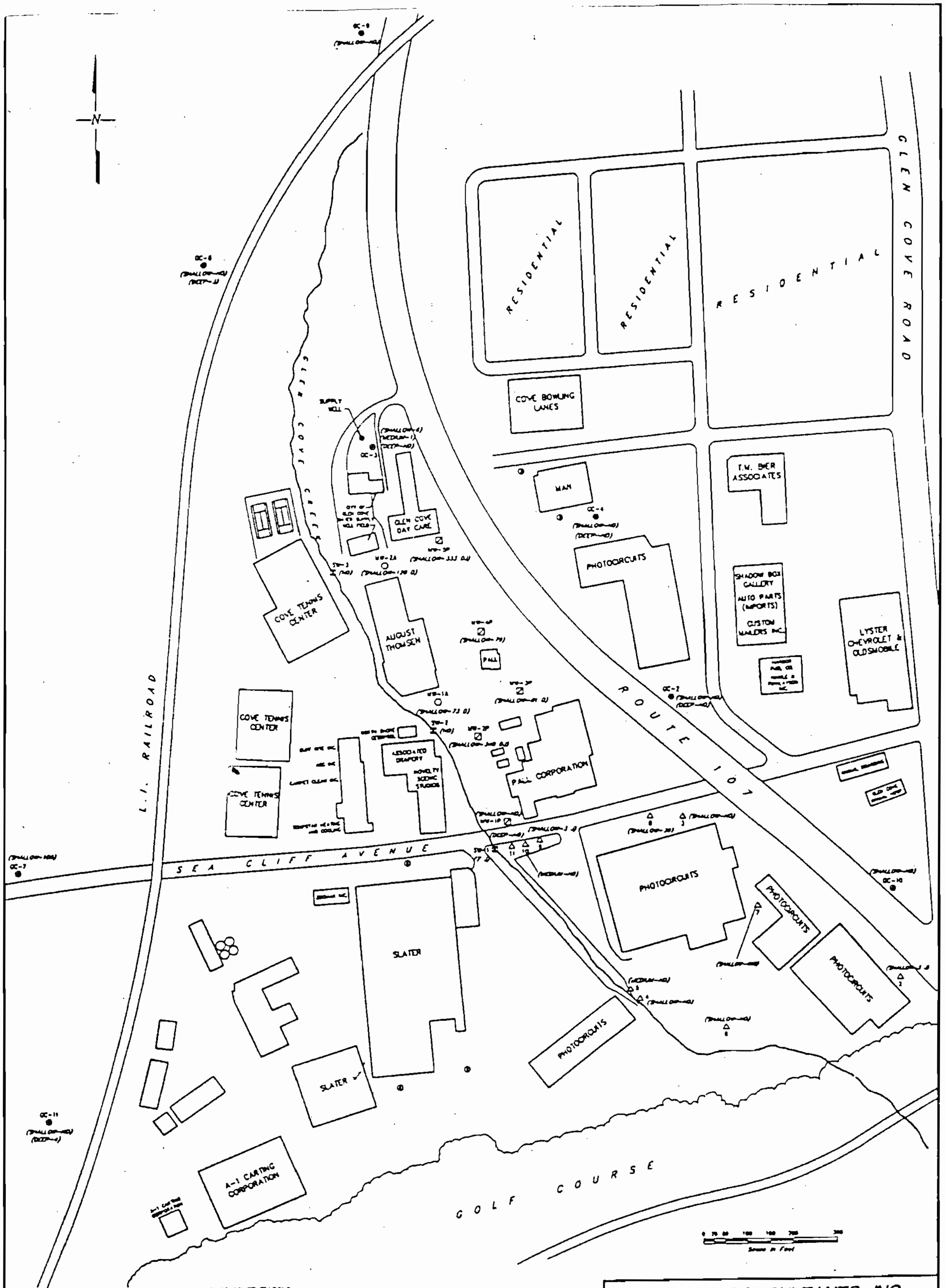
TITLE
DISTRIBUTION OF 1,1,1
1,2-DICHLOROETHENE (TOTAL)
IN GROUND WATER

DATE 3/16/92
SCALE AS SHOWN

FIGURE 5

GLEN COVE INDUSTRIAL AREA
GROUND WATER INVESTIGATION

DRAWN BY J.J.S.
APPR BY E.W.
DRAWING NO 13002-0A



VINYL CHLORIDE CONCENTRATIONS IN GROUND WATER, PPB.

KEY

- ● NCDH MONITORING WELL LOCATION
- △ PHOTOCIRCUITS MONITORING WELL LOCATION
- ☒ PHOTOCIRCUITS MONITORING WELL LOCATION
- ○ AUGUST THOMSEN MONITORING WELLS
- ● SLATER MONITORING WELLS
- ◎ MAN MONITORING WELLS
- ■ STREAM SAMPLE LOCATIONS

NOTE J = QUANTITATION IS APPROXIMATE DUE TO LIMITATION IDENTIFIED IN QUALITY CONTROL REVIEW

ND = NO DETECTION

D = COMPOUND ANALYZED AT A SECONDARY DILUTION FACTOR

WELL DEPTHS

SHALLOW ≈ 10 - 25 ft.
MEDIUM ≈ 100 - 130 ft.
DEEP ≈ 175 ft.

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
404 Glen Cove Avenue, Sea Cliff, NY 11579

TITLE DISTRIBUTION OF VINYL CHLORIDE IN GROUND WATER	DATE 3/17/92
	SCALE AS SHOWN
FIGURE 6	DRAWN BY: J.J.S.
DRAWING NO: 13002-0A	APPR. BY: E.W.

GLEN COVE INDUSTRIAL AREA
GROUND WATER INVESTIGATION

EXHIBIT

U

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CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists

September 29, 1992

Rivkin, Radler & Kremer
EAB Plaza
Uniondale, New York 11556-0111

Attention: Stanley Pierce, Esq.

Re: Installation/Sampling of Well MW-6P
Resampling of Wells MW-2P and 5P
Pall Corporation - Glen Cove, NY

Dear Dr. Pierce:

This letter serves to summarize the installation of one (1) well and the analysis of samples collected from three (3) wells at the above-referenced property. For reference, the locations of these wells are displayed on Figure 1.

Installation of Well MW-6P

Well MW-6P was installed between August 13 through 14, 1992. This well is located in the southeast portion of the property and -- based on water levels measured in February, 1992 -- is hydraulically upgradient of Pall Corporation's remaining site wells. The boring for this well encountered clayey and silty sands from grade to its final depth of 65 feet, as shown on the attached boring log. The attached construction detail illustrates the well's completion with well screens set from 50 to 60 feet below grade.

Sampling of Wells MW-2P, MW-5P and MW-6P

Two (2) weeks after the well installation and development was completed, wells MW-2P, MW-5P and MW-6P were sampled for volatile organics analysis. These results are summarized on the attached Table 1. Several compounds in each scan were detected at levels that exceeded the calibration range of the instrument. These were all diluted and reanalyzed to stay within the calibration range of the instrument.

The September, 1992 analysis of groundwater from wells MW-2P and MW-5P, revealed concentrations of a similar magnitude to those measure in these same wells during February, 1992 (see Table 2). The DCE reading of 13,000 ppb measured in February, 1992 from well MW-2P, however, was not reproduced and is probably not representative of this site.

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Summary of Detections in PPB

	MW-2P		MW-5P	
	Feb. 92'	Sept. 92'	Feb. 92'	Sept. 92'
PCE	290	290	680	510
TCE	1,800	720	1,100	1,400
DCE (Total)	13,000	4,300	2,600	5,900
Vinyl Chloride	340	260	600	860

Well MW-6P was placed to intercept groundwater as it enters the Pall property. The sample from this well contained PCE at 110 ppb, TCE at 190 ppb, DCE at 660 ppb and vinyl chloride at 150. The detection of these volatile organics at this depth indicate that the source of contamination must be from a neighboring property upgradient of the Pall property. Also, the ratio of parent compounds (PCE and TCE) to degradation compounds (DCE and vinyl chloride) is indicative of a release that occurred sometime in the past.

It is also noteworthy that 1,1,1-TCA was detected at 16 ppb. This is a compound that was not reportedly used at the Pall Facility, was not detected in the Pall Facility wells, but that was reportedly used and detected at a neighboring upgradient property.

As always, if you have any questions, please do not hesitate to call our office.

Sincerely,

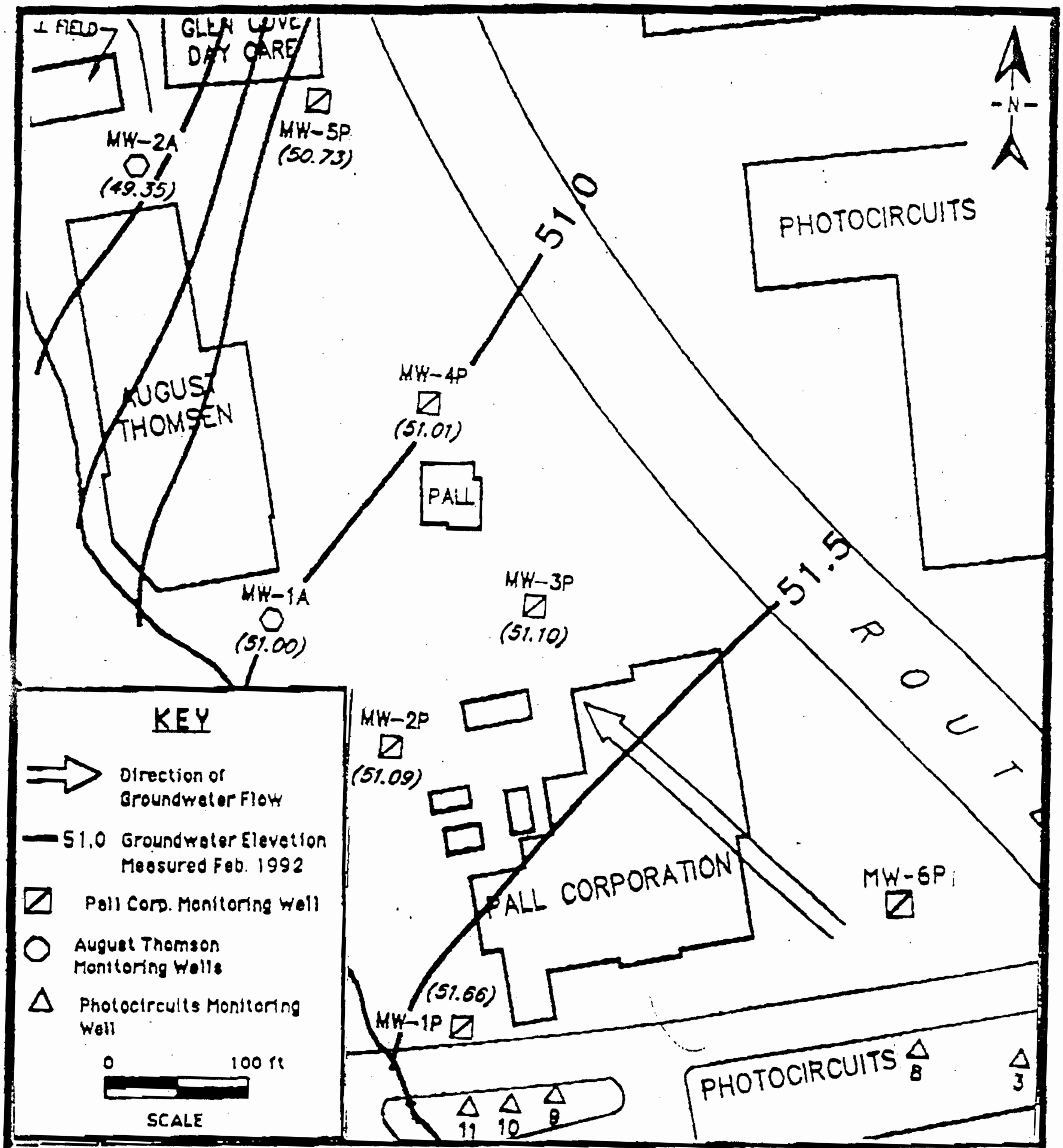
CA RICH CONSULTANTS, INC.

Eric Weinstock

Eric A. Weinstock, CPG, CGWP
Project Manager

cc: Charlotte Biblow, Esq.

EAW:mg
attachments



WELL LOCATION AND WATER TABLE ELEVATION MAP

CA RICH CONSULTANTS, INC.
Certified Ground-Water and Environmental Specialists

404 Glen Cove Avenue, Sea Cliff, N.Y. 11579

Pall Corporation
Glen Cove, New York

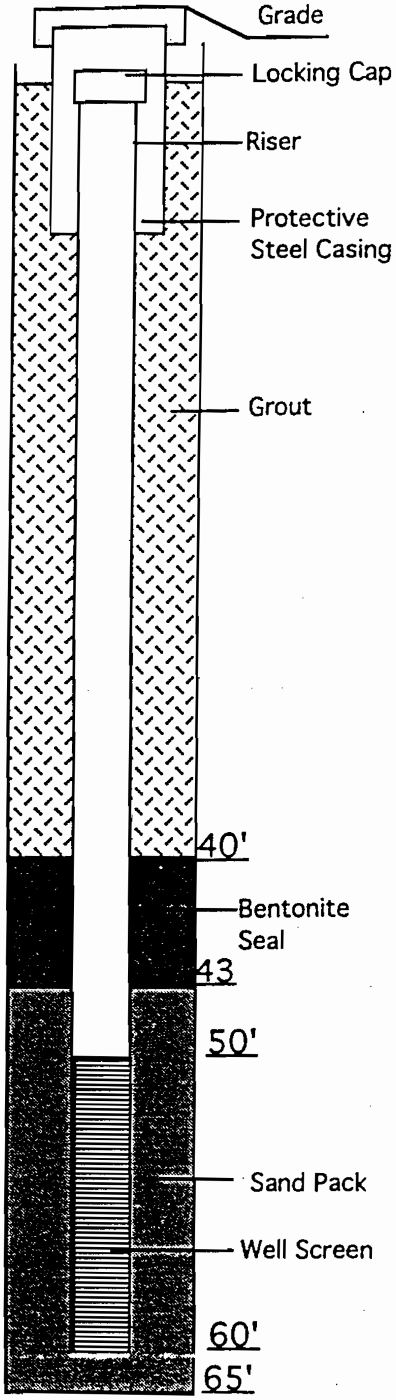
Prepared By: RH
Date: September 1992
Reviewed By: EAW
Figure: 1

6

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists

PROJECT: Pall Corporation, Glen Cove, NY WELL I.D.: MW-6P



DRILLING SUMMARY

Drilling Co: Delta Well & Pump Co. Drillers: Joe Guggino
Drill Rig Make/Model: Failing F-10
Borehole Diameters: 8"
Total Depth: 65'
Drilling Fluid: None
Depth to Water: 4.8'
Supervisory Geologist: Steven Sobstyl

WELL DESIGN

Casing Material: PVC	Diameter: 4"	Length: 50'
Screen Material: PVC	Diameter: 4"	Length: 10'
Slot Size: 20 (0.020)	Setting: 60-50	
Filter Material: Morie #2	Setting: 60-43	
Seals Material: Bentonite	Setting: 43-40	
Grout: Portland cement/bentonite	Setting: 40- 1	
Surface Casing Material: Flush	Setting: Flush	

TIME LOG

	Started	Completed
Drilling:	8-13-92	8-13-92
Installation:	8-14-92	8-14-92
Development:	8-17-92	8-17-92

WELL DEVELOPMENT

Method: Centrifugal Pump
Static Depth to Water: 2.2'
Pumping Depth to Water: 32'
Pumping Rate: .5 GPM
Volume Pumped: 110 Gallons

CA RICH CONSULTANTS, INC.

Project: Pall Corporation
Location: 30 Sea Cliff Avenue
Boring Number: MW-6P
Date Drilled: 8-13-92
Drilling Company: Delta Well & Pump Co.
Water Table Depth: 4.8'
Total Depth: 65 feet
Method Used: Hollow Stem Auger
Inspector: Steven Sobstyl
Organic Vapor Instruments: Organic Vapor Analyzer

Depth (feet)	Blows/6" 130 lbs.	Sample Interval Depth (ft.)	Adv./ Recov.	Organic Vapor PPM	Sample Description	Strata	Comments Time,etc.
0 5	Post Hole Digger	0-2	N/A	0	Surface: asphalt over gravel fill Clayey SAND; tan, medium-coarse with rounded cobbles		2:45 pm
10							
15	10-8-10-12	10-12	24"/22"	0	Silty SAND; tan, medium-coarse; some grey, silty clay and rounded gravel		
20							
25	43-25-19-18	20-22	24"/6"	0	Clayey SAND; tan, fine-coarse and rounded gravel		
30							
35	35-20-31-28	30-32	24"/24"	0	Clayey SAND; tan, fine-coarse; some silt and rounded gravel		
40							
45	50-43-38-31	40-42	24"/20"	0	Silty SAND; tan-grey, fine-coarse; very silty with rounded gravel		
50							
55	11-7-18-40	50-52	24"/18"	0	Silty SAND; tan-grey, fine-coarse		
60							
65	5-8-10-12	60-62	24"/20"	3	Silty SAND; tan-grey, fine-coarse		End 65 ft.

TABLE 1

SUMMARY OF ANALYTICAL DETECTIONS FOR GROUNDWATER

Pall Corporation
Glen Cove, New York

Well ID Date Units Dilution Factor Parameter	MW-2P 9/1/92 ug/L 1	MW-2PDL 9/1/92 ug/L 10	MW-2P 9/1/92 ug/L 5 Duplicate	MW-2PDL 9/1/92 ug/L 20 Duplicate	MW-5P 9/1/92 ug/L 5	MW-5PDL 9/1/92 ug/L 20	MW-6P 9/1/92 ug/L 1	MW-6PDL 9/1/92 ug/L 5	Trip Blank 9/1/92 ug/L 1	Field Blank 9/1/92 ug/L 1
Volatile Organics										
Vinyl Chloride	240 E	230 D •	260	270 D •	860	560 D	150	120 D	ND	ND
Methylene Chloride	3 J	22 DJ	8 J	39 DJ	27 J	80 DJ	3 J	62 D	5 J	3 J
Acetone	10 U	100 U	50 U	200 U	28 J	200 U	10 U	140 D	ND	ND
1,1-Dichloroethene	13	100 U	13 J	200 DJ	8 J	200 U	59	45 DJ	ND	ND
1,1-Dichloroethane	26	25 DJ	28 J	27 DJ	12 J	200 U	210 E	190 D	ND	ND
1,2-Dichloroethene (total)	1500 E	3600 D •	3600 E	4300 D •	4800 E	5900 D	680 E	660 D	ND	ND
1,2-Dichloroethane	10 U	100 U	50 U	200 U	50 U	200 U	58	58 D	ND	ND
1,1,1-Trichloroethane	3 J	100 U •	50 U	200 U •	50 U	200 ~~D~~ U	16	13 DJ	ND	ND
Trichloroethene	490 E	510 D •	580	720 D •	1500 E	1400 D	190	180 D	ND	ND
1,1,2-Trichloroethane	10 U	100 U	50 U	200 U	50 U	200 U	5 J	50 U	ND	ND
Benzene	3 J	100 U	50 U	200 U	50 U	200 U	3 J	50 U	ND	ND
Tetrachlorothene	220 E	210 D •	250	290 D •	510	420 D	110	97 D	ND	ND
Toluene	1 J	100 U	50 U	200 U	6 J	200 U	10 U	50 U	ND	ND
Tentatively Identified Compounds										
Freon 123	390 J	360 JN	420 J	420 JN	290 J	240 JN	ND	ND	ND	ND
Freon 113	1700 J	1500 JN	2100 J	2000 JN	3400 J	2200 JN	ND	ND	ND	ND

MW-20 P in laboratory report is a duplicate sample of MW-2P

ND = Indicates Not Detected.

U = Indicates that the compound was analyzed for but not detected at the reported detection limit.

E = Indicates compounds whose concentrations exceeded the calibration range of the GC/MS instrument for that specific analysis.

J = Indicates an estimated value.

D = Indicates all compunds identified in an analysis at a secondary dilution factor.

N = Indicates compound identification confirmed.

TABLE 2

SUMMARY OF ORGANIC ANALYSIS FOR GROUNDWATER SAMPLES
Pall Corporation
Glen Cove, New York.

	Pall Corporation										
Well ID	MW-1P	MW-2P	MW-2PDL	MW-3P	MW-3PDL	MW-4P	MW-5P	MW-5PDL	MW-5P	MW-5PDL	TB-2/7
Date	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92	2/7/92
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor	1.0	1.0	100.0	1.0	5.0	1.0	5.0	50.0	5.0	50.0	1.0
Parameter									(Duplicate)	(Duplicate)	
VOLATILE											
Vinyl Chloride	10 U	91.0	340 DJ	110.0	81 D	79.0	600.0	330 DJ	570.0	370 DJ	10 U
Methylene Chloride	2 BJ	5 U	160 BDJ	3 BJ	14 BDJ	2 BJ	24 BJ	160 BDJ	22 BJ	120 BDJ	12.0
Acetone	10 U	10 U	1000 U	47.0	50 U	10 U	50 U	500 U	50 U	500 U	10 U
1,1-Dichloroethene	5 U	16.0	500 U	5 U	25 U	5 U	25 U	250 U	25 U	250 U	5 U
1,1-Dicloroethane	12	30.0	500 U	12.0	25 U	6.0	25 U	250 U	25 U	250 U	5 U
1,2-Dichloroethene (Total)	29	2400 E	13000 D	610 E	490 D	140.0	3400 E	2300 D	3100 E	2600 D	5 U
Chloroform	5 U	5 U	500 U	5 U	25 U	5 U	25 U	250 U	25 U	250 U	5 U
1,1,1-Trichloroethane	5 U	5 U	500 U	5 U	25 U	5 U	25 U	250 U	25 U	250 U	5 U
Trichloroethene	11	460 E	1800 D	57.0	50 D	15.0	1500 E	920 D	1400 E	1100 D	5 U
Benzene	5 U	1 J	500 U	5 U	25 U	5 U	25 U	250 U	25 U	250 U	5 U
Tetrachloroethene	5 U	75.0	290 DJ	17.0	15 DJ	13.0	680.0	390 D	630.0	480 D	5 U
Toluene	5 U	5 U	500 U	5 U	25 U	5 U	25 U	250 U	25 U	250 U	5 U
TENTATIVELY IDENTIFIED COMPOUNDS											
Freon 113	ND	960 J	ND	57 J	ND	ND	3290 J	960 J	2900 J	1200 J	ND
Unknowns (total)	ND	28.5 J	3960 J	94.3 J	1548 J	11 J	27 J	19570 J	180 J	ND	ND

J - Quantitation is approximate due to limitations identified in
the quality control review.
E - Identifies compounds whose concentrations exceeded the
calibration range of the GC/MS instrument for that specific analysis.
U - Indicates Not Detected at the reported concentration.
ND - Indicates No Detection.
FB - Field Blank
TB - Trip Blank
MW-20P in the laboratory report is a duplicate of MW-5P

EXHIBIT
V

GT ENGINEERING

1245 Kings Road, Schenectady, NY 12303 USA
Tel: (518) 370-0392 Fax: (518) 370-5864

[illegible]

GROUNDWATER SAMPLING AND ANALYSIS REPORT

PALL CORPORATION
30 SEA CLIFF AVENUE
GLEN COVE, NEW YORK 11542

6
March 13, 1995

Prepared For:

Ms. Mary Ann Bartlett, Esq.
Pall Corporation
25 Harbor Park Drive
Port Washington, New York 11050

GT Engineering, P.C.
Written/Submitted By:

Daniel J. Smith, P.E.
Project Manager/Engineer

Groundwater Technology, Inc.
Reviewed By:

HARRISON SWIFT

W. Harrison Swift
Operations Manager, Holbrook, NY

ATTORNEY WORK PRODUCT - PRIVILEGED AND CONFIDENTIAL

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Appendices

1.0 INTRODUCTION

On June 20, 1994, the Pall Corporation facility located at 30 Sea Cliff Avenue, Glen Cove, New York was recommended for inclusion as a Class 2 site in the New York State Registry of Inactive Hazardous Waste Disposal Sites (IHWDS). The New York State Department of Environmental Conservation (NYSDEC) recommended that Pall Corporation be included in the Registry after completion of a Preliminary Site Assessment (PSA) Report for the area known as the "Sea Cliff Avenue Industrial Area." This section of the report provides an overview of the Pall Corp. facility and a brief discussion of the history of the Sea Cliff Avenue Industrial Area.

1.1 Site Location

The Pall Corp. Sea Cliff facility is located on the north side of Sea Cliff Avenue, approximately 1/8 mile west of Route 107 and 1/4 mile south-southeast of the Carney Street Well Field. The property is bordered on the north by August Thomsen, the south by Sea Cliff Avenue, the east by Route 107, and on the west by the Associated Drapery facility. Photocircuits Corporation and Pass and Seymour (formerly Slater Electric Company) are located south of the Pall Corp. facility across Sea Cliff Avenue. Glen Cove Creek is located parallel to the west wall of the Pall facility and runs through the property from the southwest corner to the northwest corner of the site. The neighboring areas consist primarily of industrial areas with some residential areas located about 1/4 to 1/2 mile away to the north, south, east and west. A site location map is presented in Figure 1-1. A site plan showing the Pall facility and the immediately adjacent properties is provided as Figure 1-2.

The topography of the site based upon data provided by Pall Corp. is relatively flat with a gentle slope from the southwest corner of the facility (grade elevation about 55 feet above mean sea level, msl) toward the northeast corner of the site (about 51 feet above msl). Additional site information pertaining to geologic and hydrogeologic conditions is presented in Sections 2.1 and 2.2.

1.2 Site History

Industrial activity in the Sea Cliff Avenue Industrial Area has been documented since the 1940's with the nature of industrial activities highly variable during the period from 1940 to the present. Pall Corporation has operated at the Sea Cliff Avenue facility since 1946. In addition, the property currently owned by August Thomsen was part of the Pall property until 1971 when the property was sold to August Thomsen. The main Pall facility is presently used primarily as a research and development facility related to filtration product manufacture. The August Thomsen property was used by Pall Corporation historically as a research and development facility for Pall's aerospace division. Industrial activities for the other neighboring facilities include the following:

Photocircuits Corporation:
Powers Chemco operated the facility until 1971 when Kollmorgen Corporation purchased the property. In 1986, ownership of the property was transferred to Photocircuits who is the current owner. The operations at the facility have consisted primarily of printed circuit board manufacturing since at least 1971. Chlorinated solvents have historically been used at the facility.

Pass and Seymour:
Pass and Seymour currently manufactures injection molded plastic components for electronic applications. Similar products had been manufactured at this location for over twenty years prior to Pass and Seymour's occupancy by the former tenant, Slater Electric. Chlorinated solvents have historically been used at the facility.

Associated Draperies:
Associated Draperies has occupied its current location since the early 1970's. Prior to Associated Draperies' occupancy, the site was used by HMS Machine Shop who manufactured aircraft parts from the early 1960's to 1969. Chlorinated solvents may have been used by HMS at the facility.

Carney Street Wellfields:
Carney Street Wellfield was operated by the City of Glen Cove from 1950 to 1977 when volatile organic compounds (VOCs) consisting primarily of chlorinated organics were detected in the wells at the site. The wellfield is also occupied by Glen Cove's Water Department, Emergency Medical services, and a private day care center which was constructed in 1989. No chlorinated solvents have historically been used at the facility.

Since the discovery of VOCs in the Carney Street wells, numerous investigations and studies have been performed by private parties and regulatory agencies to determine the source of contamination in the Carney Street wells. The historical reports were reviewed by NYSDEC to develop the PSA Report that formed the basis for the listing of many of the industrial facilities in the area as Inactive Hazardous Waste Disposal Sites. The following table summarizes the IHWDS status of each of the neighboring industrial facilities after completion of the NYSDEC PSA.

Facility Name	Recommended IHWDS Status
Associated Drapery	Not Listed (NYSDEC Spills)
August Thomsen	Class 2 Site
Carney St. Well Field	Not Listed (NYSDEC Spills)
Pall Corporation.	Class 2 Site
Pass and Seymour	Class 2 Site
Photocircuits Corporation	Class 2 Site

Based upon the information presented in the NYSDEC's PSA, all of the facilities included in the Sea Cliff Avenue Industrial Area except for the Associated Drapery Site and the Carney Street Well Field site have used chlorinated solvents (tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane, and/or methylene chloride) at some time since the 1940's. However, it should be noted that no chlorinated solvents are currently used at the Pall facility. Additionally, each of the sites have had documented concentrations of these chlorinated solvents present in the soil and/or groundwater at some time.

1.3 Scope and Objectives

In October 1995, Groundwater Technology, Inc. (GTI) was retained by Pall Corporation to conduct sampling and analysis of groundwater beneath the Pall facility. GTI's scope of services was limited to the following:

- Review of historical, regional groundwater quality data povided by Pall Corporation in NYSDEC's PSA dated March 1994 and in C.A. Rich's Summary Tables dated March 1992;
- Collection of depth to water measurements from existing monitoring wells at the Pall facility to determine water elevation contours and assess the likely groundwater flow direction at the facility;
- Development of the existing monitoring wells at the Pall facility prior to groundwater sampling;
- One (1) round of groundwater sampling from six (6) existing monitoring wells at the Pall facility. The samples collected were analyzed for volatile organic compounds.
- Preparation of this Groundwater Sampling and Analysis Report.

The objectives of this project were to obtain high quality, reproducible data to document the current concentrations of chlorinated organics in groundwater underlying Pall's Sea Cliff Avenue facility. Groundwater quality data generated will be used in conjunction with water level data to develop a preliminary opinion regarding the extent of on-site contamination in groundwater and to evaluate the possibility of off-site sources contributing to the contamination present.

2.0 SITE HYDROGEOLOGY

Data presented in this section has been developed based solely upon review of data provided by Pall Corporation. No new monitoring wells or soil borings were installed under the scope of this project. It should also be noted that although some of the hydrogeologic data generated by others was collected from wells and/or borings on the Pall property, the data presented is intended to be representative of the the entire Sea Cliff Avenue Industrial Area and not any individual site.

2.1 Local Geology

The geologic unit imediately below grade is the part of the Upper Glacial Aquifer which consists of two major components in the Sea Cliff Avenue Industrial Area. The uppermost unit is an upper glacial till composed of both sandy and silty till regions. The predominant geology underlying the Pall facility within the Sea Cliff Avenue Industrial Area is silty till. The silty till in the area has been described as silty, clayey, fine to medium sand with gravel, cobbles, and occasional boulders. The unit is considered to have very low permeability, although site-specific slug or pump test data was not available for GTI review. The silty till extends vertically downward from grade approximately 50 to 60 feet with a maximum thickness of 80 feet recorded in some areas.

The silty till unit is underlain by an interbedded sand and sand and gravel unit of varying composition which is approximately 110 feet thick beneath the Pall facility. The upper "half" of the sand and gravel unit consists predominately of fine to medium sand approximately 60 feet thick. The lower "half" of the unit consists predominately of fine to coarse sand and fine grave that is approximately 50 feet thick. This unit is considered to have moderate to high permeability although occasional lenses of silt have been evident in soil borings. The sand and gravel unit is underlain by the Port Washington Confining Unit which is composed of sandy clay and clay and defines the base of the Upper Glacial Aquifer in the area. The Port Washington Confining Unit is encountered at approximately 200 feet below grade in the Sea Cliff Avenue Industrial Area.

A geologic cross section through the area is included in Figures 2-1a (Plan View) and 2-1b (Section Cut). This geologic section has been reproduced from the NYSDEC PSA and GTI makes no judgement as to its accuracy or completeness. The figures are presented solely for discussion purposes and a point of reference for the text.

2.2 Site Hydrogeology and Water Level Measurements

As discussed in the previous section, the uppermost local hydrogeologic unit underlying the Pall facility is the Upper Glacial Aquifer which varies in thickness in the region but extends from grade to approximately 200 feet below grade in the Sea Cliff Avenue Industrial Area. Historic depth to water measurements collected by the Nassau County Department of Public Works (NCDPW) have indicated that groundwater is typically present at about 2 to 10 feet below grade depending upon the well location. The depth to groundwater in the area, and specifically adjacent to the Pall facility, is influenced by Glen Cove Creek which acts as a discharge area for topographic areas of high elevation adjacent to the creek.

In order to determine the groundwater elevation and to predict the corresponding groundwater flow direction beneath the Pall facility, GTI collected two sets of depth to water measurements on October 26, 1995 and December 5, 1995. The depth to water data obtained and the survey data provided by Pall Corporation is provided in Table 2-1. The data of table 2-1 was then used to develop the groundwater elevation contours of Figure 2-2.[1]

As indicated in Figure 2-2, groundwater flows from southeast to northwest across the Pall property with the groundwater elevation ranginging from approximately 50 feet above msl at the southeast corner of the site to approximately 49 feet above msl at the northwest corner of the site. However, the groundwater elevation data for wells 2P, 3P, 4P, and 5P also indicated a north-northeasterly flow component near the north side of the Pall facility. It cannot be determined from the limited data whether this flow component actually exists or is an anomaly based upon the poor triangulation of the wells and the limited data. Based upon the data available, it appears as if the Photocircuits property is located upgradient of the Pall Corporation facility.

3.0 WELL DEVELOPMENT AND SAMPLING

Groundwater Technology, Inc. collected groundwater samples from the six (6) existing monitoring wells on the Pall Corporation property. The well locations are identified in Figure 1-2. This section of the report describes the well development and sampling procedures performed by GTI to ensure the generation of accurate and useable data.

3.1 Well Development

On October 20, 1995, GTI developed the six monitoring wells on the Pall property identified as MW-1P, MW-2P, MW-3P, MW-4P, MW-5P, and MW-6P. Since the monitoring wells had not been sampled or purged in

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[1] Due to the lack of MW-6P data, the December 5, 1995, data set was not used to generate a contour map.

over two years, the wells were re-developed to ensure that groundwater collected from the wells was representative of local groundwater and that sample results would not be influenced by poor well development procedures. Each well was developed by pumping groundwater from the well until pH, specific conductivity, and turbidity measurements stabilized. Stabilization was defined to be completed when three consecutive pH, turbidity and conductivity readings (recorded approximately five minutes apart) were within 10 percent of one another. Although it was desired to develop the wells to less than 50 NTU's, only 5 of the 6 wells were able to achieve turbidity readings less than 50 NTU's after development. The remaining well, MW-3P, was pumped dry and allowed to recharge before re-pumping. Pumping and recharge cycles were continued for three cycles until turbidity readings stabilized near 250 NTU's.

The development water was containerized in 55-gallon drums, labeled and transferred to the drum staging area on site for disposal by Pall Corporation. Monitoring well development logs are provided in Appendix A.

3.2 Well Sampling

On October 26, 1995, GTI performed groundwater sampling of the six (6) monitoring wells at the Pall property and the pump sump located at the east side of the plant.

Prior to sampling, depth to groundwater readings were collected with a decontaminated water level indicator. Following these measurements, a dedicated polyethylene bailer was lowered into each well until approximately one-half of the bailer was submersed into the groundwater. The groundwater in each bailer was visually inspected for color, general appearance, odor, and presence of a sheen on the surface or particulates in the water column. Non-aqueous phase liquids were not observed in any of the wells. The pump sump sample was collected by lowering a pre-cleaned polyethylene bailer into the sump and transferring the liquid directly to the sample glassware.

Following the collection of the initial bailer sample at the wells, each well was purged until at least three well volumes were removed. Purge waters were removed with a decontaminated trash pump. All purge waters from the six (6) monitoring wells were drummed, labeled and transferred to Pall Corporation for disposal. After purging, dedicated polyethylene bailers were used to collect the groundwater samples for VOC analyses. Care was taken to prevent volatilization of the sample prior to placing it in the VOC vial. The sample vials were then immediately placed in an ice-filled cooler prior to shipment to the laboratory. All Chain of Custody procedures were followed and the samples were submitted for laboratory analysis within 48 hours of collection.

4.0 ANALYTICAL RESULTS

Groundwater samples were submitted to GTEL Environmental Laboratories, Inc. (GTEL) of Milford, New Hampshire for volatile organic compound analyses via EPA Method 624. GTEL is a New York State Department of Health (NYSDOH) certified analytical laboratory. Groundwater sample results are summarized in Table 4-1. Complete laboratory analysis reports are provided in Appendix B.

As indicated in Table 4-1, several chlorinated VOCs were detected in the Pall Corporation monitoring wells at concentrations exceeding their respective NYSDEC Class GA Groundwater Quality Standards. Specifically, the following compounds were detected at concentrations above 5 ug/l:

Contaminants Detected Above 5 ug/l

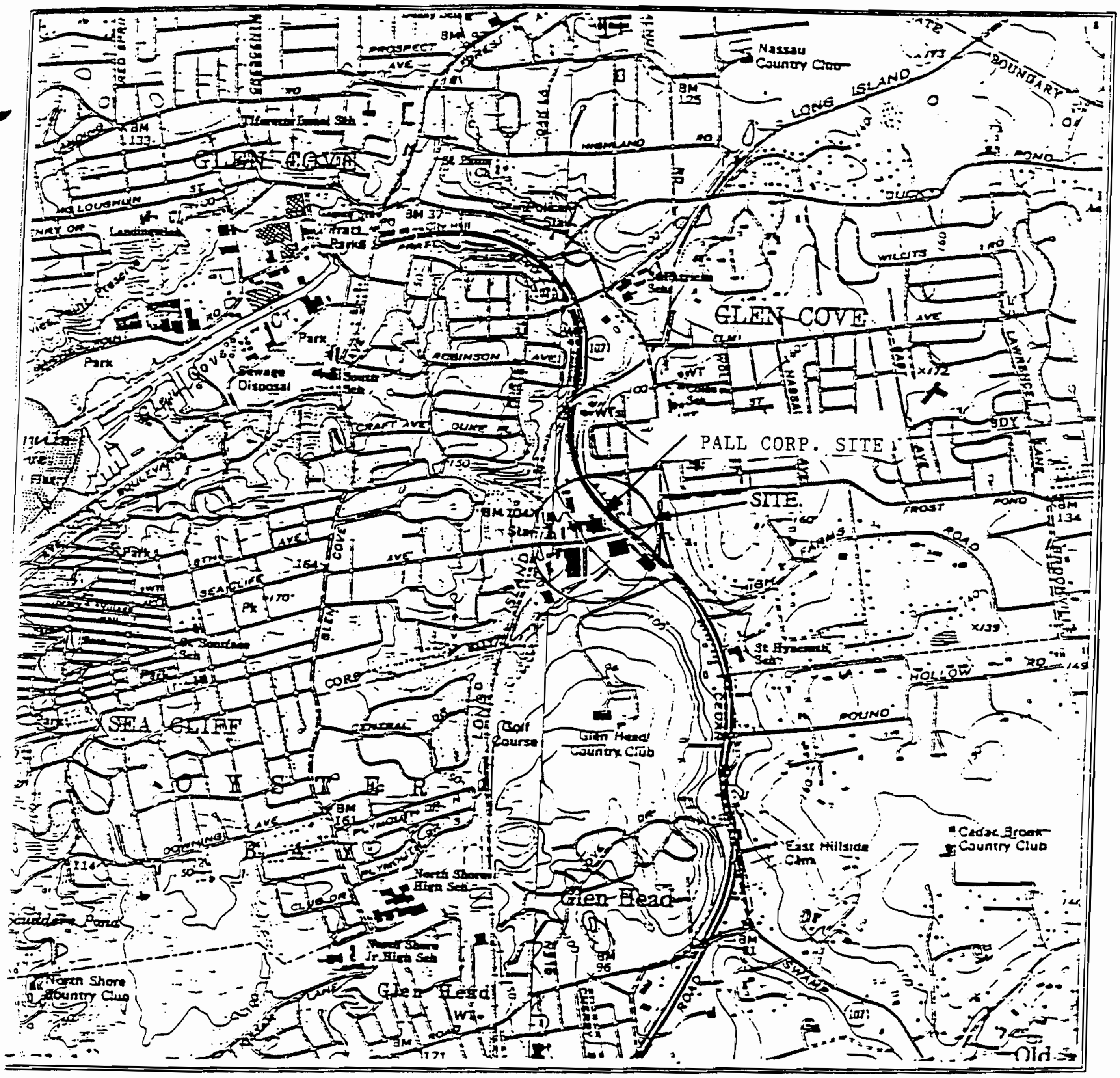
1,1-Dichloroethene*:	Max. concentration of 9.2 ug/l in MW-6P
1,1-Dichloroethane:	Max. concentration of 22 ug/l in the sump pump
1,2-Dichloroethene (total*):	Max. Concentration of 220 ug/l in MW-5P
1,1,1-trichloroethane:	Max. concentration of 47 ug/l in MW-6P
Trichloroethene:	Max. concentration of 18 ug/l in MW-6P
Tetrachloroethene:	Max. concentration of 420 ug/l in MW-2P

* Contaminant also present in method blank at the laboratory

The sample results indicate that the maximum concentrations of 1,1-dichloroethene (1,1-DCE), 1,1,1-trichloroethane (TCA), and trichloroethene (TCE) were present in the upgradient wells away from any Pall facility operations. Based upon this information and the limited groundwater flow direction availiable, an upgradient source of these compounds is likely. However, it should be noted that the upgradient monitoring well (MW-6P) is screened approximately 40 to 50 feet deeper than the other wells sampled as part of this project (MW-6P is screened at about 50 to 60 feet below grade and the other wells are screened approximately 5 to 15 feet below grade). Since tetrachloroethene (PCE) is a dense non-aqueous phased liquid (DNAPL), PCE concentrations at deeper depths may be indicative of a deeper or older plume than can be detected in the shallow, downgradient monitoring wells at the Pall facility. For this reason, the direct comparison of MW-6P results to the results obtained at the downgradient wells should be treated very cautiously.

The presence of PCE in the downgradient well MW-2P at a concentration of 420 ug/l without available data from appropriately sited and screened upgradient wells only indicates that PCE is present underlying the Pall property. However, the source of contamination cannot be confirmed as either upgradient or downgradient due to the lack of current upgradient well data. It is possible, and based upon the review of historical data, probable, that an upgradient source of PCE may exist. Another possible explanation that would explain the detected downgradient concentrations would be an older upgradient source where the leading edge (or an area of higher concentration) of the plume is located at or near MW-2P at this point in time. This is supported by the fact that the typical degradation products of PCE, namely TCE, 1,1-DCE, and 1,2-DCA, are each present in several of the wells.

FIGURES



SITE LONGITUDE – 73.6231° W
SITE LATITUDE – 40. 8518° N

NORTH

FIGURE 1-1
LOCATION MAP

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Source: U.S.G.S. Sea Cliff and Hicksville Quadrangles
Scale: 1" = 2000'

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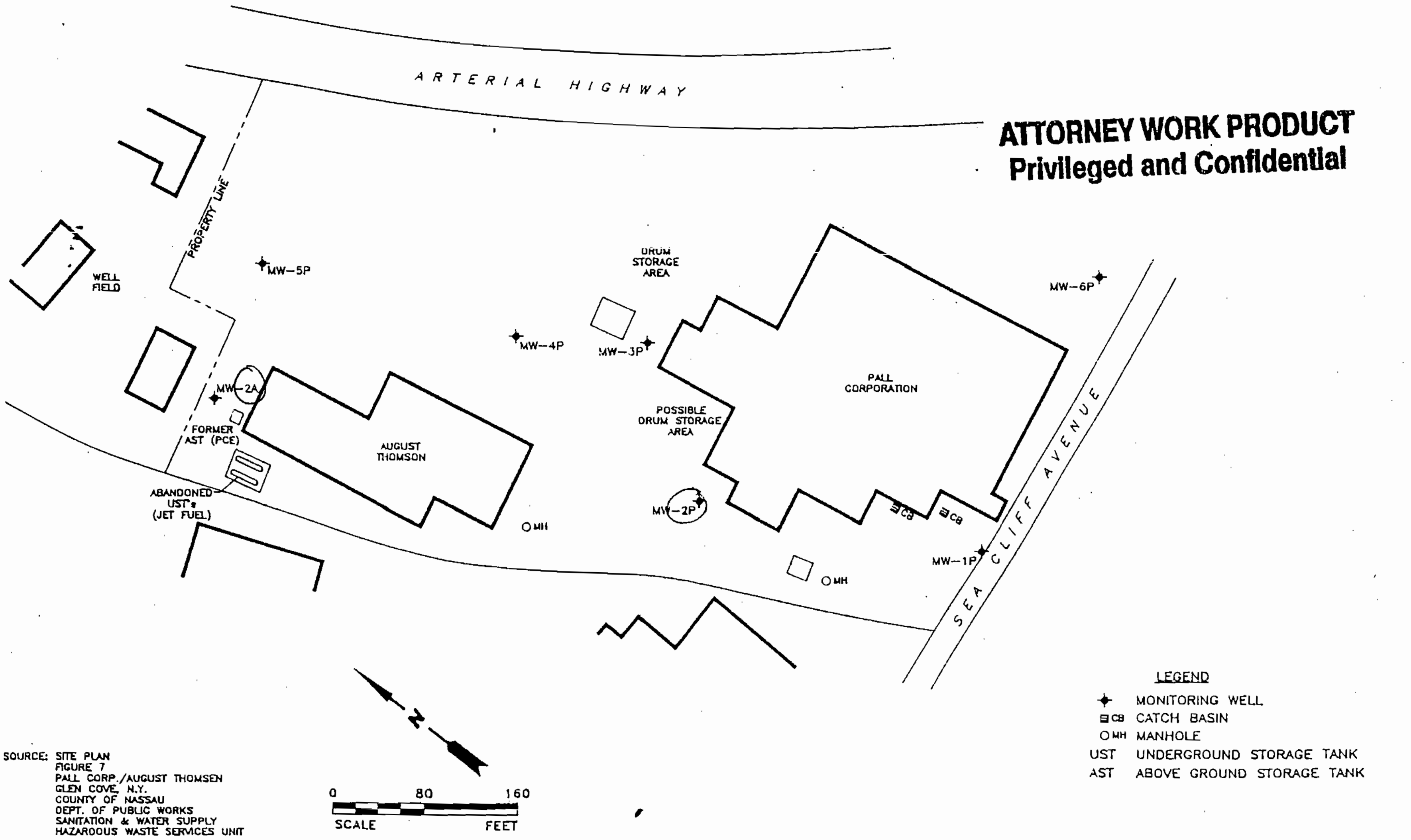

SOURCE: SITE PLAN
FIGURE 7
PALL CORP./AUGUST THOMSEN
GLEN COVE, N.Y.
COUNTY OF NASSAU
DEPT. OF PUBLIC WORKS
SANITATION & WATER SUPPLY
HAZARDOUS WASTE SERVICES UNIT

GROUNDWATER TECHNOLOGY
101-1 COLIN DRIVE
HOLBROOK, N.Y. 11741
(516) 472-4000

CLIENT: PALL CORPORATION/ AUGUST THOMSEN

PROJECT NO.: 04100-0297

PM: DS

PE/RG:

DRAWING DATE: 12/20/95

ACAD FILE: 0297ST95

SITE PLAN

LOCATION: SEA CLIFF AVENUE
GLEN COVE, NEW YORK

DETAILED: TS

FIGURE: 1-2

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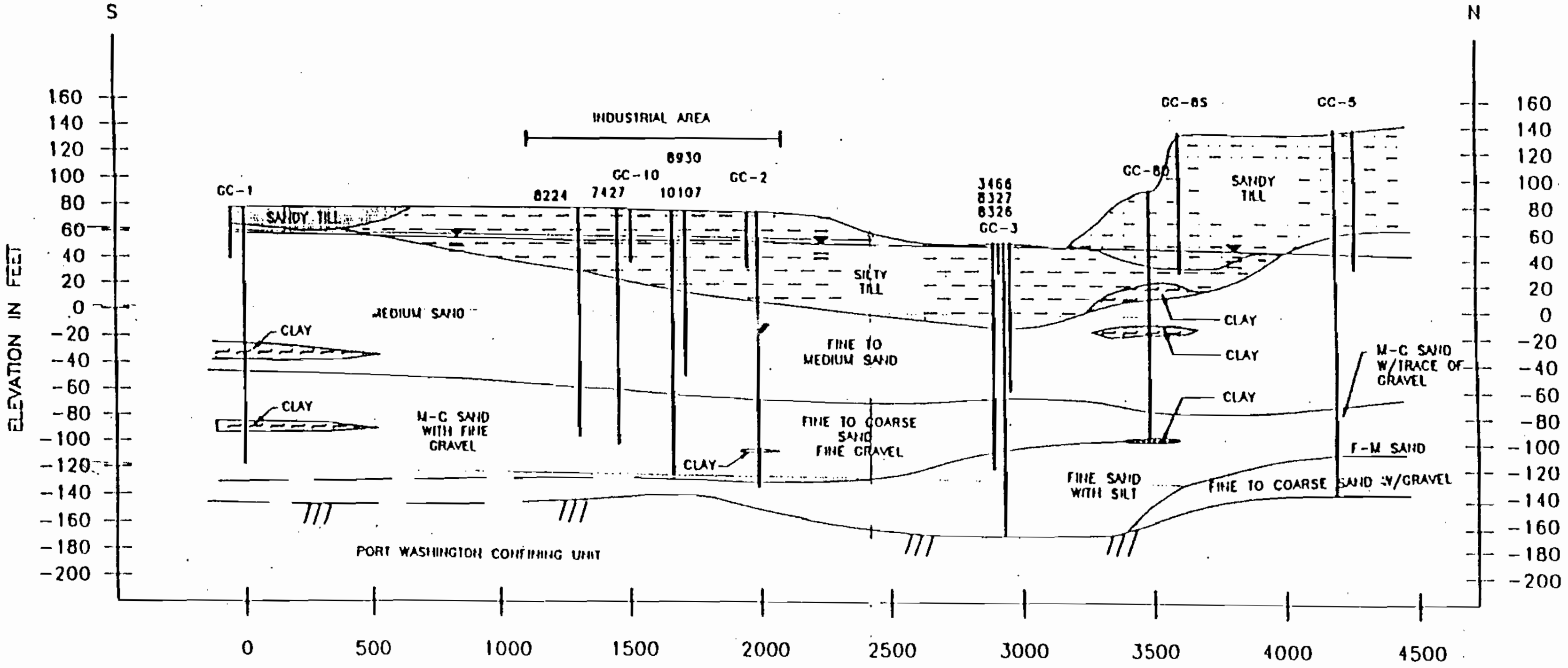
FIGURE 2-1B
GEOLOGIC CROSS SECTION
WELLS GC-1 THRU GC-8



NOTE: Figure is reproduced from NYSDEC Preliminary Site Assessment Report and is presented for reference only. GTI makes no judgement as to its accuracy or validity.

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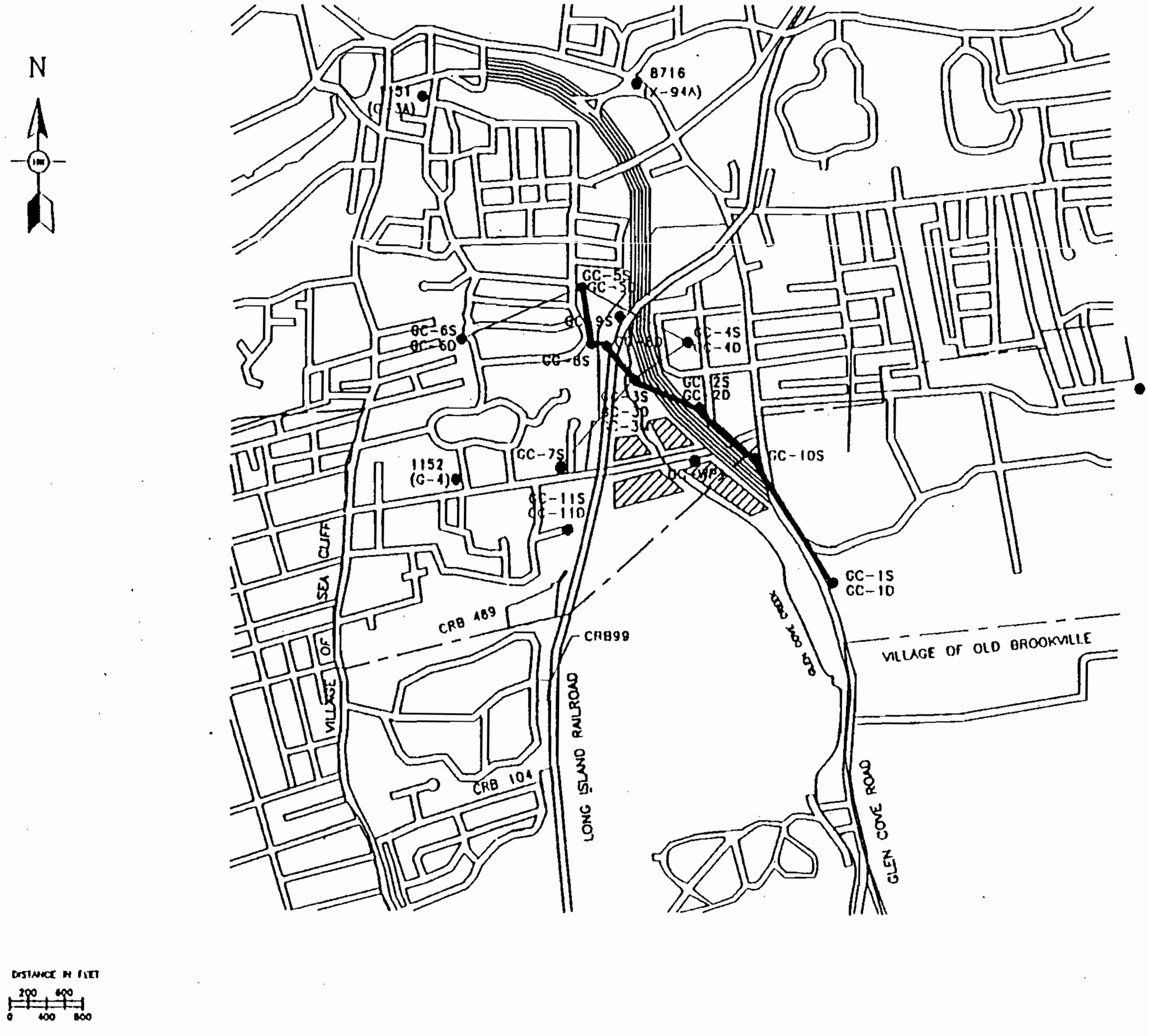


NOTE:

Figure is reproduced from NYSDEC Preliminary Site Assessment Report and is presented for reference only. GTI makes no judgement as to its accuracy or validity.

LEGEND

● GC-7S MONITORING WELL

● 9115 (H-4A) EXISTING NASSAU CO DPW MONITORING WELL

▨ INDUSTRIAL ZONE

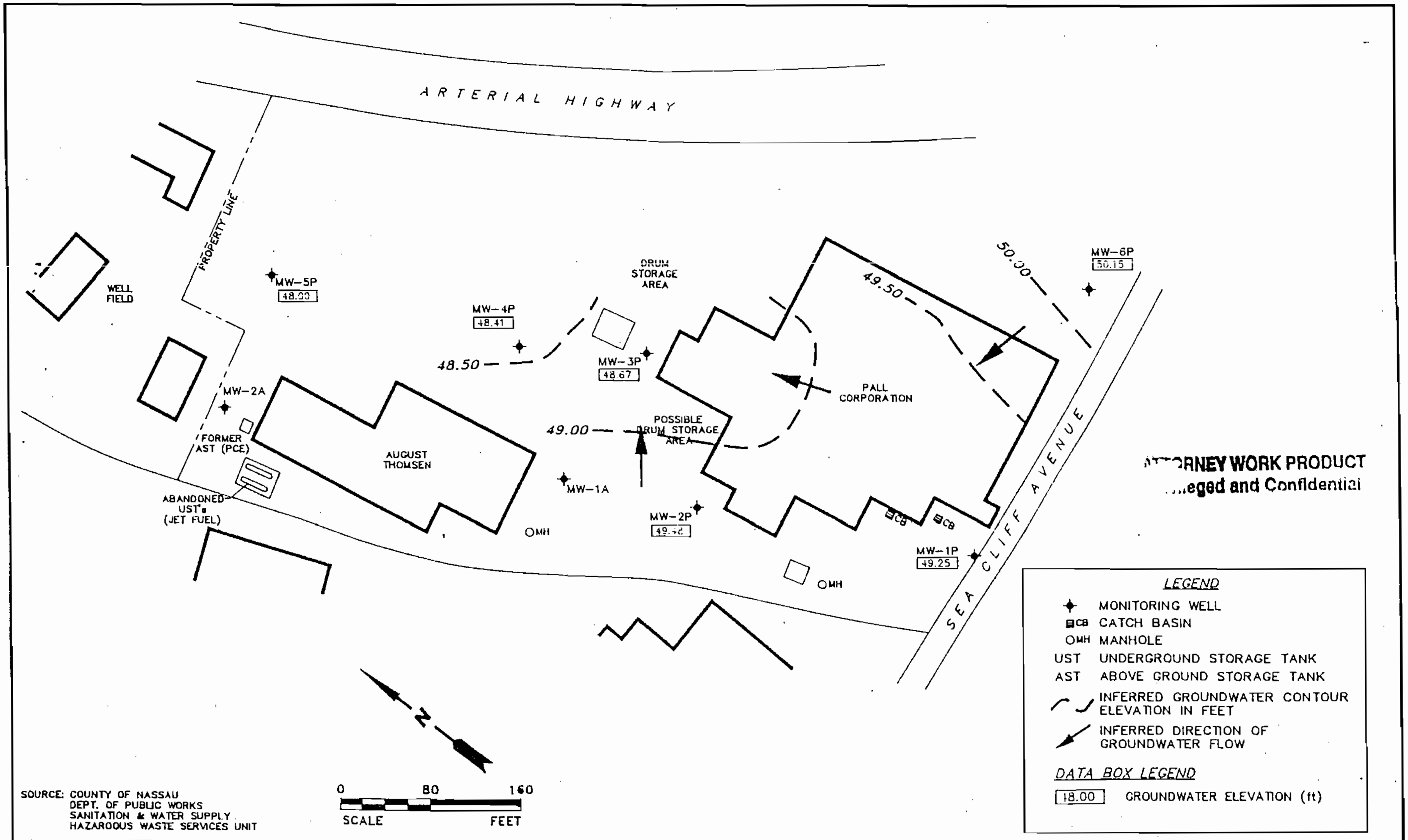
●—● GEOLOGIC SECTION LOCATION

\DWG\GLENCOV

NO.	REVISION DESCRIPTION	DATE
		9/13/89
A	FOR INFORMATION ONLY	3/22/89

FIGURE 2-1A
Geologic Section
(Plan View)

HAZARDOUS WASTE UNIT	DRAWN BY J [illegible]	DATE [illegible]	SHEET NO 1 OF 1



SOURCE: COUNTY OF NASSAU
DEPT. OF PUBLIC WORKS
SANITATION & WATER SUPPLY
HAZARDOUS WASTE SERVICES UNIT

RNEY WORK PRODUCT
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GROUNDWATER TECHNOLOGY 101-1 COLIN DRIVE HOLBROOK, N.Y. 11741 (516) 472-4000	CLIENT: PALL CORPORATION/ AUGUST THOMSEN	PROJECT NO.: 04100-0297 PM: DS PE/RG:	DRAWING DATE: 1/9/96 ACAD FILE: 0297W026	GROUNDWATER CONTOUR MAP 26 OCTOBER 1995	LOCATION: SEA CLIFF AVENUE GLEN COVE, NEW YORK	DETAILED: TS FIGURE: 2-2

TABLES

TABLE 2-1
DEPTH TO WATER MEASUREMENT DATA

OCTOBER 26, 1995 MEASUREMENTS			
WELL ID	MEASURING POINT ELEVATION (FT)*	DEPTH TO WATER (FT)	WATER TABLE ELEVATION (FT)
1P	55.91	6.66	49.25
2P	54.36	4.88	49.48
3P	53.73	5.06	48.67
4P	52.77	4.36	48.41
5P	51.36	3.36	48.00
6P	56.82	6.67	50.15
DECEMBER 5, 1995 MEASUREMENTS			
WELL ID	MEASURING POINT ELEVATION (FT)*	DEPTH TO WATER (FT)	WATER TABLE ELEVATION (FT)
1P	55.91	7.06	48.85
2P	54.36	5.34	49.02
3P	53.73	5.14	48.59
4P	52.77	4.64	48.13
5P	51.36	3.59	47.77
1A**	53.67	5.05	48.62

* Measuring point elevation data provided in NYSDEC PSA.
Top of casing (north-edge) used as reference.

** Well 1A was gauged during the second round of water levels to provide additional data.

TABLE 4-1
GROUNDWATER ANALYTICAL SUMMARY

PARAMETER	NYSDEC Class GA Standard	MW-1P (UG/L)	MW-2P (UG/L)	MW-3P (UG/L)	MW-4P (UG/L)	MW-5P (UG/L)	MW-6P (UG/L)	Pump Sump (ug/l)
Chloromethane	5*	< 10	< 10	< 10	< 10	< 50	< 10	< 10
Bromomethane	5	< 10	< 10	< 10	< 10	< 50	< 10	< 10
Vinyl Chloride	2	< 10	< 10	< 10	< 10	< 50	< 10	< 10
Chloroethane	5	< 10	< 10	< 10	< 10	< 50	< 10	< 10
Methylene Chloride	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Trichlorofluoromethane	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Acrolein	NA	< 20	< 20	< 20	< 20	< 100	< 20	< 20
Acrylonitrile	5	< 20	< 20	< 20	< 20	< 100	< 20	< 20
1,1-Dichloroethene	5	< 5	< 5	< 5	< 5	< 25	**9.2B**	**5.6B**
1,1-Dichloroethane	5	< 5	< 5	< 5	< 5	< 25	**8.9**	**22**
1,2-Dichloroethene (total)	5	**8.6B**	**8.2B**	< 5	< 5	**220B**	**47B**	**26B**
Chloroform	7	< 5	< 5	< 5	< 5	< 25	< 5	< 5
1,2-Dichloroethane	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
1,1,1-Trichloroethane	5	< 5	< 5	< 5	< 5	< 25	**47**	< 5
Carbon Tetrachloride	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Bromodichloromethane	50**	< 5	< 5	< 5	< 5	< 25	< 5	< 5
1,2-Dichloropropane	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
cis-1,3-Dichloropropene	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Trichloroethene	5	< 5	**7.1**	< 5	< 5	< 25	**18**	**5.3**
Dibromochloromethane	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
1,1,2-Trichloroethane	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Benzene	0.7	< 5	< 5	< 5	< 5	< 25	< 5	< 5
2-Chloroethyl Vinyl Ether	5*	< 10	< 10	< 10	< 10	< 50	< 10	< 10
trans-1,3-Dichloropropen	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Bromoform	50**	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Tetrachloroethene	5	< 5	**420**	< 5	< 5	< 25	**9.8**	< 5
1,1,2,2-Tetrachloroethane	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Toluene	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Chlorobenzene	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Ethylbenzene	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
Xylenes (total)	5	< 5	< 5	< 5	< 5	< 25	< 5	< 5
1,3-Dichlorobenzene	5	< 10	< 10	< 10	< 10	< 50	< 10	< 10
1,4-Dichlorobenzene	4.7	< 10	< 10	< 10	< 10	< 50	< 10	< 10
1,2-Dichlorobenzene	4.7	< 10	< 10	< 10	< 10	< 50	< 10	< 10

NOTES:

NA = Not Available
* = Chemical is classified as a "Principal Organic Contaminant" (POC) with a 50 ug/l standard.
** = Value listed is a Class GA Quality Guidance Value, not a standard.

APPENDIX A

MONITORING WELL DEVELOPMENT LOG

SITE NAME:
LOCATION:
WELL ID: MV-3P
WELL DIA.: 4"
DRILLER: Delta Well & Pump Co. (Joe Guggino)
TOTAL DEPTH: 14.50
DRILL METHOD:
SCREENED INTERVAL:
SCREEN SIZE: 4" Slot Size: 20 (0.020)
DEVOPMENT METHOD:
FLOW RATE:

TIME:	TOTAL PUMPED	pH	CONDUCTIVITY	TURBIDITY	VISUAL/ODOR
11:55	0	6.50	1.21	999	Black / Foul odor.
~~2:00~~ 12:00	8	6.53	1.18	999	" "
12:15	16	6.96	1.25	296	" "
12:37	18	6. ~~78~~ 75	1.85	885	" "
1:15	20	6.69	2.38	395	Clearing up
1:20	22	6.67	2.54	244	"
1:22	25	6.67	2.55	250	"
1:25	30	6.68	2.54	248	"

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* Note = MW-3P went Dry At. 12:00. Water In Well Is verry Black.
= MW-3P went Dry again at 12:37.
- Well went Dry @ 1:25.

GROUNDWATER TECHNOLOGY

MONITORING WELL DEVELOPMENT LOG

SITE NAME:
LOCATION:

WELL ID: MW-4 P
WELL DIA.: 4"
TOTAL DEPTH: 23.84
SCREENED INTERVAL:
SCREEN SIZE:

DRILLER:
DRILL METHOD:

DEVOPMENT METHOD:
FLOW RATE:

TIME:	TOTAL PUMPED	pH	CONDUCTIVITY	TURBIDITY	VISUAL/ODOR
11:00	0	6.27	.403	434	Black / Foul oder.
11:05	8	6.23	.371	200	" "
11:10	16	6.22	.368	150	"
11:15	24	6.20	.367	131	"
11:20	32	6.20	.366	106	"
11:25	40	6.22	.367	83	"
11:30	48	6.21	.365	68	"
11:35	56	6.19	.365	35	"
11:40	64	6.21	.365	30	"
11:45	72	6.20	.366	33	"

GROUNDWATER
TECHNOLOGY

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MONITORING WELL DEVELOPMENT LOG

SITE NAME: Pall Corp.
LOCATION: 30 Sea Cliff Ave.

WELL ID: MW-5P
WELL DIA.: 4"
DRILLER:
TOTAL DEPTH: 13.40
DRILL METHOD:
SCREENED INTERVAL:
SCREEN SIZE:

DEVOPMENT METHOD:
FLOW RATE: ~~gpm~~ 1¼ gpm.

TIME:	TOTAL PUMPED	pH	CONDUCTIVITY	TURBIDITY	VISUAL/ODOR
10:22	8	6.03	.5.72	65	Cider Brwn / no odor
10:25	16	6.46	.5.39	28	Clear / no odor
10:29	24	6.48	.534	51	" "
10:35	32	6.49	.532	12	" "
10:40	40	6.57	.529	13	" "
10:45	48	6.50	.527	4	" "
10:50	55 gal	6.31	.529	4	" "

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GROUNDWATER TECHNOLOGY

MONITORING WELL DEVELOPMENT LOG

SITE NAME:
LOCATION:

WELL ID: MW-6
WELL DIA.: 4"
TOTAL DEPTH: 57.70
SCREENED INTERVAL:
SCREEN SIZE:
DRILLER:
DRILL METHOD:

DEVOPMENT METHOD:
FLOW RATE:

TIME:	TOTAL PUMPED	pH	CONDUCTIVITY	TURBIDITY	VISUAL/ODOR
2:08	1	6.60	0.93	61	Clear No oder
2:12	8	6.60	0.91	999	
2:15	16	6.62	.833	53	
2:20	24	6.58	1.07	36	
2:24	32	6.56	1.07	30	
2:28	35	6.56	1.07	28	
2:34	38	6.55	1.06	30	
2:36	40	6.55	1.05	32	
2:40	42	6.55	1.06	33	

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MONITORING WELL DEVELOPMENT LOG

SITE NAME: Pall Corp.
LOCATION: 30 Sea Cliff Ave.
WELL ID: MW-1P
WELL DIA.: 4"
DRILLER:
TOTAL DEPTH: 13.90
DRILL METHOD:
SCREENED INTERVAL:
SCREEN SIZE:
DEVOPMENT METHOD:
FLOW RATE:

TIME:	TOTAL PUMPED	pH	CONDUCTIVITY	TURBIDITY	VISUAL/ODOR
4:41	4	6.30	.274	999	Black
4:43	5	6.36	.291	818	"
4:45	8	6.38	.308	559	"
4:46	10	6.43	.341	626	"
4:48	15	6.42	.367	330	"
4:50	17	6.43	.372	222	Clearing up
4:52	20	6.43	.374	101	"
4:53	2~~4~~3	6.44	.376	54	"
4:55	25	6.43	.376	55	Clear
4:56	27	6.43	.377	39	"
4:58	30	6.43	.377	41	"
5:00	33	6.41	.377	40	"
	55				

GROUNDWATER TECHNOLOGY

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Page 2 of 2

MONITORING WELL DEVELOPMENT LOG

SITE NAME:

LOCATION:

WELL ID: MW-2P

WELL DIA.:

DRILLER:

TOTAL DEPTH:

DRILL METHOD:

SCREENED INTERVAL:

SCREEN SIZE:

DEVOPMENT METHOD:

FLOW RATE:

TIME:	TOTAL PUMPED	pH	CONDUCTIVITY	TURBIDITY	VISUAL/ODOR
3:49	39	6.16	.324	57	
3:51	40	6.17	.324	47	
3:54	41	6.14	.325	44	
3:57	43	6.16	.325	40	
3:59	44	6.14	.326	38	
4:02	45	6.15	.326	33	
4:04	46	6.14	.326	26	
4:06	48	6.13	.326	25	
4:08	49	6.13	.327	19	
4:10	50	6.13	.326	19	
4:13	51	6.12	.327	18	

GROUNDWATER TECHNOLOGY

Page 1 of 2

MONITORING WELL DEVELOPMENT LOG

SITE NAME:
LOCATION:

WELL ID: MW-2P
WELL DIA.: 4"
TOTAL DEPTH: 14.80
SCREENED INTERVAL:
SCREEN SIZE:
DRILLER:
DRILL METHOD:

DEVOPMENT METHOD:
FLOW RATE:

TIME:	TOTAL PUMPED	pH	CONDUCTIVITY	TURBIDITY	VISUAL/ODOR
3:02	1	6.23	.312	662	No odor (green/yellow
3:08	10	6.17	.309	353	" "
3:12	15	6.19	.313	959	" "
3:15	20	6.22	.312	999	" "
3:18	23	6.16	.320	999	" "
3:24	25	6.23	.333	999	" "
3:28	26	6.27	.332	565	" "
3:31	28	6.23	.335	410	
3:34	30	6.23	.328	370	
3:36	32	6.19	.326	257	
3:38	34	6.19	.323	178	
3:41	35	6.20	.324	134	
3:43	36	6.17	.327	92	
3:46	38	6.18	.325	69	

MW-2P went Dry @ 3:18.

Next Page.

APPENDIX B

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northeast Region
Meadowbrook Industrial Park
Milford, NH 03055
(603) 672-4835
(603) 673-8105 FAX

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Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 7

To	From
Co.	Co.
Dept.	Phone #
Fax #	Fax #

November 15, 1995

Dan Smith
Groundwater Technology, Inc.
101-1 Colin Drive
Holbrook, NY 11741

RE: GTEL Client ID: 041000297
Login Number: M5100553
Project ID (number): 041000297
Project ID (name): PALL CORPORATION GLEN COVE, NY

Dear Dan Smith:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 10/31/95 under Chain-of-Custody Number(s) 66012.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes. This Analytical report shall not be reproduced except in full.

GTEL is certified by the State of New York under Lab ID #10599.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Susan C. Uhler
Susan C. Uhler
Laboratory Director

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: 041000297
Login Number: M5100553
Project ID (number): 041000297
Project ID (name): PALL CORPORATION GLEN COVE, NY

Method: EPA 624
Matrix: Aqueous

		GTEL Sample Number	M5100553-01	M5100553-02	M5100553-04	M5100553-05
		Client ID	MW-1P	MW-2P	MW-4P	MW-5P
		Date Sampled	10/26/95	10/26/95	10/26/95	10/26/95
		Date Analyzed	11/07/95	11/07/95	11/08/95	11/08/95
		Dilution Factor	1.00	1.00	1.00	5.00
Analyte	Reporting Limit	Units	Concentration:			
Chloromethane	10.	ug/L	< 10.	< 10.	< 10.	< 50.
Bromomethane	10.	ug/L	< 10.	< 10.	< 10.	< 50.
Vinyl chloride	10.	ug/L	< 10.	< 10.	< 10.	< 50.
Chloroethane	10.	ug/L	< 10.	< 10.	< 10.	< 50.
Methylene chloride	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Trichlorofluoromethane	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Acrolein	20.	ug/L	< 20.	< 20.	< 20.	< 100
Acrylonitrile	20.	ug/L	< 20.	< 20.	< 20.	< 100
1.1-Dichloroethene	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
1.1-Dichloroethane	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
1.2-Dichloroethene (total)	5.0	ug/L	8.6 B	8.2 B	< 5.0	220 B
C[illegible]oform	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
1.2-Dichloroethane	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
1.1.1-Trichloroethane	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Carbon tetrachloride	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Bromodichloromethane	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
1.2-Dichloropropane	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
cis-1.3-Dichloropropene	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Trichloroethene	5.0	ug/L	< 5.0	7.1	< 5.0	< 25.
Dibromochloromethane	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
1.1.2-Trichloroethane	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Benzene	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
2-Chloroethyl vinyl ether	10.	ug/L	< 10.	< 10.	< 10.	< 50.
trans-1.3-Dichloropropene	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Bromoform	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Tetrachloroethene	5.0	ug/L	< 5.0	420	< 5.0	< 25.
1.1.2.2-Tetrachloroethane	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Toluene	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Chlorobenzene	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Ethylbenzene	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
Xylenes (total)	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 25.
1.3-Dichlorobenzene	10.	ug/L	< 10.	< 10.	< 10.	< 50.
1.4-Dichlorobenzene	10.	ug/L	< 10.	< 10.	< 10.	< 50.
1.2-Dichlorobenzene	10.	ug/L	< 10.	< 10.	< 10.	< 50.

Notes.

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

E[illegible]24:
GTEL Milford, NH
M5100553

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ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: 041000297
Login Number: M5100553
Project ID (number): 041000297
Project ID (name): PALL CORPORATION GLEN COVE, NY

Method: EPA 624
Matrix: Aqueous

GTEL Sample Number	M5100553-03	--	--	--
Client ID	MW-3P	--	--	--
Date Sampled	10/26/95	--	--	--
Date Analyzed	11/07/95	--	--	--
Dilution Factor	1.00	--	--	--

Analyte	Reporting Limit	Units	Concentration:			
Chloromethane	10.	ug/L	< 10.	--	--	--
Bromomethane	10.	ug/L	< 10.	--	--	--
Vinyl chloride	10.	ug/L	< 10.	--	--	--
Chloroethane	10.	ug/L	< 10.	--	--	--
Methylene chloride	5.0	ug/L	< 5.0	--	--	--
Trichlorofluoromethane	5.0	ug/L	< 5.0	--	--	--
Acrolein	20.	ug/L	< 20.	--	--	--
Acrylonitrile	20.	ug/L	< 20.	--	--	--
1,1-Dichloroethene	5.0	ug/L	< 5.0	--	--	--
1,1-Dichloroethane	5.0	ug/L	< 5.0	--	--	--
1,2-Dichloroethene (total)	5.0	ug/L	< 5.0	--	--	--
Chloroform	5.0	ug/L	< 5.0	--	--	--
1,2-Dichloroethane	5.0	ug/L	< 5.0	--	--	--
1,1,1-Trichloroethane	5.0	ug/L	< 5.0	--	--	--
Carbon tetrachloride	5.0	ug/L	< 5.0	--	--	--
Bromodichloromethane	5.0	ug/L	< 5.0	--	--	--
1,2-Dichloropropane	5.0	ug/L	< 5.0	--	--	--
cis-1,3-Dichloropropene	5.0	ug/L	< 5.0	--	--	--
Trichloroethene	5.0	ug/L	< 5.0	--	--	--
Dibromochloromethane	5.0	ug/L	< 5.0	--	--	--
1,1,2-Trichloroethane	5.0	ug/L	< 5.0	--	--	--
Benzene	5.0	ug/L	< 5.0	--	--	--
2-Chloroethyl vinyl ether	10.	ug/L	< 10.	--	--	--
trans-1,3-Dichloropropene	5.0	ug/L	< 5.0	--	--	--
Bromoform	5.0	ug/L	< 5.0	--	--	--
Tetrachloroethene	5.0	ug/L	< 5.0	--	--	--
1,1,2,2-Tetrachloroethane	5.0	ug/L	< 5.0	--	--	--
Toluene	5.0	ug/L	< 5.0	--	--	--
Chlorobenzene	5.0	ug/L	< 5.0	--	--	--
Ethylbenzene	5.0	ug/L	< 5.0	--	--	--
Xylenes (total)	5.0	ug/L	< 5.0	--	--	--
1,3-Dichlorobenzene	10.	ug/L	< 10.	--	--	--
1,4-Dichlorobenzene	10.	ug/L	< 10.	--	--	--
1,2-Dichlorobenzene	10.	ug/L	< 10.	--	--	--

Notes.

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 624:

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ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: 041000297
Login Number: M5100553
Project ID (number): 041000297
Project ID (name): PALL CORPORATION GLEN COVE, NY

Method: EPA 624
Matrix: Aqueous

GTEL Sample Number	M5100553-03	--	--	--
Client ID	MW-3P	--	--	--
Date Sampled	10/26/95	--	--	--
Date Analyzed	11/07/95	--	--	--
Dilution Factor	1.00	--	--	--

Analyte	Reporting Limit	Units	Concentration:

Notes: (continued)

"Test Procedures for Analysis of Organic Pollutants", Code of Federal Regulations, 40CFR Part 136, Appendix A. Analyte list modified to include additional compounds.

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ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: 041000297
Login Number: M5100553
Project ID (number): 041000297
Project ID (name): PALL CORPORATION GLEN COVE, NY

Method: EPA 624
Matrix: Aqueous

GTEL Sample Number	M5100553-06	M5100553-07	--	--
Client ID	MW-6P	PUMP SAMPLE	--	--
Date Sampled	10/26/95	10/26/95	--	--
Date Analyzed	11/08/95	11/08/95	--	--
Dilution Factor	1.00	1.00	--	--

Analyte	Reporting Limit	Units	Concentration:			
Chloromethane	10.	ug/L	< 10.	< 10.	--	--
Bromomethane	10.	ug/L	< 10.	< 10.	--	--
Vinyl chloride	10.	ug/L	< 10.	< 10.	--	--
Chloroethane	10.	ug/L	< 10.	< 10.	--	--
Methylene chloride	5.0	ug/L	< 5.0	< 5.0	--	--
Trichlorofluoromethane	5.0	ug/L	< 5.0	< 5.0	--	--
Acrolein	20.	ug/L	< 20.	< 20.	--	--
Acrylonitrile	20.	ug/L	< 20.	< 20.	--	--
1.1-Dichloroethene	5.0	ug/L	9.2 B	5.6 B	--	--
1.1-Dichloroethane	5.0	ug/L	8.9	22.	--	--
1.2-Dichloroethene (total)	5.0	ug/L	47. B	26. B	--	--
Chloroform	5.0	ug/L	< 5.0	< 5.0	--	--
1.2-Dichloroethane	5.0	ug/L	< 5.0	< 5.0	--	--
1.1.1-Trichloroethane	5.0	ug/L	47.	< 5.0	--	--
Carbon tetrachloride	5.0	ug/L	< 5.0	< 5.0	--	--
Bromodichloromethane	5.0	ug/L	< 5.0	< 5.0	--	--
1.2-Dichloropropane	5.0	ug/L	< 5.0	< 5.0	--	--
cis-1.3-Dichloropropene	5.0	ug/L	< 5.0	< 5.0	--	--
Trichloroethene	5.0	ug/L	18.	5.3	--	--
Dibromochloromethane	5.0	ug/L	< 5.0	< 5.0	--	--
1.1.2-Trichloroethane	5.0	ug/L	< 5.0	< 5.0	--	--
Benzene	5.0	ug/L	< 5.0	< 5.0	--	--
2-Chloroethyl vinyl ether	10.	ug/L	< 10.	< 10.	--	--
trans-1.3-Dichloropropene	5.0	ug/L	< 5.0	< 5.0	--	--
Bromoform	5.0	ug/L	< 5.0	< 5.0	--	--
Tetrachloroethene	5.0	ug/L	9.8	< 5.0	--	--
1.1.2.2-Tetrachloroethane	5.0	ug/L	< 5.0	< 5.0	--	--
Toluene	5.0	ug/L	< 5.0	< 5.0	--	--
Chlorobenzene	5.0	ug/L	< 5.0	< 5.0	--	--
Ethylbenzene	5.0	ug/L	< 5.0	< 5.0	--	--
Xylenes (total)	5.0	ug/L	< 5.0	< 5.0	--	--
1.3-Dichlorobenzene	10.	ug/L	< 10.	< 10.	--	--
1.4-Dichlorobenzene	10.	ug/L	< 10.	< 10.	--	--
1.2-Dichlorobenzene	10.	ug/L	< 10.	< 10.	--	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 624:

GTEL Milford, NH
M5100553

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ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: 041000297
Login Number: M5100553
Project ID (number): 041000297
Project ID (name): PALL CORPORATION GLEN COVE, NY

Method: EPA 624
Matrix: Aqueous

GTEL Sample Number	M5100553-06	M5100553-07	--	--
Client ID	MW-6P	PUMP SAMPLE	--	--
Date Sampled	10/26/95	10/26/95	--	--
Date Analyzed	11/08/95	11/08/95	--	--
Dilution Factor	1.00	1.00	--	--

Analyte	Reporting Limit	Units	Concentration:

Notes: (continued)

"Test Procedures for Analysis of Organic Pollutants", Code of Federal Regulations, 40CFR Part 136, Appendix A. Analyte list modified to include additional compounds.

M5100553-06:
See Report Notes.

M5100553-07:
See Report Notes.

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EXHIBIT

W

GROUNDWATER
TECHNOLOGY ®

Groundwater Technology, Inc.

101-1 Colin Drive, Holbrook, NY 11741 USA
Tel: (516) 472-4000 Fax: (516) 472-4077

April 22, 1996

Mr. James P. Rigano, Esq.
McMillan, Rather, Bennett & Rigano, P.C.
395 North Service Road
Melville, New York 11747

Re: Pall Corporation
30 Sea Cliff Avenue, Glen Cove, NY Facility

Dear Mr. Rigano:

Enclosed please find the analytical results from the sampling of the monitoring wells at the Carney Street well field in Glen Cove, New York. Permission to sample the monitoring wells was obtained from the honorable Thomas R. Suozzi, Mayor of the City of Glen Cove by McMillan, Rather, Bennett & Rigano, P.C. (MRB&R) prior to the sampling event.

GTI collected one groundwater sample from each of the three monitoring wells at the Carney Street site. The wells were identified by GTI as MW-1, MW-2, and MW-3 (see Figure 1). MW-1 is a shallow well screened from approximately 5 to 20 feet below grade. Monitoring wells MW-2 and MW-3 are screened at depths greater than 100 feet below grade. Prior to sampling, the monitoring wells were purged. Three (3) well volumes were purged from MW-1; however, only two (2) well volumes were purged from monitoring wells MW-2 and MW-3 because of the limited number of drums available to contain the purgewater. The purgewater drums were temporarily stored on-site and will be disposed by GTI as soon as approvals are received from the disposal facility.

Each of the groundwater samples were analyzed for volatile organic compounds (VOCs) by EPA Method 624 at H2M Labs, Inc., a New York State ELAP Certified Laboratory. Laboratory analysis reports are provided in Attachment A. As indicated in the analytical reports, all parameters were non-detectable in the MW-2 and MW-3 samples except for cis-1,2-Dichloroethene and Tetrachloroethene which were detected at 1 ug/l each at MW-2 and Trichloroethene which was detected at 2 ug/l in MW-3. Each of these detected concentrations is within their respective New York State Department of Environmental Conservation (NYSDEC) Class GA Groundwater Quality Standards..

At MW-1, several compounds were detected at concentrations exceeding their respective practical quantitation limits (PQLs) as indicated below:

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MW-1 ANALYTICAL SUMMARY

PARAMETER	CONCENTRATION (UG/L)
Dichlorodifluoromethane	80
Bromomethane	130
Chloroethane	1
Fluorotrichloromethane	27
trans-1,2-Dichloroethene	7
1,1-Dichloroethane	11
cis-1,2-Dichloroethene	1700
1,1,1-Trichloroethane	1
Trichloroethene	410
Tetrachloroethene	360
Chlorobenzene	2
ortho-Dichlorobenzene	1

If you have any questions or comments, please do not hesitate to contact me at (516) 472-4000.

Sincerely,
GROUNDWATER TECHNOLOGY, INC.

Daniel J. Smith, P.E.
Project Manager

ATTACHMENT A

LABORATORY ANALYSIS REPORT

ATTACHMENT A

LABORATORY ANALYSIS REPORT

[illegible] LAB NO: 9608185 /DL

GROUNDWATER TECHNOLOGY, INC.
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... GROUND WATER
SPECIAL

DATE COLLECTED. 03/28/96
TIME COLLECTED. 1500 HRS.
DATE RECEIVED.. 03/29/96
COLLECTED BY... CL99
PROJECT NO..... 01113-0137

POINT NO:
LOCATION: MW-1

REMARKS: PALL CORP
CARNEY ST WELLFIELD
GLEN COVE,NY

VOL. ORGANICS(601/602 & XYLENES) - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
DICHLORODIFLUOROMETHANE	<500	1,4-XYLENE	<500
CHLOROMETHANE	<500	1,2-XYLENE	<500
VINYL CHLORIDE	<500		
BROMOMETHANE	<500		
CHLOROETHANE	<500		
FLUOROTRICHLOROMETHANE	<500		
1,1-DICHLOROETHENE	<500		
METHYLENE CHLORIDE	<500		
TRANS-1,2-DICHLOROETHENE	<500		
1,1-DICHLOROETHANE	<500		
CIS-1,2-DICHLOROETHENE	2000D		
CHLOROFORM	<500		
1,1,1-TRICHLOROETHANE	<500		
CARBON TETRACHLORIDE	<500		
1,2-DICHLOROETHANE	<500		
TRICHLOROETHENE	<500		
1,2-DICHLOROPROPANE	<500		
BROMODICHLOROMETHANE	<500		
TRANS-1,3-DICHLOROPROPENE	<500		
CIS-1,3-DICHLOROPROPENE	<500		
1,1,2-TRICHLOROETHANE	<500		
TETRACHLOROETHENE	<500		
CHLORODIBROMOMETHANE	<500		
CHLOROBENZENE	<500		
BROMOFORM	<500		
1,1,2,2-TETRACHLOROETHANE	<500		
M-DICHLOROBENZENE	<500		
P-DICHLOROBENZENE	<500		
O-DICHLOROBENZENE	<500		
BENZENE	<500		
TOLUENE	<500		
ETHYLBENZENE	<500		
1,3-XYLENE	<500		

ATTORNEY WORK PRODUCT
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COPIES TO:

DATE ISSUED 04/01/

DATE RUN....... 03/31/96
DATE REPORTED.. 04/01/96

LABORATORY DIRECT

ORIGINAL

H2M LABS, INC. (516)694-3040 FAX:(516)42[illegible] [illegible]

LAB NO: 9608185

GROUNDWATER TECHNOLOGY, INC.
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... GROUND WATER
SPECIAL

RECEIVED
APR 03 1996

DATE COLLECTED. 03/28/96
TIME COLLECTED. 1500 HRS.
DATE RECEIVED.. 03/29/96
COLLECTED BY... CL99
PROJECT NO..... 01113-0137

POINT NO:
LOCATION: MW-1

REMARKS: PALL CORP
CARNEY ST WELLFIELD
GLEN COVE,NY

VOL. ORGANICS(601/602 & XYLENES) - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
DICHLORODIFLUOROMETHANE	80	1,4-XYLENE	<1
CHLOROMETHANE	<1	1,2-XYLENE	<1
VINYL CHLORIDE	<1		
BROMOMETHANE	130		
CHLOROETHANE	1		
FLUOROTRICHLOROMETHANE	27		
1,1-DICHLOROETHENE	<1		
METHYLENE CHLORIDE	<1		
TRANS-1,2-DICHLOROETHENE	7		
1,1-DICHLOROETHANE	11		
CIS-1,2-DICHLOROETHENE	1700E		
CHLOROFORM	<1		
1,1,1-TRICHLOROETHANE	1		
CARBON TETRACHLORIDE	<1		
1,2-DICHLOROETHANE	<1		
TRICHLOROETHENE	410		
1,2-DICHLOROPROPANE	<1		
BROMODICHLOROMETHANE	<1		
TRANS-1,3-DICHLOROPROPENE	<1		
CIS-1,3-DICHLOROPROPENE	<1		
1,1,2-TRICHLOROETHANE	<1		
TETRACHLOROETHENE	360		
CHLORODIBROMOMETHANE	<1		
CHLOROBENZENE	2		
BROMOFORM	<1		
1,1,2,2-TETRACHLOROETHANE	<1		
M-DICHLOROBENZENE	<1		
P-DICHLOROBENZENE	<1		
O-DICHLOROBENZENE	1		
BENZENE	<1		
TOLUENE	<1		
ETHYLBENZENE	<1		
1,3-XYLENE	<1		

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COPIES TO:

DATE ISSUED 04/01/9

DATE RUN....... 03/31/96
DATE REPORTED.. 04/01/96

LABORATORY DIRECTO

ORIGINAL

H2M LABS INC.
[illegible]
(516)694-3040 FAX:(516)4[illegible] NYSDOH ID# 10478

LAB NO: 9608186

GROUNDWATER TECHNOLOGY, INC.
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... GROUND WATER
SPECIAL

DATE COLLECTED. 03/28/96
TIME COLLECTED. 1600 HRS.
DATE RECEIVED.. 03/29/96
COLLECTED BY... CL99
PROJECT NO..... 01113-0137

POINT NO:
LOCATION: MW-2

REMARKS: PALL CORP
CARNEY ST WELLFIELD
GLEN COVE,NY

VOL. ORGANICS(601/602 & XYLENES) - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
DICHLORODIFLUOROMETHANE	<1	1,4-XYLENE	<1
CHLOROMETHANE	<1	1,2-XYLENE	<1
VINYL CHLORIDE	<1		
BROMOMETHANE	<1		
CHLOROETHANE	<1		
FLUOROTRICHLOROMETHANE	<1		
1,1-DICHLOROETHENE	<1		
METHYLENE CHLORIDE	<1		
TRANS-1,2-DICHLOROETHENE	<1		
1,1-DICHLOROETHANE	<1		
CIS-1,2-DICHLOROETHENE	1		
CHLOROFORM	<1		
1,1,1-TRICHLOROETHANE	<1		
CARBON TETRACHLORIDE	<1		
1,2-DICHLOROETHANE	<1		
TRICHLOROETHENE	<1		
1,2-DICHLOROPROPANE	<1		
BROMODICHLOROMETHANE	<1		
TRANS-1,3-DICHLOROPROPENE	<1		
CIS-1,3-DICHLOROPROPENE	<1		
1,1,2-TRICHLOROETHANE	<1		
TETRACHLOROETHENE	1		
CHLORODIBROMOMETHANE	<1		
CHLOROBENZENE	<1		
BROMOFORM	<1		
1,1,2,2-TETRACHLOROETHANE	<1		
M-DICHLOROBENZENE	<1		
P-DICHLOROBENZENE	<1		
O-DICHLOROBENZENE	<1		
BENZENE	<1		
TOLUENE	<1		
ETHYLBENZENE	<1		
1,3-XYLENE	<1		

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COPIES TO:

DATE ISSUED 04/01/9

DATE RUN....... 03/31/96
DATE REPORTED.. 04/01/96

LABORATORY DIRECTO

ORIGINAL

H2M LABS INC. (516)694-3040 FAX:(516)420 76 NYSDOH ID# 10478

LAB NO: 9608187

GROUNDWATER TECHNOLOGY, INC.
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... GROUND WATER
SPECIAL

DATE COLLECTED. 03/28/96
TIME COLLECTED. 1700 HRS.
DATE RECEIVED.. 03/29/96
COLLECTED BY... CL99
PROJECT NO..... 01113-0137

POINT NO:
LOCATION: MW-3

REMARKS: PALL CORP
CARNEY ST WELLFIELD
GLEN COVE,NY

VOL. ORGANICS(601/602 & XYLENES) - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
DICHLORODIFLUOROMETHANE	<1	1,4-XYLENE	<1
CHLOROMETHANE	<1	1,2-XYLENE	<1
VINYL CHLORIDE	<1		
BROMOMETHANE	<1		
CHLOROETHANE	<1		
FLUOROTRICHLOROMETHANE	<1		
1,1-DICHLOROETHENE	<1		
METHYLENE CHLORIDE	<1		
TRANS-1,2-DICHLOROETHENE	<1		
1,1-DICHLOROETHANE	<1		
CIS-1,2-DICHLOROETHENE	<1		
CHLOROFORM	<1		
1,1,1-TRICHLOROETHANE	<1		
CARBON TETRACHLORIDE	<1		
1,2-DICHLOROETHANE	<1		
TRICHLOROETHENE	2		
1,2-DICHLOROPROPANE	<1		
BROMODICHLOROMETHANE	<1		
TRANS-1,3-DICHLOROPROPENE	<1		
CIS-1,3-DICHLOROPROPENE	<1		
1,1,2-TRICHLOROETHANE	<1		
TETRACHLOROETHENE	<1		
CHLORODIBROMOMETHANE	<1		
CHLOROBENZENE	<1		
BROMOFORM	<1		
1,1,2,2-TETRACHLOROETHANE	<1		
M-DICHLOROBENZENE	<1		
P-DICHLOROBENZENE	<1		
O-DICHLOROBENZENE	<1		
BENZENE	<1		
TOLUENE	<1		
ETHYLBENZENE	<1		
1,3-XYLENE	<1		

ATTORNEY WORK PRODUCT
Privileged and Confidential

COPIES TO:

DATE ISSUED 04/01/9

DATE RUN....... 03/31/96
DATE REPORTED.. 04/01/96

LABORATORY DIRECTO

ORIGINAL

[illegible] LAB NO: 9608188

GROUNDWATER TECHNOLOGY, INC.
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... GROUND WATER
SPECIAL

DATE COLLECTED. 03/28/96
DATE RECEIVED.. 03/29/96
COLLECTED BY... CL99
PROJECT NO..... 01113-0137

POINT NO:
LOCATION: TRIP BLANK

REMARKS: PALL CORP
CARNEY ST WELLFIELD
GLEN COVE,NY

VOL. ORGANICS(601/602 & XYLENES) - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
DICHLORODIFLUOROMETHANE	<1	1,4-XYLENE	<1
CHLOROMETHANE	<1	1,2-XYLENE	<1
VINYL CHLORIDE	<1		
BROMOMETHANE	<1		
CHLOROETHANE	<1		
FLUOROTRICHLOROMETHANE	<1		
1,1-DICHLOROETHENE	<1		
METHYLENE CHLORIDE	<1		
TRANS-1,2-DICHLOROETHENE	<1		
1,1-DICHLOROETHANE	<1		
CIS-1,2-DICHLOROETHENE	<1		
CHLOROFORM	<1		
1,1,1-TRICHLOROETHANE	<1		
CARBON TETRACHLORIDE	<1		
1,2-DICHLOROETHANE	<1		
TRICHLOROETHENE	<1		
1,2-DICHLOROPROPANE	<1		
BROMODICHLOROMETHANE	<1		
TRANS-1,3-DICHLOROPROPENE	<1		
CIS-1,3-DICHLOROPROPENE	<1		
1,1,2-TRICHLOROETHANE	<1		
TETRACHLOROETHENE	<1		
CHLORODIBROMOMETHANE	<1		
CHLOROBENZENE	<1		
BROMOFORM	<1		
1,1,2,2-TETRACHLOROETHANE	<1		
M-DICHLOROBENZENE	<1		
P-DICHLOROBENZENE	<1		
O-DICHLOROBENZENE	<1		
BENZENE	<1		
TOLUENE	<1		
ETHYLBENZENE	<1		
1,3-XYLENE	<1		

ATTORNEY WORK PRODUCT
Privileged and Confidential

COPIES TO:

DATE ISSUED 04/01/9

DATE RUN....... 03/31/96
DATE REPORTED.. 04/01/96

LABORATORY DIRECTC

ORIGINAL

#3

EXHIBIT

X

Photocircuits
Soil and Groundwater
Laboratory Results

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-41

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

MW2 D

Lab Name: H2M
Contract: NYSDEC

Lab Code: H2M
Case No.: CRO
SAS No.:
SDG No.: 03

Matrix: (soil/water) WATER
Lab Sample ID: 9134831

Sample wt/vol: 5.000 (g/mL) ML
Lab File ID: P7653

Level: (low/med) LOW
Date Received: 12/ 6/91

% Moisture: not dec. 100.
Date Analyzed: 12/12/91

Column: (pack/cap) CAP
Dilution Factor: 5.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	140.	D
75-34-3	1,1-Dichloroethane	260.	D
540-59-0	1,2-Dichloroethene (total)	60.	D
67-66-3	Chloroform	25.	U
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U
71-55-6	1,1,1-Trichloroethane	340.	D
56-23-5	Carbon Tetrachloride	25.	U
108-05-4	Vinyl Acetate	50.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	43.	D
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
1330-20-7	Xylene (total)	25.	U

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y
(516) 694-3040 FAX: (516) 694-41

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE

MW2 C

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134831

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7653

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/12/91

Column: (pack/cap) CAP Dilution Factor: 5.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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H2M LABS, INC.

FORM I - IN

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE

XXXMW2

Lab Name: H2M LABS, INC. Contract:

Lab Code: H2MLAB Case No.: CR003 SAS No.: SDG No.: CRC

Matrix (soil/water): WATER Lab Sample ID: 9134831

Level (low/med): LOW Date Received: 12/06/9

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminun				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	10.0	U		A
7439-89-6	Iron				NR
7439-92-1	Lead	5.6		W	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 1
(516) 694-3040 FAX: (516) 694-4122

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

MW3

Lab Name: H2M
Contract: NYSDEC

Lab Code: H2M
Case No.: CRO
SAS No.:
SDG No.: 03

Matrix: (soil/water) WATER
Lab Sample ID: 9134832

Sample wt/vol: 5.000 (g/mL) ML
Lab File ID: P7584

Level: (low/med) LOW
Date Received: 12/ 6/91

% Moisture: not dec. 100.
Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP
Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	21.	
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	29.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

S 0023

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-41

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE

MW3

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134832

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7584

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	C
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H2M LABS, INC.

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE

XXXMW3

Lab Name: H2M LABS, INC.　Contract:

Lab Code: H2MLAB　Case No.: CR003　SAS No.:　SDG No.: CROC

Matrix (soil/water): WATER　Lab Sample ID: 9134832

Level (low/med): LOW　Date Received: 12/06/91

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	10.0	U		A
7439-89-6	Iron				NR
7439-92-1	Lead	2.6	B		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS　Clarity Before: CLEAR　Texture:

Color After: COLORLESS　Clarity After: CLEAR　Artifacts:

Comments:

DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 1
(516) 694-3040 FAX: (516) 694-412

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

MW4

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134833

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7585

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	4.	J
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	3.	J
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-412

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: MW4

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134833

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7585

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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H2M LABS, INC.

FORM I - IN

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE

XXXMW4

Lab Name: H2M LABS, INC.   Contract:

Lab Code: H2MLAB   Case No.: CR003   SAS No.:   SDG No.: CRC

Matrix (soil/water): WATER   Lab Sample ID: 9134833

Level (low/med): LOW   Date Received: 12/06/9

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	10.0	U		A
7439-89-6	Iron				NR
7439-92-1	Lead	7.8			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS   Clarity Before: CLEAR   Texture:

Color After: COLORLESS   Clarity After: CLEAR   Artifacts:

Comments:

DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-412

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

MWS

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134834

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7642

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/12/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	20.	
75-34-3	1,1-Dichloroethane	4.	J
540-59-0	1,2-Dichloroethene (total)	65.	
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	32.	
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	59.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	66.	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-41

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE

MWS

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134834

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7642

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/12/91

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	15.75	5.	J
2.				
3.				
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H2M LABS, INC.

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE

XXXMW5

Lab Name: H2M LABS, INC.   Contract:

Lab Code: H2MLAB   Case No.: CRO03   SAS No.:   SDG No.: CROO

Matrix (soil/water): WATER   Lab Sample ID: 9134834

Level (low/med): LOW   Date Received: 12/06/91

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	10.0	B		A
7439-89-6	Iron				NR
7439-92-1	Lead	3.9	B	W	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS   Clarity Before: CLEAR   Texture:

Color After: COLORLESS   Clarity After: CLEAR   Artifacts:

Comments:

DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 1
(516) 694-3040 FAX. (516) 694-4122

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

MW6

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134835

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7587

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	J
75-34-3	1,1-Dichloroethane	31.	
540-59-0	1,2-Dichloroethene (total)	9.	
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	18.	
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-412

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE

MW6

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 913483S

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7587

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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H2M LABS, INC.

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE

XXXMW6

Lab Name: H2M LABS, INC.

Contract:

Lab Code: H2MLAB

Case No.: CR003

SAS No.:

SDG No.: CRO

Matrix (soil/water): WATER

Lab Sample ID: 9134835

Level (low/med): LOW

Date Received: 12/06/9

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	50.0			A
7439-89-6	Iron				NR
7439-92-1	Lead	44.6			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BEIGE

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 1
(516) 694-3040 FAX: (516) 694-412

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

MW7

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134836

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7588

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	470.	E
75-00-3	Chloroethane	1300.	E
75-09-2	Methylene Chloride	100.	
67-64-1	Acetone	26.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	260.	E
75-34-3	1,1-Dichloroethane	2900.	E
540-59-0	1,2-Dichloroethene (total)	36.	
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	47.	
78-93-3	2-Butanone	170.	
71-55-6	1,1,1-Trichloroethane	2600.	E
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	11.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	35.	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	29.	
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

H2M LABS, INC.

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE N

MW7

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134836

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7588

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER		COMPOUND NAME	RT	EST. CONC.	Q
1.	624-89-5	Ethane, (methylthio)- (9CI)	4.82	10.	J
2.	- -	UNKNOWN	8.19	7.	J
3.	- -	UNKNOWN	9.91	5.	J
4.	- -	UNKNOWN	12.85	9.	J
5.	- -	CHLOROMETHYLBENZENE(ISOMER)	15.40	7.	J
6.					
7.					
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H2M LABS, INC.

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

MW7 DL

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134836

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7643

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/12/91

Column: (pack/cap) CAP Dilution Factor: 50.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	500.	U
74-83-9	Bromomethane	500.	U
75-01-4	Vinyl Chloride	230.	J D
75-00-3	Chloroethane	1000.	D
75-09-2	Methylene Chloride	490.	B D
67-64-1	Acetone	500.	U
75-15-0	Carbon Disulfide	250.	U
75-35-4	1,1-Dichloroethene	190.	J D
75-34-3	1,1-Dichloroethane	3400.	D
540-59-0	1,2-Dichloroethene (total)	250.	U
67-66-3	Chloroform	250.	U
107-06-2	1,2-Dichloroethane	250.	U
78-93-3	2-Butanone	500.	U
71-55-6	1,1,1-Trichloroethane	2100.	D
56-23-5	Carbon Tetrachloride	250.	U
108-05-4	Vinyl Acetate	500.	U
75-27-4	Bromodichloromethane	250.	U
78-87-5	1,2-Dichloropropane	250.	U
10061-01-5	cis-1,3-Dichloropropene	250.	U
79-01-6	Trichloroethene	250.	U
124-48-1	Dibromochloromethane	250.	U
79-00-5	1,1,2-Trichloroethane	250.	U
71-43-2	Benzene	250.	U
10061-02-6	trans-1,3-Dichloropropene	250.	U
75-25-2	Bromoform	250.	U
108-10-1	4-Methyl-2-Pentanone	500.	U
591-78-6	2-Hexanone	500.	U
127-18-4	Tetrachloroethene	250.	U
79-34-5	1,1,2,2-Tetrachloroethane	250.	U
108-88-3	Toluene	250.	U
108-90-7	Chlorobenzene	250.	U
100-41-4	Ethylbenzene	250.	U
100-42-5	Styrene	250.	U
1330-20-7	Xylene (total)	250.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE N

MW7 DL

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134836

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7643

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/12/91

Column: (pack/cap) CAP Dilution Factor: 50.00

CONCENTRATION UNITS:
Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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H2M LABS, INC.

FORM I - IN

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE

XXXMW7

Lab Name: H2M LABS, INC.   Contract:

Lab Code: H2MLAB   Case No.: CR003   SAS No.:   SDG No.: CRO

Matrix (soil/water): WATER   Lab Sample ID: 9134836

Level (low/med): LOW   Date Received: 12/06/9

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	20.0	B		A
7439-89-6	Iron				NR
7439-92-1	Lead	3.6	B	W	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS   Clarity Before: CLEAR   Texture:

Color After: COLORLESS   Clarity After: CLEAR   Artifacts:

Comments:

DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-412

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

MW8

Lab Name: H2M　Contract: NYSDEC

Lab Code: H2M　Case No.: CRO　SAS No.:　SDG No.: 03

Matrix: (soil/water) WATER　Lab Sample ID: 9134837

Sample wt/vol: 5.000 (g/mL) ML　Lab File ID: P7589

Level: (low/med) LOW　Date Received: 12/ 6/91

% Moisture: not dec. 100.　Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP　Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	49.	
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	15.	
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	14.	
540-59-0	1,2-Dichloroethene (total)	75.	
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	3.	J
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	4.	J
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

EPA SAMPLE

MW8

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M

Contract: NYSDEC

Lab Code: H2M

Case No.: CRO

SAS No.:

SDG No.: 03

Matrix: (soil/water) WATER

Lab Sample ID: 9134837

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: P7589

Level: (low/med) LOW

Date Received: 12/ 6/91

% Moisture: not dec. 100.

Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	15.40	50.	J
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H2M LABS, INC.

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE

XXXMW8

Lab Name: H2M LABS, INC.   Contract:

Lab Code: H2MLAB   Case No.: CR003   SAS No.:   SDG No.: CRC

Matrix (soil/water): WATER   Lab Sample ID: 9134837

Level (low/med): LOW   Date Received: 12/06/9

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	40.0			A
7439-89-6	Iron				NR
7439-92-1	Lead	31.2			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS   Clarity Before: CLEAR   Texture:

Color After: COLORLESS   Clarity After: CLEAR   Artifacts:

Comments:
BROWN ARTIFACTS
DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 1
(516) 694-3040 FAX: (516) 694-412

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

MW9

Lab Name: H2M　　Contract: NYSDEC

Lab Code: H2M　　Case No.: CRO　　SAS No.:　　SDG No.: 03

Matrix: (soil/water) WATER　　Lab Sample ID: 9134839

Sample wt/vol: 5.000 (g/mL) ML　　Lab File ID: P7590

Level: (low/med) LOW　　Date Received: 12/ 6/91

% Moisture: not dec. 100.　　Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP　　Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	6.	
75-34-3	1,1-Dichloroethane	19.	
540-59-0	1,2-Dichloroethene (total)	79.	
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	12.	
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	59.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	8.	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

S C043

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 1
(516) 694-3040 FAX: (516) 694-4122

1E

EPA SAMPLE N

MW9

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134839

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7590

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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H2M LABS, INC.

FORM I - IN

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE

XXXMW9

Lab Name: H2M LABS, INC.
Contract:

Lab Code: H2MLAB
Case No.: CR003
SAS No.:
SDG No.: CR

Matrix (soil/water): WATER
Lab Sample ID: 913483

Level (low/med): LOW
Date Received: 12/06/9

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	40.0			A
7439-89-6	Iron				NR
7439-92-1	Lead	9.1			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: ORANGE
Clarity Before: OPAQUE
Texture:

Color After: COLORLESS
Clarity After: CLEAR
Artifacts:

Comments:
BROWN ARTIFACTS
DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-412

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

MW10

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134839

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7593

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	6.	
540-59-0	1,2-Dichloroethene (total)	32.	
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	30.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

S C046

H2M LABS, INC.

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE N

MW10

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134839

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7593

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/ 9/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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H2M LABS, INC.

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE

XXMW10

Lab Name: H2M LABS, INC.
Contract:

Lab Code: H2MLAB
Case No.: CR003
SAS No.:
SDG No.: CRC

Matrix (soil/water): WATER
Lab Sample ID: 9134839

Level (low/med): LOW
Date Received: 12/06/9

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	30.0			A
7439-89-6	Iron				NR
7439-92-1	Lead	2.4	B		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS
Clarity Before: CLEAR
Texture:

Color After: COLORLESS
Clarity After: CLEAR
Artifacts:

Comments:

DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-412

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

MW11

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134840

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7644

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/12/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	74.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	9.	
75-34-3	1,1-Dichloroethane	16.	
540-59-0	1,2-Dichloroethene (total)	86.	
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	62.	
71-55-6	1,1,1-Trichloroethane	16.	
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	79.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	14.	
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	8.	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

H2M LABS, INC.

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(516) 694-3040 FAX (516) 694-41

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE

MW11

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134840

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7644

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/12/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 10

CAS NUMBER		COMPOUND NAME	RT	EST. CONC.	C
1.	- -	UNKNOWN HYDROCARBON	4.83	9.	J
2.	- -	UNKNOWN	6.75	5.	J
3.	- -	UNKNOWN KETONE	8.00	5.	J
4.	110-62-3	Pentanal (9CI)	8.08	10.	J
5.	- -	UNKNOWN	10.31	9.	J
6.	- -	UNKNOWN HYDROCARBON	11.30	20.	J
7.	- -	UNKNOWN	13.19	5.	J
8.	- -	UNKNOWN	14.26	30.	J
9.	- -	UNKNOWN	14.44	40.	J
10.	- -	UNKNOWN	16.11	90.	J
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H2M LABS, INC.

FORM I - IN

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE

XXMW11

Lab Name: H2M LABS, INC. Contract:

Lab Code: H2MLAB Case No.: CR003 SAS No.: SDG No.: CRO

Matrix (soil/water): WATER Lab Sample ID: 9134840

Level (low/med): LOW Date Received: 12/06/9

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	30.0			A
7439-89-6	Iron				NR
7439-92-1	Lead	0.60	B		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

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(516) 694-3040 FAX: (516) 694-41

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

FIELDBLK

Lab Name: H2M　　Contract: NYSDEC

Lab Code: H2M　　Case No.: CRO　　SAS No.:　　SDG No.: 03

Matrix: (soil/water) WATER　　Lab Sample ID: 9134841

Sample wt/vol: 5.000 (g/mL) ML　　Lab File ID: P7645

Level: (low/med) LOW　　Date Received: 12/ 6/91

% Moisture: not dec. 100.　　Date Analyzed: 12/12/91

Column: (pack/cap) CAP　　Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	BJ
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

H2M LABS, INC.

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(516) 694-3040 FAX: (516) 694-412

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE

FIELDBLK

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134841

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7645

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/12/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN HYDROCARBON	4.71	8.	J
2. - -	UNKNOWN	15.66	60.	J
3. - -	UNKNOWN HYDROCARBON	16.09	6.	J
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H2M LABS, INC.

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U.S. EPA - CLP

EPA SAMPLE

1
INORGANIC ANALYSIS DATA SHEET

FLDBLK

Lab Name: H2M LABS, INC.   Contract:

Lab Code: H2MLAB   Case No.: CR003   SAS No.:   SDG No.: CRC

Matrix (soil/water): WATER   Lab Sample ID: 9134841

Level (low/med): LOW   Date Received: 12/06/9

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper	10.0	U		A
7439-89-6	Iron				NR
7439-92-1	Lead	0.50	U		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS   Clarity Before: CLEAR   Texture:

Color After: COLORLESS   Clarity After: CLEAR   Artifacts:

Comments:

DATE REPORTED: JANUARY 9, 1991

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y.
(516) 694-3040 FAX: (516) 694-412

EPA SAMPLE

TRIPBLK I

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134842

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7646

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/12/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	BJ
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 1
(516) 694-3040 FAX: (516) 694-412

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE N

TRIPBLK I

Lab Name: H2M Contract: NYSDEC

Lab Code: H2M Case No.: CRO SAS No.: SDG No.: 03

Matrix: (soil/water) WATER Lab Sample ID: 9134842

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: P7646

Level: (low/med) LOW Date Received: 12/ 6/91

% Moisture: not dec. 100. Date Analyzed: 12/12/91

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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25.					
26.					
27.					
28.					
29.					
30.					

EXHIBIT
Y

Firm PALL Corporation
Address 30 Sea CLIFF Ave, Glen Cove, N.Y.
ner Inc. Contact name S. Krakauer Phone 671-4000
Address of owner Phone
Date of follow up Reinspection date 2/17/78
Date closed

Reason for investigation

☐Abatement ☐Sample ☐SPDES Permit ☐Reinspection

ACTION CODES

1. ☐Violation corrected
2. ☐Violation Notice
3. ☐Sample
4. ☐SPDES Appl.
5. ☐Referred to
6. ☐Survey
7. ☐NO Action
8. ☐Dye Test
9. ☐Other

ACTION CODE	COMMENTS	INSPEC DATE
	– No change in chemical usage – They are presently not using any of The chemicals found in The area wells. – The building now occupied by Novelty Scenic Studio, 40 Sea CLIFF Ave had been used by HMS Machine Corp. Mr. Krakauer stated That he believes they used both Tetrachloroethylene and Trichloroethylene and spilled/dumped waste solvents in Their yard. ⇒ The Telco company was previously Eastern Heat Treatment Co. and They used both chemicals also. ⇒ Mr. Krakauer (Chem. Engineer) mentioned The possibility of a reservoir of These chemicals from past discharge practices could be in the ground and ~~we~~ could be leaking at a slow rate due To The chemicals low water solubility. He stated That in The past many Industries, including his own would dump These chemicals down drains and into yards. He said usage of Tetrachloroethylene and Trichloroethylene by Pall Corp. was extensive until 1971 when a portion of The production	2/17/7

The inspectors observed a very messy chemical storage shed at the rear of the property approximately 250 ft. from the wells.

No storage of Tetrachloroethylene and Trichloroethylene was noted. We intend to sample the soil in this ~~sample~~ area for volatile Halogenated Organics.

RZ, DB.

EXHIBIT

[illegible] Y-1

In Re: Pall Corporation
30 Sea Cliff Avenue
Glen Cove, New York
DEC Site No. 13053B

AFFIDAVIT OF GORDON R. JAMIESON

GORDON R. JAMIESON, duly sworn, deposes and says:

1. My name is Gordon R. Jamieson. I am a Chief Hydrogeologist with Woodward-Clyde Consultants, Inc. in the Wayne, New Jersey office. I have held this position since 1990 and am responsible for the work of all hydrogeologists and geologists working out of the Wayne office on projects related to the hydrogeologic aspects of investigations and remedial actions. I have a Bachelor of Science degree from the University of Waterloo in Ontario, Canada, a Masters of Science in Hydrogeology from the University of British Columbia and over fifteen years of field experience in the United States and Canada working on a variety of projects involving remedial investigations and hydrogeologic assessments. I have extensive experience in groundwater and soil contamination characterizations, environmental assessments and remedial actions, groundwater modeling, groundwater resource evaluation and the properties and propensities of contaminants (dissolved and non-aqueous phase liquids) in the hydrogeologic ecosystem. I have worked on numerous projects that required complex groundwater contamination characterizations and the design and installation of large-scale monitoring and recovery well systems. I also have broad experience in vertical and horizontal plume delineation and plume capture design. I am a member of the Association of Groundwater Scientists and Engineers and the Association of Professional Engineers, Geologists & Geophysicists of Alberta.

2. Counsel for Pall Corporation has asked me to provide my expert opinion on the validity of certain findings and conclusions relied upon by the New York Department of Environmental Conservation ("DEC") to list Pall Corporation's 30 Sea Cliff Avenue facility in New York's Registry of Inactive Hazardous Waste Disposal Sites. In connection with this effort, I reviewed the following reports and documents: Nassau County Department of Public Works, Engineering Investigations at Inactive Hazardous Wastes Sites, Preliminary Site Assessment (March 1994) (the "PSA"); Nassau County Department of Public Works and Nassau County Department of Health, Investigation of Contaminated Aquifer Segment, City of Glen Cove, Nassau County, New York (June 1990); Pall Corporation, Soil and Groundwater, Laboratory Results, (H2M), Circa January 23, 1992; GT Engineering, P.C., Groundwater Sampling and Analysis Report: Pall Corporation, 30 Sea Cliff Avenue, Glen Cove, New York 11542 (March 1, 1996).

3. Based on my review of these documents and discussions with counsel for Pall Corporation it is apparent that one conclusion the DEC relied upon to list Pall Corporation appears on page 111 of the PSA where the Nassau County Department of Public Works ("NCDPW") states that Pall Corporation was a "major point of origin for" trichloroethene (TCE) in the groundwater. This conclusion is based on NCDPW's review of two sets of groundwater data generated by Holzmacher, McLendon & Murrell, P.C. (H2M): data from samples taken on Pall Corporation's property and data from samples taken on what NCDPW characterized as the nearest potential upgradient source, Photocircuits Corporation. According to NCDPW, a comparison of this data showed concentrations of TCE in one groundwater sample from Pall Corporation's site over twenty times greater than the highest concentration in any sample from

Photocircuits' site. From this observation, the NCDPW concludes that Pall Corporation must be a major source of TCE.

4. For the following reasons, it is my opinion that the NCDPW's conclusion is not valid and not a reasonable basis for concluding that Pall Corporation was a major point of origin for TCE in the groundwater.

a. First, the samples from the Photocircuits property were collected and analyzed in December 1991. The samples from Pall Corporation's property were collected and analyzed in February 1992. This two month disparity, while perhaps not overly significant in the context of hydrogeological events, nevertheless casts a serious shadow on the analysis. Put simply, the samples are not contemporaneous and therefore one additional confounding factor, time, is added to an already complex situation.

b. Second, H2M's data did not include fundamental information on, among other things, well construction and sample methodology and protocols. Without this information, it is very difficult, if not impossible, to interpret the sample results. For example, the construction of a well can have a significant impact on the concentration of contaminants in samples taken from the well. Factors you would want to consider before basing any decision on a comparison of sample results from different wells include screen locations, length of the screens, the length of sand packs, the location of the grout seals above the sand packs, method of installing the grout seal and type of grout seal used. Similarly, the methodology used for obtaining samples is critical to an accurate determination of groundwater contamination. Any one of numerous factors could have a material effect on the analytical results. Factors you would want to know before basing any decision on sample results include, among others, whether stagnant water was purged from the wells prior to sampling, if so, how much was removed, how fast was it removed, what kind of equipment was used to remove it and whether standard parameters, such as pH, conductivity and temperature, were measured and stabilized before purging was discontinued and the sampling process begun. You would also want to know the kind of equipment used to collect the samples, whether it was properly decontaminated prior to use, the supplier of the sample containers, how the samples were preserved and transported from the site to the lab and whether proper chain-of-custody procedures were followed. In sum, it is my opinion that because well construction details and sample collection methodology and protocol factors are unknown, the results of the H2M sampling are in question and should be disregarded.

c. Third, in the documents I reviewed there were numerous references to industrial supply wells and diffusion wells in the Sea Cliff Industrial Area. While at present the available information is insufficient to reach any conclusion about the impact these wells had on the transport of contaminants in the aquifer underlying the Sea Cliff Industrial Area, I have no doubt and it is my opinion that the construction and the historic rates and frequency of pumpage had a very significant impact. Without determining that impact, any conclusions regarding the source of contamination would have to be considered suspect.

Gordon R. Jamieson

GORDON R. JAMIESON

NEW JERSEY

Morris COUNTY

I, the undersigned, a Notary Public in and for the said State and County, do hereby certify that GORDON R. JAMIESON personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal this the 15 day of January, 1997.

Lois A. Whitmore

Notary Public

My Commission Expires:

LOIS A. WHITMORE
Notary Public, State of New Jersey
No. 2188387
Commission Expires April 16, 2001

(NOTARIAL SEAL OR STAMP)

Lois A. Whitmore
1/15/97

EXHIBIT

Z

GROUNDWATER SAMPLING AND ANALYSIS REPORT

PALL CORPORATION
30 SEA CLIFF AVENUE
GLEN COVE, NEW YORK

FLUOR DANIEL GTI

GROUNDWATER SAMPLING AND ANALYSIS REPORT

PALL CORPORATION
30 SEA CLIFF AVENUE
GLEN COVE, NEW YORK

December 30, 1996

Prepared For:

Mr. Kurt Olson, Esq.
Maupin Taylor Ellis & Adams, P.A.
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Fluor Daniel GTI, Inc.
Written/Submitted By:

Daniel J. Smith, P.E.
Project Manager/Engineer

Fluor Daniel GTI, Inc.
Reviewed By:

Theodore M. Sanford

Theodore M. Sanford, P.E.
Operations Manager, Holbrook, NY

ATTORNEY WORK PRODUCT - PRIVILEGED AND CONFIDENTIAL

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GROUNDWATER SAMPLING AND ANALYSIS REPORT

PALL CORPORATION
30 SEA CLIFF AVENUE
GLEN COVE, NEW YORK

December 30, 1996

Prepared For:

Mr. Kurt Olson, Esq.
Maupin Taylor Ellis & Adams, P.A.
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ATTORNEY WORK PRODUCT - PRIVILEGED AND CONFIDENTIAL

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APPENDICES

1.0 INTRODUCTION

On June 20, 1994, the Pall Corporation (Pall) facility located at 30 Sea Cliff Avenue, Glen Cove, New York was recommended for inclusion as a Class 2 site in the New York State Registry of Inactive Hazardous Waste Disposal Sites (IHWDS). The New York State Department of Environmental Conservation (NYSDEC) recommended that Pall Corporation be included in the Registry after reviewing a Preliminary Site Assessment (PSA) Report prepared by the Nassau County Department of Public Works (NCDPW) for the area known as the "Sea Cliff Avenue Industrial Area." On June 13, 1996, the Pall Sea Cliff facility was formally included in the NYSDEC Registry of IHWDS' as a Class 2 site. This section of the report provides an overview of the Pall facility and a brief discussion of the history of the Sea Cliff Avenue Industrial Area.

1.1 Site Location

The Pall Sea Cliff facility is located on the north side of Sea Cliff Avenue, approximately 1/8 mile west of Route 107. The property is bordered on the north by August Thomsen, the south by Sea Cliff Avenue, the east by Route 107, and on the west by the Associated Drapery facility. Photocircuits Corporation (including the former Pass and Seymour facility that was formerly operated by Slater Electric Company) is located south of the Pall facility across Sea Cliff Avenue. Glen Cove Creek is located parallel to the west boundary of the Pall facility and runs through the property from the southwest corner to the northwest corner of the site. The neighboring areas consist primarily of industrial areas. A site location map is presented in Figure 1-1. A site plan showing the Pall facility and the immediately adjacent properties is provided as Figure 1-2.

The topography of the site based upon data provided by Pall is relatively flat with a gentle slope from the southwest corner of the facility (grade elevation about 55 feet above mean sea level, msl) toward the northeast corner of the site (about 51 feet above msl). Additional site information pertaining to geologic and hydrogeologic conditions is presented in Sections 2.1 and 2.2.

1.2 Site History

Industrial activity in the Sea Cliff Avenue Industrial Area has been documented since the 1940's with the nature of industrial activities highly variable during the period from 1940 to the present. Pall Corporation has operated at the Sea Cliff Avenue facility since the early 1950's. In addition, the property currently owned by August Thomsen was part of the Pall property until 1971 when it was sold to August Thomsen. The main Pall facility is presently used primarily as a research and development facility related to filtration product manufacture. The August Thomsen property was used by Pall Corporation as the location for it's subsidiary, Glen Components, Inc., a precision machine shop providing parts to Pall's other divisions, primarily Aircraft

Porous Media, Inc. Currently, no chlorinated solvents are used at the facility. Chlorinated solvent were used in cleaning operations until roughly 1971. There are no known releases of chlorinated organics to the soil or groundwater at the Pall facility. Industrial activities for the other neighboring facilities have included the following:

> *Photocircuits Corporation:*
> Powers Chemco operated the facility until 1971 when Kollmorgen Corporation purchased the property. In 1986, ownership of the property was transferred to Photocircuits who is the current owner. The operations at the facility have consisted primarily of printed circuit board manufacturing since at least 1971. Chlorinated solvents have historically been used at the facility.
>
> *Pass and Seymour (property now owned by Photocircuits):*
> Pass and Seymour manufactured injection molded plastic components for electronic applications. Similar products had been manufactured at this location for over twenty years prior to Pass and Seymour's occupancy by the former tenant, Slater Electric. Chlorinated solvents have historically been used at the facility. The property has recently been acquired by Photocircuits Corporation and current operations are unknown.
>
> *Associated Draperies:*
> Associated Draperies has occupied its current location since the early 1970's. Prior to Associated Draperies' occupancy, the site was used by HMS Machine Shop who manufactured aircraft parts from the early 1960's to 1969. Chlorinated solvents may have been used by HMS at the facility.

Numerous investigations and studies have been performed by private parties and regulatory agencies to determine the source of contamination in the Sea Cliff Avenue Industrial Area. The historical reports were reviewed by NCDPW to develop the PSA Report that formed the basis for the listing of many of the industrial facilities in the area as IHWDS'. The following table summarizes the IHWDS status of each of the Sea Cliff Avenue Industrial Area properties.

Facility Name	IHWDS Status
Associated Drapery	Not Listed (NYSDEC Spills)
August Thomsen	Class 2 Site
Pall Corporation.	Class 2 Site
Pass and Seymour	Class 2 Site
Photocircuits Corporation	Class 2 Site

In October 1995, Fluor Daniel GTI, Inc. was retained by Pall Corporation to conduct sampling and analysis of groundwater beneath the Pall facility. Fluor Daniel GTI's scope of services was limited to the following:

- Review of historical, regional groundwater quality data provided by Pall Corporation in NYSDEC's PSA dated March 1994 and in C.A. Rich's Summary Tables dated March 1992;
- Collection of depth to water measurements from existing monitoring wells at the Pall facility to determine water elevation contours and assess the likely groundwater flow direction at the facility;
- Development of the existing monitoring wells at the Pall facility prior to groundwater sampling;
- Collection of one (1) round of groundwater samples from six (6) existing monitoring wells at the Pall facility and analyses for volatile organic compounds.

The objectives of the October 1995 project were to obtain high quality, reproducible data to document the concentrations of chlorinated organics in groundwater underlying Pall's Sea Cliff Avenue facility. Groundwater quality data generated were used in conjunction with water level data to develop a preliminary opinion regarding the nature and extent of on-site contamination in groundwater and to evaluate the possibility of off-site sources contributing to the contamination present. A summary of the data obtained during the October 1995 sampling program is provided in Table 1-1.

Based upon review of the October 1995 data, it was concluded that groundwater underlying the southern portion of the Pall facility flows across the site from the south-southeast toward the north-northwest. As a result of this groundwater flow direction, properties across Sea Cliff Avenue, including Photocircuits and the former Slater Electric property, would be upgradient of the Pall Facility. Groundwater underlying the northern section of the Pall property was determined to flow from the west-southwest to the east northeast. Therefore, properties to the west-southwest of Pall (including Glen Cove Creek) are also considered to be upgradient. The reason for the change in groundwater flow direction in the area has not been determined; however, the presence of Glen Cove Creek and the historic use of injection wells in the area may be factors.

The predominant contaminants of concern historically identified in the Sea Cliff Avenue Industrial Area included tetrachloroethene (PCE); trichloroethene (TCE); 1,1,1-trichloroethane (TCA); and their breakdown products, 1,2-dichloroethenes (1,2-DCEs), 1,1-dichlororethane (1,1-DCA) and vinyl chloride. In addition, lower concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) have also been detected. The data developed by Fluor Daniel GTI during the October 1995 investigation confirmed the presence of the chlorinated organics except for vinyl chloride; however, BTEX were not detected. Data obtained during the October 1995 investigation indicated that an upgradient source of VOCs was likely because levels of chlorinated organic compounds exceeding their respective Class GA Quality Standards were present in upgradient monitoring wells. PCE was detected in both upgradient and downgradient monitoring wells at concentrations exceeding the 5 ug/l Class GA Groundwater Quality Standard with the greatest concentration detected in MW-2P (420 ug/l) which is an upgradient well based upon recent groundwater elevation data. In addition, several PCE degradation products were detected in both upgradient and downgradient wells indicating that an older source may be present upgradient and the plume is just now reaching the Pall facility. This possible cause of the elevated downgradient concentrations would also be consistent with the February 1992 sampling documented in the PSA.

2.0 SITE HYDROGEOLOGY

2.1 Local Geology

The geologic unit immediately below grade is part of the Upper Glacial Aquifer which consists of two major components in the Sea Cliff Avenue Industrial Area. The uppermost unit is an upper glacial till composed of both sandy and silty till regions. The silty till in the area has been described as silty, clayey, fine to medium sand with gravel, cobbles, and occasional boulders. The unit is considered to have very low permeability, although site-specific slug or pump test data is not available. The silty till extends vertically downward from grade approximately 50 to 60 feet with a maximum thickness of 80 feet recorded in some areas.

The silty till unit is underlain by an interbedded sand and sand and gravel unit of varying composition which is approximately 110 feet thick beneath the Pall facility. The upper "half" of the sand and gravel unit consists predominately of fine to medium sand approximately 60 feet thick. The lower "half" of the unit consists predominately of fine to coarse sand and fine gravel that is approximately 50 feet thick. This unit is considered to have moderate to high permeability although occasional lenses of silt have been evident in soil borings. The sand and gravel unit is underlain by the Port Washington Confining Unit which is composed of sandy clay and clay and defines the base of the Upper Glacial Aquifer in the area. The Port Washington Confining Unit is encountered at approximately 200 feet below grade in the Sea Cliff Avenue Industrial Area.

A geologic cross section through the Sea Cliff Avenue Industrial Area is included in Figures 2-1a (Plan View) and 2-1b (Section Cut). This geologic section has been reproduced from the NYSDEC PSA and Fluor Daniel GTI makes no judgement as to its accuracy or completeness. The figures are presented solely for discussion purposes and a point of reference for the text.

2.2 Local Hydrogeology and Water Level Measurements

The uppermost local hydrogeologic unit underlying the Pall facility is the Upper Glacial Aquifer which varies in thickness in the region but extends from grade to approximately 200 feet below grade in the Sea Cliff Avenue Industrial Area. Historic depth to water measurements collected by the Nassau County Department of Public Works (NCDPW) have indicated that groundwater is typically present at about 2 to 10 feet below grade depending upon the well location. On the Pall property, groundwater is typically encountered at approximately 3 to 6 feet below grade. The depth to groundwater in the area, and specifically adjacent to the Pall facility, may be influenced by Glen Cove Creek which acts as a discharge area for topographic areas of high elevation adjacent to the creek.

In order to confirm the groundwater elevation and to predict the corresponding groundwater flow direction beneath the Pall facility, Fluor Daniel GTI collected depth to water measurements on November 26, 1996. The depth to water data obtained and the survey data provided by Pall is provided in Table 2-1. The data of Table 2-1 was then used to develop the groundwater elevation contours of Figure 2-2.

As indicated in Figure 2-2, the direction of groundwater flow identified in October 1995 was confirmed by the November 1996 groundwater level measurements. Groundwater underlying the southern section of the Pall property flows from southeast to northwest with the groundwater elevation ranging from approximately 52 feet above msl at the southeast corner of the site to approximately 50 feet above msl at the northwest corner of the site. The groundwater elevation data for wells 2P, 3P, 4P, and 5P indicates an east-northeasterly flow component near the north side of the Pall facility. Based upon the data available, it appears as if the Photocircuits property is located upgradient of the Pall facility. In addition, the northeasterly groundwater flow direction at the north side of the Pall facility indicates that Glen Cove Creek or properties to the west of the Pall facility lie upgradient, and have the potential to adversely impact the site at Pall monitoring wells MW-2P, MW-4P and MW-5P, as well as August Thomsen monitoring well MW-1A.

3.0 WELL INSTALLATION, DEVELOPMENT AND SAMPLING

Fluor Daniel GTI installed a new shallow, upgradient well near MW-6P and collected groundwater samples from six (6) existing monitoring wells (MW-1P through MW-6P) and one (1) newly installed monitoring well (MW-7P) on the Pall property. The well locations are identified in Figure 2-2. This section of the report describes the installation of the new monitoring well, well development, and well sampling procedures performed by Fluor Daniel GTI to ensure the generation of accurate and useable data.

3.1 MW-7P Installation

In order to evaluate shallow, upgradient groundwater quality, one (1) additional monitoring well was installed as part of the groundwater sampling and analysis project. The new monitoring well (designated as MW-7P and shown on Figure 2-2) was installed on November 18, 1996. The well was installed as a 4" diameter, PVC monitoring well screened from 3 feet to 18 feet below grade. Soil boring logs for the installation and a well completion diagram is presented as Figure 3-1.

MW-7P was installed within 10 feet of MW-6P which is an intermediate well (screened from about 45 to 55 feet below grade) in order to complete a well couplet. Based upon review of the October 1995 groundwater data, it was determined that an upgradient source of contamination was likely present because of the levels of contaminants detected in MW-6P. It was also decided that a shallow monitoring well would be required to better assess off-site impacts to the Pall property with respect to possible historic upgradient releases and the nature of vertical migration of contaminants. As indicated in Figure 3-1, the shallow geology consists primarily of dark brown, medium to fine sands with traces of silt.

3.2 Well Development

On November 21, 1996, MW-7P was developed using a 2" diameter, Grundfos stainless steel pump. The pump was decontaminated prior to use with an Alconox wash and a distilled water rinse. The well was initially pumped at approximately 3 gallons per minute; however, the well rapidly pumped dry and the well was left to recharge. Development was then continued with the flow rate decreased to approximately ½ gallon per minute for several more discharge/recharge cycles. Due to the fact that the well was continually pumped dry, the turbidity level remained high at greater than 999 NTU's throughout development.

The remaining wells were aggressively re-developed during the October 1995 sampling events and were not re-developed during the November 1996 project. These wells were however purged prior to sampling.

3.3 Well Sampling

On November 26, 1996, Fluor Daniel GTI performed groundwater sampling of the seven (7) monitoring wells at the Pall property. Mr. Joseph Jones of the NYSDEC was present during the sampling event to observe activities and collect split samples. NYSDEC sample results were not available at the time this report was prepared.

Each well was purged until at least three well volumes were removed. Purge waters were removed with a submersible Whale pump. The Whale pump and associated tubing were decontaminated with a deionized water rinse between each well purging event. All purge waters from the seven (7) monitoring wells were drummed, labeled and transferred to Pall for proper disposal. After purging, dedicated polyethylene bailers were used to collect the groundwater samples for lab analyses. Care was taken to prevent volatilization of the sample prior to placing it in the appropriate sample containers. The sample containers were then immediately placed in an ice-filled cooler prior to shipment to the laboratory. All Chain of Custody procedures were followed and the samples were submitted for laboratory analysis within 48 hours of collection.

4.0 ANALYTICAL RESULTS

Groundwater samples were submitted to H2M Labs, Inc. of Melville, New York for analyses. H2M Labs is a New York State Department of Health (NYSDOH) certified analytical laboratory. Samples collected from all seven (7) wells were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs). In addition, samples collected from monitoring wells MW-1P, MW-5P, and MW-7P were analyzed for Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) and Target Analyte List (TAL) Metals as indicated in the NYSDEC approved Work Plan. VOC sample results are summarized in Table 4-1. Complete laboratory analysis reports are provided in Appendix A.

As indicated in Table 4-1 and summarized below, several chlorinated VOCs were detected in the Pall monitoring wells at concentrations exceeding their respective NYSDEC Class GA Groundwater Quality Standards.

<u>Contaminants Detected Above NYSDEC Class
GA Groundwater Quality Standards</u>

Vinyl Chloride:	Max concentration of 94 ug/l in MW-4P
1,1-Dichloroethane:	Max. concentration of 8 ug/l in MW-3P and MW-6P
1,2-Dichloroethene (total):	Max. Concentration of 510 ug/l in MW-5P
1,1,1-Trichloroethane:	Max. concentration of 23 ug/l in MW-6P
Trichloroethene:	Max. concentration of 62 ug/l in MW-2P
Tetrachloroethene:	Max. concentration of 280 ug/l in MW-2P

Based upon the data, both upgradient and downgradient monitoring wells have been impacted. While the source of this contamination cannot be determined, several observations can be made with a fair degree of certainty

- MW-2P, the well with the highest concentrations of PCE and TCE is an upgradient well based on groundwater elevation data collected during this investigation and previous investigations. This fact suggests that Glen Cove Creek or properties further to the west and south-west may be upgradient sources of contaminant migration onto the Pall property.

- The results from MW-6P suggest that an upgradient source also exists to the south-southeast. This finding is consistent with the results of previous investigations, particularly the October 1995 project.

- The downgradient detection of contaminants may be the result of historic upgradient release(s) which have migrated onto the Pall property with the passage of time (i.e., the center of the plume has migrated onto the Pall property from an upgradient source).

- The results from the newly installed well (MW-7P, screened from 3 to 18 feet below grade) support the possibility that an upgradient VOC source may have been responsible for the detection of contaminants in the downgradient monitoring wells at the Pall site. MW-7P was installed as a shallow well immediately adjacent to MW-6P which was installed as an intermediate depth well (screened at about 45 to 55 feet below grade). None of the contaminants analyzed for were detected in the shallow (MW-7P) well. However, 1,1-DCA, 1,1-DCE, 1,1,1-TCA, TCE, and PCE were each detected in the deeper (MW-6P) well, indicating that upgradient contaminants may have migrated vertically. Due to the fact that the horizontal hydraulic conductivity in aquifers such as the upper glacial is typically many times greater than the vertical hydraulic conductivity (more than an order of magnitude greater is not uncommon), the presence of contaminants in the deeper screened well is indicative of a possible older release or a deeper upgradient source area. The presence of these same contaminants further downgradient in shallow wells also is consistent with an older, upgradient release based upon typical ratios of horizontal to vertical hydraulic conductivity in medium to fine sand aquifers.

- Several PCE and TCE degradation products (e.g., 1,1-DCA, Vinyl Chloride, etc.) were present in both upgradient and downgradient monitoring wells on site, further indicating the probability of an older, upgradient release.

Of the monitoring wells sampled for SVOCs, only 1 ug/l of Dimethyl Phthalate and 4 ug/l of +++Diethyl Phthalate were detected in MW-5P. These concentrations are not considered significant and SVOCs are not discussed further in this report. TAL Metals results are summarized in Table 4-2. As indicated in the table, chromium, iron, sodium, and lead were detected in both upgradient and downgradient wells at concentrations higher than their respective NYSDEC Class GA Groundwater Quality Standards. With the exception of iron, each of the exceedances was relatively minor. Iron concentrations as high as 63.3 mg/l were detected in MW-5P; however, the upgradient well (MW-7P) also contained high levels of iron (60.5 mg/l). Elevated levels of iron are not uncommon in groundwater in the area and also may have been influenced by poor well development and recharge.

5.0 CONCLUSIONS

Based upon review of historic documents provided by Pall and the data generated by the Fluor Daniel GTI sampling and analysis program, we present the following conclusions.

Groundwater elevation measurements collected by GTI indicate that groundwater underlying the southern section of the Pall facility flows primarily across the site from the southeast toward the northwest. Based upon this flow direction, properties across Sea Cliff Avenue to the south would be upgradient of the Pall Facility. An east-northeasterly component of groundwater flow was also evident on the northern section of the Pall property based upon the groundwater elevation data collected. The east-northeasterly flow component of groundwater has now been confirmed in several gauging events and indicates that Glen Cove Creek adjacent to the site and properties further to the west-southwest also lie upgradient of the Pall property. This finding is significant because it shows that MW-2P is an upgradient well and not a downgradient well as previously thought. Additional water elevation measurements from wells outside the Pall property would be required to determine if the east-northeasterly groundwater flow direction is localized or more regional.

Review of reports prepared by other parties regarding the Sea Cliff Avenue Industrial Area and Pall indicates that VOC contamination is present in the groundwater underlying the area. The predominant contaminants of concern are chlorinated organic compounds; specifically, PCE, TCE, TCA, and their breakdown products, 1,2-DCE, 1,1-DCA and vinyl chloride. The current data developed by Fluor Daniel GTI after well sampling at Pall confirms the presence of varying levels of contaminants in the groundwater underlying the Pall facility. In addition, data obtained by Fluor Daniel GTI indicates that an upgradient source of VOCs is likely present because levels of chlorinated organic compounds exceeding their respective Class GA Quality Standards were present in upgradient monitoring wells. Tetrachloroethene was detected in both upgradient and downgradient monitoring wells at concentrations exceeding the 5 ug/l Class GA Groundwater Quality Standard with the greatest concentration detected in upgradient monitoring well MW-2P (280 ug/l).

The presence of PCE, TCE and their degradation products in the deeper upgradient well (MW-6P) but not in the newly installed, shallow upgradient well (MW-7P) implies that an older upgradient source is likely present.

FIGURES

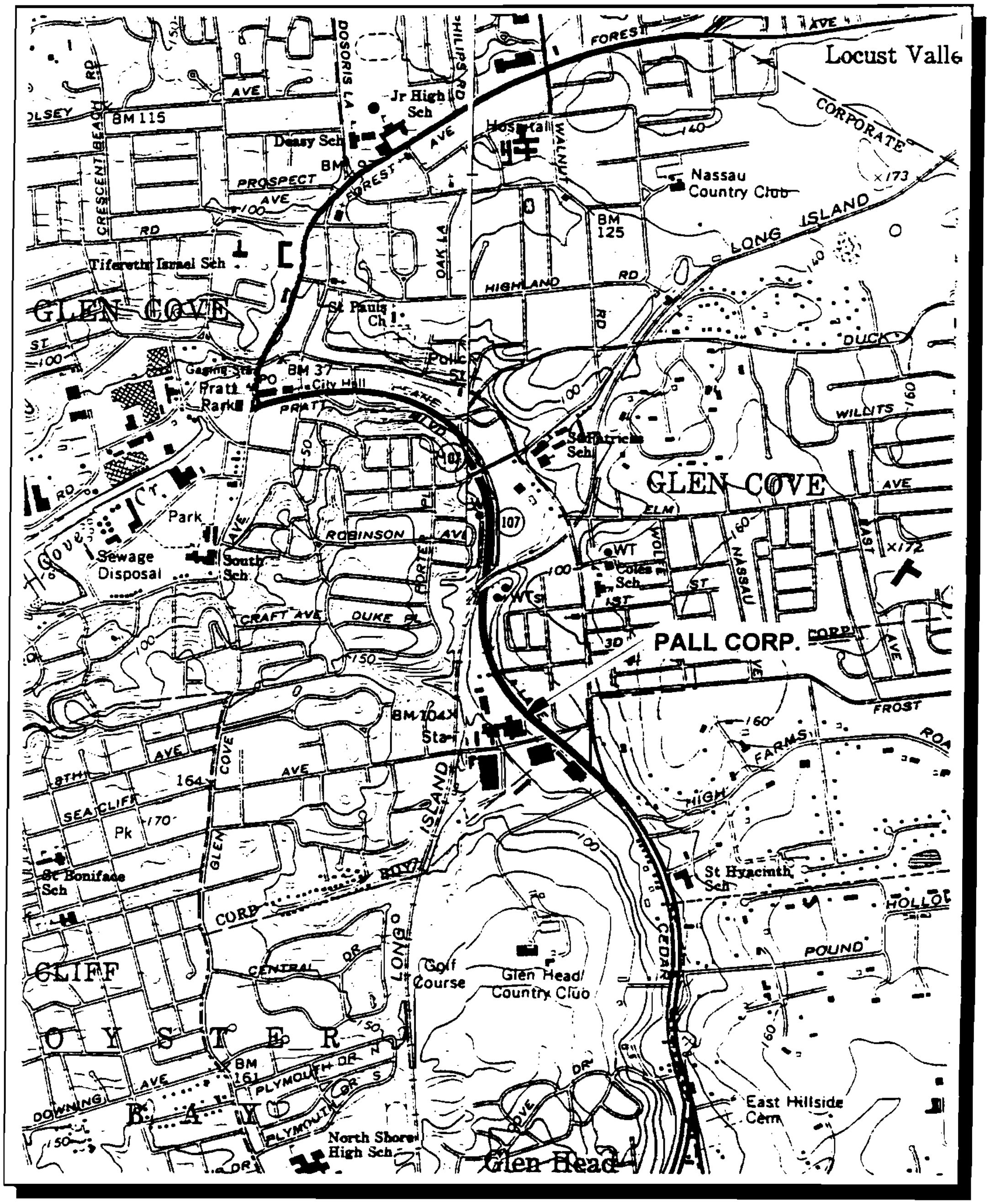
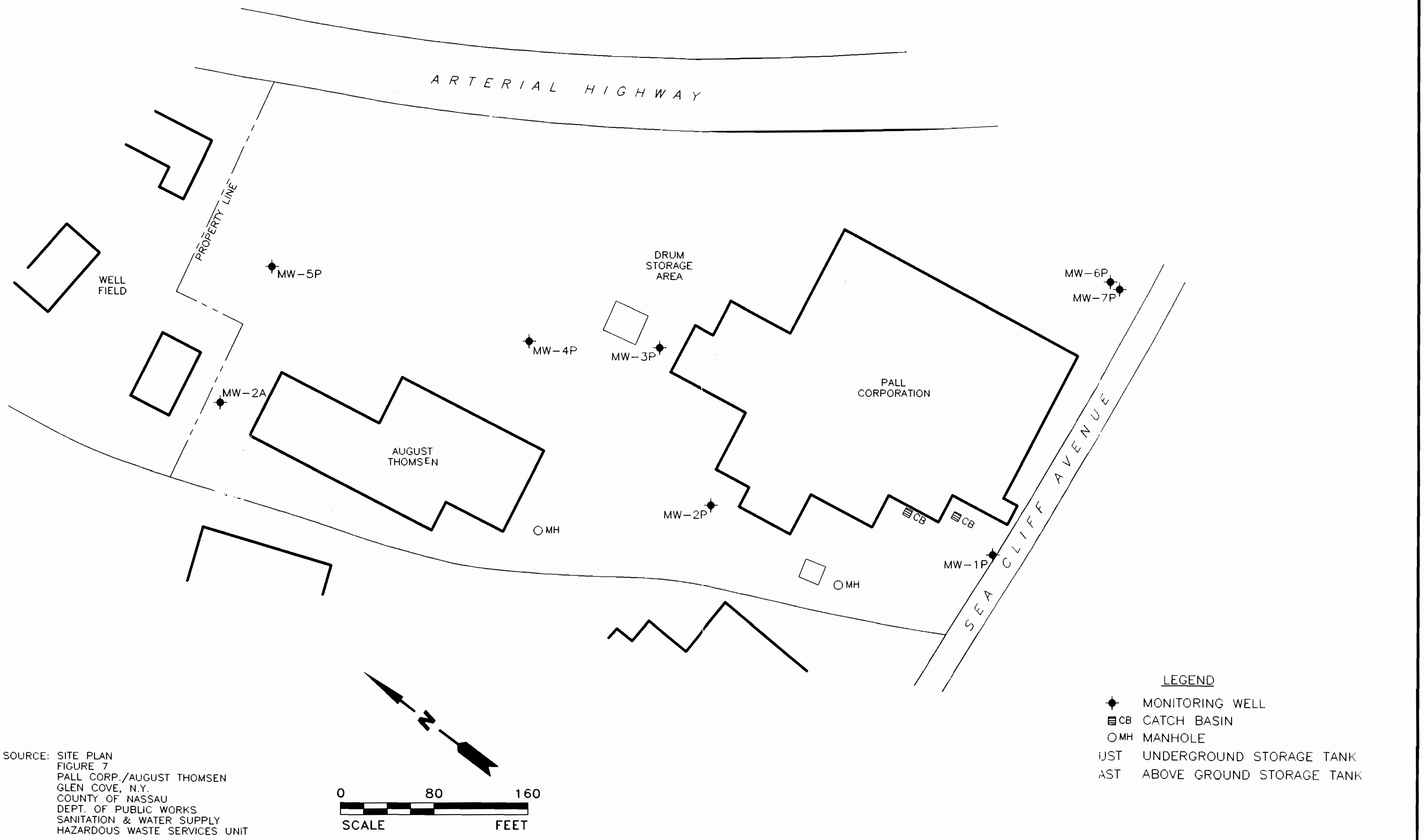


FIGURE 1-1

SITE LOCATION MAP



LEGEND

- ✦ MONITORING WELL
- ▤CB CATCH BASIN
- ○MH MANHOLE
- UST UNDERGROUND STORAGE TANK
- AST ABOVE GROUND STORAGE TANK

SOURCE: SITE PLAN
FIGURE 7
PALL CORP./AUGUST THOMSEN
GLEN COVE, N.Y.
COUNTY OF NASSAU
DEPT. OF PUBLIC WORKS
SANITATION & WATER SUPPLY
HAZARDOUS WASTE SERVICES UNIT

FLUOR DANIEL GTI

101-1 COLIN DRIVE
HOLBROOK, N.Y. 11741
(516) 472-4000

CLIENT: PALL CORPORATION/ AUGUST THOMSEN

PROJECT NO.: 04100-0297

PM: DS

PE/RG:

DRAWING DATE: 12/19/96

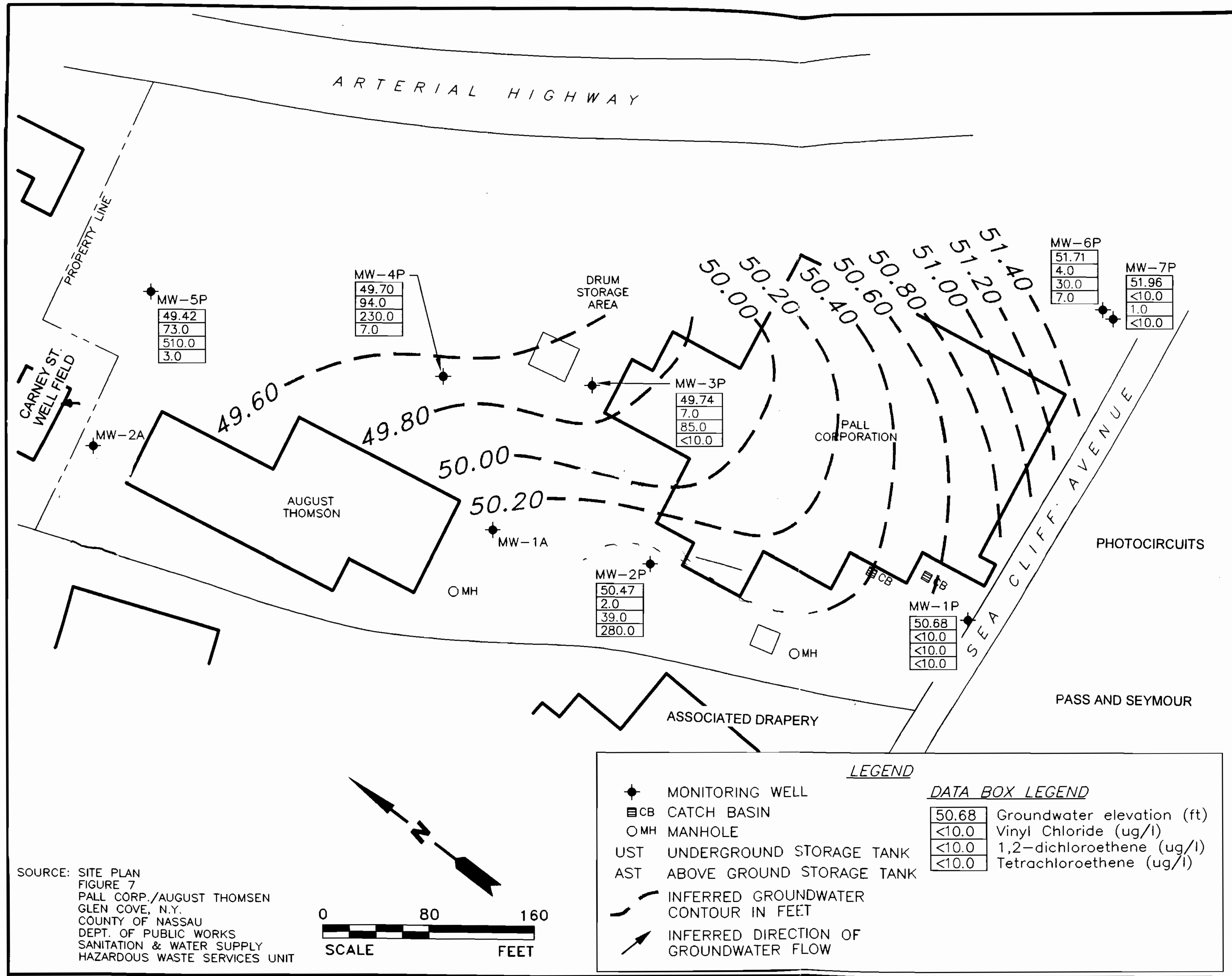
ACAD FILE: 0297ST95

SITE PLAN

LOCATION: SEA CLIFF AVENUE
GLEN COVE, NEW YORK

DETAILED: TS

FIGURE: 1-2



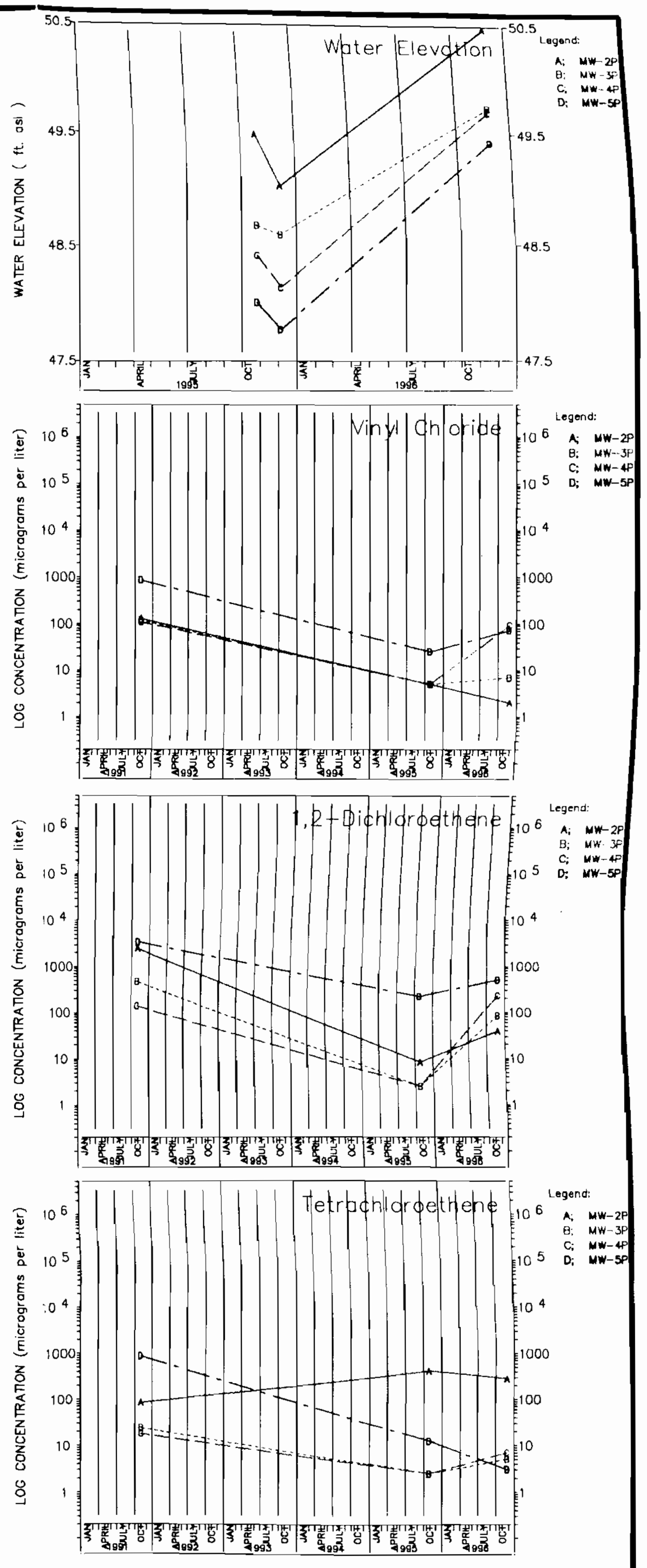
LEGEND

- MONITORING WELL
- ▤ CB CATCH BASIN
- ○ MH MANHOLE
- UST UNDERGROUND STORAGE TANK
- AST ABOVE GROUND STORAGE TANK
- INFERRED GROUNDWATER CONTOUR IN FEET
- INFERRED DIRECTION OF GROUNDWATER FLOW

DATA BOX LEGEND

50.68	Groundwater elevation (ft)
<10.0	Vinyl Chloride (ug/l)
<10.0	1,2-dichloroethene (ug/l)
<10.0	Tetrachloroethene (ug/l)

SOURCE: SITE PLAN
FIGURE 7
PALL CORP./AUGUST THOMSEN
GLEN COVE, N.Y.
COUNTY OF NASSAU
DEPT. OF PUBLIC WORKS
SANITATION & WATER SUPPLY
HAZARDOUS WASTE SERVICES UNIT



FLUOR DANIEL GTI
101-1 COLIN DRIVE
HOLBROOK, N.Y. 11741
(516) 472-4000

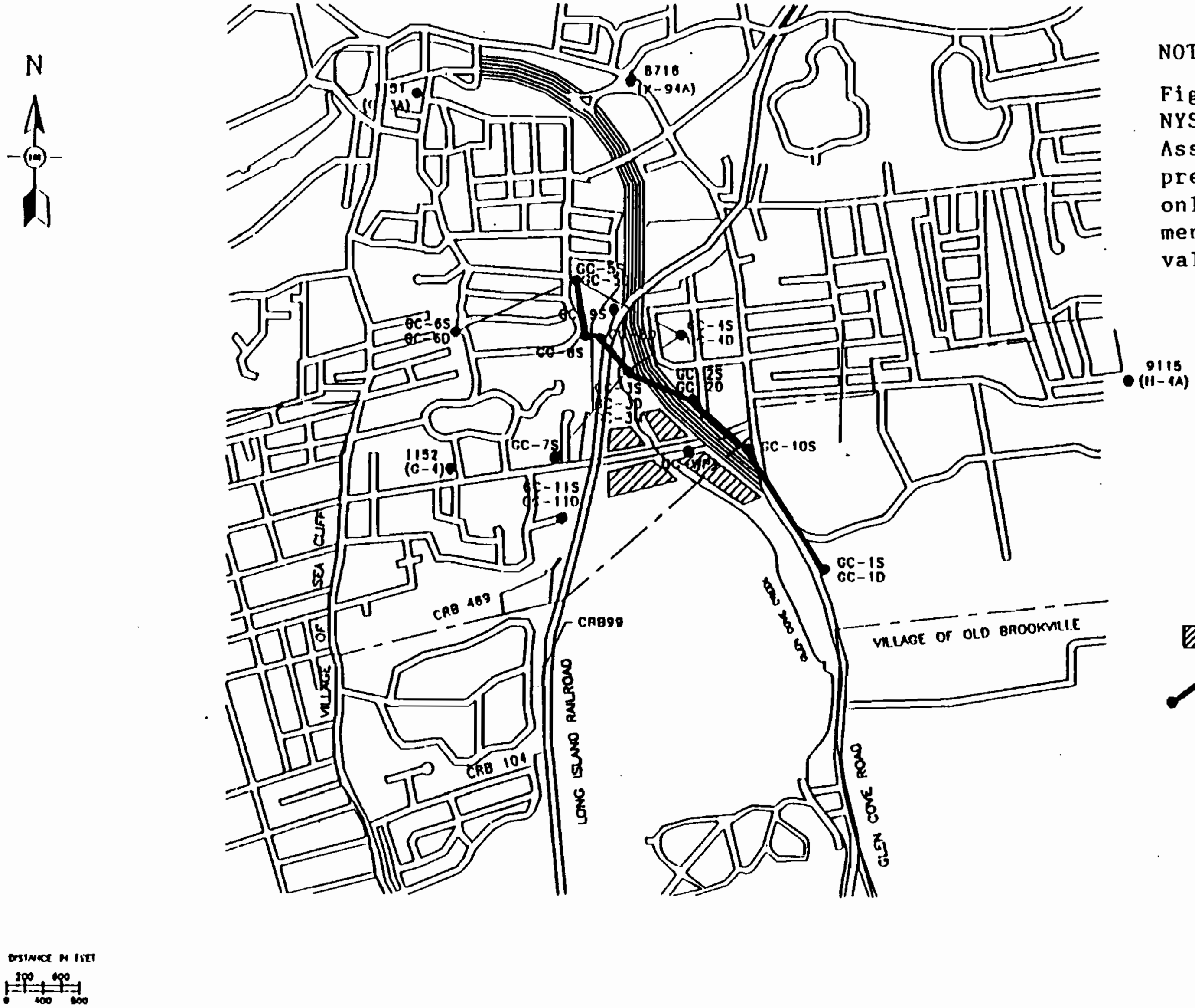
CLIENT:
PALL CORPORATION/
AUGUST THOMSEN

PROJECT NO.: 04100-0297
PM: DS
PE/RG:
DRAWING DATE: 12/23/96
ACAD FILE: 0297SN26

SITE MONITORING
26 NOVEMBER 1996

LOCATION:
SEA CLIFF AVENUE
GLEN COVE, NEW YORK

DETAILED: TS
FIGURE: **2-2**



NOTE:

Figure is reproduced from NYSDEC Preliminary Site Assessment Report and is presented for reference only. FDGTI makes no judgement as to its accuracy or validity.

LEGEND

● GC-7S MONITORING WELL

● 9115 (II-4A) EXISTING NASSAU CO DPW MONITORING WELL

▨ INDUSTRIAL ZONE

GEOLOGIC SECTION LOCATION

\DWG\GLENCOV

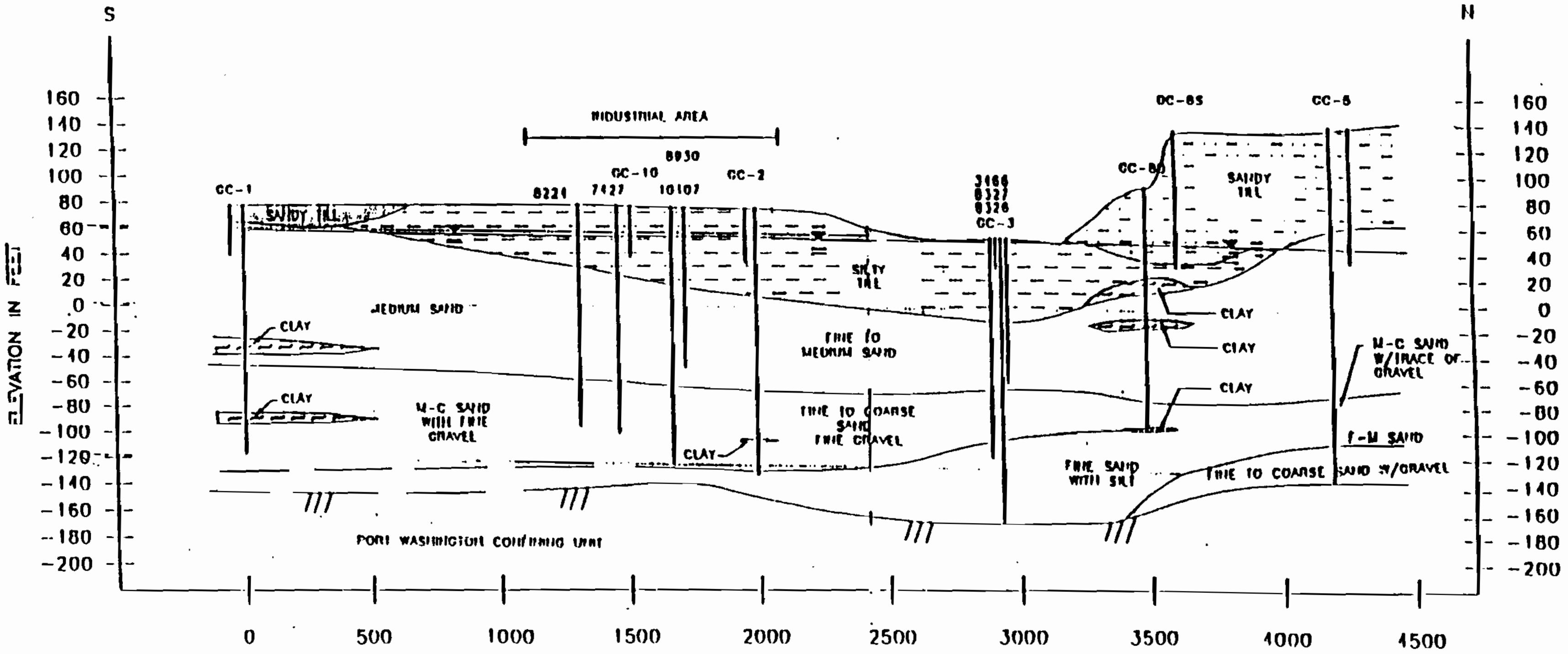
NO.	REVISION DESCRIPTION	DATE
		9/13/89
A	FOR INFORMATION ONLY	3/22/89

FIGURE 2-1A

Geologic Section
(Plan View)

HAZARDOUS WASTE UNIT	DRAWN BY [illegible]	DATE [illegible]	SHEET NO 1 OF 1

FIGURE 2-1B
GEOLOGIC CROSS SECTION
WELLS GC-1 THRU GC-8



NOTE: Figure is reproduced from NYSDEC Preliminary Site Assessment Report and is presented for reference only. GTI makes no judgement as to its accuracy or validity.

FIGURE 3-1
Drilling Log

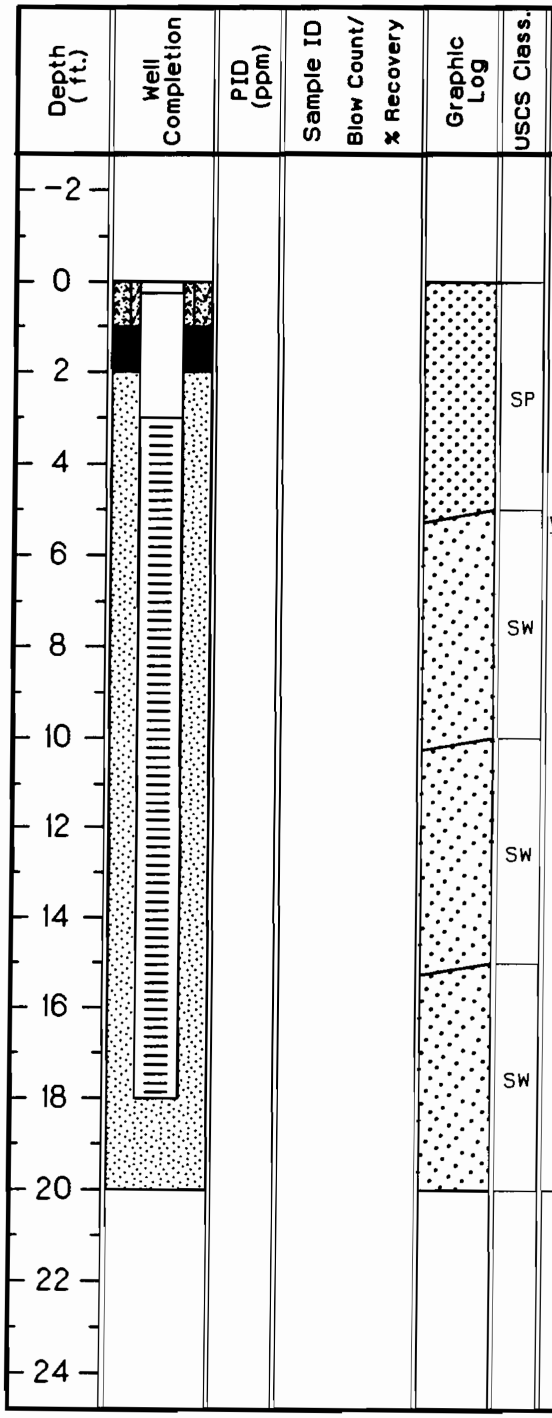
FLUOR DANIEL GTI

Monitoring Well **MW-7P**

See Site Map
For Boring Location

COMMENTS:

Project *Pall Corporation/August Thomsen* Owner *Pall Corporation*
Location *Sea Cliff Avenue, Glen Cove, N.Y.* Proj. No. *04100-0297*
Surface Elev. ______ Total Hole Depth *20 ft.* Diameter *8.75 in.*
Top of Casing *56.52 ft.* Water Level Initial *5.5 ft.* Static ______
Screen: Dia *4 in.* Length *15 ft.* Type/Size *.020 pvc in.*
Casing: Dia *4 in.* Length *3 ft.* Type *pvc*
Fill Material *#1 Morie gravel pack* Rig/Core ______
Drill Co. ______ Method *Hollow stem auger*
Driller *Carl* Log By *Daniel Smith* Date *11/18/96* Permit # ______
Checked By *Daniel Smith* License No. ______



Description
(Color, Texture, Structure)
Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%

USCS Class.	Description
	Hand-dug to 5 feet.
SP	Dark brown, dry, medium to fine SAND, some cobbles, some gravel, little clay.
SW	Dark brown, wet, medium to fine SAND and SILT. No odor.
SW	Dark brown/gray, very wet, medium to fine SAND, very homogenous.
SW	Dark brown/gray, very wet, fine SAND and SILT.
	End of exploration at 20 feet.

TABLES

TABLE 1-1
Volatile Organic Compound Analytical Summary
(Samples Collected October 1995)

PARAMETER	NYSDEC Class GA Standard	MW-1P (UG/L)		MW-2P (UG/L)		MW-3P (UG/L)		MW-4P (UG/L)		MW-5P (UG/L)		MW-6P (UG/L)	
Chloromethane	5*	<	10	<	10	<	10	<	10	<	50	<	10
Bromomethane	5	<	10	<	10	<	10	<	10	<	50	<	10
Vinyl Chloride	2	<	10	<	10	<	10	<	10	<	50	<	10
Chloroethane	5	<	10	<	10	<	10	<	10	<	50	<	10
Methylene Chloride	5	<	5	<	5	<	5	<	5	<	25	<	5
Acetone	50**		NA		NA		NA		NA		NA		NA
Carbon Disulfide	NA		NA		NA		NA		NA		NA		NA
1,1-Dichloroethene	5	<	5	<	5	<	5	<	5	<	25	B	**9.2**
1,1-Dichloroethane	5	<	5	<	5	<	5	<	5	<	25		**8.9**
1,2-Dichloroethene (total)	5	B	**8.6**	B	**8.2**	<	5	<	5	B	**220**	B	**47**
Chloroform	7	<	5	<	5	<	5	<	5	<	25	<	5
1,2-Dichloroethane	5	<	5	<	5	<	5	<	5	<	25	<	5
2-Butanone	50**		NA		NA		NA		NA		NA		NA
1,1,1-Trichloroethane	5	<	5	<	5	<	5	<	5	<	25		**47**
Carbon Tetrachloride	5	<	5	<	5	<	5	<	5	<	25	<	5
Bromodichloromethane	50**	<	5	<	5	<	5	<	5	<	25	<	5
1,2-Dichloropropane	5	<	5	<	5	<	5	<	5	<	25	<	5
cis-1,3-Dichloropropene	5	<	5	<	5	<	5	<	5	<	25	<	5
Trichloroethene	5	<	5		**7.1**	<	5	<	5	<	25		**18**
Benzene	0.7	<	5	<	5	<	5	<	5	<	25	<	5
Dibromochloromethane	50**	<	5	<	5	<	5	<	5	<	25	<	5
trans-1,3-Dichloropropene	5	<	5	<	5	<	5	<	5	<	25	<	5
1,1,2-Trichloroethane	5	<	5	<	5	<	5	<	5	<	25	<	5
Bromoform	50**	<	5	<	5	<	5	<	5	<	25	<	5
4-Methyl-2-Pentanone	NA		NA		NA		NA		NA		NA		NA
s-Hexanone	50**		NA		NA		NA		NA		NA		NA
Tetrachloroethene	5	<	5		**420**	<	5	<	5	<	25		**9.8**
1,1,2,2-Tetrachloroethane	5	<	5	<	5	<	5	<	5	<	25	<	5
Toluene	5	<	5	<	5	<	5	<	5	<	25	<	5
Chlorobenzene	5	<	5	<	5	<	5	<	5	<	25	<	5
Ethylbenzene	5	<	5	<	5	<	5	<	5	<	25	<	5
Styrene	5		NA		NA		NA		NA		NA		NA
Xylenes (total)	5	<	5	<	5	<	5	<	5	<	25	<	5

NOTES:

NA = Not Available
* = Chemical is classified as a "Principal Organic Contaminant" (POC) with a 5 ug/l standard.
** = Value listed is a Class GA Quality Guidance Value, not a standard.
< = Less than the value indicated.
J = Estimated value.
B = Compound also detected in blank sample(s)

TABLE 2-1
DEPTH TO WATER MEASUREMENT DATA

NOVEMBER 26, 1996 MEASUREMENTS

WELL ID	MEASURING POINT ELEVATION (ft)*	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft)
1P	55.91	5.23	50.68
2P	54.36	3.89	50.47
3P	53.73	3.99	49.74
4P	52.77	3.07	49.70
5P	51.36	1.94	49.42
6P	56.82	5.11	51.71
7P	56.52	4.56	51.96

* Measurement point elevation data provided by Pall Corporation in NYSDEC PSA except well MW-7P surveyed by Fluor Daniel GTI on November 21, 1996.

TABLE 4-1
Volatile Organic Compound Analytical Summary
(Samples Collected November 1996)

PARAMETER	NYSDEC Class GA Standard	MW-1P (UG/L)		MW-2P (UG/L)		MW-3P (UG/L)		MW-4P (UG/L)		MW-5P (UG/L)		MW-6P (UG/L)		MW-7P (UG/L)	
Chloromethane	5*	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Bromomethane	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Vinyl Chloride	2	<	10	J	2	J	**7**		**94**		**73**	J	**4**	<	10
Chloroethane	5	<	10	<	10	J	3	<	10	<	10	<	10	<	10
Methylene Chloride	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Acetone	50**		26	<	10		**71**		**52**		11	<	10	<	10
Carbon Disulfide	NA	<	10	<	10	<	10	<	10	<	10	<	10	<	10
1,1-Dichloroethene	5	<	10	<	10	<	10	<	10	J	1	J	5	<	10
1,1-Dichloroethane	5	<	10	<	10	J	**8**	J	**7**	J	**5**	J	**8**	<	10
1,2-Dichloroethene (total)	5	<	10		**39**	J	**8**		**230**		**510**		**30**	J	1
Chloroform	7	<	10	<	10	<	10	<	10	<	10	<	10	<	10
1,2-Dichloroethane	5	<	10	<	10	<	10	<	10	<	10	J	1	<	10
2-Butanone	50**	J	2	<	10	<	10	<	10	<	10	<	10	<	10
1,1,1-Trichloroethane	5	<	10	<	10	<	10	<	10	<	10		**23**	<	10
Carbon Tetrachloride	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Bromodichloromethane	50**	<	10	<	10	<	10	<	10	<	10	<	10	<	10
1,2-Dichloropropane	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
cis-1,3-Dichloropropene	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Trichloroethene	5	<	10		**62**	<	10	J	**3**		**11**		**12**	<	10
Benzene	0.7	<	10	<	10	<	10	J	**2**	<	10	<	10	<	10
Dibromochloromethane	50**	<	10	<	10	<	10	<	10	<	10	<	10	<	10
trans-1,3-Dichloropropene	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
1,1,2-Trichloroethane	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Bromoform	50**	<	10	<	10	<	10	<	10	<	10	<	10	<	10
4-Methyl-2-Pentanone	NA	<	10	<	10	<	10	<	10	<	10	<	10	<	10
2-Hexanone	50**	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Tetrachloroethene	5	<	10		**280**	<	10	J	**7**	J	3	J	**7**	<	10
1,1,2,2-Tetrachloroethane	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Toluene	5	<	10	<	10	J	1	J	3	<	10	<	10	<	10
Chlorobenzene	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Ethylbenzene	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Styrene	5	<	10	<	10	<	10	<	10	<	10	<	10	<	10
Xylenes (total)	5	<	10	<	10	<	10	J	2	<	10	<	10	<	10

NOTES:

NA = Not Available
* = Chemical is classified as a "Principal Organic Contaminant" (POC) with a 5 ug/l standard.
** = Value listed is a Class GA Quality Guidance Value, not a standard.
< = Less than the value indicated.
J = Estimated value.
B = Compound also detected in blank sample(s)

TABLE 4-2
TAL METALS ANALYTICAL SUMMARY
(SAMPLES COLLECTED NOVEMBER 26, 1996)

PARAMETER	NYSDEC CLASS GA QUALITY STD.	MW-1P (mg/l)	MW-5P (mg/l)	MW-7P (mg/l)
Silver	0.05	< 0.01	< 0.01	< 0.01
Aluminum	NA	1.2	6.5	24.7
Arsenic	0.025	< 0.01	0.016	0.0115
Barium	1	< 0.2	< 0.2	0.29
Berylium	0.003	< 0.005	< 0.005	< 0.005
Calcium	NA	16.7	23.7	38.8
Cadmium	0.01	< 0.005	0.076	< 0.005
Cobalt	NA	< 0.05	< 0.05	< 0.05
Chromium	0.05	< 0.01	< 0.01	**0.07**
Copper	0.2	0.03	< 0.03	0.07
Iron	0.3	**5.0**	**63.3**	**60.5**
Mercury	0.002	< 0.0002	< 0.0002	< 0.0002
Potassium	NA	3.1	5.7	11.9
Magnesium	35	4.3	7.7	13
Manganese	0.3	0.23	**0.42**	1
Sodium	20	**30.5**	**45.2**	**75.7**
Nickel	NA	< 0.04	< 0.04	0.07
Lead	0.025	**0.0255**	**0.0355**	**0.0278**
Antimony	0.003	< 0.06	< 0.06	< 0.06
Selenium	0.01	< 0.005	< 0.005	< 0.005
Thallium	0.004	< 0.01	< 0.01	< 0.01
Vanadium	NA	< 0.05	< 0.05	0.07
Zinc	0.3	0.10	0.29	0.09

APPENDIX A

H2M LABS, INC.

BATCH QC PACKAGE

PALL CORPORATION

FLUOR DANIEL GTI
SAMPLES RECEIVED: 11/27/96
(GWT008)

TABLE OF CONTENTS

I. CHAIN OF CUSTODY DOCUMENTATION

H2M LABS, INC.

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 694-3040
FAX: 516-694-4122

No 4953

EXTERNAL CHAIN OF CUSTODY

GWT 008

PROJ. NO. 01113-0173 TASK #60

PROJECT NAME: PALL CORPORATION

SAMPLERS: (Signature)/Client
Michael Borne
Fluor Daniel GTI

DELIVERABLES: TAT. 72 HRS
Report only w/ Batch MS/MSD" report

Refrigerator #

NOTES:
2x40ml VOA: TCL VOLATILE ORGANIC CMPDS
2x1000 ml ambers: SEMI/VOLATILES ORGANIC CMPDS
1 x 500 ml plastic: TAL METALS

						ANALYSIS REQUESTED										
				SAMPLE CONTAINER DESCRIPTION →		40 ml Vial-HCl	1000 ml glass						500 ml plastic-HNO3			
						ORGANIC							INORG.			
DATE	TIME	MATRIX	FIELD I.D.		TOTAL NO. OF CONTAINERS	VOA	BNA	Pest/PCB					Metal	CN	LAB I.D. No.	REMARKS
11/26/96	1610	WATER	MW-1-1P	1	5	2	2						1		9634432	INCLUDE MS/MSD WITH ANALYTICAL REPORTS
11/26/96	1550	WATER	MW-5P	2	5										433	- QA/QC LEVEL:
11/26/96	1240	WATER	MW-7P	3	5		↓						↓		434	REPORT ONLY
11/26/96	1540	WATER	MW-2P	4	2										435	WITH INTERNAL
11/26/96	1510	WATER	MW-3P	5											436	MS/MD
11/26/96	1435	WATER	MW-4P	6											437	- H2M TO REPORT INTERNAL
11/26/96	1310	WATER	MW-6P	7											438	BATCH MS/MSD RESULTS AT NO ADDITIONAL CHARGE AS
11/26/96	1445	WATER	FIELD BLANK	8											439	PER KAREN K. CONVERSATION
11/26/96	n/a	WATER	TRIP BLANK	9	↓	↓									440	W/ DANIEL SMITH.
																FAX: A.S.A.P. (516) 472-4077

Relinquished by: (Signature)	Date	time	Received by: (Signature)	Date	time
				11/27/96	0705
Relinquished by: (Signature)	Date	time	Received by: (Signature)	Date	time
	11/27/96	7:15 AM			
Relinquished by: (Signature)	Date	time	Received for Laboratory by: (Signature)	Date	time
				11/~~28~~ 27/96	1000

PROJECT CONTACT: Dan Smith
PHONE NUMBER: (516) 472-4000

Discrepancies Between Sample Labels and COC Record? Y or [✓ N]
NOTES:

LABORATORY USE ONLY

Samples were:
1) Shipped ____ or Hand Delivered ✓
Airbill # ____
2) Ambient or [✓ Chilled] <6
3) Recieved in Good Condition [✓ Y] or N
4) Properly Preserved [✓ Y] or N
5) Samples returned to lab. ____ hours from Collection

COC Tape was:
1) Present on Outer Package Y or [✓ N]
2) Unbroken on Outer Package Y or [✓ N]
3) COC Record Present and Complete Upon Sample Rec't. [✓ Y] or N

ORIGINAL COPY

H2M LABS, INC.

Page 1 of 3

INTERNAL CHAIN OF CUSTODY

CLIENT: GWT DELIVERABLES: RT-10 TURN AROUND TIME ~~STD~~ 2 wk Pkg.

SDG #: 008 CASE #: — MATRIX: ML pH CHECK Y or N

REMARKS: BATCH MS/MSD

RECEIVED BY: CDR SIGNATURE DATE ~~11-28-96~~ 11/27/96 12/12/96 TIME: 1000

	CLIENT I.D.	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
1	MW-1P	9634432	11-26	D	2	PUTCL
2	5P	433				
3	7P	434				
4	2P	435				
5	3P	436				
6	4P	437				
7	6P	438				
8	Field BLANK	439				
9	TRIP BLANK	440				
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

CDR 11/27

H2M LABS, INC.

CLIENT: GWT

SDG #: 008

INTERNAL CHAIN OF CUSTODY

DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEVIED BY	BOTTLE TYPE	PURPOSE OF CHANGE OF CUSTODY	INIT.
11-27-96	1400	SIGN	SIGN	All D	Analysis	
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

2 wk pkg.

CLIENT: GWT DELIVERABLES: RT-10 TURN AROUND TIME ~~STD~~

SDG #: 008 CASE #: — MATRIX: ML pH CHECK Y or N

REMARKS:

RECEIVED BY: CDR SIGNATURE DATE 11-27-96 TIME: 1000

	CLIENT I.D.	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
1	MW-1P	9634432	11-26-96	G	2	TCL BN/AE
2	↓ 5P	433	↓	↓	↓	↓
3	7P	434				
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

CDR 11-27

H2M LABS, INC.

CLIENT: CeWT

SDG #: 008

INTERNAL CHAIN OF CUSTODY

DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEVIED BY	BOTTLE TYPE	PURPOSE OF CHANGE OF CUSTODY	INIT.
11-27-96	17.0	SIGN	SIGN N. Crespi	All G	Prep	
12-3-96	9:05	SIGN N. Crespi	SIGN	ALL G	Extraction	
12-4-96	18:00	SIGN	SIGN	All Ⓔ	for BNA Analysis.	
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
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		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			

MCT

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

2 wk pkg.

CLIENT: GWT DELIVERABLES: BT-10 TURN AROUND TIME: ~~STD~~

SDG #: 00X8 CASE #: — MATRIX: ML pH CHECK [✓ Y] or N

CDR 11·27·96

REMARKS: BATCH MS/MSD

RECEIVED BY: CDR SIGNATURE DATE 11·28·96 TIME: 1000

CLIENT I.D.	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
1 MW-1P MS/MSD mm 12/10/96	9634432	11-26	EN	1	TAL METALS
2 5P	433	↓	↓	↓	↓
3 7P	434	↓	↓	↓	↓
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

CDR 11·27

H2M LABS, INC.

CLIENT: GWT

SDG #: 008

INTERNAL CHAIN OF CUSTODY

COR 11-27 96 DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEVIED BY	KP 12/11 BOTTLE TYPE	PURPOSE OF CHANGE OF CUSTODY	INIT.
11-~~28~~ 27-96	1400	SIGN	SIGN Karen	All E 500 ml	Prep. Anal.	
12/11/96	715	SIGN Karen	SIGN	All 500ml 12/11	Digestion	
12/11/96	750	SIGN	SIGN Karen	All 500ml	storage	
12/11/96	8:00	SIGN Karen	SIGN	all EH	Hg prep	
12/11/96	8:45	SIGN	SIGN	all EH	storage	
12/12/96	6:15	SIGN	SIGN	all BOD	Hg analysis	
12/12/96	1100	SIGN	SIGN Karen	all ff digs	ICP analysis	
12/12/96	1550	SIGN Karen	SIGN	All digs	storage	
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			

II. SAMPLE REPORTS

A. VOLATILES
B. SEMI-VOLATILES
C. METALS

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634432

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-1P

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<10		
BROMOMETHANE	<10		
VINYL CHLORIDE	<10		
CHLOROETHANE	<10		
METHYLENE CHLORIDE	<10		
1,1-DICHLOROETHENE	<10		
1,1-DICHLOROETHANE	<10		
TOTAL-1,2-DICHLOROETHENE	<10		
CHLOROFORM	<10		
1,2-DICHLOROETHANE	<10		
1,1,1-TRICHLOROETHANE	<10		
CARBON TETRACHLORIDE	<10		
BROMODICHLOROMETHANE	<10		
1,2-DICHLOROPROPANE	<10		
TRANS-1,3-DICHLOROPROPENE	<10		
TRICHLOROETHENE	<10		
DIBROMOCHLOROMETHANE	<10		
1,1,2-TRICHLOROETHANE	<10		
CIS-1,3-DICHLOROPROPENE	<10		
BENZENE	<10		
BROMOFORM	<10		
1,1,2,2-TETRACHLOROETHANE	<10		
TETRACHLOROETHENE	<10		
TOLUENE	<10		
CHLOROBENZENE	<10		
ETHYLBENZENE	<10		
XYLENES (TOTAL)	<10		
ACETONE	26		
2-BUTANONE (MEK)	2J		
4-METHYL-2PENTANONE(MIBK)	<10		
CARBON DISULFIDE	<10		
2-HEXANONE	<10		
STYRENE	<10		

COPIES TO:

DATE ISSUED 12/16/96

DATE RUN....... 11/27/96
DATE REPORTED.. 11/27/96

ORIGINAL

LABORATORY DIRECTOR

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634432

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-1P

REMARKS:

TCL SEMI-VOLATILE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
1,3-DICHLOROBENZENE	<10	BIS(2ETHYLHEXYL)PHTHALATE	<10
1,4-DICHLOROBENZENE	<10	CHRYSENE	<10
HEXACHLOROETHANE	<10	BENZO(A)ANTHRACENE	<10
BIS(2-CHLOROETHYL)ETHER	<10	3,3-DICHLOROBENZIDINE	<10
1,2-DICHLOROBENZENE	<10	DI-N-OCTYL PHTHALATE	<10
2,2-OXYBIS(1-CHL.PROPANE)	<10	BENZO(B)FLUORANTHENE	<10
N-NITROSO-DI-N-PROPYLAMIN	<10	BENZO(K)FLUORANTHENE	<10
NITROBENZENE	<10	BENZO(A)PYRENE	<10
HEXACHLOROBUTADIENE	<10	INDENO(1,2,3-C,D)PYRENE	<10
1,2,4-TRICHLOROBENZENE	<10	DIBENZO(A,H)ANTHRACENE	<10
ISOPHORONE	<10	BENZO (G,H,I)PERYLENE	<10
NAPHTHALENE	<10	2-CHLOROPHENOL	<10
BIS(2-CHL.ETHOXY)METHANE	<10	2-NITROPHENOL	<10
CARBAZOLE	<10	PHENOL	<10
HEXACHLOROCYCLOPENTADIENE	<10	2,4-DIMETHYLPHENOL	<10
2-CHLORONAPHTHALENE	<10	2,4-DICHLOROPHENOL	<10
ACENAPHTHYLENE	<10	2,4,6-TRICHLOROPHENOL	<10
ACENAPHTHENE	<10	4-CHLORO-3-METHYLPHENOL	<10
DIMETHYLPHTHALATE	<10	2,4-DINITROPHENOL	<25
2,6-DINITROTOLUENE	<10	2-METH.-4,6-DINITROPHENOL	<25
FLUORENE	<10	PENTACHLOROPHENOL	<25
4-CHL.PHENYL PHENYLETHER	<10	4-NITROPHENOL	<25
2,4-DINITROTOLUENE	<10	2-METHYLPHENOL	<10
DIETHYL PHTHALATE	<10	2,4,5-TRICHLOROPHENOL	<25
N-NITROSODIPHENYLAMINE	<10	4-METHYLPHENOL	<10
HEXACHLOROBENZENE	<10	4-CHLOROANILINE	<10
4-BROMOPHENYLPHENYLETHER	<10	2-METHYLNAPHTHALENE	<10
PHENANTHRENE	<10	2-NITROANILINE	<25
ANTHRACENE	<10	3-NITROANILINE	<25
DI-N-BUTYL PHTHALATE	<10	DIBENZOFURAN	<10
FLUORANTHENE	<10	4-NITROANILINE	<25
PYRENE	<10		
BUTYL BENZYL PHTHALATE	<10		

COPIES TO:

DATE ISSUED 12/16/96

DATE EXTRACTED. 12/03/96
DATE RUN....... 12/06/96
DATE REPORTED.. 12/09/96

LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634433

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-5P

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<10		
BROMOMETHANE	<10		
VINYL CHLORIDE	73		
CHLOROETHANE	<10		
METHYLENE CHLORIDE	<10		
1,1-DICHLOROETHENE	1J		
1,1-DICHLOROETHANE	5J		
TOTAL-1,2-DICHLOROETHENE	500E		
CHLOROFORM	<10		
1,2-DICHLOROETHANE	<10		
1,1,1-TRICHLOROETHANE	<10		
CARBON TETRACHLORIDE	<10		
BROMODICHLOROMETHANE	<10		
1,2-DICHLOROPROPANE	<10		
TRANS-1,3-DICHLOROPROPENE	<10		
TRICHLOROETHENE	11		
DIBROMOCHLOROMETHANE	<10		
1,1,2-TRICHLOROETHANE	<10		
CIS-1,3-DICHLOROPROPENE	<10		
BENZENE	<10		
BROMOFORM	<10		
1,1,2,2-TETRACHLOROETHANE	<10		
TETRACHLOROETHENE	3J		
TOLUENE	<10		
CHLOROBENZENE	<10		
ETHYLBENZENE	<10		
XYLENES (TOTAL)	<10		
ACETONE	11		
2-BUTANONE (MEK)	<10		
4-METHYL-2PENTANONE(MIBK)	<10		
CARBON DISULFIDE	<10		
2-HEXANONE	<10		
STYRENE	<10		

COPIES TO:

DATE ISSUED 12/16/96

DATE RUN....... 12/02/96
DATE REPORTED.. 12/02/96

Stanley
LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634433 /DL

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-5P

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<100		
BROMOMETHANE	<100		
VINYL CHLORIDE	65JD		
CHLOROETHANE	<100		
METHYLENE CHLORIDE	<100		
1,1-DICHLOROETHENE	<100		
1,1-DICHLOROETHANE	<100		
TOTAL-1,2-DICHLOROETHENE	510D		
CHLOROFORM	<100		
1,2-DICHLOROETHANE	<100		
1,1,1-TRICHLOROETHANE	<100		
CARBON TETRACHLORIDE	<100		
BROMODICHLOROMETHANE	<100		
1,2-DICHLOROPROPANE	<100		
TRANS-1,3-DICHLOROPROPENE	<100		
TRICHLOROETHENE	<100		
DIBROMOCHLOROMETHANE	<100		
1,1,2-TRICHLOROETHANE	<100		
CIS-1,3-DICHLOROPROPENE	<100		
BENZENE	<100		
BROMOFORM	<100		
1,1,2,2-TETRACHLOROETHANE	<100		
TETRACHLOROETHENE	<100		
TOLUENE	<100		
CHLOROBENZENE	<100		
ETHYLBENZENE	<100		
XYLENES (TOTAL)	<100		
ACETONE	<100		
2-BUTANONE (MEK)	<100		
4-METHYL-2PENTANONE(MIBK)	<100		
CARBON DISULFIDE	<100		
2-HEXANONE	<100		
STYRENE	<100		

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DATE ISSUED 12/16/96

DATE RUN....... 12/02/96
DATE REPORTED.. 12/02/96

ORIGINAL

LABORATORY DIRECTOR

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634433

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-5P

REMARKS:

TCL SEMI-VOLATILE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
1,3-DICHLOROBENZENE	<10	BIS(2ETHYLHEXYL)PHTHALATE	<10
1,4-DICHLOROBENZENE	<10	CHRYSENE	<10
HEXACHLOROETHANE	<10	BENZO(A)ANTHRACENE	<10
BIS(2-CHLOROETHYL)ETHER	<10	3,3-DICHLOROBENZIDINE	<10
1,2-DICHLOROBENZENE	<10	DI-N-OCTYL PHTHALATE	<10
2,2-OXYBIS(1-CHL.PROPANE)	<10	BENZO(B)FLUORANTHENE	<10
N-NITROSO-DI-N-PROPYLAMIN	<10	BENZO(K)FLUORANTHENE	<10
NITROBENZENE	<10	BENZO(A)PYRENE	<10
HEXACHLOROBUTADIENE	<10	INDENO(1,2,3-C,D)PYRENE	<10
1,2,4-TRICHLOROBENZENE	<10	DIBENZO(A,H)ANTHRACENE	<10
ISOPHORONE	<10	BENZO (G,H,I)PERYLENE	<10
NAPHTHALENE	<10	2-CHLOROPHENOL	<10
BIS(2-CHL.ETHOXY)METHANE	<10	2-NITROPHENOL	<10
CARBAZOLE	<10	PHENOL	<10
HEXACHLOROCYCLOPENTADIENE	<10	2,4-DIMETHYLPHENOL	<10
2-CHLORONAPHTHALENE	<10	2,4-DICHLOROPHENOL	<10
ACENAPHTHYLENE	<10	2,4,6-TRICHLOROPHENOL	<10
ACENAPHTHENE	<10	4-CHLORO-3-METHYLPHENOL	<10
DIMETHYLPHTHALATE	1J	2,4-DINITROPHENOL	<25
2,6-DINITROTOLUENE	<10	2-METH.-4,6-DINITROPHENOL	<25
FLUORENE	<10	PENTACHLOROPHENOL	<25
4-CHL.PHENYL PHENYLETHER	<10	4-NITROPHENOL	<25
2,4-DINITROTOLUENE	<10	2-METHYLPHENOL	<10
DIETHYL PHTHALATE	4J	2,4,5-TRICHLOROPHENOL	<25
N-NITROSODIPHENYLAMINE	<10	4-METHYLPHENOL	<10
HEXACHLOROBENZENE	<10	4-CHLOROANILINE	<10
4-BROMOPHENYLPHENYLETHER	<10	2-METHYLNAPHTHALENE	<10
PHENANTHRENE	<10	2-NITROANILINE	<25
ANTHRACENE	<10	3-NITROANILINE	<25
DI-N-BUTYL PHTHALATE	<10	DIBENZOFURAN	<10
FLUORANTHENE	<10	4-NITROANILINE	<25
PYRENE	<10		
BUTYL BENZYL PHTHALATE	<10		

COPIES TO:

DATE ISSUED 12/16/96

DATE EXTRACTED. 12/03/96
DATE RUN....... 12/06/96
DATE REPORTED.. 12/09/96

LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634432

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-1P

REMARKS:

PARAMETER (S)	RESULTS	UNITS
SILVER	<0.01	mg/l
ALUMINUM	1.2	mg/l
ARSENIC	<10.0	ug/l
BARIUM	<0.20	mg/l
BERYLLIUM	<5.0	ug/l
CALCIUM	16.7	mg/l
CADMIUM	<5.0	ug/l
COBALT	<0.05	mg/l
CHROMIUM	<0.01	mg/l
COPPER	0.03	mg/l
IRON	5.0	mg/l
MERCURY	<0.20	ug/l
POTASSIUM	3.1	mg/l
MAGNESIUM	4.3	mg/l
MANGANESE	0.23	mg/l
SODIUM	30.5	mg/l
NICKEL	<0.04	mg/l
LEAD	25.5	ug/l
ANTIMONY	<60.0	ug/l
SELENIUM	<5.0	ug/l
THALLIUM	<10.0	ug/l
VANADIUM	<0.05	mg/l
ZINC	0.10	mg/l

COPIES TO:

DATE ISSUED 12/16/96

LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634433

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-5P

REMARKS:

PARAMETER (S)	RESULTS	UNITS
SILVER	<0.01	mg/l
ALUMINUM	6.5	mg/l
ARSENIC	16.0	ug/l
BARIUM	<0.20	mg/l
BERYLLIUM	<5.0	ug/l
CALCIUM	23.7	mg/l
CADMIUM	76.1	ug/l
COBALT	<0.05	mg/l
CHROMIUM	<0.01	mg/l
COPPER	0.03	mg/l
IRON	63.3	mg/l
MERCURY	<0.20	ug/l
POTASSIUM	5.7	mg/l
MAGNESIUM	7.7	mg/l
MANGANESE	0.42	mg/l
SODIUM	45.2	mg/l
NICKEL	<0.04	mg/l
LEAD	35.5	ug/l
ANTIMONY	<60.0	ug/l
SELENIUM	<5.0	ug/l
THALLIUM	<10.0	ug/l
VANADIUM	<0.05	mg/l
ZINC	0.29	mg/l

COPIES TO:

DATE ISSUED 12/16/96

Stanley
LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634434

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-7P

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<10		
BROMOMETHANE	<10		
VINYL CHLORIDE	<10		
CHLOROETHANE	<10		
METHYLENE CHLORIDE	<10		
1,1-DICHLOROETHENE	<10		
1,1-DICHLOROETHANE	<10		
TOTAL-1,2-DICHLOROETHENE	1J		
CHLOROFORM	<10		
1,2-DICHLOROETHANE	<10		
1,1,1-TRICHLOROETHANE	<10		
CARBON TETRACHLORIDE	<10		
BROMODICHLOROMETHANE	<10		
1,2-DICHLOROPROPANE	<10		
TRANS-1,3-DICHLOROPROPENE	<10		
TRICHLOROETHENE	<10		
DIBROMOCHLOROMETHANE	<10		
1,1,2-TRICHLOROETHANE	<10		
CIS-1,3-DICHLOROPROPENE	<10		
BENZENE	<10		
BROMOFORM	<10		
1,1,2,2-TETRACHLOROETHANE	<10		
TETRACHLOROETHENE	<10		
TOLUENE	<10		
CHLOROBENZENE	<10		
ETHYLBENZENE	<10		
XYLENES (TOTAL)	<10		
ACETONE	<10		
2-BUTANONE (MEK)	<10		
4-METHYL-2PENTANONE(MIBK)	<10		
CARBON DISULFIDE	<10		
2-HEXANONE	<10		
STYRENE	<10		

COPIES TO:

DATE ISSUED 12/16/96

DATE RUN....... 11/27/96
DATE REPORTED.. 11/27/96

Stanley
LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634434

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-7P

REMARKS:

TCL SEMI-VOLATILE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
1,3-DICHLOROBENZENE	<10	BIS(2ETHYLHEXYL)PHTHALATE	<10
1,4-DICHLOROBENZENE	<10	CHRYSENE	<10
HEXACHLOROETHANE	<10	BENZO(A)ANTHRACENE	<10
BIS(2-CHLOROETHYL)ETHER	<10	3,3-DICHLOROBENZIDINE	<10
1,2-DICHLOROBENZENE	<10	DI-N-OCTYL PHTHALATE	<10
2,2-OXYBIS(1-CHL.PROPANE)	<10	BENZO(B)FLUORANTHENE	<10
N-NITROSO-DI-N-PROPYLAMIN	<10	BENZO(K)FLUORANTHENE	<10
NITROBENZENE	<10	BENZO(A)PYRENE	<10
HEXACHLOROBUTADIENE	<10	INDENO(1,2,3-C,D)PYRENE	<10
1,2,4-TRICHLOROBENZENE	<10	DIBENZO(A,H)ANTHRACENE	<10
ISOPHORONE	<10	BENZO (G,H,I)PERYLENE	<10
NAPHTHALENE	<10	2-CHLOROPHENOL	<10
BIS(2-CHL.ETHOXY)METHANE	<10	2-NITROPHENOL	<10
CARBAZOLE	<10	PHENOL	<10
HEXACHLOROCYCLOPENTADIENE	<10	2,4-DIMETHYLPHENOL	<10
2-CHLORONAPHTHALENE	<10	2,4-DICHLOROPHENOL	<10
ACENAPHTHYLENE	<10	2,4,6-TRICHLOROPHENOL	<10
ACENAPHTHENE	<10	4-CHLORO-3-METHYLPHENOL	<10
DIMETHYLPHTHALATE	<10	2,4-DINITROPHENOL	<25
2,6-DINITROTOLUENE	<10	2-METH.-4,6-DINITROPHENOL	<25
FLUORENE	<10	PENTACHLOROPHENOL	<25
4-CHL.PHENYL PHENYLETHER	<10	4-NITROPHENOL	<25
2,4-DINITROTOLUENE	<10	2-METHYLPHENOL	<10
DIETHYL PHTHALATE	<10	2,4,5-TRICHLOROPHENOL	<25
N-NITROSODIPHENYLAMINE	<10	4-METHYLPHENOL	<10
HEXACHLOROBENZENE	<10	4-CHLOROANILINE	<10
4-BROMOPHENYLPHENYLETHER	<10	2-METHYLNAPHTHALENE	<10
PHENANTHRENE	<10	2-NITROANILINE	<25
ANTHRACENE	<10	3-NITROANILINE	<25
DI-N-BUTYL PHTHALATE	<10	DIBENZOFURAN	<10
FLUORANTHENE	<10	4-NITROANILINE	<25
PYRENE	<10		
BUTYL BENZYL PHTHALATE	<10		

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DATE EXTRACTED. 12/03/96
DATE RUN....... 12/06/96
DATE REPORTED.. 12/09/96

LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634434

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-7P

REMARKS:

PARAMETER (S)	RESULTS	UNITS
SILVER	<0.01	mg/l
ALUMINUM	24.7	mg/l
ARSENIC	11.5	ug/l
BARIUM	0.29	mg/l
BERYLLIUM	<5.0	ug/l
CALCIUM	38.8	mg/l
CADMIUM	<5.0	ug/l
COBALT	<0.05	mg/l
CHROMIUM	0.07	mg/l
COPPER	0.07	mg/l
IRON	60.5	mg/l
MERCURY	<0.20	ug/l
POTASSIUM	11.9	mg/l
MAGNESIUM	13.0	mg/l
MANGANESE	1.0	mg/l
SODIUM	75.7	mg/l
NICKEL	0.07	mg/l
LEAD	27.8	ug/l
ANTIMONY	<60.0	ug/l
SELENIUM	<5.0	ug/l
THALLIUM	<10.0	ug/l
VANADIUM	0.07	mg/l
ZINC	0.09	mg/l

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LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634435

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-2P

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<10		
BROMOMETHANE	<10		
VINYL CHLORIDE	2J		
CHLOROETHANE	<10		
METHYLENE CHLORIDE	<10		
1,1-DICHLOROETHENE	<10		
1,1-DICHLOROETHANE	<10		
TOTAL-1,2-DICHLOROETHENE	39		
CHLOROFORM	<10		
1,2-DICHLOROETHANE	<10		
1,1,1-TRICHLOROETHANE	<10		
CARBON TETRACHLORIDE	<10		
BROMODICHLOROMETHANE	<10		
1,2-DICHLOROPROPANE	<10		
TRANS-1,3-DICHLOROPROPENE	<10		
TRICHLOROETHENE	62		
DIBROMOCHLOROMETHANE	<10		
1,1,2-TRICHLOROETHANE	<10		
CIS-1,3-DICHLOROPROPENE	<10		
BENZENE	<10		
BROMOFORM	<10		
1,1,2,2-TETRACHLOROETHANE	<10		
TETRACHLOROETHENE	290E		
TOLUENE	<10		
CHLOROBENZENE	<10		
ETHYLBENZENE	<10		
XYLENES (TOTAL)	<10		
ACETONE	<10		
2-BUTANONE (MEK)	<10		
4-METHYL-2PENTANONE(MIBK)	<10		
CARBON DISULFIDE	<10		
2-HEXANONE	<10		
STYRENE	<10		

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DATE RUN....... 11/27/96
DATE REPORTED.. 12/02/96

LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634435 /DL

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-2P

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<20		
BROMOMETHANE	<20		
VINYL CHLORIDE	<20		
CHLOROETHANE	<20		
METHYLENE CHLORIDE	<20		
1,1-DICHLOROETHENE	<20		
1,1-DICHLOROETHANE	<20		
TOTAL-1,2-DICHLOROETHENE	37D		
CHLOROFORM	<20		
1,2-DICHLOROETHANE	<20		
1,1,1-TRICHLOROETHANE	<20		
CARBON TETRACHLORIDE	<20		
BROMODICHLOROMETHANE	<20		
1,2-DICHLOROPROPANE	<20		
TRANS-1,3-DICHLOROPROPENE	<20		
TRICHLOROETHENE	56D		
DIBROMOCHLOROMETHANE	<20		
1,1,2-TRICHLOROETHANE	<20		
CIS-1,3-DICHLOROPROPENE	<20		
BENZENE	<20		
BROMOFORM	<20		
1,1,2,2-TETRACHLOROETHANE	<20		
TETRACHLOROETHENE	280D		
TOLUENE	<20		
CHLOROBENZENE	<20		
ETHYLBENZENE	<20		
XYLENES (TOTAL)	<20		
ACETONE	<20		
2-BUTANONE (MEK)	<20		
4-METHYL-2PENTANONE(MIBK)	<20		
CARBON DISULFIDE	<20		
2-HEXANONE	<20		
STYRENE	<20		

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DATE RUN....... 12/02/96
DATE REPORTED.. 12/02/96

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ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634436

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-3P

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<10		
BROMOMETHANE	<10		
VINYL CHLORIDE	7J		
CHLOROETHANE	3J		
METHYLENE CHLORIDE	<10		
1,1-DICHLOROETHENE	<10		
1,1-DICHLOROETHANE	8J		
TOTAL-1,2-DICHLOROETHENE	8J		
CHLOROFORM	<10		
1,2-DICHLOROETHANE	<10		
1,1,1-TRICHLOROETHANE	<10		
CARBON TETRACHLORIDE	<10		
BROMODICHLOROMETHANE	<10		
1,2-DICHLOROPROPANE	<10		
TRANS-1,3-DICHLOROPROPENE	<10		
TRICHLOROETHENE	<10		
DIBROMOCHLOROMETHANE	<10		
1,1,2-TRICHLOROETHANE	<10		
CIS-1,3-DICHLOROPROPENE	<10		
BENZENE	<10		
BROMOFORM	<10		
1,1,2,2-TETRACHLOROETHANE	<10		
TETRACHLOROETHENE	<10		
TOLUENE	1J		
CHLOROBENZENE	<10		
ETHYLBENZENE	<10		
XYLENES (TOTAL)	<10		
ACETONE	71		
2-BUTANONE (MEK)	<10		
4-METHYL-2PENTANONE(MIBK)	<10		
CARBON DISULFIDE	<10		
2-HEXANONE	<10		
STYRENE	<10		

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DATE REPORTED.. 11/27/96

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ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634437

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-4P

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<10		
BROMOMETHANE	<10		
VINYL CHLORIDE	94		
CHLOROETHANE	<10		
METHYLENE CHLORIDE	<10		
1,1-DICHLOROETHENE	<10		
1,1-DICHLOROETHANE	7J		
TOTAL-1,2-DICHLOROETHENE	240E		
CHLOROFORM	<10		
1,2-DICHLOROETHANE	<10		
1,1,1-TRICHLOROETHANE	<10		
CARBON TETRACHLORIDE	<10		
BROMODICHLOROMETHANE	<10		
1,2-DICHLOROPROPANE	<10		
TRANS-1,3-DICHLOROPROPENE	<10		
TRICHLOROETHENE	3J		
DIBROMOCHLOROMETHANE	<10		
1,1,2-TRICHLOROETHANE	<10		
CIS-1,3-DICHLOROPROPENE	<10		
BENZENE	2J		
BROMOFORM	<10		
1,1,2,2-TETRACHLOROETHANE	<10		
TETRACHLOROETHENE	7J		
TOLUENE	3J		
CHLOROBENZENE	<10		
ETHYLBENZENE	<10		
XYLENES (TOTAL)	2J		
ACETONE	52		
2-BUTANONE (MEK)	<10		
4-METHYL-2PENTANONE(MIBK)	<10		
CARBON DISULFIDE	<10		
2-HEXANONE	<10		
STYRENE	<10		

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DATE ISSUED 12/16/96

DATE RUN....... 11/27/96
DATE REPORTED.. 12/02/96

LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634437 /DL

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-4P

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<20		
BROMOMETHANE	<20		
VINYL CHLORIDE	93D		
CHLOROETHANE	<20		
METHYLENE CHLORIDE	<20		
1,1-DICHLOROETHENE	<20		
1,1-DICHLOROETHANE	7JD		
TOTAL-1,2-DICHLOROETHENE	230D		
CHLOROFORM	<20		
1,2-DICHLOROETHANE	<20		
1,1,1-TRICHLOROETHANE	<20		
CARBON TETRACHLORIDE	<20		
BROMODICHLOROMETHANE	<20		
1,2-DICHLOROPROPANE	<20		
TRANS-1,3-DICHLOROPROPENE	<20		
TRICHLOROETHENE	2JD		
DIBROMOCHLOROMETHANE	<20		
1,1,2-TRICHLOROETHANE	<20		
CIS-1,3-DICHLOROPROPENE	<20		
BENZENE	<20		
BROMOFORM	<20		
1,1,2,2-TETRACHLOROETHANE	<20		
TETRACHLOROETHENE	7JD		
TOLUENE	3JD		
CHLOROBENZENE	<20		
ETHYLBENZENE	<20		
XYLENES (TOTAL)	<20		
ACETONE	52D		
2-BUTANONE (MEK)	<20		
4-METHYL-2PENTANONE(MIBK)	<20		
CARBON DISULFIDE	<20		
2-HEXANONE	<20		
STYRENE	<20		

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DATE RUN....... 12/02/96
DATE REPORTED.. 12/02/96

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ORIGINAL

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634438

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: MW-6P

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<10		
BROMOMETHANE	<10		
VINYL CHLORIDE	4J		
CHLOROETHANE	<10		
METHYLENE CHLORIDE	<10		
1,1-DICHLOROETHENE	5J		
1,1-DICHLOROETHANE	8J		
TOTAL-1,2-DICHLOROETHENE	30		
CHLOROFORM	<10		
1,2-DICHLOROETHANE	1J		
1,1,1-TRICHLOROETHANE	23		
CARBON TETRACHLORIDE	<10		
BROMODICHLOROMETHANE	<10		
1,2-DICHLOROPROPANE	<10		
TRANS-1,3-DICHLOROPROPENE	<10		
TRICHLOROETHENE	12		
DIBROMOCHLOROMETHANE	<10		
1,1,2-TRICHLOROETHANE	<10		
CIS-1,3-DICHLOROPROPENE	<10		
BENZENE	<10		
BROMOFORM	<10		
1,1,2,2-TETRACHLOROETHANE	<10		
TETRACHLOROETHENE	7J		
TOLUENE	<10		
CHLOROBENZENE	<10		
ETHYLBENZENE	<10		
XYLENES (TOTAL)	<10		
ACETONE	<10		
2-BUTANONE (MEK)	<10		
4-METHYL-2PENTANONE(MIBK)	<10		
CARBON DISULFIDE	<10		
2-HEXANONE	<10		
STYRENE	<10		

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DATE RUN....... 11/27/96
DATE REPORTED.. 11/27/96

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ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634439

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: FIELD BLANK

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<10		
BROMOMETHANE	<10		
VINYL CHLORIDE	<10		
CHLOROETHANE	<10		
METHYLENE CHLORIDE	<10		
1,1-DICHLOROETHENE	<10		
1,1-DICHLOROETHANE	<10		
TOTAL-1,2-DICHLOROETHENE	<10		
CHLOROFORM	<10		
1,2-DICHLOROETHANE	<10		
1,1,1-TRICHLOROETHANE	<10		
CARBON TETRACHLORIDE	<10		
BROMODICHLOROMETHANE	<10		
1,2-DICHLOROPROPANE	<10		
TRANS-1,3-DICHLOROPROPENE	<10		
TRICHLOROETHENE	<10		
DIBROMOCHLOROMETHANE	<10		
1,1,2-TRICHLOROETHANE	<10		
CIS-1,3-DICHLOROPROPENE	<10		
BENZENE	<10		
BROMOFORM	<10		
1,1,2,2-TETRACHLOROETHANE	<10		
TETRACHLOROETHENE	<10		
TOLUENE	<10		
CHLOROBENZENE	<10		
ETHYLBENZENE	<10		
XYLENES (TOTAL)	<10		
ACETONE	<10		
2-BUTANONE (MEK)	<10		
4-METHYL-2PENTANONE(MIBK)	<10		
CARBON DISULFIDE	<10		
2-HEXANONE	<10		
STYRENE	<10		

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DATE RUN....... 11/27/96
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Stanley

LABORATORY DIRECTOR

ORIGINAL

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516)694-3040 FAX:(516)420-8436 NYSDOH ID# 10478

LAB NO: 9634440

FLUOR DANIEL GTI
101-1 COLIN DR.
HOLBROOK, NY 11741

TYPE...... MISCELLANEOUS LIQUID
SPECIAL

DATE COLLECTED. 11/26/96
DATE RECEIVED.. 11/27/96
COLLECTED BY... CL99
PROJECT NO..... 0113-0193

POINT NO:
LOCATION: TRIP BLANK

REMARKS:

TCL PURGEABLE ORGANICS - (ug/l)

PARAMETER (S)	RESULT	PARAMETER (S)	RESULT
CHLOROMETHANE	<10		
BROMOMETHANE	<10		
VINYL CHLORIDE	<10		
CHLOROETHANE	<10		
METHYLENE CHLORIDE	<10		
1,1-DICHLOROETHENE	<10		
1,1-DICHLOROETHANE	<10		
TOTAL-1,2-DICHLOROETHENE	<10		
CHLOROFORM	<10		
1,2-DICHLOROETHANE	<10		
1,1,1-TRICHLOROETHANE	<10		
CARBON TETRACHLORIDE	<10		
BROMODICHLOROMETHANE	<10		
1,2-DICHLOROPROPANE	<10		
TRANS-1,3-DICHLOROPROPENE	<10		
TRICHLOROETHENE	<10		
DIBROMOCHLOROMETHANE	<10		
1,1,2-TRICHLOROETHANE	<10		
CIS-1,3-DICHLOROPROPENE	<10		
BENZENE	<10		
BROMOFORM	<10		
1,1,2,2-TETRACHLOROETHANE	<10		
TETRACHLOROETHENE	<10		
TOLUENE	<10		
CHLOROBENZENE	<10		
ETHYLBENZENE	<10		
XYLENES (TOTAL)	<10		
ACETONE	<10		
2-BUTANONE (MEK)	<10		
4-METHYL-2PENTANONE(MIBK)	<10		
CARBON DISULFIDE	<10		
2-HEXANONE	<10		
STYRENE	<10		

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DATE RUN....... 11/27/96
DATE REPORTED.. 11/27/96

ORIGINAL

LABORATORY DIRECTOR

III. QC SUMMARY

A. VOLATILE ORGANICS

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: H2M LABS, INC Contract:

Lab Code: H2M Case No.: CRA SAS No.: SDG No.: CRA176

Matrix Spike - EPA Sample No.: RM23DL Level: (low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	7100	0.0	6500	92	59 - 172
Trichloroethene	7100	0.0	6800	96	62 - 137
Benzene	7100	13000	20000	92	66 - 142
Toluene	7100	7200	14000	93	59 - 139
Chlorobenzene	7100	12000	18000	87	60 - 133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	7100	6400	90	2	22	59 - 172
Trichloroethene	7100	6800	96	0	24	62 - 137
Benzene	7100	20000	99	0	21	66 - 142
Toluene	7100	14000	96	0	21	59 - 139
Chlorobenzene	7100	18000	85	0	21	60 - 133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III VOA-2

B. SEMI-VOLATILE ORGANICS

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LFB12/3

Name: H2M LABS INC Contract: NYSDEC

Lab Code: 10478 Case No.: GWT SAS No.: SDG No.: GWT008

Matrix: (soil/water) WATER Lab Sample ID: LFB12/3

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: D3217

Level: (low/med) LOW Date Received: 00/00/00

% Moisture: ______ decanted: (Y/N)___ Date Extracted: 12/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 12/06/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Spike Added: 25 UG/L

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	% REC.	LIMITS
108-95-2	Phenol	72.	25-131
111-44-4	bis(2-Chloroethyl)ether	81.	39-111
95-57-8	2-Chlorophenol	80.	48-116
541-73-1	1,3-Dichlorobenzene	64.	18-122
106-46-7	1,4-Dichlorobenzene	60.	25-123
95-50-1	1,2-Dichlorobenzene	65.	28-116
95-48-7	2-Methylphenol	78.	41-131
108-60-1	2,2'-oxybis(1-Chloropropane)	74.	28-146
106-44-5	4-Methylphenol	82.	37-137
621-64-7	N-Nitroso-di-n-propylamine	85.	40-124
67-72-1	Hexachloroethane	67.	5-125
98-95-3	Nitrobenzene	103.	48-126
78-59-1	Isophorone	71.	33-131
88-75-5	2-Nitrophenol	70.	41-121
105-67-9	2,4-Dimethylphenol	87.	39-135
111-91-1	bis(2-Chloroethoxy)methane	85.	20-148
120-83-2	2,4-Dichlorophenol	75.	46-130
120-82-1	1,2,4-Trichlorobenzene	65.	25-129
91-20-3	Naphthalene	67.	47-117
106-47-8	4-Chloroaniline	63.	0-163
87-68-3	Hexachlorobutadiene	63.	11-135
59-50-7	4-Chloro-3-methylphenol	45.	45-135
91-57-6	2-Methylnaphthalene	67.	13-151
77-47-4	Hexachlorocyclopentadiene	20.	0- 99
88-06-2	2,4,6-Trichlorophenol	66.	53-131
95-95-4	2,4,5-Trichlorophenol	60.	48-132
91-58-7	2-Chloronaphthalene	68.	47-123
88-74-4	2-Nitroaniline	90.	41-131
131-11-3	Dimethylphthalate	88.	10-162
208-96-8	Acenaphthylene	68.	36-132
606-20-2	2,6-Dinitrotoluene	100.	48-136
99-09-2	3-Nitroaniline	150.	4-174
83-32-9	Acenaphthene	69.	51-133

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LFB12/3

o Name: H2M LABS INC   Contract: NYSDEC

Lab Code: 10478   Case No.: GWT   SAS No.:   SDG No.: GWT008

Matrix: (soil/water) WATER   Lab Sample ID: LFB12/3

Sample wt/vol: 1000.0 (g/mL) ML   Lab File ID: D3217

Level: (low/med) LOW   Date Received: 00/00/00

% Moisture: ______ decanted: (Y/N)___   Date Extracted: 12/03/96

Concentrated Extract Volume: 1000.0 (uL)   Date Analyzed: 12/06/96

Injection Volume: 2.0 (uL)   Dilution Factor: 1.0

GPC Cleanup: (Y/N) N   pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	% REC.	LIMITS
51-28-5	2,4-Dinitrophenol		84.	0-142
100-02-7	4-Nitrophenol		88.	22-156
132-64-9	Dibenzofuran		67.	45-131
121-14-2	2,4-Dinitrotoluene		98.	48-134
84-66-2	Diethylphthalate		87.	24-156
7005-72-3	4-Chlorophenyl-phenylether		72.	50-130
86-73-7	Fluorene		74.	55-129
100-01-6	4-Nitroaniline		105.	0-226
534-52-1	4,6-Dinitro-2-methylphenol		92.	47-107
86-30-6	N-Nitrosodiphenylamine (1)		83.	0-208
101-55-3	4-Bromophenyl-phenylether		82.	50-142
118-74-1	Hexachlorobenzene		85.	56-154
87-86-5	Pentachlorophenol		88.	6-148
85-01-8	Phenanthrene		86.	57-135
120-12-7	Anthracene		93.	61-135
86-74-8	Carbazole		86.	0-260
84-74-2	Di-n-butylphthalate		90.	44-144
206-44-0	Fluoranthene		92.	61-135
129-00-0	Pyrene		88.	58-136
85-68-7	Butylbenzylphthalate		92.	49-135
91-94-1	3,3'-Dichlorobenzidine		118.	6-216
56-55-3	Benzo(a)anthracene		85.	56-136
218-01-9	Chrysene		89.	38-170
117-81-7	bis(2-Ethylhexyl)phthalate		82.	33-193
117-84-0	Di-n-octylphthalate		105.	45-155
205-99-2	Benzo(b)fluoranthene		91.	43-147
207-08-9	Benzo(k)fluoranthene		113.	53-159
50-32-8	Benzo(a)pyrene		83.	47-141
193-39-5	Indeno(1,2,3-cd)pyrene		64.	26-156
53-70-3	Dibenz(a,h)anthracene		77.	15-185
191-24-2	Benzo(g,h,i)perylene		59.	25-153

(1) - Cannot be separated from diphenylamine

C. METALS

ENVIROFORMS/INORGANIC CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

X14G1AS

Lab Name: H2M LABS, INC. Contract:

Lab Code: H2MLAB Case No.: SAS No.: SDG No.: GWT008

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2206.4000		253.7000		2000.00	97.6		P
Antimony	75-125	497.2087		2.7000	U	500.00	99.4		P
Arsenic	75-125	2120.9897		1.5000	U	2000.00	106.0		P
Barium	75-125	1940.0667		48.8333	B	2000.00	94.6		P
Beryllium	75-125	53.6333		0.2000	U	50.00	107.3		P
Cadmium	75-125	53.3333		0.9000	B	50.00	104.9		P
Calcium									NR
Chromium	75-125	204.2000		1.9000	B	200.00	101.2		P
Cobalt	75-125	510.8667		1.4000	U	500.00	102.2		P
Copper	75-125	239.1667		4.9667	B	250.00	93.7		P
Iron	75-125	1491.2667		472.3000		1000.00	101.9		P
Lead	75-125	506.8064		4.0701		500.00	100.5		P
Magnesium									NR
Manganese	75-125	585.9333		68.1667		500.00	103.6		P
Mercury									NR
Nickel	75-125	507.9667		2.1000	U	500.00	101.6		P
Potassium									NR
Selenium	75-125	2144.2209		1.4000	U	2000.00	107.2		P
Silver	75-125	48.1179		0.4000	U	50.00	96.2		P
Sodium									NR
Thallium	75-125	2021.3491		1.9000	U	2000.00	101.1		P
Vanadium	75-125	503.5000		1.6000	U	500.00	100.7		P
Zinc	75-125	597.4000		40.4333		500.00	111.4		P
Cyanide									NR

Comments:

H2M LABS, INC. ENVIROFORMS/INORGANIC CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

XXC216S

Lab Name: H2M LABS, INC. Contract:

Lab Code: H2MLAB Case No.: SAS No.: SDG No.: GWT008

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	1.0305		0.1000	U	1.00	103.0		CV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

FORM V (PART 1) - IN

H2M LABS, INC.

ENVIROFORMS/INORGANIC CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

X14G1AA

Lab Name: H2M LABS, INC.　　Contract:

Lab Code: H2MLAB　　Case No.:　　SAS No.:　　SDG No.: GWT008

Matrix (soil/water): WATER　　Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

ENVIROFORMS/INORGANIC CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

XXC216A

Lab Name: H2M LABS, INC.   Contract:

Lab Code: H2MLAB   Case No.:   SAS No.:   SDG No.: GWT008

Matrix (soil/water): WATER   Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

ENVIROFORMS/INORGANIC CLP

6
DUPLICATES

SAMPLE NO.

X14G1AD

Lab Name: H2M LABS, INC.　　Contract:

Lab Code: H2MLAB　　Case No.:　　SAS No.:　　SDG No.: GWT008

Matrix (soil/water): WATER　　Level (low/med): LOW

% Solids for Sample: 0.0　　% Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	253.7000		278.0000		9.1		P
Antimony		2.7000	U	2.7000	U			P
Arsenic		1.5000	U	1.5000	U			P
Barium		48.8333	B	47.9000	B	1.9		P
Beryllium		0.2000	U	0.2000	U			P
Cadmium		0.9000	B	0.9667	B	7.1		P
Calcium		47992.7330		48962.1000		2.0		P
Chromium		1.9000	B	2.6667	B	33.6		P
Cobalt		1.4000	U	1.4000	U			P
Copper		4.9667	B	4.7667	B	4.1		P
Iron	100.0	472.3000		491.4000		4.0		P
Lead	3.0	4.0701		4.1935		3.0		P
Magnesium	5000.0	19085.7000		19048.7000		0.2		P
Manganese	15.0	68.1667		69.1667		1.5		P
Mercury								
Nickel		2.1000	U	2.6000	B	200.0		P
Potassium	5000.0	13882.7330		13503.2330		2.8		P
Selenium		1.4000	U	1.4000	U			P
Silver		0.4000	U	0.4000	U			P
Sodium	5000.0	23307.0660		23081.5660		1.0		P
Thallium		1.9000	U	1.9000	U			P
Vanadium		1.6000	U	1.6000	U			P
Zinc	20.0	40.4333		48.1000		17.3		P
Cyanide								

H2M LABS, INC.

ENVIROFORMS/INORGANIC CLP

6
DUPLICATES

SAMPLE NO.

XXC216D

Lab Name: H2M LABS, INC.   Contract:

Lab Code: H2MLAB   Case No.:   SAS No.:   SDG No.: GWT008

Matrix (soil/water): WATER   Level (low/med): LOW

% Solids for Sample: 0.0   % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury		0.1000	U	0.1000	U			CV
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide								