

**Torres Rojas, Genara**

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To: prblawyers@aol.com  
Date: Wednesday, March 06, 2013 10:50 AM  
From: Duffy, Daniel  
Subject: Torres Rojas, Genara; Van Duyne, Sheree  
Freedom of Information Online Request Form

Information:

First Name: JOSEPH  
Last Name: VITULLI  
Company: PLISKIN, RUBANO PLLC  
Mailing Address 1: 137-11 NORTHERN BLVD.  
Mailing Address 2:  
City: Great Neck  
State: NY  
Zip Code: 11544  
Email Address: prblawyers@aol.com  
Phone: 718-539-3100  
Required copies of the records: Yes

List of specific records(s):

All lease agreements and any amendements or extensions thereto between the Port Authority of New York and New Jersey, as landlord, in connection with the building 197FTH 10X located at JFK Airport, Jamaica, NY 11430 for the last 5 years

April 17, 2013

Mr. Joseph Vitulli  
Pliskin, Rubano Et Al  
137-11 Northern Blvd.  
Flushing, NY 11354

Re: Freedom of Information Reference No. 13817

Dear Mr. Vitulli:

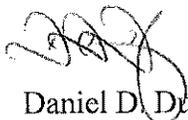
This is a response to your March 6, 2013 request, which has been processed under the Port Authority's Freedom of Information Code (the "Code") for copies of all lease agreements and any amendments or extensions thereto between the Port Authority, as landlord, in connection with the building 197 Fedex located at John F. Kennedy International Airport, Jamaica, NY 11430 for the last 5 years.

Material responsive to your request and available under the Code can be found on the Port Authority's website at <http://www.panynj.gov/corporate-information/foi/13817-LPA.pdf>. Paper copies of the available records are available upon request.

Certain material responsive to your request is exempt from disclosure pursuant to exemptions (1), (2.a.) and (4) of the Code.

Please refer to the above FOI reference number in any future correspondence relating to your request.

Very truly yours,



Daniel D. Duffy  
FOI Administrator

AVIATION DEPT.  
PD & M - JFKIA  
**FILE COPY**  
The Port Authority

*Fully Executed*

Lease No. AYD-162

2/11/2001  
8/1/2011

The Port Authority of New York and New Jersey

2/11/2002 -  
1/31/2017

*John F. Kennedy International Airport*

*Agreement of Lease*

*between*

*The Port Authority of New York and New Jersey*

*and*

*United States Postal Service*

*Dated as of July 2, 2001*

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EXHIBITS

Exhibit A	Space Sketch
Exhibit M	Baseline Environmental (Reserved) Assessment Report

SCHEDULES

Schedule E
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THIS AGREEMENT SHALL NOT BE BINDING UPON  
THE PORT AUTHORITY UNTIL DULY EXECUTED BY  
AN EXECUTIVE OFFICER THEREOF AND DELIVERED  
TO THE LESSEE BY AN AUTHORIZED  
REPRESENTATIVE OF THE PORT AUTHORITY

Lease No. AYD-162

### AGREEMENT OF LEASE

THIS AGREEMENT OF LEASE, made as of the 2nd day of July 2001, by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called "the Port Authority"), a body corporate and politic, established by Compact between the States of New Jersey and New York with the consent of the Congress of the United States of America, and having an office at One World Trade Center, in the Borough of Manhattan, City, County and State of New York, and UNITED STATES POSTAL SERVICE (hereinafter called "the Lessee"), an independent establishment of the executive branch of the United States established pursuant to the provisions of the Postal Reorganization Act of August 12, 1970, having an office and place of business at Two Hudson Place, Hoboken, New Jersey 07030-5502, whose representative is Gregory C. Lackey, Real Estate Specialist.

WITNESSETH, That:

The Port Authority and the Lessee, for and in consideration of the rents, covenants and mutual agreements hereinafter contained, hereby covenant and agree as follows:

Section 1. Letting

(a) The Port Authority hereby lets to the Lessee and the Lessee hereby hires and takes from the Port Authority at John F. Kennedy International Airport (sometimes hereinafter referred to as "the Airport") in the County of Queens, City and State of New York the ground space shown in stipple on the drawing attached hereto, hereby made a part hereof and marked "Exhibit A", together with all buildings (including without limitation Building No. 197) located thereon, and together with the structures, fixtures, improvements and other property of the Port Authority, if any, located therein, thereon or thereunder all of the foregoing being sometimes hereinafter referred to as the "site", the site and all structures, improvements, additions, buildings and facilities located, constructed or installed or which may be located, constructed or installed therein, thereon or

thereunder, being hereinafter collectively referred to as "the premises".

(b) Except to the extent required for the performance of any of the obligations of the Lessee hereunder, nothing contained in this Agreement shall grant to the Lessee any rights whatsoever in the air space above the heights of the structures thereon as of the Completion Date, as defined in Section 2(h)2 hereof.

(c) The parties acknowledge that the premises constitute non-residential real property.

Section 2. The Lessee Construction Work

(a) The Lessee shall, prior to its submission to the Port Authority of the plans and specifications hereinafter provided for, submit to the Port Authority for its consent, the Lessee's comprehensive plan for the Lessee Construction Work, as herein below defined, including but not limited to renderings, layouts, locations, models, estimated commencement and completion dates, and preliminary functional plans.

(1) Without limiting the above, the Lessee agrees that said comprehensive plan shall include the following:

(i) A plan for the renovation and refurbishment of a warehouse building for the conduct of airmail operations consisting of approximately 50,770 square feet of space;

(ii) All appropriate lines, pipes, mains, cables, manholes, wires, tubes, ducts, assemblies, conduits and other facilities required in connection with or relating to the mechanical, utility, electrical, storm sewer, sanitary sewer, telephone, fire alarm, fire protection, gas, heating, ventilation and air-conditioning, steam, drainage, refrigerating, communications, and other systems needed for the warehouse (as hereinafter defined);

(iii) All necessary or appropriate ground roadways, ramps, sidewalks, vehicular service areas, and pedestrian circulation areas, together with all related and associated areas and facilities (the foregoing being herein sometimes called the "circulation areas");

(iv) All grading and all asphalt and concrete paving of ground areas and appropriate landscaping, together with all related and associated work;

(v) All necessary or required fencing;

(vi) Any and all other appropriate or necessary work in connection with or required by or for the foregoing, including without limitation thereto, all borings, surveys, route marker signs, obstruction lights and material inspections and also including utility tie-in and roadway-access lines.

(2) All of the foregoing work shall be constructed by the Lessee in the premises and outside of the premises where required, and where constructed in the premises shall be and become a part of the premises under the Lease.

(3) The Lessee shall keep the aforesaid comprehensive plan covered by this paragraph (a) up to date and shall submit to the Port Authority for its prior approval any amendments, revisions, or modifications thereof.

(b) (1) The Lessee agrees at its sole cost and expense to design and to construct all of the foregoing work for the renovation and refurbishment of the premises including without limitation all of the items of work as described in paragraph (a) above, such design and construction being hereinafter referred to as the "Lessee Construction Work".

(2) Prior to the commencement of the Lessee Construction Work, the Lessee shall submit to the Port Authority for the Port Authority's approval complete plans and specifications therefor. The Port Authority may refuse to grant approval with respect to the Lessee Construction Work if, in its opinion, any of the proposed Lessee Construction Work as set forth in said plans and specifications (all of which shall be in such detail as may reasonably permit the Port Authority to make a determination as to whether the requirements hereinafter referred to are met) shall:

(i) Be unsafe, unsound, hazardous or improper for the use and occupancy for which it is designed, or

(ii) Not comply with the Port Authority's requirements for harmony of external architecture of similar existing or future improvements at the Airport, or

(iii) Not comply with the Port Authority's requirements with respect to external and interior building materials and finishes of similar existing or future improvements at the Airport, or

(iv) Not provide for sufficient clearances for taxiways, runways and apron areas, or

(v) Be designed for use for purposes other than those authorized under the Agreement, or

(vi) Set forth ground elevations or heights other than those prescribed by the Port Authority, or

areas, or

(vii) Not provide adequate and proper roadways and pedestrian circulation

(viii) Not be at locations or not be oriented in accordance with the Lessee's approved comprehensive plan, or

(ix) Not comply with the provisions of the Basic Lease, including without limiting the generality thereof, those provisions of the Basic Lease providing the Port Authority will conform to the enactments, ordinances, resolutions and regulations of the City of New York and its various departments, boards and business in regard to the construction and maintenance of buildings and structures and in regard to health and fire protection which would be applicable if the Port Authority were a private corporation to the extent that the Port Authority finds it practicable so to do, or

(x) Be in violation or contravention of any other provisions and terms of this Agreement, or

(xi) Not comply with all applicable governmental laws, ordinances, enactments, resolutions, rules and orders, or

(xii) Not comply with all applicable requirements of the National Board of Fire Underwriters and the Fire Insurance Rating Organization of New York, or

(xiii) Not comply with the Port Authority's requirements with respect to landscaping, or

(xiv) Not comply with Port Authority's requirements and standards with respect to noise, air pollution, water pollution or other types of pollution, or

(xv) Not comply with the construction limitations set forth in Exhibit A, or

(xvi) Without limiting any other term or provision hereof not comply with the Americans with Disabilities Act of 1990 and all federal rules, regulations and guidelines pertaining thereto.

(c) All Lessee Construction Work shall be done in accordance with the following terms and conditions:

(1) (i) The Lessee hereby assumes the risk of loss or damage to all of the Lessee Construction Work prior to the completion thereof and the risk of loss or damage to all property of the Port Authority arising out of or in connection with the performance of the Lessee Construction Work including without limitation any and all Environmental Requirements and Environmental Damages. In the event of such loss or damage, the Lessee shall forthwith repair,

replace and make good the Lessee Construction Work and the property of the Port Authority without cost or expense to the Port Authority.

(ii) The Lessee shall include in every contract it may enter into in connection with the Construction Work the following provision:

The contractor shall indemnify and hold harmless the Port Authority, its Commissioners, officers, agents and employees from and against all claims, demands, suits, litigation, proceedings and governmental investigations (hereinafter referred to as "Claims") just or unjust, of third persons (including employees, officers, and agents of the Port Authority) arising or alleged to arise out of the performance of the Lessee Construction Work all of the foregoing to include without limitation Claims arising out of or in connection with Environmental Damages and Environmental Requirements and for all expenses incurred by it and by them in the defense, settlement or satisfaction thereof, including without limitation thereto, claims and demands for death, for personal injury or for property damage, direct or consequential, whether they arise from the acts or omissions of the Lessee, of any contractors of the Lessee, of the Port Authority, or of third persons, or from acts of God or of the public enemy, or otherwise, (including claims of the City of New York against the Port Authority pursuant to the provisions of the Basic Lease whereby the Port Authority has agreed to indemnify the City against claims), excepting only claims and demands which result solely from affirmative wilful acts done by the Port Authority, its Commissioners, officers, agents and employees with respect to the Lessee Construction Work, provided, however, that the Lessee shall not be required to indemnify the Port Authority where indemnity would be precluded pursuant to the provisions of Section 5-322.1 of the General Obligations Law of the State of New York. This obligation is for the benefit of the Port Authority and its Commissioners, officers, agents and employees, each of which shall have a direct right of action thereon. If so directed by the Port Authority, the contractor shall at its own expense defend any suit based upon any such claim or demand (even if such suit, claim or demand is groundless, false or fraudulent), and in handling such it shall not, without obtaining express advance written permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority, or the provisions of any statutes respecting suits against the Port Authority.

(iii) The Lessee shall indemnify and hold harmless the Port Authority its Commissioners, officers, agents and employees from and against all claims, demands, suits, litigation, proceedings and governmental investigations (hereinafter referred to as "Claims") just or unjust, of third persons (including employees, officers, and agents of the Port Authority), including without limitation all Environmental Damages and all Environmental Requirements, caused by the negligent or wrongful act or omission of any employee of the Lessee while acting within the scope of his office or employment under circumstances where the Lessee, if a private person, would be liable in accordance with the law of the place where the act or omission occurred.

Liability shall not extend to claims based upon acts or omissions of the Lessee's employees. The Lessee would not be liable under the Federal Tort Claims Act of 1945 (28 U.S.C. 2672) As now or hereafter amended. The Port Authority shall furnish the Lessee with copies of any claims made against the Port Authority.

(2) Prior to engaging or retaining an architect or architects for the Lessee Construction Work, the name or names of said architect or architects shall be submitted to the Port Authority for its approval. The Port Authority shall have the right to disapprove any architect who is unacceptable to it. All Lessee Construction Work shall be done in accordance with plans and specifications to be submitted to and approved by the Port Authority prior to the commencement of Lessee Construction Work, and until such approval has been obtained the Lessee shall be required to resubmit plans and specifications as required. Upon approval of such plans and specifications by the Port Authority, the Lessee shall proceed diligently at its sole cost and expense from the Lessee Construction Work. All Lessee Construction Work, including workmanship and materials, shall be of first class quality. The Lessee shall re-do, replace or construct at its own expense, any Lessee Construction Work not done in accordance with the approved plans and specifications, the provisions of this Section 2 or any further requirements of the Port Authority.

The Lessee shall expend not less than (Ex. 2.a.)  
with respect to the Lessee Construction Work. The Lessee shall complete the Lessee Construction Work no later than ~~October 31, 2001~~  
*JANUARY 31, 2002*

(3) Prior to entering into a contract for any part of the Lessee Construction Work, the Lessee shall submit to the Port Authority for its approval the names of the contractors to whom the Lessee proposes to award said contracts. The Port Authority, acting in a non-arbitrary and non-capricious manner, shall have the right to disapprove any contractor who may be unacceptable to it, such. The Lessee shall include in all such contracts such provisions and conditions as may be reasonably required by the Port Authority. Without limiting the generality of the foregoing all of the Lessee's construction contracts shall provide as follows: "If (i) the Contractor fails to perform any of his obligations under the Contract, including his obligation to the Lessee to pay any claims lawfully made against him by any materialman, subcontractor or workman or other third person which arises out of or in connection with the performance of the Contract or (ii) any claim (just or unjust) which arises out of or in connection with the Contract is made against the Lessee or (iii) any subcontractor under the Contract fails to pay any claims, lawfully made against him by any materialman, subcontractor, workman or other third persons which arises out of in connection with the Contract or of in the Lessee's opinion any of the aforesaid contingencies is likely to arise, then the Lessee shall have the right, in its discretion, to withhold out of any payment (final or otherwise and even though such payments have already been certified as due) such sums as the Lessee may deem ample to protect it against delay or loss or to assume the payment of just claims of third persons, and to apply such sums in such manner as the Lessee may deem proper to secure such protection or satisfy such claims. All sums so applied shall be deducted from the Contractor's

compensation. Omission by the Lessee to withhold out of any payment, final or otherwise, a sum for any of the above contingencies, even though such contingency has occurred at the time of such payment, shall not be deemed to indicate that the Lessee does not intend to exercise its right with respect to such contingency. Neither the above provisions for rights of the Lessee to withhold and apply monies nor any exercise, or attempted exercise of, or omission to exercise such rights by the Lessee shall create any obligation to any kind to such materialmen, subcontractors, workmen or other third persons. Until actual payment is made to the Contractor, his right to any amount to be paid under the Contract (even though such amount has already been certified as due) shall be subordinate to the rights of the Lessee under this provision."

The Lessee shall file with the Port Authority a copy of its contracts with its contractors prior to start of the Lessee Construction Work.

(4) The Lessee shall furnish or require its architect to furnish a full time resident engineer during the construction period. The Lessee shall require certification by a licensed engineer of all pile driving data and of all controlled concrete work and such other certifications as may be requested by the Port Authority from time to time.

(5) The Lessee agrees to be solely responsible for any plans and specifications used by it and for any loss or damages resulting from the use thereof, notwithstanding that the same have been approved by the Port Authority and notwithstanding the incorporation therein of Port Authority recommendations or requirements. Notwithstanding the requirement for approval by the Port Authority of the contracts to be entered into by the Lessee or the incorporation therein of Port Authority requirements or recommendations, and notwithstanding any rights the Port Authority may have reserved to itself hereunder, the Port Authority shall have no liabilities or obligations of any kind to any contractors engaged by the Lessee or for any other matter in connection therewith and the Lessee hereby releases and discharges the Port Authority, its Commissioners, officers, representatives and employees of and from any and all liability, claims for damages or losses of any kind whether legal or equitable, or from any action or cause of action arising or alleged to arise out of the performance of any Lessee Construction Work pursuant to the contracts between the Lessee and its contractors. Any warranties contained in any construction contract entered into by the Lessee for the performance of the Lessee Construction Work hereunder shall be for the benefit of the Port Authority as well as the Lessee, and the contract shall so provide.

(6) The Port Authority shall have the right, through its duly designated representatives, to inspect the Lessee Construction Work and the plans and specifications thereof, at any and all reasonable times during the progress thereof and from time to time, in its discretion, to take samples and perform testing on any part of the Lessee Construction Work.

(7) The Lessee agrees that it shall deliver to the Port Authority two (2) sets of "as built" microfilm drawings of the Lessee Construction Work mounted on aperture cards, all

of which shall conform to the specifications of the Port Authority (the receipt of a copy of said specifications prior to the execution of this Lease being hereby acknowledged by the Lessee), and the Lessee shall during the term of this Lease keep said drawings current showing thereon any changes or modifications which may be made. (No changes or modifications shall be made without prior Port Authority consent).

(8) The Lessee shall, if requested by the Port Authority, take all reasonable measures to prevent erosion of the soil and the blowing of sand during the performance of the Lessee Construction Work, including but not limited to the fencing of the premises or portions thereof or other areas and the covering of open areas with asphaltic emulsion or similar materials as the Port Authority may direct.

(9) Title to any soil, dirt, sand or other matter (hereinafter to this item (9) collectively called "the matter") excavated by the Lessee during the course of the Lessee Construction Work and not used by the Lessee at the premises in the Lessee Construction Work shall vest in the Lessee upon the excavation thereof and all such excavated material shall be delivered and deposited by the Lessee at its sole cost and expense to any location off the Airport in accordance with the terms and provisions of this Agreement, including, without limitation, Section 53 hereof. The entire proceeds, if any, of the sale or other disposition of the matter shall belong to the Lessee.

(10) The Lessee shall pay or cause to be paid all claims lawfully made against it by its contractors, subcontractors, materialmen and workmen, and all claims lawfully made against it by other third persons arising out of or in connection with or because of the performance of the Lessee Construction Work, and shall cause its contractors and subcontractors to pay all such claims lawfully made against them provided, however, that nothing herein contained shall be construed to limit the right of the Lessee to contest any claim of a contractor, subcontractor, materialman, workman and/or other person and no such claim shall be considered to be an obligation of the Lessee within the meaning of this Section unless and until the same shall have been finally adjudicated. The Lessee shall use its best efforts to resolve any such claims and shall keep the Port Authority fully informed of its actions with respect thereto. Nothing herein contained shall be deemed to constitute consent to the creation of any liens or claims against the premises nor to create any rights in said third persons against the Port Authority or the Lessee.

(11) (i) The Lessee shall cause each of its contractors performing any portion of the Construction Work, in its own name as insured and including the Port Authority and the Lessee as additional insureds including without limitation for both ongoing and completed operations, to procure and maintain Commercial General Liability insurance, including but not limited to warehouseman's legal liability, premises-operations, products liability-completed operations, independent contractors, explosion, collapse and underground property damages, personal injury (including death) and property damage, and with a contractual liability endorsement covering the obligations assumed by the contractor pursuant to subparagraph (1) of this subparagraph

(c) and by the Lessee pursuant to subparagraphs (1) and (5) of this paragraph (c), none of the foregoing to contain any care, custody or control exclusions, and not to contain any exclusion for bodily injury to or sickness, disease or death of any employee of the Lessee or of any of its contractors which would conflict with or impair coverage under the contractual liability endorsement and Commercial Automobile Liability insurance covering owned, non-owned and hired vehicles and including automatic coverage for newly acquired vehicles. The said Commercial General Liability insurance policy shall have a limit of not less than \$5,000,000 combined single limit per occurrence for death, bodily injury and property damage liability, and said Comprehensive Automobile Liability policy shall have a limit of not less than \$2,000,000 combined single limit per accident for death, bodily injury and property damage liability.

(ii) Without limiting the provisions hereof, in the event any contractor maintains the foregoing insurance in limits greater than aforesaid, the Port Authority and the Lessee shall be included therein as additional insureds including without limitation for both ongoing and completed operations to the full extent of all such insurance in accordance with all the terms and provisions hereof.

(iii) The foregoing shall be in addition to all policies of insurance otherwise required by this Agreement, or the Lessee may require each contractor engaged by it for the Lessee Construction Work to procure and maintain such insurance including such contractual liability endorsement, said insurance not to contain any exclusion for bodily injury to or sickness, disease or death of any employee of the Lessee or of any of its contractors which would conflict with in or in any way impair coverage under the contractual liability endorsement. Further, the Lessee shall cause its contractors to provide and maintain contractor's property and equipment coverage for the full value of such property and equipment with the Port Authority insured thereunder as its interests may appear. All of the aforesaid policy or policies of insurance shall also provide or contain an endorsement providing that the protections afforded the named insured thereunder with respect to any claim or action against such named insured by a third person shall pertain and apply with like effect with respect to any claim or action against the Lessee or its contractor(s) or both by the Port Authority, and shall also provide or contain an endorsement providing that the protections afforded the Port Authority thereunder with respect to any claim or action against the Port Authority by the Lessee or its contractor(s) or both shall be the same as the protections afforded the named insured by a third person as if the Port Authority were the named insured thereunder; but such provision or endorsement shall not limit, vary or affect the protections afforded the Port Authority thereunder as an additional insured.

(iv) The Lessee shall also cause each of its contractors performing any portion of the Construction Work to procure and maintain in effect Workers' Compensation Insurance and Employer's Liability Insurance in accordance with and as required by law.

(v) Not less than ten days prior to commencement of work, the

Lessee shall cause each of its contractors to deliver to the Port Authority, a certificate from the contractor(s)' insurer in duplicate evidencing policies of the above insurance and containing a separate express statement of compliance with each of the requirements above set forth. Upon request of the Port Authority to the Lessee, the Lessee shall cause the contractor(s) to furnish the Port Authority with a certified copy of each policy itself.

(vi) The insurance required hereunder in this subparagraph (11) shall be maintained in effect during the performance of the Lessee Construction Work and shall be in compliance with and subject to the provisions of paragraph (c) of Section 15 hereof.

(vii) The insurance covered by this paragraph (c) shall be written by companies approved by the Port Authority. If at any time any of the insurance policies shall be or become unsatisfactory to the Port Authority as to the form or substance or if any of the carriers issuing such policies shall be or become unsatisfactory to the Port Authority, the Lessee shall promptly obtain a new and satisfactory policy from its contractor(s) in replacement. If at any time the Port Authority so requests, a certified copy of each of the said policies shall be delivered to the Port Authority.

(viii) If at any time the above liability insurance should be cancelled, terminated or modified so that insurance is not in effect as above required, then, if the Port Authority shall so direct, the Lessee shall require the contractor(s) to suspend performance of the Construction Work.

(12) The Lessee shall be under no obligation to reimburse the Port Authority for expenses incurred by the Port Authority in connection with its normal review and approval of the original plans and specifications submitted by the Lessee pursuant to this Section. The Lessee however agrees to pay to the Port Authority upon its demand the expenses incurred by the Port Authority in connection with any additional review for approval of any changes, modifications or revisions of the original plans and specifications which may be proposed by the Lessee for the Port Authority's approval. The expenses of the Port Authority for any such additional review and approval shall be computed on the basis of direct payroll time expended in connection therewith plus 100%. Wherever in this Lease reference is made to "direct payroll time", costs computed thereunder shall include a pro rata share of the cost to the Port Authority of providing employee benefits, including, but not limited to, pensions, hospitalization, medical and life insurance, vacations and holidays. Such computations shall be in accordance with the Port Authority's accounting principles as consistently applied prior to the execution of this Lease.

(13) The Lessee shall prior to the commencement of construction and at all times during construction submit to the Port Authority all engineering studies with respect to construction and samples of construction materials as may be required at any time and from time to time by the Port Authority.

(14) The Lessee shall at the time of submitting the comprehensive plan to the Port Authority as provided in paragraph (a) hereof submit to the Port Authority its forecasts of the number of people who will be working at various times during the term of the Lease at the premises, the expected utility demands of the premises, noise profiles and such other information as the Port Authority may require. The Lessee shall continue to submit its latest forecasts and such other information as may be required as aforesaid as the Port Authority shall from time to time and at any time request.

(15) The Lessee shall execute and submit for the Port Authority's approval a Construction Application or Applications in the form prescribed by the Port Authority covering the Lessee Construction Work or portions thereof. The Lessee shall comply with all the terms and provisions of the approved Construction Applications. In the event of any inconsistency between the terms of any Construction Application and the terms of the Lease, the terms of this Lease shall prevail and control.

(16) Nothing contained in this Lease shall grant or be deemed to grant to any contractor, architect, supplier, subcontractor or any other person engaged by the Lessee or any of its contractors in the performance of any part of the Lessee Construction Work any right or action or claim against the Port Authority, its Commissioners, officers, agents and employees with respect to any work any of them may do in connection with the Lessee Construction Work. Nothing contained herein shall create or be deemed to create any relationship between the Port Authority and any such contractor, architect, supplier, subcontractor or any other person engaged by the Lessee or any of its contractors in the performance of any part of the construction and the Port Authority shall not be responsible to any of the foregoing for any payments due or alleged to be due thereto for any work performed or materials purchased in connection with the Lessee Construction Work.

(17) (i) Without limiting any of the terms and conditions of this Lease, the Lessee understands and agrees that it shall put into effect prior to the commencement of any Lessee Construction Work an affirmative action program and Minority Business Enterprise (MBE) program and Women-owned Business Enterprise (WBE) program in accordance with the provisions of Schedule E, attached hereto and hereby made a part hereof. The provisions of said Schedule E of this Lease shall be applicable to the Lessee's contractor or contractors and subcontractors at any tier of construction as well as to the Lessee itself and the Lessee shall include the provisions of said Schedule E within all of its construction contracts so as to make said provisions and undertakings the direct obligation of the construction contractor or contractors and subcontractors at any tier of construction. The Lessee shall and shall require its said contractor, contractors and subcontractors to furnish to the Port Authority such data, including but not limited to compliance reports relating to the operation and implementation of the affirmative action, MBE and WBE programs called for hereunder as the Port Authority may request at any time and from time to time regarding the affirmative action, Minority Business Enterprises and Women-owned Business Enterprises programs of the Lessee and its contractor, contractors, and subcontractors at any tier of construction, and the

Lessee shall and shall also require that its contractor, contractors and subcontractors at any tier of construction make and put into effect such modifications and additions thereto as may be directed by the Port Authority pursuant to the provisions hereof and said Schedule E to effectuate the goals of affirmative action and Minority Business Enterprise and Women-owned Business Enterprise programs.

(ii) In addition to and without limiting any terms and conditions of this Lease, the Lessee shall provide in its contracts and all subcontracts covering the Lessee Construction Work or any portion thereof, that:

(aa) The contractor shall not discriminate against employees and applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons are afforded equal employment opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selections for training or retraining, including apprenticeships and on-the-job training;

(bb) At the request of either the Port Authority or the Lessee, the contractor shall request such employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding and which is involved in the performance of the contract with the Lessee to furnish a written statement that such employment agency, labor union or representative shall not discriminate because of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will cooperate in the implementation of the contractor's obligations hereunder;

(cc) The contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the contractor in the performance of the contract, that all qualified applicants will be afforded equal employment opportunity without discrimination because of race, creed, color, national origin, sex, age, disability or marital status;

(dd) The contractor will include the provisions of subparagraphs (aa) through (cc) of this paragraph in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to its work in connection with the contract;

(ee) "Contractor" as used herein shall include each contractor and

subcontractor at any tier of construction.

(d) The Lessee may wish to commence construction of portions of the Lessee Construction Work prior to the approval by the Port Authority of its plans and specifications pursuant to paragraph (b) hereof, and if it does it shall submit a written request to the Port Authority setting forth the work it proposes then to do. The Port Authority shall have full and complete discretion as to whether or not to permit the Lessee to proceed with any portion of the Lessee Construction Work. If the Port Authority has no objection to the Lessee's proceeding with any of the aforementioned work, it shall do so by writing a letter to the Lessee to such effect. If the Lessee performs the work covered by said letter it agrees all such work shall be performed subject to and in accordance with all of the provisions of the approval letter and subject to and in accordance with the following terms and conditions:

(1) The performance by the Lessee of the work covered by any request as aforesaid will be at its sole risk and if for any reason the plans and specifications for the Lessee Construction Work are not approved by the Port Authority or if the approval thereof calls for modifications or changes in the work undertaken by the Lessee under any approval granted by the Port Authority pursuant to this paragraph (d), the Lessee will, as directed by the Port Authority, at its sole cost and expense, either restore the area affected to the condition existing prior to the commencement of any such work or make such modifications and changes in any such work as may be required by the Port Authority.

(2) Nothing contained in any approval hereunder shall constitute a determination or indication by the Port Authority that the Lessee has complied with the applicable governmental laws, ordinances, enactments, resolutions, rules and orders, including but not limited to those of the City of New York, which may pertain to the work to be performed.

(3) The approved work will be performed in accordance with and subject to the terms, indemnities and provisions of the Lease covering the Lessee Construction Work and with the terms and conditions of any Construction Application which the Port Authority may request the Lessee to submit even though such Construction Application may not have, at the time of the approval under this paragraph (d), been approved by the Port Authority.

(4) No work under any such approval shall affect or limit the obligations of the Lessee under all prior approvals with respect to its construction of the Lessee Construction Work.

(5) The Lessee shall comply with all requirements, stipulations and provisions as may be set forth in the letters of approval.

(6) In the event that the Lessee shall at any time during the construction of any portion of the Lessee Construction Work under the approval granted by the Port Authority

pursuant to this paragraph (d) fail, in the opinion of the General Manager of the Airport, to comply with all of the provisions of this Lease with respect to the Lessee Construction Work, the Construction Application or the approval letter covering the same or be, in the opinion of the General Manager, in breach of any of the provisions of this Lease, the Construction Application or the approval letter covering the same, the Port Authority shall have the right, acting through said General Manager to cause the Lessee to cease all or such part of the Lessee Construction Work as is being performed in violation of this Lease, the Construction Application or the approval letter. Upon such written direction from the General Manager the Lessee shall promptly cease construction of the portion of the Lessee Construction Work specified. The Lessee shall thereupon submit to the Port Authority for its written approval the Lessee's proposal for making modifications, corrections or changes in or to the Lessee Construction Work that has been or is to be performed so that the same will comply with the provisions of this Lease, the Construction Application and the approval letter covering the Lessee Construction Work. The Lessee shall not commence construction of the portion of the Lessee Construction Work that has been halted until such written approval has been received.

(7) It is hereby expressly understood and agreed that neither the field engineer covered by paragraph (e) hereof nor the Resident Engineer of the Port Authority at the Airport has any authority to approve any plans and specifications of the Lessee with respect to the Lessee Construction Work, to approve the construction by the Lessee of any portion of the Lessee Construction Work or to agree to any variation by the Lessee from compliance with the terms of this Lease, or the Construction Application or the approval letter with respect to the Lessee Construction Work. Notwithstanding the foregoing, should the field engineer or the Resident Engineer give any directions or approvals with respect to the Lessee's performance of any portion of the Lessee Construction Work which are contrary to the provisions of this Lease, the Construction Application or the approval letter, said directions or approvals shall not affect the obligations of the Lessee as set forth herein nor release or relieve the Lessee from the strict compliance therewith. It is hereby further understood and agreed that the Port Authority has no duty or obligation of any kind whatsoever to inspect or police the performance of the Lessee Construction Work by the Lessee and the rights granted to the Port Authority hereunder shall not create or be deemed to create such a duty or obligation. Accordingly, the fact that the General Manager has not exercised the Port Authority's right to require the Lessee to cease its construction of all or any part of the Lessee Construction Work shall not be or be deemed to be an agreement or acknowledgement on the part of the Port Authority that the Lessee has in fact performed such portion of the Lessee Construction Work in accordance with the terms of the Lease, the Construction Application or the approval letter nor shall such fact be or be deemed to be a waiver by the Port Authority from the requirement of strict compliance by the Lessee with the provisions of the Lease, the Construction Application and the approval letter with respect to the Lessee Construction Work.

(8) Without limiting the discretion of the Port Authority hereunder, the Port Authority hereby specifically advises the Lessee that even if the Port Authority hereafter in the exercise of its discretion wishes to grant approvals under this paragraph (d), it may be unable to do

so, so as to permit the Lessee to continue work without interruption following its completion of the work covered by any prior approval hereunder. The Lessee hereby acknowledges that if it commences work pursuant to this paragraph (d), it shall do so with full knowledge that there may not be continuity by it in the performance of its Lessee Construction Work under the procedures of this paragraph (d).

(9) No prior approval of any work in connection with the Lessee Construction Work shall create or be deemed to create any obligation on the part of the Port Authority to permit subsequent work to be performed in connection with such Lessee Construction Work prior to the approval by the Port Authority of the Lessee's complete plans and specifications thereof. It is understood that no such prior approval shall release or relieve the Lessee from its obligation to submit complete plans and specifications for the Lessee Construction Work and to obtain the Port Authority's approval of the same as set forth in paragraph (b) hereof. It is further understood that in the event the Lessee elects not to continue to seek further approval letter(s) pursuant to this paragraph (d), the obligations of the Lessee to restore the area and to make modifications and changes as set forth in subparagraph (1) above shall be suspended until the Lessee's submission of its complete plans and specifications in accordance with paragraph (b) hereof.

(e) The Lessee will give the Port Authority fifteen (15) days' notice prior to the commencement of construction. The Port Authority will assign to the Lessee Construction Work a full time field engineer or engineers. The Lessee shall pay to the Port Authority for the services of said engineer or engineers, the sum of (Ex. 2.a.) each day that the engineer or engineers are so assigned during the 2001 calendar year for the services of such engineer or engineers during such calendar year for each day or part thereof that the engineer or engineers are so assigned for such calendar year. Nothing contained herein shall affect any of the provisions of paragraph (h) hereof or the rights of the Port Authority hereunder. The foregoing provisions of this paragraph (e) for the services of said field engineer may be revoked at any time by either party on thirty (30) days' written notice to the other, but if revoked by the Lessee it shall continue during the period construction under any partial approvals pursuant to paragraph (d) hereof is performed.

(f) (1) The Lessee Construction Work shall be constructed in such a manner that there will be at all times a minimum of air pollution, water pollution or any other type of pollution and a minimum of noise emanating from, arising out of or resulting from the operation, use or maintenance thereof by the Lessee and from the operations of the Lessee under this Agreement. Accordingly, and in addition to all other obligations imposed on the Lessee under this Agreement and without diminishing, limiting, modifying or affecting any of the same, the Lessee shall be obligated to construct as part of the Lessee Construction Work hereunder such structures, fences, equipment, devices and other facilities as may be necessary or appropriate to accomplish the foregoing and each of the foregoing shall be and become a part of Lessee Construction Work it affects and all of the foregoing shall be covered under the comprehensive plan of the Lessee

submitted under paragraph (a) hereof and shall be part of the Lessee Construction Work hereunder.

(2) Notwithstanding the provisions of subparagraph (1) above and in addition thereto, the Port Authority hereby reserves the right from time to time and at any time during the term of the Lease to require the Lessee, subsequent to the completion of the Lessee Construction Work to design and construct at its sole cost and expense such further reasonable structures, fences, equipment, devices and other facilities as may be necessary or appropriate to accomplish the objectives as set forth in the first sentence of said subparagraph (1). All locations, the manner, type and method of construction and the size of any of the foregoing shall be determined by the Port Authority. The Lessee shall submit for Port Authority approval its plans and specifications covering the required work and upon receiving such approval shall proceed diligently to construct the same. All other provisions of this Section 2 with respect to the Lessee Construction Work shall apply and pertain with like effect to any work which the Lessee is obligated to perform pursuant to this paragraph (f) and upon completion of each portion of such work it shall be and become a part of the Lessee Construction Work. The obligations assumed by the Lessee under this paragraph (f) are a special inducement and consideration to the Port Authority in granting this Lease to the Lessee.

(g) Title to all the Lessee Construction Work shall pass to the City of New York as the same or any part thereof is erected, constructed or installed, and shall be and become part of the premises if located within the premises.

(h) (1) When the Lessee Construction Work is substantially completed and ready for use the Lessee shall advise the Port Authority to such effect and shall deliver to the Port Authority a certificate signed by an authorized officer of the Lessee and also signed by the Lessee's licensed architect or engineer certifying that the Lessee Construction Work has been constructed in accordance with the approved plans and specifications and the provisions of this Lease and in compliance with all applicable laws, ordinances and governmental rules, regulations and orders. Thereafter, the Lessee Construction Work will be inspected by the Port Authority and if the same has been completed as certified by the Lessee and the Lessee's licensed architect or engineer, as aforesaid, a certificate to such effect shall be delivered to the Lessee, subject to the condition that all risks thereafter with respect to the construction and installation of the same and any liability therefor for negligence or other reason shall be borne by the Lessee. The Lessee shall not use or permit the use of the Lessee Construction Work or any portion thereof for the purposes set forth in the Lease until such certificate is received from the Port Authority and the Lessee shall not use or permit the use of the Lessee Construction Work or any portion thereof even if such certificate is received if the Port Authority states in any such certificate that the same cannot be used until other specified portions are completed.

(2) The term "Lessee Construction Work Completion Date" for the purposes of this Lease shall mean the date appearing on the certificate issued by the Port Authority pursuant to subparagraph (1) of this paragraph.

(3) In addition to and without affecting the obligations of the Lessee under the preceding subparagraphs (1) and (2), when an integral and material portion of the Lessee Construction Work is substantially completed or is properly usable the Lessee may advise the Port Authority to such effect and may deliver to the Port Authority a certificate signed by an authorized officer of the Lessee and also signed by the Lessee's licensed architect or engineer certifying that such portion of the Lessee Construction Work has been constructed in accordance with the approved plans and specifications and the provisions of this Lease and in compliance with all applicable laws, ordinances and governmental rules, regulations and orders, and specifying that such portion of the Lessee Construction Work can be properly used even though the Lessee Construction Work has not been completed and that the Lessee desires such use. The Port Authority may in its sole discretion deliver a certificate to the Lessee with respect to each such portion of the Lessee Construction Work permitting the Lessee to use such portion thereof for the purposes set forth in the Lease. In such event the Lessee may use such portion subject to the condition that all risks thereafter with respect to the construction and installation of the same and any liability therefor for negligence or other reason shall be borne by the Lessee, and subject to the risks as set forth in paragraph (d) hereof in the event that the Port Authority shall not have then approved the complete plans and specifications for the Lessee Construction Work. Moreover, at any time prior to the issuance of the certificate required in subparagraph (1) above for the Lessee Construction Work, the Lessee shall promptly upon receipt of a written notice from the Port Authority cease its use of such portion of the Lessee Construction Work which it had been using pursuant to permission granted in this subparagraph (3).

(i) The Lessee understands that there may be communications and utility lines and conduits located on or under the site which do not, and may not in the future, serve the premises. The Lessee agrees at its sole cost and expense, if directed by the Port Authority so to do, to relocate and reinstall such communications and utility lines and conduits on the site or off the site as directed by the Port Authority and to restore all affected areas (such work being hereinafter collectively called "the relocation work"). The Lessee shall perform the relocation work subject to and in accordance with all the terms and provisions of this Section 2 and the relocation work shall be and become a part of the Lessee Construction Work, it being understood, however, that the relocation work shall not be or become a part of the premises hereunder.

(j) The Lessee, as part of the Lessee Construction Work and subject to all of the terms and provisions covering the same, shall perform any and all asbestos removal and disposal work relating to, or occasioned by or arising out of the Lessee's Construction Work, in full and proper compliance with all of the terms, provisions, covenants, and conditions of the Lease and all applicable laws, ordinances, governmental rules, regulations and orders and the Lessee shall have all obligations and liabilities associated therewith. Nothing herein shall or shall be construed as releasing or relieving the Lessee, its officers, directors, employees, agents and representatives, or any of its contractors from any of the terms, provisions, covenants and conditions of this Lease or from the requirements of any and all applicable laws, ordinances, governmental rules, regulations and orders.

Section 3. Term

~~August~~  
~~July~~  
~~April 1, 2001~~

(a) The term of the letting under this Agreement shall commence on ~~April 1, 2001~~ (hereinafter referred to as "the Commencement Date") and, unless sooner terminated, the term of the letting under this Agreement shall expire on the day immediately preceding the tenth (10th) anniversary of the Rent Commencement Date, as defined in Section 4.

(b) If the Port Authority shall not give possession of the premises on the date set forth in paragraph (a) hereof by reason of the failure or refusal of any occupant thereof to deliver possession thereof to the Port Authority or by reason of any cause or condition beyond the control of the Port Authority, the Port Authority shall not be subject to any liability for the failure to give possession on said date. No such failure to give possession on the date hereinabove specified shall in any wise affect the validity of this Agreement or the obligations of the Lessee hereunder, nor shall the same be construed in any wise to extend the term beyond the date stated in paragraph (a) hereof. Tender shall be made by notice given at least five (5) days prior to the effective date of the tender. In the event that notice of tender of the site is not given for possession to commence on or before three hundred sixty-five (365) days after the effective date of the Agreement, then this Agreement shall be deemed cancelled, except that each party shall and does release and discharge the other party from any and all claims or demands based on this Agreement, or a breach or alleged breach thereof.

Section 4. Rentals

I. Definitions

(a) "Annual Period" shall mean, as the context requires, the twelve-month period commencing with the Rental Commencement Date established pursuant to the provisions of this Agreement and each of the twelve-month periods thereafter occurring during the term of the letting, *provided, however*, that if the Rent Commencement Date occurs on a day which is other than the first day of a calendar month, the first annual period shall include the portion of the month in which the Rental Commencement Date falls following such date plus the succeeding 12 calendar months and each subsequent annual period shall commence on the anniversaries of the first day of the first full calendar month following the month in which the Rent Commencement Date occurs.

(b) The term "Rent Commencement Date" as used in this Agreement shall mean the earlier of: (i) the Lessee Construction Work Completion Date (as defined in Section 2(h)(2) of the Agreement) or (ii) the date the premises, or any portion thereof, are occupied or used by the Lessee, or

~~September 1, 2001~~  
~~JANUARY 1, 2002~~  
~~FEBRUARY~~

II. Ground Rental:

(a) The Lessee agrees to pay to the Port Authority annual rental (hereinafter

referred to as the "Ground Rental") during the letting subject to adjustment as herein provided at the annual rate of (Ex. 2.a.) payable in advance in equal monthly installments of \_\_\_\_\_ on the Rent Commencement Date and on the first day of each calendar month thereafter during the letting hereunder subject to adjustment as provided in paragraph (b) hereof.

(b) CPI Adjustments:

The following terms as used in this Section 4 shall have the respective meanings given below:

(i) "CPI" or "Consumer Price Index" shall mean the Consumer Price Index for All Urban Consumers - New York, - Northern New Jersey - Long Island, NY-NJ-CT (All Items, unadjusted 1982-84=100) published by the Bureau of Labor Statistics of the United States Department of Labor.

(ii) "The Port Authority shall ascertain the CPI for the month in which the Rent Commencement Date occurs and for the month in which the first year anniversary of the Rent commencement Date occurs and for the same calendar month in each year thereafter during the term of this Agreement after the same has been published, and the Port Authority shall also determine the annual percentage increase, if any, for each such twelve month period after the same has been published (hereinafter called "the annual CPI percentage increase").

(iii) Effective on the first day of the month in which the first year anniversary of the Rent Commencement Date occurs and thereafter on the first day of the month in each succeeding year of the Rent Commencement Date during the term of the letting hereunder the ground rental set forth in paragraph (a) of this subdivision II of this Section 4 shall be increased as follows: (x) the annual rental rate as set forth in said paragraph (a) (as the same may have been last adjusted hereunder), shall be multiplied by a percentage composed of  $\frac{1}{2}$  of the annual CPI percentage increase, if any, as determined for the latest twelve month period using the same calendar month in accordance with subparagraph (2) above, plus 100%; (y) and the said annual rental rate as set forth in said paragraph (a) as the same may have been last adjusted hereunder shall be multiplied by 104%; and the greater of the two products so obtained by the calculations set forth in the foregoing clauses (x) and (y) shall be and become the annual ground rental in effect for the annual period commencing on the said first day of the month in which the anniversary of the Rent Commencement Date occurs and ending on the last day of the immediately preceding twelfth month.

(iv) In the event that the Consumer Price Index is not available for any specified month as hereinabove set forth within the time set forth for payment such index for the latest month then published shall be used to constitute the Consumer Price Index. In the event of

the change of basis or the discontinuance of the publication by the United States Department of Labor of the Consumer Price Index such other appropriate index or indexes shall be substituted as may be agreed by the parties hereto as properly reflecting changes in the value of the current United States money in a manner similar to that established in the said indexes used in the latest adjustment. In the event of the failure of the parties to so agree, the Port Authority may select and use such index or indexes as it deems appropriate.

If after an adjustment in rental shall have been fixed for any period, the Index used for computing such adjustment shall be changed or adjusted, then the rental adjustment for that period shall be recomputed and from and after notification of the change or adjustment, the Lessee shall make payments based upon the recomputed rental and upon demand shall pay any excess in the rental due for such period as recomputed over amounts theretofore actually paid on account of the rental for such period. If such change or adjustment results in a reduction in the rental due for any period prior to notification, the Port Authority will credit the Lessee with the difference between the rental as recomputed for that period and amounts of rental actually paid.

(v) In no event shall any rental rate established under this paragraph (b) be less than the rental rate it supersedes.

(c) The ground rental hereunder shall be payable by the Lessee in advance in equal monthly installments on the first day of the Rent Commencement Date and on the first day of each and every calendar month thereafter during the balance of the term of the letting. If the Rent Commencement Date for the payment of ground rental herein be other than the first day of the month, or if any installment of ground rental payable hereunder shall be for less than a full calendar month, then the rental payment for the portion of the month for which said payment is due shall be the monthly installment prorated on a daily basis using the actual number of days in the said month. Upon any termination of the letting hereunder (even if stated to have the same effect as expiration), the Lessee shall within twenty (20) days after the effective date of such termination, make a payment of the rental computed as follows: if the letting hereunder is terminated effective on a date other than the last day of a month the rental for the portion of that month in which the letting remains effective shall be the amount of the monthly installment of rental prorated on a daily basis, and if the monthly installment due on the first day of that month has not been paid the Lessee shall pay the prorated part of the amount of that installment; if the monthly installment has been paid, then the excess thereof shall be credited to the Lessee's obligations.

Nothing contained in the foregoing shall affect the survival obligations of the Lessee as set forth in Section 27 hereof.

(d) Abatement

In the event that the Lessee shall at any time by the provisions of this

Agreement become entitled to an abatement of rental, said abatement shall be computed as follows (it being understood that there shall be no abatement of rental for any portion of the premises or for any portion of the term except as specifically provided herein):(i) for each square foot of land as shown on Exhibit A the use of which is denied to the Lessee at the daily rate of (Ex. 2.a.) , and (ii) for each square foot of enclosed area as shown in Exhibit A the use of which is denied to the Lessee at the daily rate of (Ex. 2.a.) , both amounts as appropriately adjusted to reflect any and all CPI Adjustments pursuant to paragraph (b ) above.

### III. Subletting Percentage Fees

(a) In addition to the rentals and all other fees, charges and payments to be made by the Lessee hereunder, the Lessee shall pay to the Port Authority a percentage fee (herein called the "Subletting Percentage Fees"), at the times set forth in and in accordance with subparagraph (c) below, during the term of the letting hereunder equal to (Ex. 2.a.) of the Lessee's "Gross Sublease Rentals" arising during the term of the letting hereunder.

(b) As used herein, the term "Gross Sublease Rentals" shall include all revenues, monies, income, and receipts of every kind paid or payable to the Lessee by each and every sublessee of the Lessee (if any) arising out of or pursuant to the terms of the sublease or the subletting of each such sublessee, or out of the operations of each such sublessee at the premises without any deductions therefrom. Without limiting any of the foregoing or any other term or provision of this Agreement, including without limitation the terms and provisions of Section 23 hereof, it is hereby understood and agreed that the Lessee shall pay to the Port Authority the Subletting Percentage Fees with respect to each and every sublessee notwithstanding the failure of the parties, or any of them, to execute a written Consent Agreement covering the Port Authority's prior written Consent to such sublessee as required under and pursuant to Section 23 hereof.

It is expressly understood and agreed that neither this Section nor anything contained herein nor any payment(s) made or required to be made hereunder shall or shall be deemed to grant any right or rights to the Lessee to sublet the premises or any portion thereof nor to impose or create any obligation on the Port Authority nor to alter, expand or waive the terms and provisions of Section 23 hereof nor to waive the requirements for the prior written consent of the Port Authority and the execution of a consent agreement as called for under Section 23 hereof nor to constitute any such consent nor to release or relieve the Lessee from any of the obligations and liabilities under this Agreement with respect to any such sublessee.

(c) The Lessee shall pay the Subletting Percentage Fees as follows:

On the 20th day of the first month following the Percentage Rental Commencement Date (as hereinafter defined) and on the 20th day of each and every month thereafter during the term of the letting and within twenty (20) days after the expiration or

sooner termination of the term of the letting hereunder, the Lessee shall submit to the Port Authority a statement sworn to by a responsible fiscal or executive officer of the Lessee showing all of its Gross Sublease Rentals for the preceding month. Each of the said statements shall also show the Lessee's cumulative Gross Sublease Rentals from the Percentage Rental Commencement Date (or the most recent anniversary thereof) through the last day of the preceding month. At the same time it renders each of the said statements, the Lessee shall pay to the Port Authority the Subletting Percentage Fees with respect thereto. On the 20th day of the first month following each anniversary of the Percentage Rental Commencement Date the Lessee shall submit to the Port Authority a sworn statement certified by a responsible fiscal officer of the Lessee setting forth the cumulative totals of said Gross Sublease Rentals for the entire preceding twelve month period.

(d) Upon the expiration of the letting hereunder and upon any termination of the letting hereunder (even if stated to have the same effect as expiration), the Lessee shall, within twenty (20) days after the effective date of such expiration or termination, make a payment of the Subletting Percentage Fees as follows:

First, without limiting the above, the Lessee shall within twenty (20) days after the effective date of termination, render to the Port Authority a sworn statement of all Gross Sublease Rentals during the period from the last preceding anniversary of the Percentage Rental Commencement Date up to the date of termination, and

Second, the Lessee shall at the same time pay to the Port Authority the payment then due on account of all Subletting Percentage Fees during the period from the last preceding anniversary of the Percentage Rental Commencement Date up to the date of termination.

(e) Nothing hereinabove provided shall affect the survival of obligations of the Lessee as set forth in Section 27 of this Agreement.

(f) As used herein the term "Percentage Rental Commencement Date" shall mean the earlier to occur of (i) the Completion Date and (ii) the date of the Lessee's use of any portion of the Facility for the purposes specified in Section 5 hereof.

#### Section 5. Use of Premises

(a) The Lessee, in accordance with all of the terms, provisions, covenants and conditions of this Lease and in connection with its business of providing mail delivery services, shall use the premises for the receipt, distribution and dispatch of mail transported or to be transported by air, the conduct of postal business as an Airport Mail Facility, and as an airport retail postal office. The Lessee shall also use the following designated portions of the premises for the following specific purposes and activities only for no other purpose or purposes or activities whatsoever:

(1) As to the enclosed portions of the premises:

(i) For general offices of the Lessee in connection with the operations of the Lessee permitted hereunder.

(ii) For the reception and distribution of mail transported or to be transported from the Airport.

(iii) For the operation of a cafeteria for over-the-counter sales to officers and employees of the Lessee and their families and to occasional business guests of such officers and employees, of food, beverages and other merchandise normally sold in such establishments at no profit to the Lessee.

(2) As to the unenclosed paved portions of the premises:

(i) For the loading and unloading by the Lessee of mail on automobiles and trucks;

(ii) For the parking of automobiles and trucks operated by officers, employees and business guests of the Lessee in connection with the Lessee's operations hereunder.

(3) As to the unpaved portions of the premises:

For appropriate landscaping purposes.

(4) As to all or any part of the premises:

For any other purpose or activity for which the Port Authority, expressly in writing, authorizes all or said portion of the premises to be used.

(b) Neither this Lease, nor anything contained herein, including without limitation this Section 5, shall or shall be deemed to grant to the Lessee any right, privilege or permission to perform any sale, service or any other activity at the premises other than as is expressly provided herein and upon the terms and conditions hereof, including without limitation the obligations to make the payments called for in this Agreement.

Section 6. Obligations in Connection with the Conduct of the Lessee's Business at the Premises: Books and Records

The Lessee shall:

(a) Permit in ordinary business hours during the term of this Agreement and for one year thereafter and during such further period as is mentioned in the preceding paragraph, the examination and audit by the officers, employees and representatives of the Port Authority of such records and books of account and also any records and books of account of any company which is owned or controlled by the Lessee, or which owns or controls the Lessee if said company performs air cargo services or subletting services anywhere in the Port of New York District.

(b) Permit the inspection by the officers, employees and representatives of the Port Authority, at any time and as often as it may consider necessary, of any equipment used by the Lessee, including but not limited to cash registers, and of any services being rendered and/or merchandise being sold or held for sale by the Lessee, and upon the request of the Port Authority, the Lessee shall demonstrate any activity being carried on by the Lessee hereunder;

(c) Without limiting any term or provision of this Agreement and without limiting the requirement for Port Authority prior written approval and the issuance of a Port Authority permit, if the Lessee conducts any service, operation or any other permitted use under the Lease through the use of a contractor which is not a Port Authority permittee and where the payments for any of the foregoing are made to such contractor rather than to the Lessee, said payments shall be deemed monies, revenues, receipts and income paid or payable to the Lessee for purposes of determining the Lessee's gross receipts; provided, however, that the foregoing shall not constitute a waiver by the Port Authority of any default or breach of this Agreement by the Lessee nor shall the foregoing grant or be deemed to grant any right or permission to the Lessee to use an independent contractor to perform any such service, operation or any other permitted use under the Lease or the doing of anything hereunder by an independent contractor or any other person or entity which is not a Port Authority permittee.

(d) Install and use such cash registers, sales slips, invoicing machines and any other equipment or devices for recording orders taken, or services rendered as may be appropriate to the Lessee's business and necessary or desirable to keep accurate records of gross receipts.

#### Section 7. Federal Airport Aid

The Port Authority has applied for and received a grant or grants of money from the Administrator of the Federal Aviation Administration pursuant to the Airport and Airways Development Act of 1970, as the same has been amended and supplemented or superseded by similar federal legislation, and under prior federal statutes which said Act superseded and the Port Authority may in the future apply for and receive further such grants. In connection therewith the Port Authority has undertaken and may in the future undertake certain obligations respecting its operation of the Airport and the activities of its contractors, lessees and permittees thereon. The performance by the Lessee of the covenants and obligations contained in this Lease is therefore a special consideration and inducement to the making of this Agreement by the Port Authority, and

the Lessee further covenants and agrees that if the Administrator of the Federal Aviation Administration or any other governmental officer or body having jurisdiction over the enforcement of the obligations of the Port Authority in connection with Federal Airport Aid shall make any orders, recommendations or suggestions respecting the performance by the Lessee of its covenants and obligations under this Agreement, the Lessee will promptly comply therewith at the time or times, when and to the extent that the Port Authority may direct.

Section 8. Method of Operation

(a) With respect to the Lessee's subleasing activities at the premises, a principal purpose of the Port Authority in the making of this Agreement is to make available at the Airport the items and/or services which the Lessee is permitted to sell and/or render hereunder. Accordingly, the Lessee hereby warrants and agrees: (i) that it will conduct a first class operation and will furnish all necessary or proper fixtures, equipment, personnel (including licensed personnel as necessary), supplies, materials and facilities, (ii) that it will furnish such services promptly, efficiently and adequately to meet all demands therefor at the premises, (iii) that it will furnish such services on a fair, equal and non-discriminatory basis to all users thereof, and at charges which are fair, reasonable and non-discriminatory.

(b) The Lessee shall, prior to subleasing any space or furnishing any services hereunder, prepare a schedule of rates and charges for the services it will perform. Such schedule shall be furnished to the Port Authority. All subsequent changes therein shall be submitted to the Port Authority prior to the effective date or dates thereof. The entire schedule, including all changes, amendments and supplements, shall be made available to the public by the Lessee at its office on the premises and at the office of the General Manager of the Airport. That part of the schedule covering rates, charges and services ordinarily made to customers of the Lessee not having continuing contracts with the Lessee shall be posted prominently at the office of the Lessee on the premises. The Lessee covenants and agrees to adhere to the charges shown on the schedule, and to refund promptly to the customer, upon demand of the Port Authority, any charge or charges made in excess of those shown on the schedule.

(c) The Lessee covenants and agrees that it will not enter into continuing contracts or arrangements with third parties for the furnishing of services by the Lessee if any such contract or arrangement will have the effect of utilizing to an unreasonable extent the capacity of the Lessee for furnishing such services generally. At all times the Lessee will reserve a reasonable capacity to furnish services hereunder to customers not parties to continuing contracts with the Lessee.

(d) The Lessee covenants and agrees that it will not enter into any agreement or understanding, whether or not binding, with any person, firm, association, corporation or other entity, which will have the effect of fixing rates, of lessening or preventing competition, or of creating or tending to create a monopoly, at the Airport, relating to the services, products, or articles

furnished or sold by the Lessee.

Section 9. Compliance with Governmental Requirements

(a) The Lessee shall promptly comply with, observe and execute all laws and ordinances and governmental rules, regulations and orders now or at any time during the term of this Lease which as a matter of law are applicable to or which affect (i) the premises, (ii) the operations of the Lessee at the premises or the Lessee's operations at the Facility, (iii) the occupancy or use of the premises by the Lessee or by others with its consent, or (iv) with regard to Environmental Requirements only, property outside the premises as a result of the Lessee's use and occupancy of, or operations at, the premises or a migration, discharge or other release of Hazardous Substances from the premises. The Lessee shall, in accordance with and subject to the provisions of Section 37 hereof, make any and all structural and non-structural improvements, alterations or repairs of the premises and perform all remediation work and clean up of Hazardous Substances required in order to fully satisfy the compliance obligations set forth herein.

(b) The Lessee hereby agrees that it shall, at its own cost and expense, procure and obtain from all governmental authorities having jurisdiction over the operations of the Lessee hereunder and shall maintain in full force and effect throughout the term of this Agreement all licenses, certificates, permits or other authorization which may be necessary for the conduct of such operations. "Governmental authority" shall not be construed as intending to include The Port Authority of New York and New Jersey, the lessor under this Agreement.

(c) The obligation of the Lessee to comply with governmental requirements with respect to the premises is provided herein for the purpose of assuring proper safeguards for the protection of persons and property on the premises. Such provision is not to be construed as a submission by the Port Authority to the application to itself of such requirements or any of them. No immunity or exemption of the Port Authority from any Environmental Requirements shall excuse compliance or be grounds for non-compliance on the part of the Lessee.

(d) The Lessee shall pay all applicable license, certification, permit and examination fees, duties, excises, taxes and all other governmental charges of every character, present and future, which may be assessed, levied, exacted or imposed on the Lessee's property, operations or occupancy hereunder or on any property whatsoever which may be received at the premises or on the gross receipts, rental or income therefrom including any penalties or interest thereon and any taxes on personal property which may be assessed, levied, exacted, or imposed, and the Lessee shall make all applications and reports required in connection therewith. If any bond or other undertaking shall be required by any governmental authority in connection with any of the operations of the Lessee or any property received or exhibited by the Lessee at the premises, the Lessee shall furnish the same and pay all expenses in connection therewith. The Lessee shall also pay any and all corporate franchise and excise and other taxes, fees and other charges assessed, levied or imposed

on the Lessee in respect of its corporate existence or its right to do business. No alleged or purported immunity or exemption from any taxes or fees described in this paragraph available to the Port Authority shall be grounds for or excuse non-payment thereof by the Lessee.

(e) The Lessee shall pay any and all applicable real estate taxes or any other tax, assessment, levy, fee or charge, general or special, ordinary or extraordinary, foreseen or unforeseen, of whatever nature or kind which during the term of the letting hereunder may be levied, assessed, imposed or charged by any taxing or other governmental authority upon the premises or upon occupancy of the premises or any structure or improvement erected or made thereon or any appurtenances or any facilities of the premises or upon the leasehold estate hereby created, or with respect to the rentals or Lessee's income therefrom in lieu of any tax, assessment, levy or charge which would otherwise be a real estate tax, assessment, levy or charge. The Lessee's obligation hereunder shall include any such as are levied, assessed, imposed or charged upon the Port Authority and any payments made by the Port Authority to the taxing authority, by agreement or otherwise, in lieu of any tax, assessment, levy or charge. If any such tax, assessment, levy or charge, or payment in lieu thereof, is paid directly by the Port Authority, the Lessee shall pay the Port Authority therefor. If the taxing or governmental body imposing the tax or charge referred to herein does not segregate the amount thereof attributable to the premises from the balance of the Airport then the Port Authority shall allocate the same equitably on the basis of a proportion between the total number of square feet in the Airport subject to such taxes and the total number of square feet in the premises. The Lessee shall pay the allocable portion thereof as directed by the Port Authority either to the Port Authority or to the taxing or governmental body. The Lessee shall file all applications and furnish all information required in connection therewith and shall pay any penalties or interest thereon other than on amounts directly payable by the Port Authority as to which the Lessee has made prompt and timely payments to the Port Authority as required hereunder. The provisions of this paragraph (e) are included herein solely to set forth certain responsibilities as between the Lessee and the Port Authority and are not to be construed as a submission by the Port Authority to the imposition of any tax, assessment, levy, fee or charge aforesaid described or otherwise.

(f) Since the Port Authority has agreed in the Basic Lease to conform to the enactments, ordinances, resolutions and regulations of the City of New York and its various departments, boards and bureaus in regard to the construction and maintenance of buildings and structures and in regard to health and fire protection which would be applicable if the Port Authority were a private corporation to the extent that the Port Authority finds it practicable so to do, the Lessee shall comply with all such enactments, ordinances, resolutions and regulations which would be applicable to its operations hereunder if the Port Authority were a private corporation, except in cases where the Port Authority either notifies the Lessee that it need not comply with or directs it not to comply with any such enactments, ordinances, resolutions or regulations which are applicable only because of the Port Authority's agreement in the Basic Lease. The Lessee shall, for the Port Authority's information, deliver to the Port Authority promptly after receipt of any notice, warning, summons, or other legal process for the enforcement of any such enactment, ordinance, resolution or regulation a true copy

of the same. Any direction by the Port Authority to the Lessee not to comply with any such enactment, ordinance, resolution or regulation shall be given only pursuant to a resolution duly adopted by the Board of Commissioners of the Port Authority or by an authorized committee of its Board and if any such direction is given by the Port Authority to the Lessee, the Port Authority, to the extent that it may lawfully do so, shall indemnify and hold the Lessee harmless from and against all claims, actions, damages, liabilities, fines, penalties, costs and expenses suffered or incurred by the Lessee as a result of noncompliance with such enactment, ordinance, resolution or regulation.

(g) In the event of compliance with any such enactment, ordinance, resolution or regulation on the part of the Lessee, acting in good faith, commenced after such delivery to the Port Authority but prior to the receipt by the Lessee of a written direction from the Port Authority not to comply (and thereafter discontinued), without limiting any of the foregoing provisions such compliance shall not constitute a breach of this Agreement, although the Port Authority thereafter directs the Lessee not to comply. Nothing herein contained shall release or discharge the Lessee from compliance with any other provision hereof respecting governmental requirements.

(h) The Lessee shall have such time within which to comply with the aforesaid laws, ordinances, rules and regulations as the authorities enforcing the same shall allow.

Section 10. Rules and Regulations

(a) The Lessee covenants and agrees to observe and obey (and to require its officers, employees, guests, and invitees and those doing business with it to observe and obey) the existing Rules and Regulations of the Port Authority in effect as of the execution of this Agreement and such reasonable future Rules and Regulations and amendments and supplements to existing Rules and Regulations for the government of the conduct and operations of the Lessee and others on the premises as may from time to time during the letting be promulgated by the Port Authority for reasons of safety, health, sanitation or good order. The obligation of the Lessee to require such observance and obedience on the part of its guests, invitees and business visitors shall obtain only while such persons are on the premises. The Port Authority agrees that except in cases of emergency, it will give notice to the Lessee of every such future rule or regulation adopted by it at least five (5) days before the Lessee shall be required to comply therewith.

(b) If a copy of the Rules and Regulations is not attached, then the Port Authority will notify the Lessee thereof either by delivery of a copy, or by making a copy available at the office of the Secretary of the Port Authority.

Section 11. Various Obligations of the Lessee

(a) The Lessee shall conduct its operations hereunder in an orderly and proper manner, so as not to unreasonably annoy, disturb or be offensive to others at or off the Airport. The Lessee shall

take all reasonable measures to eliminate vibrations originating on the premises tending to damage any equipment, structure, building or portion of a building which is on the premises, or is a part thereof, or is located elsewhere on or off the Airport.

(b) The Lessee shall use its best efforts to conduct all its operations at the premises in a safe and careful manner, following in all respects the best practices of the industry in the United States.

(c) The Port Authority shall have the right to object to the Lessee regarding the conduct and demeanor of the employees of the Lessee whereupon the Lessee will take all steps reasonably necessary to remove the cause of the objection. If requested by the Port Authority the Lessee shall supply and shall require its employees to wear or carry badges or other suitable means of identification, which shall be subject to the prior and continuing approval of the General Manager of the Airport.

(d) The Lessee shall control all vehicular traffic on the roadways or other areas within the premises and shall take all precautions reasonably necessary to promote the safety of the persons using such roadways or other areas. The Lessee shall employ such means as may be necessary to direct the movement of vehicular traffic within the premises to prevent traffic congestion on the public roadways leading to the premises.

(e) The Lessee shall remove from the Airport or otherwise dispose of in a manner approved by the General Manager of the Airport all garbage, debris, and other waste materials (whether solid or liquid) arising out of the occupancy of the premises or out of operations at the premises or out of its operations at the Airport. Any such which may be temporarily stored in the open, shall be kept in suitable garbage and waste receptacles, the same to be made of metal or other suitable material, and equipped with tightfitting covers, and to be of a design safely and properly to contain whatever material may be placed therein. The Lessee shall use extreme care when effecting removal of all such waste materials, and shall effect such removal at such times and by such means as first approved by the Port Authority. No such garbage, debris, or other waste materials shall be or be permitted to be thrown, discharged or deposited into or upon the waters at or bounding the Airport.

(f) From time to time and as often as reasonably required by the Port Authority, the Lessee shall conduct pressure, water-flow, and other appropriate tests of the fire extinguishing system and apparatus which constitute a part of the premises. The Lessee shall keep in proper functioning order all fire-fighting equipment, fire-alarm and smoke detection equipment on the premises and the Lessee shall at all times maintain on the premises adequate stocks of fresh, usable chemicals for use in such systems, equipment and apparatus. The Lessee shall notify the Port Authority prior to conducting such tests. If requested by the Port Authority, the Lessee shall furnish the Port Authority with a copy of written reports of such tests.

(g) The Lessee agrees that it will not erect, construct or maintain or otherwise create or

continue any obstacle or so park or store any object on the premises so as to create any obstacle that will hamper or interfere with the free, orderly, unobstructed and uninterrupted passage of vehicles, aircraft or of the wings or other integral parts of aircraft of any type, nature or description, while such vehicle is operating or aircraft is taxiing or being transported or towed along any runways, taxiways and roads outside of and adjacent to the premises.

(h) In addition to compliance by the Lessee with all laws, ordinances, governmental rules, regulations and orders now or at any time in effect during the term of the letting hereunder which as a matter of law are applicable to the operation, use or maintenance by the Lessee of the premises or the operations of the Lessee under this Agreement (the foregoing not to be construed as a submission by the Port Authority to the application to itself of such requirements or any of them), the Lessee agrees that it shall exercise the highest degree of safety and care and shall conduct all its operations under this Agreement and shall operate, use and maintain the premises in accordance with the highest standards and in such manner that there will be at all times a minimum of air pollution, water pollution or any other type of pollution and a minimum of noise emanating from, arising out of or resulting from the operation, use or maintenance of the premises by the Lessee and from the operations of the Lessee under this Agreement. The Port Authority hereby reserves the right from time to time and at any time during the term of the Lease to require the Lessee, and the Lessee agrees, to design and construct at its sole cost and expense such reasonable structures, fences, equipment, devices and other facilities as may be necessary or appropriate to accomplish the objectives as set forth in the first sentence of this paragraph. All locations, the manner, type and method of construction and the size of any of the foregoing shall be determined by the Port Authority. The Lessee shall submit for Port Authority approval its plans and specifications covering the required work and upon receiving such approval shall proceed diligently to construct the same.

The obligations assumed by the Lessee under this paragraph (h) shall continue throughout the term of this Lease and shall not be limited, affected, impaired or in any manner modified by the fact that the Port Authority shall have approved any Construction Application and supporting plans, specifications and contracts covering construction work and notwithstanding the incorporation therein of the Port Authority's recommendations or requirements and notwithstanding that the Port Authority may have at any time during the term of the Lease consented to or approved any particular procedure or method of operation which the Lessee may have proposed or the Port Authority may have itself prescribed the use of any procedure or method. The agreement of the Lessee to assume the obligations under this paragraph (h) is a special inducement and consideration to the Port Authority in entering into this Lease with the Lessee.

(i) The Lessee shall furnish guard service at locations approved by the Port Authority or such comparable means as approved by the Port Authority on the premises for the prevention of access to aircraft taxiways, runways, public ramp and apron areas and aircraft parking and storage areas by all persons and vehicles not authorized by the Port Authority to enter upon said areas. Such prevention shall be accomplished on a twenty-four hour, seven-day week basis.

(j) The Lessee shall periodically inspect, clean out and maintain the oil separators serving the premises which are located on the premises, if any, and the oil separators located outside the premises, if any, if they exclusively serve the premises.

(k) Without limiting any other of the Lessee's obligations under this Lease, the Lessee shall, unless otherwise directed by the Port Authority, provide the General Manager of the Airport at the cost and expense of the Lessee and at any time during or subsequent to the term of the letting of the premises under this Lease, with such information, documentation, records, correspondence, notices, reports, tests, results, certifications and any other information as the Port Authority shall request in connection with any Environmental Requirements or Environmental Damages, and as may be necessary for the preparation of any application, registration, statement, certification, notice, non-applicability affidavits, communication, negative declaration, clean-up plan or other information, documentation or communication required pursuant to the Environmental Requirements and the Lessee shall promptly acknowledge, swear to, sign or otherwise fully execute the same when and as directed by the Port Authority. The Lessee agrees that any of the foregoing may be filed by the Port Authority with the appropriate governmental authority on behalf of the Lessee at the Lessee's cost and expense. Further, the Lessee agrees unless directed otherwise by the Port Authority, to provide the General Manager of the Airport with copies of all information, documentation, records, correspondence, notice, certifications, reports, test results and all other submissions provided by the Lessee to a governmental authority to the Lessee within two (2) business days that the same are made available to or received by the Lessee with respect to any Environmental Requirements.

(l) The Lessee shall at all times during the term of this Agreement on a twenty-four (24) hour basis maintain sufficient qualified personnel at the Airport or on call within thirty (30) minutes, who shall be qualified to perform the maintenance obligations of the Lessee under this Agreement and particularly be able to respond to all emergencies.

(m) In addition to and without limiting the generality of the obligations of the Lessee set forth above and elsewhere in the Lease, the Lessee shall at its sole cost and expense and in accordance with and subject to the provisions of Section 37 hereof, upon notice from the Port Authority, promptly take all actions to completely remove and remediate all Hazardous Substances which result from the Lessee's use or occupancy of the premises or which have been disposed of, released or discharged or otherwise placed on, under or about the premises during the term of the letting hereunder, and to clean-up and remediate all other Hazardous Substances on, about or under the premises or which have migrated from the premises to any adjoining property or other area which any federal, state or local governmental agency or political subdivision or any Environmental Requirements or any violation thereof require to be remediated, and to clean-up and remediate all Hazardous Substances which are necessary to mitigate Environmental Damages. The foregoing obligations of the Lessee shall include without limitation the investigation of the environmental condition of the area to be remediated, the presentation of feasibility studies, reports and remedial plans, and the performance of any clean-up, remediation, containment, operation, maintenance,

monitoring or restoration work; the standard for any of the foregoing to be that standard as required under Environmental Requirements and in the event that any Environmental Requirement sets forth more than one standard, the standard to be applied shall be that which requires the lowest level of a Hazardous Substance. The Lessee agrees that, notwithstanding the foregoing, the Port Authority shall have the right at any time and from time to time, acting in its sole discretion, to designate any standard or standards of remediation or cleanup permitted or required under any Environmental Requirement, and such designation shall be binding upon the Lessee with respect to its obligations hereunder. Any actions of the Lessee under the foregoing shall be performed in a good, safe and workmanlike manner and shall minimize any impact on activities off the premises. The Lessee shall promptly provide to the Port Authority all copies of test results and reports generated in connection with such actions. Promptly upon completion of such investigation and remediation, the Lessee shall seal or cap all monitoring wells and test holes, remove all associated equipment and restore the remediated property.

#### Section 12. Prohibited Acts

(a) The Lessee shall commit no unlawful nuisance, waste or injury on the premises or at the Airport and shall not do or permit to be done anything which may result in the creation or commission or maintenance of such nuisance, waste or injury on the premises or at the Airport.

(b) The Lessee shall not create nor permit to be caused or created upon the premises, any obnoxious odors or smokes, or noxious gases or vapors. The creation of exhaust fumes by the operation of internal-combustion engines, or aircraft engines of other types, so long as such engines are maintained and are being operated in a proper manner, shall not be a violation of this paragraph (b).

(c) The Lessee shall not do or permit to be done anything which may interfere with the effectiveness or accessibility of the drainage and sewerage system, water system, communications system, fuel system, electrical, fire-protection system, sprinkler system, alarm system, fire hydrants and hoses and other systems, if any, installed or located on, under, or in the premises.

(d) The Lessee shall not do or permit to be done any act or thing upon the premises or at the Airport (1) which will invalidate or conflict with any fire insurance, extended coverage or rental insurance policies covering the premises or any part thereof, or the Airport, or any part thereof, or (2) which in the opinion of the Port Authority, may constitute an extra-hazardous condition, so as to increase the risks normally attendant upon the operations contemplated by or mentioned in Section 5 hereof. The Lessee shall promptly observe, comply with and execute the provisions of any and all present and future rules and regulations, requirements, orders and directions of The National Board of Fire Underwriters and the Fire Rating Organization of the State of New York, or of any other board or organization exercising or which may exercise similar functions, which may pertain or apply to the operations of the Lessee on the premises, and the Lessee shall, subject to and in

accordance with the provisions of Section 37 hereof, make any and all structural and non-structural improvements, alterations or repairs of the premises required at any time hereafter by any such present or future rule, regulation, requirement, order or direction. If by reason of any failure on the part of the Lessee to comply with the provisions of this paragraph any fire insurance rate, extended coverage or rental insurance rate on the premises or any part thereof, or on the Airport or any part thereof, shall at any time be higher than it would be if the premises were properly used for the purposes permitted by Section 5 hereof, then the Lessee shall pay to the Port Authority, as an item of additional rental, that part of all insurance premiums paid by the Port Authority which shall have been charged because of such violation or failure by the Lessee.

(e) The Lessee shall not dispose of nor permit any one to dispose of any waste material (whether liquid or solid) by means of the toilets, manholes, sanitary sewers or storm sewers in the premises or on the Airport except after treatment in installations or equipment included in plans and specifications submitted to and approved by the Port Authority. The obligations assumed by the Lessee under this paragraph (e) shall not diminish, limit, modify or affect any other of the obligations of the Lessee with respect to waste material under this Agreement, including without limitation Sections 9, 10 and 11 hereof.

(f) The Lessee shall not keep or store during any 24-hour period flammable liquids within any enclosed portion of the premises (other than in rooms or areas expressly constructed for the storage of such liquids) in excess of the Lessee's (including the Lessee's customers) working requirements during the said 24-hour period. Any such liquids having a flash point of less than 110°F. shall be kept and stored in safety containers of a type approved by the Underwriters Laboratories or the Factory Mutual Insurance Association.

(g) The Lessee shall not operate any engine or any item of automotive equipment in any enclosed space on the premises unless such space is adequately ventilated and unless such engine or item of automotive equipment is equipped with a proper spark arresting device which has been approved by the Port Authority.

(h) (i) Except as provided in subdivisions (ii) and (iii) of this paragraph, the Lessee shall not install, maintain or operate, or permit the installation, maintenance or operation on the premises of any vending-machine or device designed to dispense or sell food; beverages; tobacco; tobacco products or merchandise of any kind whether or not included in the above categories, or of any restaurant, cafeteria, kitchen, stand or other establishment of any type for the preparation or dispensing of food, beverages, tobacco, tobacco products, or merchandise of any kind whether or not included in the above categories, or of any equipment or devices for the furnishing to the public of service of any kind including therein, without limitation thereto, telephone pay stations.

(ii) Subject to all of the terms and provisions of this Agreement, and notwithstanding the provisions of subdivision (i) of this paragraph, the Lessee may install food vending machines or

arrange for the installation and operation of such machines, subject to the Port Authority's approval of the type and method of installation thereof and the Lessee may use an independent contractor, operator or supplier for such machines selected by the Lessee unless the Port Authority reasonably determines that said contractor, operator or supplier will adversely affect or interfere with operations at the Facility or will cause or contribute to the causing of labor problems or disturbances thereat, *provided*, that such vending machines shall be installed and operated solely for use by the Lessee's officers, members, employees, contractors, customers, guests and invitees. The Lessee's agreement with any contractor, operator or supplier of vending machines shall permit cancellation by the Lessee on short term notice in the event the Port Authority notifies the Lessee that such a contractor, operator or supplier fails to meet the standards described in this paragraph. Nothing herein is intended to permit the furnishing on the premises to the public of any food or other merchandise or vending operation or service of any kind.

(iii) The Lessee has represented to the Port Authority that it has existing commitments to organizations of its employees to permit such organizations to install and operate vending machines and devices at the Lessee's installations designed to dispense and sell food and beverages with the profit from such dispensing and sales to be realized solely by and to be solely for the benefit of such employee organizations. The Port Authority is willing to grant permission for such operation on the premises by such employee organizations or by the Lessee on behalf of such employee organizations for so long as such commitments continue. The Lessee shall submit to the Port Authority prior to the exercise of the permission hereunder the name of its employee organization or organizations which will be permitted to install or for which the Lessee will install such machines, their location on the premises and types of merchandise to be dispensed or sold. If the Lessee shall operate such vending machines and devices for such party it shall keep such records and submit such reports of its operations hereunder to the Port Authority as the Port Authority may from time to time direct. The Lessee has also represented to the Port Authority that it has requirements imposed pursuant to law to authorize the operation of newsstands by blind operators (and under certain circumstances as imposed by law to assign vending machine income in connection therewith) for the sale at retail to employees of the Lessee of newspapers and magazines, tobacco and tobacco products, candy, chewing gum, and paper-bound books with the profit from such sales to be solely for the benefit of such blind operators. The Port Authority is willing to grant permission for such operation on the premises for so long as such requirements continue. The Lessee shall submit to the Port Authority prior to the exercise of the permission hereunder the name of the blind operator or operators which will be permitted to install newsstands and operate on the premises. The Lessee shall request such operators to keep such business records and submit such reports of their operations at the Airport to the Port Authority, as the Port Authority may from time to time request. The use of the premises for the purposes stated in this paragraph (iii) and in accordance therewith shall be without payment of fees to the Port Authority.

(i) The Port Authority, by itself or by contractors, lessees or permittees, shall have the exclusive right to install, maintain and receive the revenues from all coin-operated or other vending

machines or devices installed by it and operated on the premises for the sale of merchandise of all types or for the rendering of services, provided, however, that no such machine or device shall be installed except upon the request of the Lessee. If the Port Authority does not install and maintain any such machine that the Lessee may reasonably request, the Lessee shall have the right to do so, provided, however, (1) that the Lessee shall pay or cause to be paid to the Port Authority each month for each machine upon the same basis for the preceding month as any concessionaire, permittee or licensee of the Port Authority then operating machines at the Airport for the sale of similar merchandise or the rendering of similar services, and (2) that in the event the Lessee exercises such right the Port Authority, at any time thereafter, may substitute for the Lessee's machines other machines selling similar merchandise or services operated by the Port Authority or by its licensee, permittee or concessionaire, and thereupon the Lessee shall remove its machines.

(j) The Lessee shall not overload any floor and shall repair any floor, including supporting members, and any paved area damaged by overloading. Nothing in this paragraph (j) or elsewhere in this Agreement shall be or be construed to be a representation by the Port Authority of the weight any floor will bear.

(k) The Lessee shall not fuel or defuel its automotive vehicles or other equipment in the enclosed portions of the premises without the prior approval of the General Manager of the Airport.

(l) Except as provided in paragraph (f) hereof, the Lessee shall not keep or store in the premises, explosives, inflammable liquids or solids or oxidized materials or use any cleaning materials having a harmful corrosive effect on any part of the premises.

(m) The Lessee shall not use or permit the use of any truss or structural supporting member of the building or roof or any part thereof for the storage of any material or equipment, or to hoist, lift, move or support any material or equipment or other weight or load, by means of said trusses or structural supporting members.

(n) The Lessee shall not fuel or defuel aircraft or other equipment in the enclosed portions of the premises without prior approval of the General Manager of the Airport, provided however, that the Lessee shall not be prohibited from using gasoline or other fuel in such enclosed portions where necessary in repairing and testing component parts; and in such event the Lessee shall take all precautions reasonably necessary to minimize the hazard created by such use.

(o) The Lessee shall not dispose of, release or discharge nor permit anyone to dispose of, release or discharge any Hazardous Substance on or from the premises or at the Airport. In addition to and without limiting any other term or provision of the Lease, any Hazardous Substance disposed of, released or discharged by the Lessee (or permitted by the Lessee to be disposed of, released or discharged) on or from the premises or at the Airport, shall upon notice by the Port Authority to the Lessee and subject to the provisions of Section 37 hereof, be completely removed, cleaned up and/or

remediated by the Lessee. The obligations of the Lessee pursuant to this paragraph (p) shall survive the expiration or termination of this Agreement.

Section 13. Care, Maintenance, Rebuilding and Repair by the Lessee

(a) The Lessee shall repair, replace, rebuild and paint all or any part of the Airport which may be damaged or destroyed by the acts or omissions of the Lessee or by those of its officers or employees, customers, guests or invitees or of other persons on or at the premises with the Lessee's consent.

(b) The Lessee shall throughout the term of the letting hereunder assume the entire responsibility and shall relieve the Port Authority from all responsibility for all repair, rebuilding and maintenance whatsoever in the premises whether such repair, rebuilding or maintenance be ordinary or extraordinary, partial or entire, inside or outside, foreseen or unforeseen, structural or otherwise, and without limiting the generality of the foregoing, the Lessee shall:

(1) Keep at all times in a clean and orderly condition and appearance the premises and all of the Lessee's fixtures, equipment and personal property, which are located in any part of the premises which is open to or visible by the general public;

(2) Remove all snow and ice and perform all other activities and functions necessary or proper to make the premises available for use;

(3) Take good care of the premises and maintain the same at all times in good condition; perform all necessary preventive maintenance, including but not limited to, painting (the exterior of the premises and areas visible to the general public to be painted only in colors which have been approved by the Port Authority); and make all repairs and replacements, and do all rebuilding, ordinary and extraordinary, partial and entire, inside and outside, foreseen and unforeseen, structural or otherwise, which repairs, replacements and rebuilding by the Lessee shall be in quality and class not inferior to the original in material and workmanship; and pay promptly the cost and expense of such repairs, replacements and maintenance;

(4) Without limiting its obligations elsewhere in this Section, the Lessee shall perform all decorating and painting (including redecorating and repainting) so that at all times the premises and all parts thereof are in first class appearance and condition;

(5) Provide and maintain all obstruction lights and similar devices on the premises, and provide and maintain all fire protection and safety equipment and all

other equipment of every kind and nature required by any law, rule, ordinance, resolution or regulation of the type and nature described in Sections 9 and 10 of this Agreement. The Lessee shall enter into and keep in effect throughout the term of the Lease a contract or contracts with a central station alarm company acceptable to the Port Authority to provide continuous and automatic surveillance of the fire protection system on the premises. The Lessee shall insure that all fire alarm signals with respect to the premises shall also be transmitted to the Airport's police emergency alarm board or to such other location on the Airport as the General Manager of the Airport may direct. The Lessee's obligations hereunder shall in no way create any obligation whatsoever on the part of the Port Authority;

(6) Be responsible for appropriate lighting of all ramp and apron areas on the premises and for the maintenance and repair of any damage to the paving or other surface of the premises, and the maintenance and repair of all access roadways, taxiways and ramp and apron areas located upon the premises or located adjacent to the premises and used exclusively by those operating at or occupying the premises;

(7) Promptly wipe up all oil, gasoline, grease, lubricants and other flammable liquids or substances having a corrosive or detrimental effect on the paving or other surface of the premises which may leak or be spilled thereon. The Lessee shall repair any damage to the paving or other surface caused by such oil, gasoline, grease, lubricants or other liquids or substances;

(8) Take such anti-erosion measures and maintain the landscaping at all times in good condition, including but not limited to periodic planting and replanting, as the Port Authority may require, and perform and maintain such other landscaping with respect to all portions of the premises not paved or built upon as the Port Authority may require;

(9) Be responsible for the maintenance and repair of all utility service lines, including but not limited to, service lines for the supply of water, gas service lines, electric power and telephone conduits and lines, sanitary sewers and storm sewers located upon the premises or located adjacent to the premises and serving the premises exclusively.

(c) If the performance of any of the foregoing repair, maintenance, replacement, repainting or rebuilding obligations of the Lessee requires work to be performed near an active taxiway or where safety of operations is involved, the Lessee agrees that it will at its own expense, post guards at such locations to insure the safety of the work performed thereat.

(d) In the event the Lessee fails to commence so to maintain, clean, repair, replace, rebuild or paint within a period of twenty (20) days after notice from the Port Authority so to do if

the said notice specifies that the required work to be accomplished by the Lessee includes maintenance and/or repair other than preventive maintenance, or within a period of one hundred eighty (180) days if the said notice specifies that the work to be accomplished by the Lessee involves preventive maintenance only, or fails diligently to continue to completion the cleaning, maintenance, repair, replacement, lamping and relamping, rebuilding, painting or repainting or restoration of all of the premises required to be cleaned, maintained, repaired, replaced, rebuilt, painted, repainted or restored by the Lessee under the terms of this Agreement, the Port Authority may, at its option, and in addition to any other remedies which may be available to it, clean, maintain, repair, replace, lamp or relamp, rebuild, paint or repaint or restore all or any part of the premises included in the said notice, and the cost thereof shall be payable by the Lessee upon demand.

Section 14.                   THERE IS NO SECTION 14.

Section 15.    Damage to or Destruction of Premises

(a) Removal of Debris. If the premises, or any part thereof shall be damaged by fire, the elements, the public enemy or other casualty, the Lessee shall promptly remove all debris resulting from such damage from the premises, and to the extent, if any, that the removal of debris under the circumstances is covered by insurance and such insurance proceeds have been collected by the Port Authority, the proceeds thereof shall be made available to and be used by the Lessee for such purpose.

(b) Minor Damage. If the premises, or any part thereof, shall be damaged by fire, the elements, the public enemy or other casualty but not rendered untenable or unusable for a period of ninety (90) days, the premises shall be repaired with due diligence in accordance with the plans and specifications for the premises as they existed prior to such damage by and at the expense of the Lessee and if such damage is covered by insurance and such insurance proceeds have been collected by the Port Authority, the proceeds thereof shall be made available to and be used by the Lessee for such repairs.

(c) Major Damage to or Destruction of the Premises. If the premises, or any part thereof, shall be destroyed or so damaged by fire, the elements, the public enemy or other casualty as to be untenable or unusable for ninety days, or if within ninety (90) days after such damage or destruction the Lessee notifies the Port Authority in writing that in its opinion said premises will be untenable or unusable for ninety days then: The Lessee shall proceed with due diligence to make the necessary repairs or replacements to restore such premises in accordance with the plans and specifications for the premises as they existed prior to such damage or destruction; or with the approval in writing of the Port Authority make such other repairs, replacements or changes as may be desired by the Lessee. If such destruction or damage was covered by insurance and such insurance has been collected by the Port Authority, the proceeds thereof shall be made available to and used by the Lessee for such restoration. Any excess of the proceeds of insurance over the costs of the

restoration shall be retained by the Port Authority.

(d) The parties hereby stipulate that neither the provisions of Section 227 of the Real Property Law of the State of New York nor those of any other similar statute shall extend or apply to this Agreement.

Section 16. Indemnity and Liability Insurance

(a) (1) The Lessee shall indemnify and hold harmless the Port Authority, its Commissioners, officers, employees and representatives, from and against (and shall reimburse the Port Authority for the Port Authority's costs and expenses including legal expenses incurred in connection with the defense of) all claims and demands of third persons (including claims and demands of the City of New York from which the Port Authority derives its rights in the Airport, for indemnification, arising by operation of law or through agreement of the Port Authority with the said City) including but not limited to claims and demands for death or personal injuries, or for property damages, including without limitation all Environmental Damages and Environmental Requirements, caused by the negligent or wrongful act or omission of any employee of the Lessee while acting within the scope of his office or employment under circumstances where the Lessee, if a private person, would be liable in accordance with the law of the place where the act or omission occurred. The foregoing indemnity shall not extend to claims based upon acts or omissions of the Lessee's employees for which the Lessee would not be liable under the Federal Tort Claims Act of 1945 (28 U.S.C. 2671 et, Seq.) as now or hereafter amended. The Port Authority shall furnish the Lessee with reasonable notice of any claims made against the Port Authority. It is understood that in the event that the Lessee has to pay for losses under this Section, such payment will not entail expenditures which exceed appropriations available. Nothing in this Agreement shall be considered as implying that Congress will, at a later date, appropriate funds sufficient to meet deficiencies.

(b) The Lessee agrees to include in any contract it may enter into in connection with the exercise of the privileges granted by this Agreement except for contracts for the Construction work, the following provision:

"The contractor shall indemnify and save harmless the Port Authority of New York and New Jersey, its Commissioners, officers, agents and employees for and against injuries (including death) suffered by it or any of them and damage to or loss of of its or their property and all claims of third parties for injuries to persons (including death) or for damage to or loss of property, that may arise out of or in connection with the performance of the work covered by this contract all of the foregoing to include without limitation injuries, damages, losses and claims arising out of or in connection with Environmental Damages. This obligation is for the benefit of the Port Authority of New York and New Jersey, its Commissioners, officers, agents and employees, each of which shall have a direct right of action thereon."

(c) In addition to the obligations set forth in paragraphs (a) and (b) of this Section and all other insurance required under this Agreement, the Lessee prior to any use or occupancy of the premises (other than solely for purposes of the construction work) and thereafter during the term of this Agreement shall require its duly authorized agents and contractors performing work (other than the Construction work for which insurance shall be provided pursuant to and in accordance with Section 2 hereof) pursuant to the provisions of this Agreement (which agents and contractors are hereinafter in this Section referred to in the singular as a "Contractor" and in the plural as "Contractors") to procure, maintain and pay the premiums on the following described policy or policies of insurance in not less than the following limits in the Contractor's own name as insured and including the Port Authority and the Lessee as additional insureds: Comprehensive General Liability Insurance, including premises-operations, products liability, completed operations and covering bodily injury, including death, and property damage liability, and none of the foregoing to contain care, custody or control exclusions and not to contain any exclusion for bodily injury to or sickness, disease or death of any employee of the Lessee or of any of its Contractors which would conflict with or in any way impair coverage under the contractual liability endorsement and providing for coverage in the limits set forth below, and Comprehensive Automobile Liability Insurance covering owned, non-owned and hired vehicles and including automatic coverage for newly acquired vehicles and providing for coverage in the limits set forth below. Without limiting the provisions hereof, in the event the Contractor maintains the foregoing insurance in limits greater than aforesaid, the Port Authority shall be included therein as an additional insured to the full extent of all such insurance in accordance with all the terms and provisions hereof. All the aforesaid policy or policies of insurance shall also provide or contain an endorsement providing that the protections afforded the named insured thereunder with respect to any claim or action against such named insured by a third person shall pertain and apply with like effect with respect to any claim or action against the Lessee or the Contractor, or both by the Port Authority but such endorsement shall not limit, vary, change or affect the protections afforded the Port Authority thereunder as an additional insured. In addition, each such policy or policies of insurance shall also provide or contain an endorsement providing that the protections afforded the Port Authority thereunder and with respect to any claim or action against the Port Authority by the Lessee or the Contractor, or both, shall be the same as the protections afforded the named insured thereunder with respect to any claim or action against the named insured by a third person as if the Port Authority were the named insured thereunder, but such endorsement shall not limit, vary, change, or affect the protections afforded the Port Authority thereunder as an additional insured. The said policy or policies of insurance shall also provide or contain a contractual liability endorsement covering the obligations assumed by the Lessee under paragraph (a) above and by the Contractor pursuant to paragraph (b) above.

#### Minimum Limits

Comprehensive General Liability  
Combined single limit per  
occurrence for death, bodily injury

and property damage liability: \$2,000,000

Comprehensive Automobile Liability  
(covering owned, non-owned and hired  
vehicles)

Combined single limit per occurrence  
for death, bodily injury and property  
damage liability: \$ 2,000,000

All insurance coverages and policies required under this Section may be reviewed by the Port Authority for adequacy of terms, conditions and limits of coverage at any time and from time to time during the term of the letting hereunder. The Port Authority may, at any such time, require additions, deletions, amendments or modifications to the above-scheduled insurance requirements, or may require such other and additional insurance, in such reasonable amounts, against such other insurable hazards, as the Port Authority may deem required and the Lessee shall promptly comply therewith.

(d) Notwithstanding the foregoing, it is specifically understood and agreed that the Port Authority shall have the right upon notice to the Lessee given from time to time and at any time to require the Lessee cause the Contractor to increase any or all of the foregoing limits to reasonably commercial amounts and the Lessee shall promptly comply therewith and shall cause the Contractor to promptly submit a certificate or certificates evidencing the same to the Port Authority.

(e) As to the insurance required by the provisions of this Section, and by the provisions of Section 2(c) (11) the Lessee shall cause the Contractors to deliver a certified copy of the policies or a certificate or certificates or binders, evidencing the existence thereof to the Port Authority as to the insurance required by Section 2(c)(11) such delivery shall be made by the Lessee upon execution of this Lease and delivery thereof by the Lessee to the Port Authority; as to the insurance required by this Section such delivery shall be made by the Lessee at least thirty (30) days prior to the use (other than solely for purposes of the construction work) of any portion of the premises by the Lessee. Each policy, certificate or binder delivered as aforesaid shall bear the endorsement of or be accompanied by evidence of payment of the premium thereon. In the event a binder is delivered, it shall be replaced within thirty (30) days by a certified copy of the policy or a certificate. Each such copy or certificate shall contain a valid provision or endorsement that the policy may not be cancelled, terminated, changed or modified without giving thirty (30) days' written advance notice thereof to the Port Authority. Each such copy or certificate shall contain an additional endorsement providing that the insurance carrier shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, its Commissioners, officers, agents, or

employees, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provisions of any statutes respecting suits against the Port Authority. Any renewal policy or certificate shall be delivered to the Port Authority prior to the expiration of each expiring policy, except for any policy expiring after the date of expiration of the term of this Agreement. The aforesaid insurance shall be written by a company or companies approved by the Port Authority. If at any time any of the insurance policies shall be or become unsatisfactory to the Port Authority as to the form or substance or if any of the carriers issuing such policies shall be or become unsatisfactory to the Port Authority, the Lessee shall obtain from the Contractor a new and satisfactory policy in replacement. If the Port Authority at any time so requests, a certified copy of each of the policies shall be delivered to the Port Authority.

(f) If at any time the above liability insurance should be cancelled, terminated or modified so that insurance is not in effect as above required, then, if the Port Authority shall so direct, the Lessee shall require the Contractor to suspend performance of the work.

(g) Nothing contained in this Agreement shall require the obtaining by the Lessee of such insurance in connection with the performance of work by employees of the Lessee.

Section 17.        Signs

(a) Except with the prior written approval of the Port Authority, the Lessee shall not erect, maintain or display any signs or any advertising at or on the exterior parts of the premises or in the premises so as to be visible from outside the premises or at or on any other portion of the Airport outside the premises. Interior signs affecting public safety and security shall be in accordance with established Port Authority standards.

(b) Upon the expiration or termination of the letting, the Lessee shall remove, obliterate or paint out, as the Port Authority may direct, any and all signs and advertising on the premises or elsewhere on the Airport and in connection therewith shall restore the portion of the premises and the Airport affected by such signs or advertising to the same condition as existing prior to the installation of such signs and advertising. In the event of a failure on the part of the Lessee so to remove, obliterate or paint out each and every such sign or advertising and so to restore the premises and the Airport, the Port Authority may perform the necessary work and the Lessee shall pay the cost thereof to the Port Authority on demand.

Section 18.        Obstruction Lights

The Lessee shall install, maintain and operate at its own expense such obstruction lights on the premises as the Federal Aviation Administration may direct or as the General Manager of the Airport may reasonably direct, and shall install said lights in the locations on the premises designated by the Port Authority and shall maintain them in first class operating condition at all times. The

Lessee shall furnish and install the bulbs and furnish the electricity necessary for the operation of said lights, and shall operate the same in accordance with the directions of the Port Authority. The Port Authority hereby directs that all said obstruction lights shall, until further notice be operated daily for a period commencing thirty (30) minutes before sunset and ending thirty (30) minutes after sunrise (as sunset and sunrise may vary from day to day throughout the year) and for such other period as may be directed or requested by the Control Tower of the Airport.

Section 19. Additional Rent and Charges

(a) If the Port Authority has paid any sum or has incurred any obligation or expense which the Lessee has agreed to pay or reimburse the Port Authority for or if the Port Authority is required or elects to pay any sum or sums or incurs any obligations or expense by reason of the failure, neglect or refusal of the Lessee to perform or fulfill any one or more of the conditions, covenants or agreements contained in this Agreement or as a result of an act or omission of the Lessee contrary to the said conditions, covenants and agreements, the Lessee agrees to pay the sum or sums so paid or the expense so incurred, including all interest, costs, damages and penalties, and the same may be added to any installment of rent thereafter due hereunder, and each and every part of the same shall be and become additional rent, recoverable by the Port Authority in the same manner and with like remedies as if it were originally a part of the rent as set forth in Section 4 hereof.

(b) For all purposes under this Section and in any suit, action or proceeding of any kind between the parties hereto, any receipt showing any payment of a sum or sums by the Port Authority for any work done or material furnished shall be prima facie evidence against the Lessee that the amount of such payment was necessary and reasonable. Should the Port Authority elect to use its operating and maintenance staff in performing any work and to charge the Lessee with the cost of same, any time report of any employee of the Port Authority showing hours of labor or work allocated to such work, or any stock requisition of the Port Authority showing the issuance of materials actually used in the performance thereof, shall likewise be prima facie evidence against the Lessee that the amount of such charge was necessary and reasonable.

Section 20. Rights of Entry Reserved

(a) The Port Authority, by its officers, employees, agents, representatives and contractors shall have the right at all reasonable times to enter upon the premises for the purpose of inspecting the same, for observing the performance by the Lessee of its obligations under this Agreement, and for the doing of any act or thing which the Port Authority may be obligated or have the right to do under this Agreement, or otherwise.

(b) Without limiting the generality of the foregoing, the Port Authority, by its officers, employees, agents, representatives, and contractors, and furnishers of utilities and other services, shall have the right, for its own benefit, for the benefit of the Lessee, or for the benefit of others than

the Lessee at the Airport, to maintain existing and future sewerage, utility, mechanical, electrical and other systems or portions thereof on the premises, including therein without limitation thereto, systems for the supply of heat, water, gas, fuel, electricity and for the furnishing of fire-alarm, fire-protection, sprinkler, sewerage, drainage, telegraph and telephone service, including all lines, pipes, mains, wires, conduits and equipment connected with or appurtenant to such systems, and to enter upon the premises at all reasonable times to make such repairs, replacements or alterations as may, in the opinion of the Port Authority, be deemed necessary or advisable and, from time to time, to construct or install over, in or under the premises new systems or parts thereof, and to use the premises for access to other parts of the Airport otherwise not conveniently accessible; provided, however, that in the exercise of such rights of access, repair, alteration or new construction the Port Authority shall not unreasonably interfere with the use and occupancy of the premises by the Lessee.

(c) In the event that any property of the Lessee shall obstruct the access of the Port Authority, its employees, agents or contractors to any of the existing or future utility, mechanical, electrical and other systems and thus shall interfere with the inspection, maintenance or repair of any such system, the Lessee shall move such property, as directed by the Port Authority, in order that access may be had to the system or part thereof for its inspection, maintenance or repair, and, if the Lessee shall fail to so move such property after direction from the Port Authority to do so, the Port Authority may move it and the Lessee hereby agrees to pay the cost of such moving upon demand.

(d) Nothing in this Section shall or shall be construed to impose upon the Port Authority any obligations so to construct or maintain or to make repairs, replacements, alterations or additions, or shall create any liability for any failure so to do. With respect to the premises the Lessee is and shall be in exclusive control and possession thereof and the Port Authority shall not in any event be liable for any injury or damage to any property or to any person happening on or about said premises nor for any injury or damage to said premises nor to any property of the Lessee or of any other person located therein or thereon.

(e) At any time and from time to time during ordinary business hours within the six (6) months next preceding the expiration of the letting, the Port Authority, for and by its agents and employees, whether or not accompanied by prospective lessees, occupiers or users of the premises, shall have the right to enter thereon for the purpose of exhibiting and viewing all parts of the same, and during such six-month period the Port Authority may place and maintain on the premises the usual "To Let" signs, which signs the Lessee shall permit to remain without molestation.

(f) If, during the last month of the letting, the Lessee shall have removed all or substantially all of its property from the premises, the Port Authority may immediately enter and alter, renovate and redecorate the premises.

(g) The exercise of any or all of the foregoing rights by the Port Authority or others shall not be or be construed to be an eviction of the Lessee nor be made the grounds for any abatement of rental

nor any claim or demand for damages, consequential or otherwise.

Section 21. Condemnation

(a) In any action or other proceeding by any governmental agency or agencies for the taking for a public use of any interest in all or part of the premises, or in case of any deed, lease or other conveyance in lieu thereof (all of which are in this Section referred to as "taking"), the Lessee shall not be entitled to assert any claim to any compensation, award or part thereof made or to be made therein or therefor or any claim to any consideration or rental or any part thereof paid therefor, or to institute any action or proceeding or to assert any claim against such agency or agencies or against the Port Authority for or on account of any such taking (except the possible claim to an award for loss of the Lessee's removable fixtures), it being understood and agreed between the Port Authority and the Lessee that the Port Authority shall be entitled to all compensation or awards made or to be made or paid, and all such consideration or rental, free of any claim or right of the Lessee.

(b) In the event that all or any portion of the premises is required by the Port Authority to comply with any present or future governmental law, rule, regulation, requirement, order or direction, the Port Authority may by notice given to the Lessee terminate the letting with respect to all or such portion of the premises so required. If the Port Authority so elects to terminate all or such portion of the premises so required it shall give the Lessee written notice to such effect. Such termination shall be effective on the date specified in the notice. The Lessee hereby agrees to deliver possession of all or such portion of the premises so required upon the effective date of such termination in the same condition as that required for the delivery of the premises upon the date originally fixed by this Agreement for the expiration of the term of the letting. No taking by or conveyance to any governmental authority as described in paragraph (a) of this Section, nor any delivery by the Lessee nor taking by the Port Authority pursuant to this paragraph, shall be or be construed to be an eviction of the Lessee or a breach of this Agreement or to be made the basis of any claim by the Lessee against the Port Authority for damages, consequential or otherwise.

(c) In the event that the taking covers the entire premises, or in the event that the letting is terminated with respect to the entire premises pursuant to paragraph (b) of this Section, then this Agreement shall, as of the date possession is taken by such agency or agencies from the Port Authority, or as of the effective date of such termination, cease and determine in the same manner and with the same effect as if the date were the original date of expiration hereof.

(d) In the event that the taking covers a part only of the premises, or in the event that the letting is terminated pursuant to paragraph (b) of this Section with respect to a part only of the premises, then the letting as to such part shall, as of the date possession thereof is taken by such agency or agencies, or as of the effective date of such termination, cease and determine in the same manner and with the same effect as if the term of the letting had on that date expired, and the rentals shall be abated as hereinbefore provided.

(e) In the event that the taking covers only a material part of the premises, then the Lessee and the Port Authority shall each have an option exercisable by notice given within ten (10) days after the effective date of such taking to terminate the letting hereunder with respect to the premises not taken, as of the date of such taking, and such termination shall be effective as if the date of such taking were the original date of expiration hereof. If the letting of the entire premises is not terminated, the settlement or abatement of rentals after the date possession is taken by the body having a superior power of eminent domain shall be in accordance with Section 4 hereof.

(f) As used in this Section with reference to the premises the phrase "a material part" shall mean such a part of the premises that the Lessee cannot continue to carry on its normal operations hereunder without using such part.

Section 22.        Late Charges

If the Lessee should fail to pay any amount required under this Agreement when due to the Port Authority, including without limitation any payment of Ground Rental, Subletting Percentage Fees or other rental or any payment of utility fees or charges, or other charges or fees, or if any such amount is found to be due as the result of an audit, then, in such event, the Port Authority may impose (by statement, bill or otherwise) a late charge with respect to each such unpaid amount for each late charge period hereinbelow described) during the entirety of which such amount remains unpaid, each such late charge not to exceed an amount equal to eight-tenths of one percent of such unpaid amount for each late charge period. There shall be twenty-four late charge periods during each calendar year; each late charge period shall be for a period of at least fifteen (15) calendar days except one late charge period each calendar year may be for a period of less than fifteen (but not less than thirteen) calendar days. Without limiting the generality of the foregoing, late charge periods in the case of accounts found to have been owing to the Port Authority as the result of Port Authority audit findings shall consist of each late charge period following the date the unpaid amount should have been paid under this Agreement. Each late charge shall be payable immediately upon demand made at any time therefor by the Port Authority. No acceptance by the Port Authority of payment of any unpaid amount or of any unpaid late charge amount shall be deemed a waiver of the right of the Port Authority to payment of any late charge or late charges payable under the provisions of this Section, with respect to such unpaid amount. Each late charge shall be and become additional rent, recoverable by the Port Authority in the same manner and with like remedies as if it were originally a part of the rentals as set forth in Section 4 hereof. Nothing in this Section is intended to, or shall be deemed to, affect, alter, modify or diminish in any way (i) any rights of the Port Authority under this Agreement, including without limitation the Port Authority's rights set forth in the section of this Agreement entitled "Termination by the Port Authority" or (ii) any obligations of the Lessee under this Agreement. In the event that any late charge imposed pursuant to this Section shall exceed a legal maximum applicable to such late charge, then, in such event, each such late charge payable under this Agreement shall be payable instead at such legal maximum.

Section 23. Assignment and Sublease

(a) The Lessee covenants and agrees that it will not sell, convey, transfer, mortgage, pledge or assign this Agreement or any part thereof, or any rights created thereby or the letting thereunder or any part thereof without the prior written consent of the Port Authority.

(b) The Lessee covenants and agrees that it shall not sublet the premises or any part thereof, without the prior written consent of the Port Authority.

(c) Any sale, assignment, transfer, sublease, mortgage, pledge, hypothecation, encumbrance or disposition of the premises or of the rents, revenues or any other income from the premises, or this Agreement, or any part thereof, or any license or other interest of the Lessee therein not made in accordance with the provisions of this Agreement shall be null and void ab initio and of no force or effect.

(d) If without prior written consent of the Port Authority, the Lessee assigns, sells, conveys, transfers, mortgages, pledges or sublets in violation of the foregoing paragraphs of this Section or if the premises are occupied by anybody other than the Lessee, the Port Authority may collect rent from any assignee, sublessee or anyone who claims a right under this Agreement or letting or who occupies the premises, and the Port Authority shall apply the net amount collected to the rental herein reserved; but no such collection shall be deemed a waiver by the Port Authority of the covenants contained in the foregoing paragraphs of this Section or an acceptance by the Port Authority of any such assignee, sublessee, claimant or occupant as Lessee, nor a release of the Lessee by the Port Authority from the further performance by the Lessee of the covenants contained herein.

(e) Any consent granted by the Port Authority to any assignment or subletting or to any sublease pursuant to the provisions hereof shall not be construed or deemed to release, relieve or discharge any succeeding assignee, successor or transferee of the Lessee or any other person claiming any right, title or interest in this Agreement from the requirement of obtaining the prior written consent of the Port Authority in the event it wishes to sell, convey, transfer, mortgage, pledge, sublet or assign this Agreement or any part thereof, or any rights created thereby or the letting hereunder or any part thereof; and such assignee, successor or transferee or other person claiming any right, title or interest in this Agreement shall not sell, convey, transfer, mortgage, pledge, sublet or assign this Agreement or any part thereof, or any rights created thereby or the letting thereunder or any part thereof without such prior written consent of the Port Authority.

(f) The Port Authority shall not assign or otherwise transfer this Lease or any of its rights hereunder (1) to any private person without written consent duly executed by the Lessee; or (2) to the City of New York, unless the City of New York at the time of such assignment or transfer assumes the obligations of the Port Authority under this Lease.

(g) The Lessee shall not use or permit any person to use the premises or any portion thereof for any purpose other than the purposes stated in Section 5 hereof. Except as provided in this Agreement or otherwise permitted in writing by the Port Authority, the Lessee shall not permit the premises to be used or occupied by any person other than its own officers, employees, contractors and representatives.

Section 24. Termination by the Port Authority

(a) If any one or more of the following events shall occur, that is to say:

(1) The Lessee shall become insolvent or shall take the benefit of any present or future insolvency statute, or shall make a general assignment for the benefit of creditors or file a voluntary petition in bankruptcy or a petition or answer seeking an arrangement or its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any other law or statute of the United States or of any State thereof, or consent to the appointment of a receiver, trustee, or liquidator of all or substantially all of its property; or

(2) By order or decree of a court the Lessee shall be adjudged bankrupt or an order shall be made approving a petition filed by any of its creditors or by any of the stockholders of the Lessee, seeking its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any law or statute of the United States or of any State thereof, provided that if any such judgment or order is stayed or vacated within sixty (60) days after the entry thereof, any notice of cancellation shall be and become null, void and of no effect; or

(3) By or pursuant to, or under authority of any legislative act, resolution or rule, or any order or decree of any court or governmental board, agency or officer having jurisdiction, a receiver, trustee, or liquidator shall take possession or control of all or substantially all of the property of the Lessee, and such possession or control shall continue in effect for a period of thirty (30) days; or

(4) The Lessee shall voluntarily abandon, desert or vacate the premises or discontinue its operations at the Airport, or after exhausting or abandoning any right of further appeal, the Lessee shall be prevented for a period of thirty (30) days by action of any governmental agency other than the Port Authority having jurisdiction thereof, from conducting its operations at the Airport, regardless of the fault of the Lessee; or

(5) Any lien is filed against the premises because of any act or omission of the Lessee and shall not be discharged within thirty (30) days after the Lessee has received notice thereof; or

(6) The letting hereunder or the interest or estate of the Lessee under this Agreement shall be transferred directly by the Lessee or shall pass to or devolve upon, by operation of law or

otherwise, any other person, firm or corporation; or

(7) A petition under any part of the federal bankruptcy laws or an action under any present or future insolvency law or statute shall be filed against the Lessee and shall not be dismissed within thirty (30) days after the filing thereof; or

(8) The Lessee shall, without the prior written approval of the Port Authority, become a possessor or merged corporation in a merger, a constituent corporation in a consolidation, or a corporation in dissolution; or

(9) The Lessee shall fail duly and punctually to pay the rentals, fees or charges or to make any other payment required hereunder when due to the Port Authority; or

(10) The Lessee shall fail to keep, perform and observe each and every other promise, covenant and agreement set forth in this Agreement on its part to be kept, performed, or observed, within twenty (20) days after receipt of notice of default thereunder from the Port Authority (except where fulfillment of its obligation requires activity over a period of time, and the Lessee shall have commenced to perform whatever may be required for fulfillment within twenty (20) days after receipt of notice and continues such performance without interruption except for causes beyond its control);

then upon the occurrence of any such event or at any time thereafter during the continuance thereof, the Port Authority may upon five (5) days' notice terminate the rights of the Lessee hereunder and the letting, such termination to be effective upon the date specified in such notice. Such right of termination and the exercise thereof shall be and operate as a conditional limitation.

(b) If any of the events enumerated in paragraph (a) of this Section shall occur prior to the letting, the Lessee shall not be entitled to enter into possession of the premises and the Port Authority upon the occurrence of any such event or at any time thereafter during the continuance thereof by twenty-four (24) hours' notice may cancel the interest of the Lessee hereunder, such cancellation to be effective upon the date specified in such notice.

(c) No failure by the Port Authority to insist on strict performance of any agreement, term, covenant or condition of this Agreement or to exercise any right or remedy consequent upon a breach or default thereof, and no extension, supplement or amendment of this Agreement during or after a breach or default thereof, unless stated to be a waiver, and no acceptance by the Port Authority of rentals, fees, charges or other payments in whole or in part after or during the continuance of any such breach or default, shall constitute a waiver of any such breach or default of such agreement, term, covenant or condition. No agreement, term, covenant or condition of this Agreement to be performed or complied with by the Lessee, and no breach or default thereof, shall be waived, altered or modified except by a written instrument executed by the Port Authority.

(d) No waiver by the Port Authority of any default or breach on the part of the Lessee in performance of any agreement, term, covenant or condition hereof shall affect or alter this Agreement but each and every agreement, term, covenant and condition hereof shall continue in full force and effect with respect to any other then existing or subsequent breach or default thereof.

(e) The rights of termination described above shall be in addition to any other rights of termination provided in this Agreement and in addition to any rights and remedies that the Port Authority would have at law or in equity consequent upon any breach of this Agreement by the Lessee, and the exercise by the Port Authority of any right of termination shall be without prejudice to any other such rights and remedies.

Section 25. Right of Re-entry

The Port Authority shall, as an additional remedy upon the giving of a notice of termination as provided in Section 24 hereof, have the right to re-enter the premises and every part thereof upon the effective date of termination without further notice of any kind, and may regain and resume possession either with or without the institution of summary or any other legal proceedings or otherwise. Such re-entry, or regaining or resumption of possession, however, shall not in any manner affect, alter or diminish any of the obligations of the Lessee under this Agreement, and shall in no event constitute an acceptance of surrender.

Section 26. Waiver of Redemption

The Lessee hereby waives any and all rights to recover or regain possession of the premises and all rights of redemption, granted by or under any present or future law in the event it is evicted or dispossessed for any cause, or in the event the Port Authority obtains possession of the premises in any lawful manner.

Section 27. Survival of the Obligations of the Lessee

(a) In the event that the letting shall have been terminated in accordance with a notice of termination as provided in Section 24 hereof, or the interest of the Lessee cancelled pursuant thereto, or in the event that the Port Authority has re-entered, regained or resumed possession of the premises in accordance with the provisions of Section 25 hereof, all the obligations of the Lessee under this Agreement shall survive such termination or cancellation, or re-entry, regaining or resumption of possession and shall remain in full force and effect for the full term of the letting under this Agreement, and the amount or amounts of damages or deficiency therefor shall become due and payable to the Port Authority to the same extent, at the same time or times and in the same manner as if no termination, cancellation, reentry, regaining or resumption of possession had taken place. The Port Authority may maintain separate actions each month to recover the damage or deficiency then due or at its option and at any time may sue to recover the full deficiency less the proper discount,

for the entire unexpired term.

(b) The amount of damages for the period of time subsequent to termination or cancellation (or re-entry, regaining or resumption of possession) on account of the Lessee's rental obligations, shall be the sum of the following:

(1) The amount of the total of all Ground Rentals less the installments thereof payable prior to the effective date of termination except that the credit to be allowed for the installment payable on the first day of the month in which the termination is effective shall be prorated for the part of the month the letting remains in effect on the basis of the actual number of days in said month, and

(2) On account of the Lessee's obligation to pay the Subletting Percentage Fees, an amount equal to \_\_\_\_\_ of Gross Sublease Rentals of the Lessee, which Gross Sublease Rentals would have been received by the Lessee during the balance of the term if there had been no termination or cancellation (or re-entry, regaining, or resumption or possession); and for the purpose of calculation hereunder (i) the said amount of Gross Sublease Rentals shall be derived by

(Ex. 2.a.)

(3) It is understood and agreed that the statement of damages under the preceding subparagraph (2) shall not affect or be construed to affect the Port Authority's right to damages in the event of termination or cancellation (or reentry, regaining or resumption of possession) where the Lessee has not received any actual Gross Sublease Rentals under this Agreement.

(4) An amount equal to all expenses reasonably incurred by the Port Authority in connection with regaining possession and restoring and reletting the demised premises, for legal expenses (including but not limited to the cost to the Port Authority of in-house legal services) putting the premises in order including, without limitation, cleaning, decorating and restoring (on failure of the Lessee to restore), maintenance and brokerage fees and commissions.

(c) In addition to and without limiting the foregoing or any other right, claim or remedy of the Port Authority, in the event this Lease shall be terminated pursuant to Section 24 hereof and the Lessee shall not have completed the Lessee Construction Work or any portion thereof within the time period specified in Section 2 (c)(2) hereof, the Lessee shall and hereby agrees to pay to the Port Authority any and all amounts, costs or expenses, of any type whatsoever, paid or incurred by the Port Authority by reason of the failure of the Lessee so to complete the construction work, or any portion thereof, including all interest costs, damages, losses, and penalties, and all of the same shall be deemed treated as survived damages hereunder in addition to the foregoing.

(d) Notwithstanding anything to the contrary herein contained, all of the obligations of the Lessee under this Lease with respect to Environmental Damages and Environmental Requirements shall survive the expiration or termination of this Agreement.

Section 28. Reletting by the Port Authority

The Port Authority upon termination or cancellation pursuant to Section 24 hereof, or upon any re-entry, regaining or resumption of possession pursuant to Section 25 hereof, may occupy the premises or may relet the premises, and shall have the right to permit any person, firm or corporation to enter upon the premises and use the same. Such reletting may be of part only of the premises or a part thereof together with other space, and for a period of time the same as or different from the balance of the term hereunder remaining, and on terms and conditions the same as or different from those set forth in this Agreement. The Port Authority shall also, upon termination or cancellation pursuant to the said Section 24, or upon its re-entry, regaining or resumption of possession pursuant to the said Section 25, have the right to repair or to make structural or other changes in the premises, including changes which alter the character of the premises and the suitability thereof for the purpose of the Lessee under this Agreement, without affecting, altering or diminishing the obligations of the Lessee hereunder. In the event either of any reletting or of any actual use and occupancy by the Port Authority (the mere right of the Port Authority to use and occupy not being sufficient however) there shall be credited to the account of the Lessee against its survived obligations under Section 27 any net amount remaining after deducting from the amount actually received from any lessee, licensee, permittee or other occupier in connection with the use of the said premises or portion thereof during the balance of the letting as the same is originally stated in this Agreement, or from the market value of the occupancy of such portion of the premises as the Port Authority may during such period actually use and occupy, all expenses, costs and disbursements incurred or paid by the Port Authority in connection therewith. No such reletting shall be or be construed to be an acceptance of surrender.

Section 29. Remedies to be Non-Exclusive

All remedies provided in this Agreement shall be deemed cumulative and additional and not in lieu of or exclusive of each other or of any other remedy available to the Port Authority or to the Lessee at law or in equity, and the exercise of any remedy, or the existence herein of other remedies or indemnities shall not prevent the exercise of any other remedy.

Section 30. Surrender

The Lessee covenants and agrees to yield and deliver peaceably to the Port Authority possession of the premises on the date of cessation of the letting, whether such cessation be by termination, expiration or otherwise, promptly and in good condition, except for reasonable wear and tear which does not cause or tend to cause deterioration of the premises or adversely affect the efficient or proper utilization thereof, and all of the premises shall be free and clear of all liens,

encumbrances, security interests of any type whatsoever and of any sublessees or any other persons occupying or having any right to occupy the premises in whole or in part.

Section 31. Acceptance of Surrender of Lease

No agreement of surrender or to accept a surrender shall be valid unless and until the same shall have been reduced to writing and signed by the duly authorized representatives of the Port Authority and of the Lessee. Except as expressly provided in this Section, neither the doing of, nor any omission to do, any act or thing, by any of the officers, agents or employees of the Port Authority, shall be deemed an acceptance of a surrender of the letting or of this Agreement.

Section 32. Effect of Basic Lease

(a) Notwithstanding any other term, provision, covenant or condition of this Agreement, this Agreement and the letting hereunder shall, in any event, terminate with the termination or expiration of the Basic Lease with the City of New York which covers the premises, such termination to be effective on such date and to have the same effect as if the term of the letting had on that date expired. The rights of the Port Authority in the premises are those granted to it by the Basic Lease, and no greater rights are granted or intended to be granted to the Lessee than the Port Authority has power thereunder to grant.

(b) The Port Authority covenants that, during the term of this Agreement, the Port Authority will not take any action which would amount to or have the effect of cancelling, surrendering or terminating the Basic Lease prior to the date specified in the Basic Lease for its expiration insofar as such surrender, cancellation or termination would in any manner deprive the Lessee of any of its rights, licenses or privileges under this Agreement.

(c) Nothing herein contained shall prevent the Port Authority from entering into an agreement with The City of New York pursuant to which the Basic Lease is surrendered, cancelled or terminated provided that The City of New York, at the time of such agreement, assumes the obligations of the Port Authority under this Agreement.

(d) Nothing contained in this Agreement shall be deemed a waiver by the Lessee of any of its rights, licenses or privileges under this Agreement in the event that the Basic Lease should be surrendered, cancelled or terminated prior to the date specified in the Basic Lease for its expiration.

Section 33. Removal of Property

All personal property (including trade fixtures) removable without material damage to the premises, which are installed by the Lessee in or on the premises leased to the Lessee pursuant to this Agreement, shall be deemed to be and remain the property of the Lessee. All such property, provided

the Lessee shall install suitable replacements therefor if such personal property is necessary to perform any of the Lessee's obligations hereunder, may at the Lessee's option be removed by the Lessee from the premises at any time during the term of this Lease and shall, unless otherwise agreed in writing by the parties, be removed by the Lessee at or before the expiration or other termination of the term of this Lease. If the Lessee shall fail to remove its property on or before the termination or expiration of the letting, the Port Authority may remove such property to a public warehouse for deposit or retain the same in its own possession, and sell the same at public auction, the proceeds of which shall be applied first to the expenses of removal, storage and sale, second to any sums owed by the Lessee to the Port Authority, with any balance remaining to be paid to the Lessee; if the expenses of such removal, storage and sale shall exceed the proceeds of sale, the Lessee shall pay such excess to the Port Authority upon demand.

Section 34. Brokerage

The Lessee represents and warrants that no broker has been concerned on its behalf in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. The Lessee shall indemnify and save harmless the Port Authority of and from any claim for commission or brokerage made by any and all persons, firms or corporations whatsoever for services rendered to the Lessee in connection with the negotiation or execution of this Agreement.

Section 35. Limitation of Rights and Privileges Granted

(a) No greater rights or privileges with respect to the use of the premises or any part thereof are granted or intended to be granted to the Lessee by this Agreement, or by any provision thereof, than the rights and privileges expressly and specifically granted hereby.

(b) The premises are let to the Lessee and the Lessee takes the same subject to all the following: (i) easements, restrictions, reservations, covenants and agreements, if any, to which the premises may be subject, and rights of the public in and to any public street, (ii) rights, if any, of any enterprise, public or private which is engaged in furnishing heating, light, power, telegraph, telephone, steam, or transportation services and of the City New York and State of New York; (iii) permits, licenses, regulations and restrictions, if any, of the United States, the City of New York or State of New York or other governmental authority.

Section 36. Notices

Except where expressly required or permitted herein to be oral, all notices, directions, requests, consents and approvals required to be given to or by either party shall be in writing, and all such notices shall be personally delivered to the duly designated officer or representative of such party or delivered to the office of such officer or representative during regular business hours, or

forwarded to him or to the party at such address by certified or registered mail. The Lessee shall from time to time designate in writing an office within the Port of New York District and an officer or representative whose regular place of business is at such office upon whom notices may be served. Until further notice, the Port Authority hereby designates its Executive Director, and the Lessee designates its representative named on the first page hereof as their respective representatives upon whom notices may be served, and the Port Authority designates its office at One World Trade Center, New York City, New York 10048, and the Lessee designates its office at the address set forth on the first page hereof as their respective offices where notices may be served. If mailed, the notices herein required to be served shall be deemed effective and served as of the date of the certified or registered mailing thereof.

Section 37. Other Construction by the Lessee

(a) The Lessee shall not erect any structures, make any improvements or do any other construction work on the premises or alter, modify, or make additions or improvements or repairs to or replacements of any structure now existing or built at any time during the letting, or install any fixture (other than trade fixtures, removable without material damage to the premises, any such damage to be immediately repaired by the Lessee) without the prior written approval of the Port Authority and in the event any construction, improvement, alteration, modification, repair, replacement or addition, is made without such approval, then upon reasonable notice so to do, the Lessee will remove the same, or at the option of the Port Authority cause the same to be changed to the satisfaction of the Port Authority. In case of any failure on the part of the Lessee to comply with such notice, the Port Authority may effect the removal or change and the Lessee shall pay the cost thereof to the Port Authority.

(b) Without limiting the generality of the foregoing paragraph (a) hereof the Lessee acknowledges and agrees that any Notes and associated reference lines set forth on Exhibit A to this Agreement shall not constitute or be deemed to constitute or imply that approval of the Port Authority will be granted to any proposed construction by the Lessee nor shall the same grant or be deemed to grant any right or permission to the Lessee now or in the future to erect any structures, make any improvements or do any other construction in the premises, including but not limited to repairs to or replacements of, any structure now existing or built at any time during the letting or install any fixtures on the premises, including but not limited to paving, and that the provisions of the foregoing paragraph of this Section shall be read and construed as if there were no Notes and associated reference lines on said Exhibit and that any which were placed on such Exhibit are solely and exclusively for the benefit of the Port Authority.

Section 38. Place of Payments

All payments required of the Lessee by this Agreement shall be made to The Port Authority of New York and New Jersey, P.O. Box 17309, Newark, New Jersey 07194, or to such other address

as may be substituted therefor by notice to the Lessee from time to time.

Section 39.        Construction and Application of Terms

(a) The Section and paragraph headings, if any in this Agreement, are inserted only as a matter of convenience and for reference and in no way define, limit or describe the scope or intent of any provision hereof.

(b) Unless otherwise expressly specified, the terms, provisions and obligations contained in the Exhibit(s) and Schedules attached hereto, whether there set out in full or as amendments of, or supplements to provisions elsewhere in the Agreement stated, shall have the same force and effect as if herein set forth in full.

(c) If any clause, provision or section of this Agreement shall be ruled invalid by any court of competent jurisdiction, the invalidity of such clause, provision or section or sections shall not affect any of the remaining clauses, provisions or sections hereof.

(d) The Lessee agrees that any rule of construction to the effect that any ambiguities in this Agreement are to be resolved against the drafting party shall not be applicable to the interpretation or construction of this Agreement or any amendments, addendums, supplements, Exhibits or Schedules hereto.

Section 40.        Non-liability of Individuals

Neither the Commissioners of the Port Authority nor any director, officer, agent or employee thereof shall be charged personally or held contractually liable by or to the Lessee under any term or provision of this Agreement or of any supplement, modification or amendment to this Agreement or because of any breach or alleged breach thereof, or because of its or their execution or attempted execution.

Section 41.        Quiet Enjoyment

The Port Authority covenants and agrees that as long as it remains the lessee of the Airport the Lessee, upon paying all rentals and fees hereunder and performing all the covenants, conditions and provisions of this Agreement on its part to be performed, shall and may peacefully and quietly have and enjoy the premises free of any act or acts of the Port Authority except as expressly agreed upon in this Agreement.

Section 42.        Force Majeure

Neither the Port Authority nor the Lessee shall be deemed to be in violation of this

Agreement if it is prevented from performing any of its obligations hereunder by reason of strikes, boycotts, labor disputes, embargoes, shortages of material, acts of God, acts of the public enemy, acts of superior governmental authority, weather conditions, tides, riots, rebellion, sabotage or any other circumstances for which it is not responsible and which are not within its control; provided, however, that this provision shall not apply to failures by the Lessee to pay the rentals specified in Section 4 and shall not apply to any other charges or money payments; and, provided, further, that this provision shall not prevent either party from exercising any right of termination it may have under this Agreement.

Section 43.        Ingress and Egress

(a) The Lessee, its officers, employees, business invitees, contractors, suppliers of material and furnishers of service shall have the right of ingress and egress between the premises and a city street or public way outside the Airport by means of existing roadways used in common with others having rights of passage within the Airport, provided, however, that the Port Authority may from time to time substitute other reasonably equivalent means of ingress and egress.

(b) The use of all roadways shall be subject to the Rules and Regulations of the Port Authority which are now in effect or which may hereafter be promulgated for the safe and efficient operation of the Airport. In addition to the rights of closure granted above, the Port Authority may, at any time, temporarily or permanently close, or consent to or request the closing of, any such roadway, and any other area at the Airport presently or hereafter used as such, so long as a means of ingress and egress reasonably equivalent to that provided in paragraphs (a) above is concurrently made available to the Lessee. The Lessee hereby releases and discharges the Port Authority, its successors and assigns, of and from any and all claims, demands or causes of action which the Lessee may now or at any time hereafter have against any of the foregoing, arising or alleged to arise out of the closing of any street, roadway, or other area used as such whether within or outside the Airport, provided, that the Port Authority makes available to the Lessee a means of ingress and egress reasonably equivalent to that provided in paragraphs (a) above. The Lessee shall not do or permit to be anything to be done which will interfere with the free access and passage of others to space adjacent to the premises or in any streets, ways and walks near the premises.

Section 44.        Non-Discrimination

(a) Without limiting the generality of any of the provisions of the Agreement, the Lessee, for itself, its successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with the land that (1) no person on the grounds of race, creed, color, sex or national origin shall be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of the premises, and the exercise of any privilege under this Agreement, (2) that in the construction of any improvements on, over, or under the premises and furnishing of services thereon by it, no person on the ground of race, creed, color, sex

or national origin shall be excluded from participation in, denied the benefits of, or otherwise be subject to discrimination, (3) that the Lessee shall use the premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation-Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended, and any other present or future laws, rules, regulations, orders or directions of the United States of America with respect thereto which from time to time may be applicable to the Lessee's operations at the Airport, whether by reason of agreement between the Port Authority and the United States Government or otherwise.

(b) The Lessee shall include the provisions of paragraph (a) of this Section in every sublease, agreement or concession it may make pursuant to which any person or persons, other than the Lessee, operates any facility at the Airport providing services to the public and shall also include therein a provision granting the Port Authority a right to take such action as the United States may direct to enforce such covenant.

(c) The Lessee's non-compliance with the provisions of this Section shall constitute a material breach of this Agreement. In the event of the breach by the Lessee of any of the above non-discrimination provisions the Port Authority may take appropriate action to enforce compliance; or in the event such noncompliance shall continue for a period of twenty (20) days after receipt of written notice from the Port Authority, the Port Authority shall have the right to terminate the Agreement and the letting hereunder with the same force and effect as a termination under the Section of this Agreement providing for termination for default by the Lessee in the performance or observance of any other term or provision of this Agreement, or may pursue such other remedies as may be provided by law; and as to any or all of the foregoing, the Port Authority may take such action as the United States may direct.

(d) The Lessee shall indemnify and hold harmless the Port Authority from any claims and demands of third persons including the United States of America resulting from the Lessee's noncompliance with any of the provisions of this Section and the Lessee shall reimburse the Port Authority for any loss or expense incurred by reason of such noncompliance.

(e) Nothing contained in this Section shall grant or shall be deemed to grant to the Lessee the right to transfer or assign this Agreement, to make any agreement or concession of the type mentioned in paragraph (b) hereof, or any right to perform any construction on the premises.

Section 45. Affirmative Action

In addition to and without limiting any other term or provision of this Agreement, the Lessee assures that it will undertake an affirmative action program as required by 14 CFR Part 152, Subpart E, to insure that no person shall on the grounds of race, creed, color, national origin, or sex be

excluded from participating in any employment activities covered in 14 CFR Part 152, Subpart E. The Lessee assures that no person shall be excluded on these grounds from participating in or receiving the services or benefits of any program or activity covered by this subpart. The Lessee assures that it will require that its covered suborganizations provide assurances to the Lessee that they similarly will undertake affirmative action programs and that they will require assurances from their suborganizations, as required by 14 CFR Part 152, Subpart E, to the same effect.

Section 46. The Lessee's Additional Ongoing Affirmative Action Equal Opportunity Commitment

(a) In addition to and without limiting any other term or provision of this Agreement, in connection with its use and occupancy of the premises and any and all of its activities and operations at or affecting the premises or the Airport, the Lessee shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons and women are afforded equal employment opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selections for training or retraining, including apprenticeship and on-the-job training.

(b) In addition to and without limiting the foregoing, and without limiting the provisions of Sections 2(c), 44 and 45 and Schedule E of this Agreement, it is hereby agreed that the Lessee in connection with its continuing operation, maintenance and repair of the premises, or any portion thereof, as provided in this Agreement, and in connection with every award or agreement for concessions or consumer services at the Airport, shall throughout the term of the letting hereunder commit itself to and use good faith efforts to implement an extensive program of affirmative action, including specific affirmative action steps to be taken by the Lessee, to ensure maximum opportunities for employment and contracting by minorities and women, and by Minority Business Enterprises and Women-owned Business Enterprises. In meeting the said commitment the Lessee agrees to submit to the Port Authority for its review and approval the Lessee's said extensive affirmative action program, including the specific affirmative action steps to be taken by the Lessee to meet its aforesaid commitment, within sixty (60) days after the execution of this Agreement. The Lessee shall incorporate in its said program such revisions and changes which the Port Authority initially or from time to time may reasonably require. The Lessee throughout the term of the letting hereunder shall document its efforts in implementing the said program, shall keep the Port Authority fully advised of the Lessee's progress in implementing the said program and shall supply to the Port Authority such information, data and documentation with respect thereto as the Port Authority may from time to time and at any time request, including but not limited to annual reports.

(c) (1) "Minority" as used herein includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (all persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American culture or origin, regardless of race);

(iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(2) "Minority Business Enterprise" (MBE) as used herein shall mean any business enterprise which is at least fifty-one percentum owned by, or in the case of a publicly owned business, at least fifty-one percentum of the stock of which is owned by citizens or permanent resident aliens who are minorities and such ownership is real, substantial and continuing.

(3) "Women-owned Business Enterprise" (WBE) as used herein shall mean any business enterprise which is at least fifty-one percentum owned by, or in the case of a publicly owned business, at least fifty-one percentum of the stock of which is owned by women and such ownership is real, substantial and continuing.

(4) Good faith efforts to include meaningful participation by MBEs and WBEs shall include at least the following:

(i) Dividing the work to be subcontracted into smaller portions where feasible.

(ii) Actively and affirmatively soliciting bids for subcontracts from MBEs and WBEs, including circulation of solicitations to minority and female contractor associations. The Lessee shall maintain records detailing the efforts made to provide for meaningful MBE and WBE participation as called for in paragraph (b) above, including the names and addresses of all MBEs and WBEs contacted and, if any such MBE or WBE is not selected as a joint venturer or subcontractor, the reason for such decision.

(iii) Making plans and specifications for prospective work available to MBEs and WBEs in sufficient time for review.

(iv) Utilizing the list of eligible MBEs and WBEs maintained by the Port Authority or seeking minorities and women from other sources for the purpose of soliciting bids for subcontractors.

(v) Encouraging the formation of joint ventures, partnerships or other similar arrangements among subcontractors, where appropriate, to insure that the Lessee will meet its obligations hereunder.

(vi) Insuring that provision is made to provide progress payments to MBEs and WBEs on a timely basis.

(vii) Submitting quarterly reports to the Port Authority (Office of Business and Job Opportunity) detailing its compliance with the provisions hereof.

(d) The Lessee's non-compliance with the provisions of this Section shall constitute a material breach of this Agreement. In the event of the breach by the Lessee of any of the above provisions the Port Authority may take any appropriate action to enforce compliance; or in the event such non-compliance shall continue for a period of twenty (20) days after receipt of written notice from the Port Authority, the Port Authority shall have the right to terminate this Agreement and the letting hereunder with the same force and effect as a termination under the Section of this Agreement providing for termination for default by the Lessee in the performance or observance of any other term or provision of this Agreement or may pursue such other remedies as may be provided by law.

(e) In the implementation of this Section, the Port Authority may consider compliance by the Lessee with the provisions of any federal, state or local law concerning affirmative action-equal employment opportunity which are at least equal to the requirements of this Section, as effectuating the provisions of this Section. If the Port Authority determines that by virtue of such compliance with the provisions of any such federal, state or local law that the provisions hereof duplicate or conflict with such law the Port Authority may waive the applicability of the provisions of this Section to the extent that such duplication or conflict exists.

(f) Nothing herein provided shall be construed as a limitation upon the application of any laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents.

(g) Nothing in this Section shall grant or be deemed to grant to the Lessee the right to make any agreement or award for concessions or consumer services at the Airport.

Section 47. Services to the Lessee

(a) Except as provided in this Section 47, the Port Authority shall not be obligated to perform or furnish any services or utilities whatsoever in connection with this Lease or the use and occupancy of the premises hereunder.

(b) The Port Authority shall sell, furnish and supply to the Lessee in reasonable quantities

and to the extent of the capability of existing facilities for use on the premises and the Lessee agrees to take from the Port Authority and pay for electricity of the same voltage, phase and cycle as supplied to the premises by the public utility in the vicinity, but limited, however, to serve a maximum of 1500 KVA installed transformer capacity, at the same charge which would be made by such public utility for the same quantity used under the same conditions and in the same service classification but in no event less than an amount that would reimburse the Port Authority for its cost of obtaining and supplying electricity hereunder; charges shall be payable by the Lessee when billed and the quantity of electricity consumed shall be measured by the meter or meters installed for the purpose; provided, however, that if for any reason, any meter or meters fail to record the consumption of electricity, the consumption during the period such meter or meters are out of service will be considered to be the same as the consumption for a like period either immediately before or after the interruption as elected by the Port Authority. The Port Authority shall not discontinue the supply of electricity except upon fifteen (15) days' notice to the Lessee and unless a supply of electricity of the same voltage, phase and cycle (subject to the KVA limitation as aforesaid) shall be available from another supplier and upon any such discontinuance the Lessee shall be at liberty to contract or otherwise arrange for the supply of such current after the expiration of said fifteen (15) days from any other person, firm or corporation.

(c) The Port Authority agrees to sell, furnish and supply to the Lessee for use on the premises cold water (of the character furnished by the City of New York) in reasonable quantities through pipes, mains and fittings and the Lessee agrees to take such water from the Port Authority and to pay the Port Authority therefor an amount equal to that which would be charged by the municipality or other supplier of the same (whether or not representing a charge for water or other services measured by water consumption) for the same quantity, used under the same conditions and in the same service classification plus the cost to the Port Authority of supplying such water which shall not be less than (Ex. 2.a.) nor in excess of: (Ex. 2.a.) of the amount charged but in no event less than an amount which would reimburse the Port Authority for its costs of obtaining and supplying cold water to the Lessee hereunder. The charge therefor shall be payable by the Lessee when billed and the quantity of water consumed shall be measured by the meter or meters installed for the purpose; provided, however, that if for any reason, any meters or meters fail to record the consumption of water, the consumption during the period such meter or meters are out of service will be considered to be the same as the consumption for a like period immediately before of after the interruption, as elected by the Port Authority. The Port Authority shall install the appropriate meters. In the event meters are not installed to measure the consumption of water under high pressure, the quantity of such water used by the Lessee will be based upon equitable estimates of consumption, which estimates shall be deemed binding on the Lessee.

(d) The Lessee shall pay to the Port Authority such of the existing and future charges for sewage services furnished by the City of New York as are presently or may hereafter be imposed or assessed against the Port Authority in respect of the Lessee's premises or its use and occupancy thereof. In the event that the City or the State of New York is now furnishing services with or

without charge therefor, which are beneficial to the Lessee in its use of the premises, and shall hereafter impose charges or increase existing charges for such services, the Lessee agrees to pay to the Port Authority such of the charges or the increase in charges as may be imposed or assessed against the Port Authority in respect of the Lessee's premises or its use and occupancy thereof.

(e) In the event the Port Authority shall provide extermination service for the premises, the Lessee agrees to utilize the same and to pay its share of the reasonable cost thereof, upon demand. This paragraph does not impose any obligation on the Port Authority to furnish such service.

(f) The Port Authority shall be under no obligation to supply services if and to the extent and during any period that the supplying of any such service or the use of any component necessary therefor shall be prohibited or rationed by any federal, state or municipal law, rule, regulation, requirement, order or direction and if the Port Authority deems it in the public interest to comply therewith, even though such law, rule, regulation, requirement, order or direction may not be mandatory on the Port Authority as a public agency. The Port Authority shall not be obligated to perform or furnish any service whatsoever in connection with the premises at any time while the Lessee shall be in default hereunder or has breached any of the provisions hereof after the period, if any, herein granted to cure such default shall have expired.

(g) No failure, delay or interruption in supplying agreed services (whether or not a separate charge is made therefor) shall be or be construed to be an eviction of the Lessee or grounds for any diminution or abatement of rental, or (unless resulting from the negligence or willful failure of the Port Authority) shall be grounds for any claims by the Lessee for damages, consequential or otherwise.

Section 48. Condition of Premises

(a) The Lessee hereby acknowledges that it has not relied upon any representation or statement of the Port Authority or its Commissioners, officers, employees or agents as to the condition of the premises. The Lessee, prior to the execution of this Agreement, has thoroughly examined the premises and determined them to be suitable for the Lessee's operation hereunder and the Lessee hereby agrees to take the premises in the condition they are in as of the commencement of the term of the letting hereunder and to assume all responsibility for any and all risks, costs and expenses of any kind whatsoever caused by, arising out of or in connection with, the condition of the premises whether any aspect of such condition existed prior to, on or after the effective date of the letting of the premises hereunder, including without limitation all Environmental Requirements and Environmental Damages, and to indemnify and hold harmless the Port Authority for all such risks, requirements, costs and expenses. Without limiting any obligation of the Lessee to commence operations hereunder at the time and in the manner stated elsewhere in this Agreement, the Lessee agrees that no portion of the premises will be used initially or at any time during the letting which is in a condition unsafe or improper for the conduct of the Lessee's operations hereunder so that there

is possibility of injury or damage to life or property. It is hereby understood and agreed that whenever reference is made in this Lease to the condition of the premises as of the commencement of the term thereof, the same shall be deemed to mean the condition of the premises as of the date the Lessee first occupied the premises, and as to the improvements made and the alteration work performed during the term of the Agreement in the condition existing after the completion of the same.

(b) All the obligations of the Lessee under this Section with respect to responsibilities, risks, costs and expenses assumed by the Lessee shall survive the expiration or termination of this Agreement.

Section 49. Utility Lines

The Port Authority, shall, if and to the extent required, bring appropriate roadway access stubs and service lines for the supply of cold water, electric power, telephone (limited to four telephone conduits) and sanitary and storm sewers (said service lines and sanitary and storm sewers being hereinafter collectively referred to as "utility service lines") to such locations, at the perimeter of the site or to other locations off the site as the Port Authority shall determine. The Lessee at its sole cost and expense is hereby obligated to tie its utility lines and roadways into such locations at or near the perimeter of the site where such utility service lines and roadway access stubs will be brought by the Port Authority hereunder. The Port Authority shall have no obligation to make available any utility service lines or roadway access stubs to any location with respect to the premises prior to receiving the certificate of the Lessee and of the Lessee's architect or engineer that all of the construction work has been completed or that a portion of the construction work is properly usable, all as provided in paragraph (h) of Section 2 hereof, and that the Lessee is ready to tie its utility lines and roadways into the utility service lines and roadway access stubs to be furnished by the Port Authority to the premises.

Section 50. Relationship of the Parties

This Agreement does not constitute the Lessee as the agent or representative of the Port Authority for any purpose whatsoever. Neither a partnership nor any joint adventure is hereby created, notwithstanding the fact that certain payments to the Port Authority pursuant to Section 4 hereof are to be determined on the basis of a percentage of Lessee's gross receipts and notwithstanding the fact certain other payments to the Port Authority pursuant to Section 4 hereof may be determined on the basis of a percentage of gross sublease rentals to the Lessee.

Section 51. Lessee's Rights Non-Exclusive

The rights and privileges granted to the Lessee are non-exclusive and neither the execution of this Lease by the Port Authority nor anything contained herein shall grant or be deemed to grant

to the Lessee any exclusive rights or privileges including but not limited to the right to design, construct, lease and operate air cargo facilities on the Airport.

Section 52. Definitions

The following terms, when used in this Agreement, shall, unless the context shall require otherwise, have the respective meanings given below.

(a) "Airport" shall mean the land and the premises in the City of New York, in the County of Queens and State of New York, which are shown in green upon the Exhibit attached to the Basic Lease between The City of New York and Port Authority referred to in subdivision (b) below, said Exhibit being marked "Map II", and lands contiguous thereto which may have been heretofore or may be hereafter be acquired by the Port Authority to use for air terminal purposes.

(b) "Basic Lease" shall mean the agreement between The City of New York and the Port Authority dated April 17, 1947, as the same from time to time may have been or may be supplemented or amended. Said agreement dated April 17, 1947, has been recorded in the Office of the Register of The City of New York, County of Queens, on May 22, 1947, in Liber 5402 of Conveyances, at pages 319, et seq.

(c) "Agreement" shall mean this agreement of lease.

(d) "Lease" shall mean this agreement of lease.

(e) "Letting" shall mean the letting under this Agreement for the original term stated herein, and shall include any extension thereof.

(f) "Premises" as defined in Section 1 hereof shall, without limiting the generality of said Section, include the land, buildings, structures and other improvements located or to be located or to be constructed therein or thereon, the equipment permanently affixed or permanently located therein, such as electrical, plumbing, sprinkler, fire protection and fire alarm, heating, steam, sewage, drainage, refrigeration, communications, gas and other systems, and their pipes, wires, mains, lines, tubes, conduits, equipment and fixtures, and all paving, drains, culverts, ditches and catch-basins.

(g) "General Manager of the Airport" shall mean the person or persons from time to time designated by the Port Authority to exercise the powers and functions vested in the said General Manager by this Agreement; but until further notice from the Port Authority to the Lessee it shall mean the General Manager (or the temporary or acting General Manager) of the Airport for the time being, or his duly designated representative or representatives.

(h) "Governmental Authority", "governmental board", "governmental agency" shall mean

federal, state, municipal and other governmental authorities, boards and agencies of any state, nation or government, except that with respect to the Lessee's environmental responsibilities hereunder the term Governmental Authority or Governmental Authorities shall mean all governmental agencies, authorities, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof. None of the foregoing terms shall be construed to include The Port Authority of New York and New Jersey, the lessor under this Lease.

(i) "Person" shall mean not only a natural person, corporation or other legal entity, but also two or more natural persons, corporations or other legal entities acting jointly as a firm, partnership, unincorporated association, consortium, joint adventurers or otherwise.

(j) "Environmental Damages" shall mean any one or more of the following: (i) the presence on, about or under the premises of any Hazardous Substance whether such presence occurred prior to or during the term of the letting under this Agreement or resulted from any act or omission of the Lessee or others and/or (ii) the disposal, discharge, release or threatened release of any Hazardous Substance from the premises of any Hazardous Substance from under the premises, and/or (iii) the presence of any Hazardous Substance in, on, about or under other property at the Airport as a result of the use and occupancy of, or operations at, the premises by the Lessee or by others with the consent or permission of the Lessee or a migration of a Hazardous Substance from the premises or from under the premises, and/or (iv) any personal injury (including wrongful death) or property damage arising out of or related to any such Hazardous Substance, and/or (v) the violation of any Environmental Requirements pertaining to any such Hazardous Substance, the premises and/or the activities thereon.

(k) "Environmental Requirements" and "Environmental Requirement" shall mean all common law and all past, present and future laws, statutes, enactments, resolutions, regulations, rules, directives, ordinances, codes, licenses, permits, orders, memoranda of agreement/understanding, guidances, approvals, plans, authorizations, concessions, franchises, requirements and similar items, of all Governmental Authorities, all pollution prevention programs, "best management practices plans" and other programs adopted and agreements made by the Port Authority with Governmental Authorities, and all applicable judicial, administrative, voluntary and regulatory decrees, judgments, orders and agreements relating to the protection of human health or the environment, and in the event that there shall be more than one compliance standard, the standard for any of the foregoing to be that which requires the lowest level of a Hazardous Substance, the foregoing to include without limitation:

- (i) All requirements pertaining to registration, reporting, licensing, permitting, investigation, and remediation of emissions, discharges, spills, leaks, releases, or threatened releases of Hazardous Substances into the air, surface water, groundwater or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport, or handling of Hazardous Substances or the transfer of property on which Hazardous Substances exist;

- (ii) All requirements, pertaining to the protection from Hazardous Substances of the health and safety of employees or the public;

(1) "Hazardous Substance" and "Hazardous Substances" shall mean and include, without limitation, any pollutant, contaminant, toxic or hazardous waste, dangerous substance, potentially dangerous substance, noxious substance, toxic substance, flammable, explosive or radioactive material, urea formaldehyde foam insulation, asbestos, polychlorinated biphenyls (PCBs), chemicals known to cause cancer, endocrine disruption or reproductive toxicity, petroleum and petroleum products and other substances which have been or in the future shall be declared to be hazardous or toxic, or the removal, containment or restriction of which have been or in the future shall be required, or the manufacture, preparation, production, generation, use, maintenance, treatment, storage, transfer, handling or ownership of which have been or in the future shall be restricted, prohibited, regulated or penalized by any Environmental Requirement.

Section 53. Certain Environmental Testing and Clean-up Obligations

(a) For purposes of this Agreement, the following terms shall have the respective meanings provided below:

(1) "Analyzed Item" shall mean with respect to the ground water each of and "Analyzed Items" shall mean with respect to the ground water all of the constituents for which the ground water samples described in the Environmental Subsurface Baseline Investigation Summary Report, dated June 2000 ( attached hereto and hereby referred to as Exhibit M) were tested and "Analyzed Item" shall mean with respect to soil each of and "Analyzed Items" shall mean with respect to soil all of the constituents for which the soil samples described in Exhibit M were tested.

(2) "Existing Condition" shall mean the levels of Analyzed Items in the soil and ground water for all portions of the premises as derived by applying the methodology set forth in paragraph (g) below to the test results in Exhibit M as such test results may be superseded and supplemented.

(b) (1) Without limiting the generality of any of the other terms and provisions of this Agreement and subject to the terms and provisions of paragraph (b)(2) below, the Lessee hereby expressly agrees to assume all responsibility for and relieve the Port Authority from and reimburse the Port Authority for any and all risks, claims, penalties, costs and expenses of any kind whatsoever relating to, caused by, arising out of or in connection with the conditions of the premises whether any such conditions existed prior to, on or after the effective date of the letting of the premises to the Lessee hereunder, including without limitation, all Environmental Damages and all Environmental Requirements which the Lessee is obligated to comply with pursuant to this Agreement.

(2) It is expressly agreed and understood that except as set forth in paragraphs (h),

and (n) of this Section the Lessee shall not be responsible for the remediation or removal of the Existing Condition on the premises.

(c) In addition to and without limiting the generality of the obligations of the Lessee set forth above and elsewhere in this Agreement, the Lessee, shall, at its sole cost and expense and in accordance with and subject to the provisions of Section 37 of this Agreement, upon notice from the Port Authority, prompt take all actions to:

- (1) remove and remediate all Analyzed Items from the premises to the extent of any increase in the level of any Analyzed Item above the Existing Condition;
- (2) completely remove and remediate all Hazardous Substances in, on or under the premises and at the Facility resulting from or in connection with the Lessee's use and occupancy of the premises or which have been or permitted to be disposed of, released, discharged or otherwise placed in, on or under the Facility by the Lessee or which have been placed in, on or under the premises during the term of the letting of the premises under this Agreement or during the term of any previous agreement between the Lessee and the Port Authority covering the Lessee's use and/or occupancy of the premises or any portion thereof;
- (3) except with respect to remediation and removal of the Existing Condition in the premises which the Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, remove and remediate all Hazardous Substances in, on or under the premises or which have migrated from or from under the premises to any other property which any Governmental Authority or any Environmental Requirement or any violation thereof required to be remediated or removed; and
- (4) except with respect to remediation and removal of the Existing Condition in the premises which the Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, remove and remediate all Hazardous Substances in, on or under the premises or which have migrated from or from under the premises necessary to mitigate any Environmental Damages.

(d) Without limiting any other of the Lessee's obligations under this Agreement and except with respect to remediation and removal of the Existing Condition in the premises which the Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, the Lessee agrees, unless otherwise directed by the Port Authority, to provide the Manager of the Facility, at the cost and expense of the Lessee and at any time during or subsequent to the term of the letting of the premises under this Agreement, with such information, documentation, records, correspondence, notices, reports, test results, certifications and any other information as the Port Authority shall request in

connection with any Environmental Damages or any Environmental Requirement which the Lessee is obligated to comply with under this Agreement, and the Lessee shall promptly acknowledge, swear to, sign or otherwise fully execute the same when and as directed by the Port Authority. The Lessee agrees that any of the foregoing may be filed by the Port Authority with the appropriate Governmental Authority on behalf of the Lessee at the Lessee's cost and expense. Further, the Lessee agrees, unless otherwise directed by the Port Authority, to provide the Manager of the Facility with copies of all information, documentation, records, correspondence, notices, certifications, reports, test results and all other submissions provided by the Lessee to a Governmental Authority and by a Governmental Authority to the Lessee within two (2) business days that the same are made available to or received by the Lessee with respect to any Environmental Damages and any Environmental Requirement which the Lessee is obligated to comply with pursuant to this Agreement.

(e) Without limiting the generality of any other provision contained in this Agreement and except with respect to remediation and removal of Existing Condition in the premises which the Lessee is not responsible for pursuant to paragraph (b)(2) of this Section, the Lessee shall indemnify, hold harmless and reimburse the Port Authority, its Commissioners, officers, employees and representatives from and against all claims, demands, penalties, fines, liabilities (including strict liability), settlements, attorney and consultant fees, investigation and laboratory fees, removal and remediation costs, court costs and litigation expenses, damages, judgments, losses, costs and expenses of whatsoever kind or nature and whether known or unknown, contingent or otherwise, just or unjust, groundless, unforeseeable or otherwise, arising or alleged to arise out of or in any way related to any Environmental Damages or any Environmental Requirement which the Lessee is obligated to comply with pursuant to this Agreement, or the risks and responsibilities assumed hereunder by the Lessee for the condition of the premises or a breach or default of the Lessee's obligations under this Section caused by the negligent or wrongful act or omission of any employee of the Lessee while acting within the scope of his office or employment under circumstances where the Lessee, if a private person, would be liable in accordance with the law of the place where the act or omission occurred. The foregoing indemnity shall not extend to claims based upon acts or omissions of the Lessee's employees for which the Lessee would not be liable under the Federal Tort Claims Act of 1945 (28 U.S.C. 267 et. seq.) as now or hereafter amended. The Port Authority shall furnish the Lessee with reasonable notice of any claims made against the Port Authority.

(f) (1) Without limiting the generality of any provision of this Agreement, in the event that Environmental Requirements set forth more than one compliance standard, the Lessee agrees that the standard or standards to be applied in connection with any obligation it may have under this Agreement with respect to any Environmental Requirement shall be that which requires or permits the lowest level of a Hazardous Substance; provided, however, in the event such lowest level of a Hazardous Substance requires or allows the imposition of any restriction of any nature whatsoever upon the use or occupancy of the premises or any other portion of the Facility or upon any operations or activities conducted or to be conducted on the premises or the Facility or upon the transfer of the premises or the Facility, then the Lessee shall remediate to such level so that there is no such

restriction placed upon the use and occupancy of the premises or the Facility or upon any operations or activities conducted or to be conducted on the premises or the Facility.

(2) The Lessee further agrees that, notwithstanding the terms and conditions of subparagraph (f)(1) above, the Port Authority shall have the right at any time and from time to time, acting in its sole discretion and without any obligation whatsoever to the Lessee or otherwise to do so, to designate any level or levels or standard or standards of remediation permitted or required under any Environmental Requirement, and such designation shall be binding upon the Lessee with respect to Environmental Requirements.

(g) The methodology to be used for the purpose of this Section to determine for any Existing Condition the level of an Analyzed Item at any location in, on or under the premises shall be for both soil and ground water, straight line interpolation methodology and, notwithstanding any other evidence to the contrary, the Existing Condition as so determined shall set forth and constitute for all purposes as between the Lessee and the Port Authority the levels of the Analyzed Items in the soil and ground water in, on and under the premises.

(h) (1) It is expressly understood and agreed that the proper handling, delivery, treatment, storage, transportation, disposal and depositing (all of the foregoing being hereinafter collectively called "Disposal"), whether on or off the Facility, of any soil, dirt, sand, silt, dredged material, water or other matter (hereinafter collectively called the "Matter") excavated, disturbed or removed by the Lessee (or by any contractor or contractors of the Lessee) at, from or under the premises (or any other area of the Facility) at any time or times and regardless of the nature or composition of such Matter, including without limitation, any and all Disposal of said Matter in connection with the performance of the Lessee's Construction Work (as defined in Section 2 of this Agreement) and any and all remediation and Disposal of said Matter and any and all other remediation and Disposal (whether soil, upper aquifer or otherwise) necessary, required or appropriate as a result of, caused by, incidental to or triggered by such excavation, disturbance or removal of the Matter or arising therefrom, and the taking or doing of any and all other action or actions necessary, required or appropriate in connection therewith, shall be the sole and complete responsibility of the Lessee including, without limitation, all costs and expenses thereof and any and all Environmental Damages, Environmental Requirements, claims, penalties and other expenses relating thereto. The foregoing obligations of the Lessee shall obtain and apply with full force and effect irrespective of the nature or source of any contaminant, pollutant, chemical, waste or other substance or whether any of the same is Hazardous Substance or whether any of the same is at a level or levels above or below the level or levels of any of the Analyzed Items constituting the Existing Condition or whether there has or has not been any increase in such level or levels. The Lessee shall perform all of the foregoing in accordance with and subject to all the terms, provisions, covenants and conditions of this Agreement.

(2) Without limiting the generality of any other term or condition of this Lease, title to any Matter on the premises or the Facility excavated by the Lessee and not used at the

premises shall vest in the Lessee upon the excavation thereof and all such Material shall be delivered and deposited by the Lessee at the Lessee's sole cost and expense to a location off the Facility in accordance with the terms and conditions of this Lease and all Environmental Requirements. The entire proceeds, if any, of the sale or other disposition of the Material shall belong to the Lessee.

(3) In the event the Lessee discovers any Hazardous Substance in, on or under the premises, the Lessee in reporting such Hazardous Substance shall direct such report to the attention of such individual at the subject governmental authority as the Facility Manager shall require in order to assure consistency in the environmental management of the Facility.

(i) Without limiting the generality of the provisions Section 20 of this Agreement, the Port Authority and its designees shall have the right but not the obligation to enter upon the premises upon forty-eight (48) hours' notice to the Lessee to conduct testing and related activities from the existing wells made by the borings referred to in Exhibit M, to make additional wells and borings and to conduct testing and related activities therefrom and to perform such activities as shall be necessary to remediate the Existing Condition.

(j) If after any remediation performed on the premises, whether by the Lessee, the Port Authority or a third party, the Port Authority samples and tests the soil and upper aquifer of the premises or portions thereof and sets forth the results of such tests in a report (it being understood, however, that the Port Authority shall not have any obligation hereunder to perform such sampling and testing or to set forth the results thereof in a report), upon delivery of such report and test results to the Lessee, such report and test results shall supersede Exhibit M or the applicable portions thereof if the test results and report are of Analyzed Items which have been previously tested and the results thereof reported in Exhibit M and the existing and new test results are from samples taken from the same well or a new well or boring which is immediately adjacent to such well or boring and shall supplement Exhibit M or the applicable portions thereof if the test results and report would not supersede any test results and reports in Exhibit M as aforesaid.

(k) Without limiting the generality of the provisions of Section 13 of this Agreement, the Lessee agrees to protect and maintain the wells made by the borings referred to in Exhibit M and paragraph (j) of this Section and shall repair any damage thereto caused by the activities of the Port Authority or its designees, if any, pursuant to paragraphs (i) and (j) of this Section.

(l) Without limiting the generality of any other term or provision of this Agreement, all of the obligations of the Lessee under this Section shall survive the expiration or earlier termination of the letting of the premises or any portion thereof.

(m) The terms and conditions of this Section are intended to allocate obligations and responsibilities between the Lessee and the Port Authority, and nothing in this Section shall limit, modify or otherwise alter the rights and remedies which the Port Authority or the Lessee may have

against third parties at law, equity or otherwise.

(n) Notwithstanding any other term or condition of this Agreement, it is hereby understood and agreed that the Lessee's obligations under this Agreement, including without limitation paragraphs (b),(c),(d),(e),(f)and(h) of this Section shall not be or be deemed to be affected in any way whatsoever if the Existing Condition or any portion thereof, is or will be remediated or removed by the Lessee in whole or in part in the fulfillment of any of the Lessee's obligations under this Agreement, whether due to the fact the Lessee cannot remediate or remove one or more Hazardous Substances for which it is responsible to remediate or remove without remediating or removing one or more Analyzed Items for which it is not responsible for remediating or removing or due to the cost or expedience or for any other reason, and in no event shall the Port Authority have any responsibility for such remediation or removal including without limitation any obligation to share in the cost of such remediation or removal.

(o) Upon the cessation of the letting hereunder or any portion thereof, whether such cessation be by termination, expiration or otherwise, no level of any Analyzed Item shall exceed the level of such Analyzed Item as set forth in the Existing Condition (the amount of the increase, if any, of each and every Analyzed Item above the Existing Condition being hereinafter collectively called "Analyzed Item Increases"). The Lessee covenants and agrees on or before the cessation of the letting or any portion thereof and subject to the provisions of Section 37 hereof, to remove and/or remediate all Analyzed Item Increases down to the Existing Condition.

#### Section 54. Books and Records

(a) In addition to and without limiting the provisions of Section 52 (j) hereof or any term or provision of this Agreement, the Lessee shall keep in an office or offices in the Port of New York District, appropriate books and records showing (i) all matters with respect to the costs of the construction work; (ii) all matters which the Lessee is required to certify to the Port Authority pursuant to this Lease and (iii) any and all other matters concerning the Lessee's operations at the Airport with respect to which the Port Authority may reasonably need information to fulfill its obligations or exercise its rights under this Lease whether or not of the type enumerated above in this Section and whether or not an express obligation to keep books and records with regard thereto is expressly set forth elsewhere in this Lease. The Lessee shall not be obligated to preserve any such records for more than seven (7) years after the receipt of revenues or occurrences of charges or expenses hereunder unless they are material to litigation initiated within that time, in which event they shall be preserved until the final determination of the controversy. The Port Authority shall have the right to audit and inspect such books and records during regular business hours.

#### Section 55. Entire Agreement

This Agreement consists of the following: Sections 1 through 55 inclusive, and Exhibit A

and Schedule E. It constitutes the entire agreement of the parties on the subject matter hereof and may not be changed, modified, discharged or extended except by written instrument duly executed by the Port Authority and the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed these presents the day and year first above written.

ATTEST:

THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

Cab [Signature]  
Secretary  
INSTANT SECRETARY

By [Signature]  
William F. Tolosa  
(Title) DIRECTOR, Aviation Department.  
(Seal)

WITNESS  
ATTEST:  
[Signature]  
George J. Jachey

UNITED STATES POSTAL SERVICE

By [Signature]  
Ralph F. Champa  
(Title) CONTRACTING OFFICER  
(Corporate Seal)

APPROVED:  
FROM [Signature] MS

[Signature]

**EXEMPTION (4) – DRAWINGS OF NON-PUBLIC AREAS**

## SCHEDULE E

For purposes hereof, Minority Business Enterprise (MBE) shall mean any business enterprise which is at least fifty-one percentum owned by one or more citizens or permanent resident aliens who are minorities and such ownership is real, substantial and continuing, or in the case of a publicly owned business, at least fifty-one percentum of the stock of which is owned by citizens or permanent resident aliens who are minorities and such ownership is real, substantial and continuing. As used herein minority shall mean an individual member of any of the following racial groups

- (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin;
- (ii) Hispanic (all persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American origin, regardless of race);
- (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asian, the Indian Subcontinent, or the Pacific Islands) which includes persons whose origins are from Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa, Guam, the U.S. Trust Territories of the Pacific, the Northern Marianas, India, Pakistan, Bangladesh, and Sri Lanka; and
- (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification) which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians.

For the purposes hereof, Women-owned Business Enterprise (WBE) shall mean any business enterprise which is at least fifty-one percentum owned by one or more women and such ownership is real, substantial and continuing, or in the case of a publicly owned business, at least fifty-one percentum of the stock of which is owned by one or more women and such ownership is real, substantial and continuing. "Meaningful participation" shall mean that at least seventeen percent (17%) of the total dollar value of the contracts (including subcontracts) are for the participation of Minority Business Enterprises, and that at least \* percent ( 17 %) of the total dollar value of the contracts

\*seventeen

perform, or any other performance-related qualifications. Only listed MBEs and WBEs and such firms as are not so listed but as are certified by the Port Authority as MBEs and WBEs hereunder will count toward the MBE and WBE goals.

Certification of MBE's and WBEs hereunder shall be made by the Office of Business and Job Opportunity of the Port Authority. If the Contractor wishes to utilize a firm not so listed but which the Contractor believes should be certified because it is an MBE or WBE the Contractor shall submit to the Port Authority a written request for a determination that the proposed firm is eligible for certification. This shall be done by completing and forwarding such form as may be required by the Port Authority from time to time. All such requests shall be in writing addressed to Mr. John Alexander or other designee of the Office of Business and Job Opportunity, the Port Authority of New York and New Jersey, One World Trade Center, 37 South, New York, N.Y. 10048. If any such firm is determined eligible for certification it shall only be by a writing over the name of the Director in charge of such Office. The determination of the Port Authority shall be final and binding on the Contractor. For inquiries or assistance, please contact Mr. John Alexander at (212) 432-4188.

The following organizations may be able to refer the Contractor to firms which the referring organization has a reasonable basis to believe may meet the Port Authority's criteria for certification as an MBE or WBE. Any referrals which are not listed shall be submitted to the Port Authority for a determination as to eligibility as provided above.

1. National Minority Bus Council, Inc.  
235 East 42nd Street  
New York, N.Y. 10017  
(212) 573-2385
2. N.Y./N.J. Minority Purchasing Council  
1412 Broadway - 11th floor  
New York, N.Y. 10018  
(212) 944-2442
3. Newark, Paterson, Jersey City Business Development Center  
60 Park Place, Suite 1307  
Newark, N.J. 01702  
(201) 623-7712
4. The Council For Airport Opportunity  
2 World Trade Center  
Suite 2228  
New York, N.Y. 10048  
(212) 466-1091
5. Assoc. of Minority Enterprises of N.Y.  
(AMENY)  
165-40A Baisley Blvd.  
Suite #3  
Jamaica, N.Y., 11434
6. Air Services Development Office  
90-04 161st Street  
Jamaica, N.Y. 11432  
(718) 262-9012

In the event that the participation of any MBE or WBE selected by the Lessee or any of its contractors to participate in any contracts or subcontracts entered into with respect to any construction work performed on the premises, is cancelled or terminated for any reason, the Lessee agrees and agrees to require its contractors to make every good faith effort, to the maximum extent feasible, and consistent with the Lessee's exercise of good business judgment, including, without limitation, the consideration of cost competitiveness, to utilize other MBEs and WBEs so as to maintain appropriate participation by MBEs and WBEs in such contracts.

#### Labor Force Utilization

Without limiting the foregoing provisions of this Schedule, and without limiting any of the terms and conditions of the Agreement to which this Schedule is attached, the Lessee agrees and agrees to require its construction and maintenance contractors and subcontractors at each tier of any construction undertaken pursuant to the provisions of the Agreement to which this Schedule is attached to make good faith efforts to achieve a supervisory and non-supervisory work force on each contract that is representative of the local community labor force with respect to minority and female participation and will work with the Port Authority's Office of Business and Job Opportunity to identify referral sources when needed. The Lessee will cooperate with the Port Authority to develop on the job training programs and will participate in apprenticeship and other training programs that expressly include minority and female workers. The Lessee agrees to require its contractors and subcontractors to participate in such programs and to make a good faith effort to utilize apprentices or other trainees in the work as appropriate. The Lessee agrees to and shall require its contractors and subcontractors to appoint an executive of their respective companies to assume the responsibility for the implementation of the contractors' good faith efforts to achieve minority and female participation in the work force under the contract.

The goals for minority and female participation, expressed in percentage terms for the aggregate workforce in each trade on all construction work are as follows:

#### Journey level trade workers

Minority participation: 30%

Female participation: 6.9%

#### Laborers and other unskilled workers

Minority participation: 40%

Female participation: 6.9%

These goals are applicable to all construction work performed in and for the premises. Compliance with the goals will be measured against the total work hours performed.

(a) The Lessee agrees to require its contractors and subcontractors to provide written notification to the Lessee and the Lessee agrees to provide written notification to the Office of Business and Job Opportunity of the Port Authority within 10 working days of award of any construction contract or subcontract in excess of \$10,000.00 at any tier for construction work. The notification shall list the name, address, telephone number and employer identification number of the contractor or subcontractor; and the estimated starting and completion dates of the contract or subcontract. As used herein, "Employer identification number" shall mean the Federal Social Security Number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941. The term minority shall mean an individual member of any of the racial groups described in this Schedule.

(b) The Lessee agrees to require its contractors and subcontractors, at any tier, whenever they subcontract a portion of the construction work involving any construction trade, to physically include in each subcontract in excess of \$10,000 those provisions which include the applicable goals for minority and female participation.

(c) The Lessee agrees to require its contractors and subcontractors to implement the specific affirmative action standards provided in subparagraphs (1) through (16) of paragraph (f) hereof. The goals set forth above are expressed as percentages of the total hours of employment and training of minority and female utilization the Lessee's contractors and subcontractors should reasonably be able to achieve in each construction trade in which it has employees on the premises. The Lessee agrees and agrees to require its contractors and subcontractors to use good faith efforts to make substantially uniform progress toward its goals in each craft during the period specified.

(d) The Lessee agrees to provide in its construction contracts that neither the provisions of any collective bargaining agreement, nor the failure by a union with which the contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the contractor's obligations thereunder.

(e) The Lessee further agrees to provide in its agreements with its contractors that in order for the nonworking

training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the contractor during the training period, and the contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U. S. Department of Labor.

(f) The Lessee agrees to require its contractors and subcontractors to take specific affirmative actions to ensure equal employment opportunity ("EEO"). The Lessee's evaluation of the contractor's compliance with these provisions shall be based upon the contractor's good faith effort to achieve maximum results from its actions. The Lessee agrees to require its contractors and subcontractors to document these efforts fully, and to implement affirmative action steps at least as extensive as the following:

(1) Ensure and maintain a working environment free of harassment, intimidation, and coercion at all portions of the premises at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each phase of the construction project. The contractor shall specifically ensure that all foremen, superintendents, and other supervisory personnel at the premises are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at the premises.

(2) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefor, along with whatever additional action the contractor may have taken.

(4) Provide immediate written notification to the Lessee when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or woman, sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under subparagraph (2) above.

(6) Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the contractor's newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the contractor's EEO policy on bulletin boards accessible to all employees at each location where the construction work is performed.

(7) Review, at least every six months, the contractor's EEO policy and affirmative action obligations hereunder with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-area supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at the premises. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.

(9) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students, to minority and female recruitment and training organizations and to State certified minority referral agencies serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the premises and in other areas of a contractor's workforce.

(11) Tests and other selection requirements shall comply with 41 CFR Part 60-3.

(12) Conduct, at least every six months, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

(13) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations hereunder are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

(15) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least every six months, of all supervisors' adherence to and performance under the contractor's EEO policies and affirmative action obligations.

(g) The Lessee shall encourage its contractors to participate in voluntary associations which assist in fulfilling one or more of the affirmative action obligations set forth in subparagraphs (1)-(16) of paragraph (f) of this Section. The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under paragraph (f) hereof provided that: the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The requirement for good faith efforts to comply, however, shall remain with the contractor and the Lessee shall provide in its agreements with the contractor that failure of such a group to fulfill an obligation shall not be a defense for the contractor's non-compliance.

(h) Goals for minorities and a separate single goal for women have been established. The Lessee, however, agrees to require its contractors and subcontractors to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority, and to provide that consequently, the contractor may be in violation of its agreement with the Lessee if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation if a specific minority group of women is under-utilized).

(i) The Lessee agrees to provide that the contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

(j) The Lessee agrees that it will not enter into any contract with any person or firm debarred from Government contracts pursuant to Executive Order 11246, and agrees to require that its contractors and subcontractors not enter into any subcontract with any such person or firm.

(k) The Lessee agrees to carry out such sanctions and penalties for violation of these provisions including suspension, termination and cancellation of existing contracts and

subcontracts as may be required and the Lessee further agrees to require its contractors and subcontractors to agree to carry out such sanctions and penalties for violation of these provisions including suspension, termination and cancellation of existing contracts and subcontracts as may be imposed or ordered by the Lessee.

(l) The Lessee agrees to require its contractors and subcontractors, in fulfilling their obligations to the Lessee, to implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph (f) hereof so as to achieve maximum results from their efforts to ensure equal employment opportunity. If the contractor fails to comply with such requirements, the Lessee shall proceed accordingly.

(m) The Lessee agrees to require its contractors and subcontractors to designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the contractor's EEO obligations as may be required, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), date of changes in status, hours worked per week in the indicated trade, rate of pay, and location at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors need not be required to maintain separate records.

(n) Nothing herein provided shall be construed as a limitation upon the application of any laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(o) Without limiting any other term or provision of this Agreement, the Lessee agrees and agrees to require its contractors and subcontractors to cooperate with all federal, state, or local agencies established for the purpose of implementing affirmative action compliance programs and the Lessee agrees and agrees to require its contractors and subcontractors to comply with all procedures which may be agreed to by and between the Port Authority and the Lessee.

(p) In addition to and without limiting any of the terms and provisions of this Agreement, the Lessee agrees to provide in its contracts and all subcontracts covering construction work, or any portion thereof, that:

(i) The contractor shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons are afforded equal employment opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selections for training or retraining, including apprenticeships and on-the-job training;

(ii) At the request of either the Port Authority or the Lessee, the contractor shall request such employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding and which is involved in the performance of the contract with the Lessee to furnish a written statement that such employment agency, labor union or representative shall not discriminate because of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will cooperate in the implementation of the contractor's obligations hereunder;

(iii) The contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the contractor in the performance of the contract, that all qualified applicants will be afforded equal employment opportunity without discrimination because of race, creed, color, national origin, sex, age, disability or marital status;

(iv) The contractor will include the provisions of subdivisions (i) through (iii) of this paragraph in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to its work in connection with the contract;

(v) "Contractor" as used in subdivisions (i) through (iv) of this paragraph shall include each contractor and subcontractor at any tier of construction.

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For the Port Authority

Initialed:

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For the Lessee

# EXHIBIT M

Environmental Engineering Unit  
Aviation Design Division

John F. Kennedy  
International Airport  
Building 197

Environmental Subsurface  
Baseline Investigation

Summary Report

June 2000



*Engineering Department*

**THE PORT AUTHORITY OF NY & NJ**

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## EXECUTIVE SUMMARY

The Environmental Engineering Unit of the Port Authority of New York and New Jersey (Port Authority) has conducted a subsurface baseline investigation of the Building No. 197 site located at John F. Kennedy International Airport (JFKIA). The site has been used as a terminal, an office building, and a warehouse. Previous tenants include AirFreight Warehouse, Taxi and Limousine Commission, and Ogden Allied. Currently, Virgin Atlantic Cargo (VAC) leases the property, and has occupied the building since August 1992. The building is currently used as a warehouse.

A total of four soil borings were drilled. All four borings were completed as permanent monitoring wells. Soil samples were collected from four borings and six groundwater samples were collected from the new and existing monitoring wells. Soil and groundwater samples were collected and analyzed for constituents on the EPA Priority Pollutants plus 40 (PP+40), including total xylenes, methyl-tert-butyl ether (MTBE), tert-butyl alcohol (TBA) and total petroleum hydrocarbons (TPHC).

Free phase product was not discovered in any of the soil and groundwater samples. Methylene chloride was the only Volatile Organic Analytes (VOAs) detected in the soil samples. Methylene chloride was detected in four soil samples and its concentration ranged from 10 to 15 ug/kg. Methylene chloride was also detected in the laboratory method blank indicating that its presence may be due to laboratory contamination. Soil samples were analyzed for Base Neutral/Acids Extractables (BNAs), pesticides, polychlorinated biphenyls (PCBs) and total cyanide. However, none of the compounds of BNAs, pesticides, PCBs or total cyanide were detected. Soil samples were also analyzed for metals and few metals were detected with the concentrations ranging from 0.373 to 24.1 mg/kg. The TPHC concentration in the soil samples ranged from 46 mg/kg to 82 mg/kg.

Benzene, chlorobenzene and 1,4-dichlorobenzene were the three volatile organics detected in the groundwater samples. Benzene was detected (3.8 ug/l) in the groundwater sample from MW-6. Chlorobenzene was detected in samples collected from two of the six monitoring wells (0.6 ug/l in MW-5 and 21 ug/l in MW-6). 1,4-Dichlorobenzene was detected (3.2 ug/l) in a groundwater sample from MW-6. The groundwater samples were analyzed for BNAs, pesticide, PCBs, total cyanide, and TPHC. However, none of the compounds of BNAs, pesticides, PCBs, total cyanide and TPHC were detected in the groundwater samples. The metals, beryllium and cadmium were detected in groundwater samples and their concentrations ranged from 5 ug/l to 42.6 ug/l.

## **1.0 INTRODUCTION**

This report summarizes the baseline subsurface environmental investigation performed at the Building No. 197 at JFKIA. The report includes a description of the site and its background, a discussion of field activities and analytical results, and a summary of the investigation's findings.

### **1.1 Site Location and Description**

Building No. 197 is located within the confines of JFK International Airport, County of Queens, New York (see Drawing ENV-1). The surrounding land bordering the site consists primarily of cargo storage and airlines facilities.

Building 197 was constructed in 1955, and has been used as an active terminal, an office building and a warehouse. Previous tenants included AirFreight Warehouse, the Taxi and Limousine Commission, and Ogden Allied. VAC took over the leasehold in April 1992. VAC operates a 47,000 - square foot warehouse on three and one half acres of property.

A Site Assessment Report of Building 197 was prepared by Lawler, Matusky, & Skelly in December 1992. The findings of the investigations are summarized in a report titled "SITE ASSESSMENT BUILDING NO. 197 JOHN F. KENNEDY AIRPORT" dated December 1992. In addition to the 1992 Site Assessment Report, Camp Dresser & McKee performed an environmental compliance audit of the site. The findings of the compliance audit are summarized in "John F. Kennedy International Airport (JFK Comprehensive Environmental Compliance Audit Exit Interview Summary Building 197". A copy of the Exit Interview Summary is included in Appendix C of this report.

### **1.2 Geological Background**

In general, the soils found beneath JFKIA consist of a top layer of fine to medium sand to a depth of approximately seven to ten feet below grade. This brown and gray sand originated from Jamaica Bay and was hydraulically placed prior to the development of the airport in the 1940's. Underlying the fill in most areas is a layer of relatively impermeable organic soils. This layer varies from two to seven feet in thickness and is made up of intermittent layers of organic peat and gray organic silt and clays. This is the original marsh soil that covered most of JFKIA prior to airport development. Beneath the organic material is a stratum of glacial outwash. In areas where the organic layer exists, a perched water table can be found at approximately six feet below grade. In other areas, the groundwater is eight to ten feet below grade and generally flows south towards Jamaica Bay.

Based on the four borings installed for this investigation, the site-specific soil is composed of medium to fine brown and gray sand with some gravel. The groundwater at the site is five to seven feet below grade.

## **2.0 FIELD PROCEDURES AND SAMPLING METHODOLOGY**

Soil borings and monitoring wells were installed at the site to collect soil and groundwater samples. All work was performed in accordance with the Port Authority's "Field Standard Operating Procedures Manual" and in conformance with NYSDEC and U.S. EPA requirements. This section describes the procedures for soil borings and well installation and the methods employed during sampling activities.

### **2.1 Soil Borings and Monitoring Well Installation**

Four soil borings were drilled at the site on April 24, 2000. All the borings were completed as permanent monitoring wells. The Port Authority identified proposed soil boring locations and the locations of the borings were finalized during field installation after field screening of obstructions and utility clearance. After installation, the monitoring well locations were surveyed by a Port Authority Construction Engineering representative for elevations and location coordinates.

The boreholes were installed as per ASTM standard protocol using a drill rig equipped with 6-inch inside diameter (I.D.) hollow-stem augers. Before drilling each borehole, all downhole equipment was decontaminated to protect against cross-contamination. Monitoring wells were installed and developed according to Port Authority's guidelines for unconfined, unconsolidated monitoring well installation and development procedures. The wells are constructed of a 2-inch diameter, flush-joint, polyvinyl chloride (PVC) casing with a 0.020-inch machine slotted well screen and were installed so the screens intercept the groundwater table. All wells were finished with a flush-mounted curb box with an 8-inch diameter steel manhole cover set in concrete. All wellheads are equipped with locking caps.

All drilling and monitoring well installation was performed by Craig Drilling. A Port Authority Materials Engineering representative was present during all drilling activities to log soil lithology, note any visible signs of contamination, screen and collect soil samples, ensure that standard drilling and well installation protocols were followed, and complete Boring Logs and Well Installation Reports.

The monitoring well locations are shown on Drawing ENV-2. Table I presents a summary of the soil boring and well installation data, including survey coordinates. Survey results, drilling logs and well construction data are presented in Appendix A. Monitoring well development data are presented in Appendix B.

### **2.2 Sampling Methodology**

This section describes the field methods used to screen and collect soil samples from the boreholes and collect groundwater samples from the monitoring wells. Sufficient volume of each media was collected for each sample to allow for laboratory analysis of the constituents on the EPA PP+40 List including total xylenes, Methyl tertiary-butyl ether (MTBE), Total Petroleum Hydrocarbons (TPHC), and tertiary-butyl alcohol (TBA).

### 2.2.1 Soils

Soils from each borehole were sampled at two-foot intervals, from the surface to a depth 12 feet below grade, using a split-spoon sampler. At each interval from ground level to the bottom of the boring, the samples were placed in jars and screened for total ionizable vapors using an HNu Model photoionization detector (PID). Ionizable vapors were not detected in any of the soil sampled. Thus, a sample was collected in the interval immediately above the groundwater table for analysis. A total of four soil samples were submitted for laboratory analysis. The soil boring reports in Appendix A indicate which soil samples from each borehole were submitted for laboratory analysis. The soil samples mainly consist of brown medium to fine sand to silt with some gravel.

### 2.2.2 Groundwater

A Port Authority Materials Engineering representative gauged and sampled the monitoring wells installed at the site. Monitoring well gauging was performed to determine the groundwater table elevation in the wells. Four new monitoring wells were installed for this investigation. There were also four existing monitoring wells which were installed during previous investigations. However, two of the existing monitoring wells previously installed have been destroyed over time. Therefore, only six monitoring wells were sampled for groundwater.

A phase interface probe was used to gauge the depth to groundwater and to detect free product in the wells. The total well depth was also measured. The probe is accurate to within 0.01 feet. The measurements were taken relative to the surveyed top of casing elevation of each well. The probe was decontaminated before gauging each well. Table I summarizes the data generated by the well gauging activities, including groundwater table elevations.

After the gauging activity, each well was purged and sampled with dedicated, disposable bailers. Three to four well casing volumes were purged before sampling. After each well volume was removed, pH, temperature, conductivity, and salinity were measured and recorded. These data are included in Appendix B on the monitoring well development data sheets.

### 3.0 INVESTIGATION RESULTS

This section describes the findings of the baseline investigation. Site hydrogeology is discussed and analytical results for soil and groundwater samples are presented.

#### 3.1 Site Hydrogeology

The direction of groundwater flow at the site is towards the southwest and Jamaica Bay. This local groundwater flow direction supports the regional groundwater flow which is towards Jamaica Bay. Table I includes groundwater table elevation data for the monitoring new monitoring wells which were gauged. Groundwater elevations were calculated with the May 5, 2000, survey data and were used to generate the Groundwater Contour Map (see Drawing ENV-3).

#### 3.2 Analytical Results

Soil and groundwater samples collected from the site were analyzed for constituents on the EPA PP+40 List, including total xylenes, methyl-tert-butyl ether and tert-butyl alcohol.

##### 3.2.1 Soils

During field screening of the soil samples with a PID, ionizable organic vapors were not detected in any of the borings. The soil samples submitted for laboratory analysis are noted on the soil boring logs in Appendix A. One soil sample was collected from each borehole. A total of four soil samples were collected and all of the samples collected for laboratory analysis were adjacent to the water table.

Methylene chloride was the only VOA detected in the soil samples and its concentration ranged from 10 ug/kg to 15 ug/kg. Methylene chloride was also detected in the method blank, indicating that its presence may be due to laboratory contamination. The results of soil VOAs are summarized in Table II. Soil samples were also analyzed for BNAs, pesticides, PCBs, and total cyanide. However, none of the compounds of BNAs, pesticides, PCBs or total cyanide were detected. The results of soil BNAs, pesticides, PCBs, and total cyanide are summarized in Table III & IV.

Soil samples were also analyzed for metals/TPHC. The TPHC concentration in the soil samples ranged from 46 mg/kg to 82 mg/kg. The following metals were detected at the site at the following concentrations:

- arsenic                    3.2 mg/kg
- beryllium                0.373 mg/kg
- cadmium                 0.751 mg/kg
- chromium                4.33 mg/kg – 8.08 mg/kg
- copper                    4.41 mg /kg

- lead                    24.1 mg/kg
- nickel                8.51 mg/kg
- zinc                    8.70 mg/kg – 14.1. mg/kg

The results of soil metals/TPHC are summarized in Table V.

### 3.2.2 Groundwater

Benzene, chlorobenzene and 1,4-dichlorobenzene were the three VOAs detected in the groundwater samples. Benzene was detected (3.8 ug/l) in the groundwater sample from MW-6. Chlorobenzene was detected in samples collected from two of the six monitoring wells (0.6 ug/l in MW-5 and 21 ug/l in MW-6). 1,4-Dichlorobenzene was detected (3.2 ug/l) in a groundwater sample from MW-6. The results of groundwater VOAs analysis are summarized in Table VI. The groundwater samples were analyzed for BNAs, pesticide, PCBs, total cyanide, and TPHC. However, none of the compounds of BNAs, pesticides, PCBs, total cyanide and TPHC were detected in the groundwater samples. The metals, beryllium and cadmium were detected in groundwater samples and their concentrations ranged from 5 ug/l to 42.6 ug/l. The following metals were detected in the groundwater samples:

- beryllium            5.76 mg/l – 21.6 ug/l
- cadmium             10.5 mg/l – 47.1 ug/l

The results of groundwater BNAs, pesticides/PCBs, metals/TPHC are summarized in Tables VII – IX. The complete laboratory reports are included in the section Appendix D of this report.

#### 4.0 SUMMARY

Free phase product was not discovered in any of the soil and groundwater samples. Fuel odors and HNu readings were not encountered in during drilling of borings. The direction of groundwater flow at the site was determined to be towards the southwest and Jamaica Bay.

Methylene chloride was detected in four soil samples and field blank. Thus its presence may be attributed due to laboratory contamination. Few metals were detected in the soil samples and their concentrations ranged from 0.373 to 24.1 mg/kg.

Benzene was detected at a concentration of 3.8 ug/l in one groundwater sample. Chlorobenzene was detected in two groundwater samples and its concentrations were 0.6 ug/l and 21 ug/l. Dichloroenezene was detected at a concentration of 3.2 ug/l in one groundwater sample. The metals, beryllium and cadmium were also detected in groundwater samples, with concentrations ranging from 5 ug/l to 42.6 ug/l.

# TABLES

**Table I**  
**John F. Kennedy International Airport**  
**Building 197**  
**Baseline Investigation**  
**Monitoring Well Installation & Groundwater Elevation Data Summary**

<b>Well ID #</b>	<b>Installation Date</b>	<b>Well Depth</b>	<b>Ground Elevation</b>	<b>Top of Pipe Elevation</b>	<b>Date Gauged</b>	<b>Depth to Water</b>	<b>GW Elevation</b>	<b>South Coordinates</b>	<b>East Coordinates</b>
197MW-5	4/24/00	10.86'	12.97'	12.49'	5/15/00	6.85'	5.64'	51802	72874
197MW-6	4/24/00	10.60'	12.39'	12.14	5/15/00	5.25'	6.89'	51631	72965
197MW-7	4/24/00	10.88'	12.77'	12.57'	5/15/00	6.63'	5.94'	51602	72450
197MW-8	4/21/00	11.83'	12.93'	12.58'	5/15/00	5.80'	6.78'	51593	73146

TABLE II  
JFK-Bldg 197  
Summary of Results for VOAs Analysis for Soil Samples

	PA-NYNJ Sample ID:	MW-8,S-4	MW-8,S-4 DUP	FB	MW-5 S-3	MW-6 S-3	MW-7 S-3	FB
	Laboratory ID:	0004402	0004403	0004404	0004450	0004451	0004452	0004453
	Sampling Date:	04/21/00	04/21/00	04/21/00	04/24/00	04/24/00	04/24/00	04/24/00
	Units:	UG/KG	UG/KG	UG/L	UG/KG	UG/KG	UG/KG	UG/L
CAS #	Analyte:							
107-02-8	Acrolein	29 U	29 U	25 U	28 U	28 U	26 U	25 U
107-13-1	Acrylonitrile	29 U	29 U	25 U	28 U	28 U	26 U	25 U
74-87-3	Chloromethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
75-01-4	Vinyl Chloride	6 U	6 U	5 U	6 U	6 U	5 U	5 U
74-83-9	Bromomethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
75-00-3	Chloroethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
75-69-4	Trichlorofluoromethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
75-35-4	1,1-Dichloroethene	6 U	6 U	5 U	6 U	6 U	5 U	5 U
75-09-2	Methylene Chloride	14 B	12 B	10 B	15 B	13 B	14 B	11 B
156-60-5	trans-1,2-Dichloroethene	6 U	6 U	5 U	6 U	6 U	5 U	5 U
75-34-3	1,1-Dichloroethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
67-66-3	Chloroform	6 U	6 U	5 U	6 U	6 U	5 U	5 U
71-55-6	1,1,1-Trichloroethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
56-23-5	Carbon Tetrachloride	6 U	6 U	5 U	6 U	6 U	5 U	5 U
107-06-2	1,2-Dichloroethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
71-43-2	Benzene	6 U	6 U	5 U	6 U	6 U	5 U	5 U
79-01-6	Trichloroethene	6 U	6 U	5 U	6 U	6 U	5 U	5 U
78-87-5	1,2-Dichloropropane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
75-27-4	Bromodichloromethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
10061-01-5	cis-1,3-dichloropropene	6 U	6 U	5 U	6 U	6 U	5 U	5 U
108-88-3	Toluene	6 U	6 U	4 J	6 U	6 U	5 U	5 U
10061-02-6	trans-1,3-Dichloropropene	6 U	6 U	5 U	6 U	6 U	5 U	5 U
79-00-5	1,1,2-Trichloroethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
127-18-4	Tetrachloroethene	6 U	6 U	5 U	6 U	6 U	5 U	5 U
124-48-1	Dibromochloromethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
100-41-4	Ethylbenzene	6 U	6 U	5 U	6 U	6 U	5 U	5 U
108-90-7	Chlorobenzene	6 U	6 U	5 U	6 U	6 U	5 U	5 U
1330-20-7	m,p-Xylene	12 U	12 U	5 U	11 U	11 U	10 U	10 U
75-25-2	Bromoform	6 U	6 U	5 U	6 U	6 U	5 U	5 U
79-34-5	1,1,2,2-Tetrachloroethane	6 U	6 U	5 U	6 U	6 U	5 U	5 U
95-47-6	o-Xylene	6 U	6 U	5 U	6 U	6 U	5 U	5 U
75-65-0	T-butyl alcohol	58 U	59 U	50 U	56 U	56 U	52 U	50 U
1634-04-4	Methyl t-butyl ether	58 U	59 U	50 U	56 U	56 U	52 U	50 U
110-75-8	2-Chloroethylvinylether	6 U	6 U	5 U	6 U	6 U	5 U	5 U
UG/L	Micrograms per Liter, equivalent to parts per billion.							
UG/KG	Micrograms per Kilogram, equivalent to parts per billion.							
FB	Field Blank.							
TB	Trip Blank.							
U	Compound analyzed for but not detected.							
J	Compound concentration found below MDL.							
D	Result is based on a dilution.							
E	Result exceeds highest calibration standard.							
B	Compound found in method blank.							

TABLE III  
Summary of Results for BNAs Analysis for Soil Samples

	PA-NYNJ Sample ID:	MW-8, S-4	MW-8, S-4	MW-8, S-4 DUP	MW-5 S-3	MW-6 S-3	MW-7 S-3
	Laboratory ID:	0004402	0004402-RE	0004403	0004450	0004451	0004452
	Sampling Date:	04/21/00	04/21/00	04/21/00	04/24/00	04/24/00	04/24/00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CAS #	Analyte:						
83329	Acenaphthene	380 U	380 U	390 U	380 U	370 U	340 U
208968	Acenaphthylene	380 U	380 U	390 U	380 U	370 U	340 U
120127	Anthracene	380 U	380 U	390 U	380 U	370 U	340 U
56553	Benzo(a)Anthracene	380 U	380 U	390 U	47 J	370 U	340 U
50328	Benzo(a)Pyrene	380 U	380 U	390 U	47 J	370 U	340 U
205992	Benzo(b)fluoranthene	380 U	380 U	390 U	55 J	370 U	340 U
191242	Benzo(g,h,i)Perylene	380 U	380 U	390 U	39 J	370 U	340 U
207089	Benzo(k)Fluoranthene	380 U	380 U	390 U	40 J	370 U	340 U
65850	Benzoic Acid	1900 U	1900 U	2000 U	1900 U	1900 U	1700 U
100516	Benzyl Alcohol	380 U	380 U	390 U	380 U	370 U	340 U
111444	bis(-2-Chloroethyl)Ether	380 U	380 U	390 U	380 U	370 U	340 U
108601	bis(2-Chloroisopropyl)ether	380 U	380 U	390 U	380 U	370 U	340 U
117817	Bis(2-Ethylhexyl)Phthalate	47 J	48 J	390 U	95 JB	100 JB	69 JB
111911	bis(-2-Chloroethoxy)Methane	380 U	380 U	390 U	380 U	370 U	340 U
101553	4-Bromophenyl-phenylether	380 U	380 U	390 U	380 U	370 U	340 U
85687	Butylbenzylphthalate	380 U	380 U	390 U	380 U	370 U	340 U
106478	4-Chloroaniline	380 U	380 U	390 U	380 U	370 U	340 U
91587	2-Chloronaphthalene	380 U	380 U	390 U	380 U	370 U	340 U
59507	4-Chloro-3-methylphenol	380 U	380 U	390 U	380 U	370 U	340 U
95578	2-Chlorophenol	380 U	380 U	390 U	380 U	370 U	340 U
7005723	4-Chlorophenyl-phenylether	380 U	380 U	390 U	380 U	370 U	340 U
218019	Chrysene	380 U	380 U	390 U	52 J	370 U	340 U
53703	Dibenzo(a,h)Anthracene	380 U	380 U	390 U	380 U	370 U	340 U
132649	Dibenzofuran	380 U	380 U	390 U	380 U	370 U	340 U
95501	1,2-Dichlorobenzene	380 U	380 U	390 U	380 U	370 U	340 U
541731	1,3-Dichlorobenzene	380 U	380 U	390 U	380 U	370 U	340 U
106467	1,4-Dichlorobenzene	380 U	380 U	390 U	380 U	370 U	340 U
91941	3,3'-Dichlorobenzidine	380 U	380 U	390 U	380 U	370 U	340 U
120832	2,4-Dichlorophenol	380 U	380 U	390 U	380 U	370 U	340 U
84662	Diethylphthalate	380 U	380 U	390 U	380 U	370 U	340 U
105679	2,4-Dimethylphenol	380 U	380 U	390 U	380 U	370 U	340 U
131113	Dimethyl Phthalate	380 U	380 U	390 U	380 U	370 U	340 U
84742	Di-n-Butylphthalate	380 U	380 U	390 U	380 U	370 U	340 U
534521	4,6-Dinitro-2-methylphenol	380 U	380 U	390 U	380 U	370 U	340 U
51285	2,4-Dinitrophenol	380 U	380 U	390 U	380 U	370 U	340 U
121142	2,4-Dinitrotoluene	380 U	380 U	390 U	380 U	370 U	340 U
606202	2,6-Dinitrotoluene	380 U	380 U	390 U	380 U	370 U	340 U
117840	Di-n-octyl phthalate	380 U	380 U	390 U	380 U	370 U	340 U
206440	Fluoranthene	380 U	380 U	390 U	90 J	370 U	340 U
86737	Fluorene	380 U	380 U	390 U	380 U	370 U	340 U
118741	Hexachlorobenzene	380 U	380 U	390 U	380 U	370 U	340 U
87683	Hexachlorobutadiene	380 U	380 U	390 U	380 U	370 U	340 U
77474	Hexachlorocyclopentadiene	380 U	380 U	390 U	380 U	370 U	340 U
67721	Hexachloroethane	380 U	380 U	390 U	380 U	370 U	340 U
193395	Indeno(1,2,3-cd)Pyrene	380 U	380 U	390 U	380 U	370 U	340 U
78591	Isophorone	380 U	380 U	390 U	380 U	370 U	340 U
91576	2-Methylnaphthalene	380 U	380 U	390 U	380 U	370 U	340 U
95487	2-Methylphenol	380 U	380 U	390 U	380 U	370 U	340 U
108394	3&4-Methylphenol	380 U	380 U	390 U	380 U	370 U	340 U
91203	Naphthalene	380 U	380 U	390 U	380 U	370 U	340 U
88744	2-Nitroaniline	380 U	380 U	390 U	380 U	370 U	340 U
99092	3-Nitroaniline	380 U	380 U	390 U	380 U	370 U	340 U
100016	4-Nitroaniline	380 U	380 U	390 U	380 U	370 U	340 U
98953	Nitrobenzene	380 U	380 U	390 U	380 U	370 U	340 U
88755	2-Nitrophenol	380 U	380 U	390 U	380 U	370 U	340 U
100027	4-Nitrophenol	380 U	380 U	390 U	380 U	370 U	340 U
62759	N-Nitrosodimethylamine	380 U	380 U	390 U	380 U	370 U	340 U
86306	N-Nitrosodiphenylamine	380 U	380 U	390 U	380 U	370 U	340 U
621647	N-Nitroso-Di-n-propylamine	380 U	380 U	390 U	380 U	370 U	340 U
87865	Pentachlorophenol	380 U	380 U	390 U	380 U	370 U	340 U
85018	Phenanthrene	380 U	380 U	390 U	380 U	370 U	340 U
108952	Phenol	380 U	380 U	390 U	380 U	370 U	340 U
129000	Pyrene	380 U	380 U	390 U	79 J	370 U	340 U
120821	1,2,4-Trichlorobenzene	380 U	380 U	390 U	380 U	370 U	340 U
95954	2,4,5-Trichlorophenol	380 U	380 U	390 U	380 U	370 U	340 U
88062	2,4,6-Trichlorophenol	380 U	380 U	390 U	380 U	370 U	340 U
92875	Benzidine	380 U	380 U	390 U	380 U	370 U	340 U
122667	1,2-Diphenylhydrazine	380 U	380 U	390 U	380 U	370 U	340 U
UG/KG	Micrograms per Kilogram, equivalent to parts per billion.						
FB	Field Blank.						
TB	Trip Blank.						
U	Compound analyzed for but not detected.						
J	Compound concentration found below MDL.						
D	Result is based on a dilution.						
E	Result exceeds highest calibration standard.						
B	Compound found in method blank.						

TABLE IV  
Summary of Results for Pesticides/PCBs Analysis of Soil Samples

	PA-NYNJ Sample ID:	MW-8,S-4	MW-8,S-4 DUP	MW-5 S-3	MW-6 S-3	MW-7 S-3
	Laboratory ID:	0004402	0004403	0004450	0004451	0004452
	Sampling Date:	04/21/00	04/21/00	04/24/00	04/24/00	04/24/00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
CAS #	Analyte:					
319-84-6	alpha-BHC	0.769 U	0.784 U	0.753 U	0.747 U	0.689 U
319-85-7	beta-BHC	0.769 U	0.784 U	0.753 U	0.747 U	0.689 U
58-89-9	gamma-BHC (Lindane)	0.769 U	0.784 U	0.753 U	0.747 U	0.689 U
319-86-8	delta-BHC	0.769 U	0.784 U	0.753 U	0.747 U	0.689 U
76-44-8	Heptachlor	0.260 J	0.784 U	0.753 U	0.747 U	0.689 U
309-00-2	Aldrin	0.769 U	0.784 U	0.753 U	0.747 U	0.689 U
1024-57-3	Heptachlor epoxide	0.769 U	0.784 U	0.753 U	0.747 U	0.689 U
959-98-8	Endosulfan I	0.769 U	0.784 U	0.753 U	0.747 U	0.689 U
5103-71-9	alpha-Chlordane	0.769 U	0.784 U	0.753 U	0.747 U	0.689 U
5103-74-2	Gamma-chlordane	0.769 U	0.784 U	0.753 U	0.747 U	0.689 U
60-57-1	Dieldrin	1.54 U	1.57 U	1.51 U	1.49 U	1.38 U
72-55-9	4,4'-DDE	1.54 U	1.57 U	1.51 U	1.49 U	1.38 U
72-20-8	Endrin	1.54 U	1.57 U	1.51 U	1.49 U	1.38 U
33213-65-	Endosulfan II	1.54 U	1.57 U	1.51 U	1.49 U	1.38 U
72-54-8	4,4'-DDD	1.54 U	1.57 U	1.51 U	1.49 U	1.38 U
7421-93-4	Endrin Aldehyde	1.54 U	1.57 U	1.51 U	1.49 U	1.38 U
1031-07-8	Endosulfan Sulfate	1.54 U	1.57 U	1.51 U	1.49 U	1.38 U
50-29-3	4,4'-DDT	1.54 U	1.57 U	1.51 U	1.49 U	1.38 U
53494-70-	Endrin ketone	1.54 U	1.57 U	1.51 U	1.49 U	1.38 U
72-43-5	Methoxychlor	7.69 U	7.84 U	7.53 U	7.47 U	6.89 U
8001-35-2	Toxaphene	38.4 U	39.2 U	37.7 U	37.3 U	34.5 U
12674112	Aroclor-1216	19.2 U	19.6 U	18.8 U	18.7 U	17.2 U
11104282	Aroclor-1221	19.2 U	19.6 U	18.8 U	18.7 U	17.2 U
11141165	Aroclor-1232	19.2 U	19.6 U	18.8 U	18.7 U	17.2 U
53469219	Aroclor-1242	19.2 U	19.6 U	18.8 U	18.7 U	17.2 U
12672296	Aroclor-1248	19.2 U	19.6 U	18.8 U	18.7 U	17.2 U
11097691	Aroclor-1254	19.2 U	19.6 U	18.8 U	18.7 U	17.2 U
11096825	Aroclor-1260	19.2 U	19.6 U	18.8 U	18.7 U	17.2 U
UG/KG	Micrograms per Kilogram, equivalent to parts per billion.					
FB	Field Blank.					
TB	Trip Blank.					
U	Compound analyzed for but not detected.					
J	Compound concentration found below MDL.					
D	Result is based on a dilution.					
E	Result exceeds highest calibration standard.					
B	Compound found in method blank.					

TABLE V  
JFK-Bldg 197

Summary of Results for Metals/TPHC Analysis of Soil Samples

		PA-NYNJ Sample ID:	MW-8,S-4	MW-8,S-4 DUP	MW-5 S-3	MW-6 S-3	MW-7 S-3
		Laboratory Sample ID:	0004402	0004403	0004450	0004451	0004452
		Sampling Date:	04/21/00	04/21/00	04/24/00	04/24/00	04/24/00
CAS #	Analyte	Units					
7440-36-0	Antimony	mg/Kg	7.25 U	7.45 U	7.15 U	7.04 U	6.50 U
7440-38-2	Arsenic	mg/Kg	1.50 U	1.49 U	3.27	1.43 U	1.35 U
7740-41-7	Beryllium	mg/Kg	0.363 U	0.372 U	0.373	0.352 U	0.325 U
7440-43-9	Cadmium	mg/Kg	0.725 U	0.745 U	0.751	0.704 U	0.650 U
7440-47-3	Chromium	mg/Kg	4.59	4.33	8.08	4.70	4.60
7440-50-8	Copper	mg/Kg	2.18 U	2.23 U	4.48	2.11 U	5.09
7439-92-1	Lead	mg/Kg	18.1 U	18.6 U	24.1	17.6 U	16.3 U
7439-97-6	Mercury	mg/Kg	0.231 U	0.235 U	0.226 U	0.224 U	0.207 U
7440-02-0	Nickel	mg/Kg	2.90 U	2.98 U	8.51	2.82 U	8.59
7782-49-2	Selenium	mg/Kg	1.87 U	1.86 U	1.82 U	1.78 U	1.69 U
7440-22-4	Silver	mg/Kg	0.725 U	0.745 U	0.715 U	0.704 U	0.650 U
7440-28-0	Thallium	mg/Kg	1.87 U	1.86 U	1.82 U	1.78 U	1.69 U
7440-66-6	Zinc	mg/Kg	8.70	9.68	14.1	7.04 U	8.78
	Solids, Percent	%	86.7	85.0	88.5	89.3	96.7
	Cyanide, Total	mg/Kg	1.03 U	0.94 U	0.73 U	0.74 U	0.90 U
	Total Petroleum Hydrocarbons (TPHC)	mg/Kg	43 U	46	82	43 U	41 U
mg/Kg	Miligrams per Kilogram, equivalent to parts per billion.						
U	Compound analyzed for but not detected.						

TABLE VI  
JFK - Bldg 197  
Summary of Results for VOAs Analysis of Groundwater Samples

	PA-NYNJ Sample ID:	MW-3	PAMW-4	MW-5	MW-6	MW-7
	Laboratory ID:	0005401	0005402	0005403	0005404	0005405
	Sampling Date:	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00
	Units:	UG/L	UG/L	UG/L	UG/L	UG/L
CAS #	Analyte:					
107-02-8	Acrolein	6.1 U				
107-13-1	Acrylonitrile	6.6 U				
71-43-2	Benzene	0.4 U	0.4 U	0.4 U	3.8	0.4 U
75-27-4	Bromodichloromethane	0.4 U				
75-25-2	Bromoform	0.4 U				
74-83-9	Bromomethane	2.0 U				
56-23-5	Carbon Tetrachloride	0.4 U				
108-90-7	Chlorobenzene	0.4 U	0.4 U	0.6	21	0.4 U
75-00-3	Chloroethane	2.0 U				
110-75-8	2-Chloroethylvinylether	2.0 U				
67-66-3	Chloroform	0.4 U				
74-87-3	Chloromethane	2.0 U				
124-48-1	Dibromochloromethane	0.4 U				
95-50-1	1,2-Dichlorobenzene	0.5 U				
541-73-1	1,3-Dichlorobenzene	0.4 U				
106-46-7	1,4-Dichlorobenzene	0.4 U	0.4 U	0.4 U	3.2	0.4 U
75-34-3	1,1-Dichloroethane	0.4 U				
107-06-2	1,2-Dichloroethane	0.4 U				
75-35-4	1,1-Dichloroethene	0.4 U				
156-60-5	trans-1,2-Dichloroethene	0.4 U				
78-87-5	1,2-Dichloropropane	0.4 U				
10061-01-5	cis-1,3-Dichloropropene	0.4 U				
10061-02-6	trans-1,3-Dichloropropene	0.4 U				
100-41-4	Ethylbenzene	1.0 U				
75-09-2	Methylene Chloride	1.0 U				
1634-04-4	Methyl t-butyl ether	4.2 U				
75-65-0	T-butyl alcohol	9.6 U				
79-34-5	1,1,2,2-Tetrachloroethane	0.6 U				
127-18-4	Tetrachloroethene	0.4 U				
108-88-3	Toluene	0.5 U				
71-55-6	1,1,1-Trichloroethane	0.4 U				
79-00-5	1,1,2-Trichloroethane	0.4 U				
79-01-6	Trichloroethene	0.4 U				
75-69-4	Trichlorofluoromethane	0.4 U				
75-01-4	Vinyl Chloride	2.0 U				
1330-20-7	m,p-Xylene	2.8 U				
95-47-6	o-Xylene	2.1 U				

UG/L Micrograms per Liter, equivalent to parts per billion.  
 FB Field Blank.  
 TB Trip Blank.  
 U Compound analyzed for but not detected.  
 J Compound concentration found below MDL.  
 D Result is based on a dilution.  
 E Result exceeds highest calibration standard.  
 B Compound in method blank.

TABLE VI  
JFK - Bldg 197  
Summary of Results for VOAs Analysis of Groundwater Samples

	PA-NYNJ Sample ID:	MW-8	DUP	FB	TB
	Laboratory ID:	0005406	0005407	0005408	0005409
	Sampling Date:	05/15/00	05/15/00	05/15/00	05/15/00
	Units:	UG/L	UG/L	UG/L	UG/L
CAS #	Analyte:				
107-02-8	Acrolein	6.1 U	6.1 U	6.1 U	6.1 U
107-13-1	Acrylonitrile	6.6 U	6.6 U	6.6 U	6.6 U
71-43-2	Benzene	0.4 U	0.4 U	0.4 U	0.4 U
75-27-4	Bromodichloromethane	0.4 U	0.4 U	0.4 U	0.4 U
75-25-2	Bromoform	0.4 U	0.4 U	0.4 U	0.4 U
74-83-9	Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U
56-23-5	Carbon Tetrachloride	0.4 U	0.4 U	0.4 U	0.4 U
108-90-7	Chlorobenzene	0.4 U	0.4 U	0.4 U	0.4 U
75-00-3	Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U
110-75-8	2-Chloroethylvinylether	2.0 U	2.0 U	2.0 U	2.0 U
67-66-3	Chloroform	0.4 U	0.4 U	0.4 U	0.4 U
74-87-3	Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U
124-48-1	Dibromochloromethane	0.4 U	0.4 U	0.4 U	0.4 U
95-50-1	1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
541-73-1	1,3-Dichlorobenzene	0.4 U	0.4 U	0.4 U	0.4 U
106-46-7	1,4-Dichlorobenzene	0.4 U	0.4 U	0.4 U	0.4 U
75-34-3	1,1-Dichloroethane	0.4 U	0.4 U	0.4 U	0.4 U
107-06-2	1,2-Dichloroethane	0.4 U	0.4 U	0.4 U	0.4 U
75-35-4	1,1-Dichloroethene	0.4 U	0.4 U	0.4 U	0.4 U
156-60-5	trans-1,2-Dichloroethene	0.4 U	0.4 U	0.4 U	0.4 U
78-87-5	1,2-Dichloropropane	0.4 U	0.4 U	0.4 U	0.4 U
10061-01-5	cis-1,3-Dichloropropene	0.4 U	0.4 U	0.4 U	0.4 U
10061-02-6	trans-1,3-Dichloropropene	0.4 U	0.4 U	0.4 U	0.4 U
100-41-4	Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
75-09-2	Methylene Chloride	1.0 U	1.0 U	3.6	3.0
1634-04-4	Methyl t-butyl ether	4.2 U	4.2 U	4.2 U	4.2 U
75-65-0	T-butyl alcohol	9.6 U	9.6 U	9.6 U	9.6 U
79-34-5	1,1,2,2-Tetrachloroethane	0.6 U	0.6 U	0.6 U	0.6 U
127-18-4	Tetrachloroethene	0.4 U	0.4 U	0.4 U	0.4 U
108-88-3	Toluene	0.5 U	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-Trichloroethane	0.4 U	0.4 U	0.4 U	0.4 U
79-00-5	1,1,2-Trichloroethane	0.4 U	0.4 U	0.4 U	0.4 U
79-01-6	Trichloroethene	0.4 U	0.4 U	0.4 U	0.4 U
75-69-4	Trichlorofluoromethane	0.4 U	0.4 U	0.4 U	0.4 U
75-01-4	Vinyl Chloride	2.0 U	2.0 U	2.0 U	2.0 U
1330-20-7	m,p-Xylene	2.8 U	2.8 U	2.8 U	2.8 U
95-47-6	o-Xylene	2.1 U	2.1 U	2.1 U	2.1 U

UG/L      Micrograms per Liter, equivalent to parts per billion.  
 FB          Field Blank.  
 TB          Trip Blank.  
 U            Compound analyzed for but not detected.  
 J            Compound concentration found below MDL.  
 D            Result is based on a dilution.  
 E            Result exceeds highest calibration standard.  
 B            Compound in method blank.

TABLE VII  
Summary of Results for BNAs Analysis of Groundwater Samples

PA-NYNJ Sample ID:	MW-3	PAMW-4	MW-5	MW-6	MW-7	MW-8	DUP	FB
Laboratory ID:	0005401	0005402	0005403	0005404	0005405	0005406	0005407	0005408
Sampling Date:	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Analyte:								
1	Acenaphthene	10 U						
2	Acenaphthylene	10 U						
3	Anthracene	10 U						
4	Benzo(a)Anthracene	10 U						
5	Benzo(a)Pyrene	10 U						
6	Benzo(b)fluoranthene	10 U						
7	Benzo(g,h,i)Perylene	10 U						
8	Benzo(k)Fluoranthene	10 U						
9	Benzoic Acid	50 U						
10	Benzyl Alcohol	10 U						
11	bis-(2-Chloroethyl)Ether	10 U						
12	bis(2-Chloroisopropyl)ether	10 U						
13	Bis(2-Ethylhexyl)Phthalate	10 U						
14	bis-(2-Chloroethoxy)Methane	10 U						
15	4-Bromophenyl-phenylether	10 U						
16	Butylbenzylphthalate	10 U						
17	4-Chloroaniline	10 U						
18	2-Chloronaphthalene	10 U						
19	4-Chloro-3-methylphenol	10 U						
20	2-Chlorophenol	10 U						
21	4-Chlorophenyl-phenylether	10 U						
22	Chrysene	10 U						
23	Dibenzo(a,h)Anthracene	10 U						
24	Dibenzofuran	10 U						
25	1,2-Dichlorobenzene	10 U						
26	1,3-Dichlorobenzene	10 U						
27	1,4-Dichlorobenzene	10 U	10 U	10 U	2 J	10 U	10 U	10 U
28	1,3'-Dichlorobenzidine	10 U						
29	2,4-Dichlorophenol	10 U						
30	Diethylphthalate	10 U						
31	2,4-Dimethylphenol	10 U						
32	Dimethyl Phthalate	10 U						
33	Di-n-Butylphthalate	10 U						
34	4,6-Dinitro-2-methylphenol	10 U						
35	2,4-Dinitrophenol	10 U						
36	2,4-Dinitrotoluene	10 U						
37	2,6-Dinitrotoluene	10 U						
38	Di-n-octyl phthalate	10 U						
39	Fluoranthene	10 U						
40	Fluorene	10 U						
41	Hexachlorobenzene	10 U						
42	Hexachlorobutadiene	10 U						
43	Hexachlorocyclopentadiene	10 U						
44	Hexachloroethane	10 U						
45	Indeno(1,2,3-cd)Pyrene	10 U						
46	Isophrone	10 U						
47	2-Methylnaphthalene	10 U						
48	2-Methylphenol	10 U						
49	3&4-Methylphenol	10 U						
50	Naphthalene	10 U						
51	2-Nitroaniline	10 U						
52	3-Nitroaniline	10 U						
53	4-Nitroaniline	10 U						
54	Nitrobenzene	10 U						
55	2-Nitrophenol	10 U						
56	4-Nitrophenol	10 U						
57	N-Nitrosodimethylamine	10 U						
58	N-Nitrosodiphenylamine	10 U						
59	N-Nitroso-Di-n-propylamine	10 U						
60	Pentachlorophenol	10 U						
61	Phenanthrene	10 U						
62	Phenol	10 U						
63	Pyrene	10 U						
64	1,2,4-Trichlorobenzene	10 U						
65	2,4,5-Trichlorophenol	10 U						
66	2,4,6-Trichlorophenol	10 U						
67	Benzidine	10 U						
68	1,2-Diphenylhydrazine	10 U						

Micrograms per Liter, equivalent to parts per billion.

B

Compound in method blank.

Compound analyzed for but not detected.

Compound concentration found below MDL.

Result is based on a dilution.

Summary of Results for Pesticides/PCBs Analysis of Groundwater Samples

	PA-NYNJ Sample ID:	MW-3	PAMW-4	MW-5	MW-6	MW-7	MW-8	DUP	FB	
	Laboratory ID:	0005401	0005402	0005403	0005404	0005405	0005406	0005407	0005408	
	Sampling Date:	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00	
	Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
CAS #	Analyte:									
319846	A-BHC	0.022 U	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U	0.022 U	0.024 U	
319857	B-BHC	0.022 U	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U	0.022 U	0.024 U	
58899	G-BHC (Lindane)	0.022 U	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U	0.022 U	0.024 U	
319868	D-BHC	0.022 U	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U	0.022 U	0.024 U	
76448	Heptachlor	0.022 U	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U	0.022 U	0.024 U	
309002	Aldrin	0.022 U	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U	0.022 U	0.024 U	
1024573	Heptachlor Epoxide	0.022 U	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U	0.022 U	0.024 U	
959988	Endosulfan I	0.022 U	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U	0.022 U	0.024 U	
5103719	A-Chlordane	0.022 U	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U	0.022 U	0.024 U	
5103742	G-Chlordane	0.022 U	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U	0.022 U	0.024 U	
60571	Dieldrin	0.044 U	0.044 U	0.048 U	0.048 U	0.048 U	0.048 U	0.044 U	0.048 U	
72559	4,4'-DDE	0.044 U	0.044 U	0.048 U	0.048 U	0.048 U	0.048 U	0.044 U	0.048 U	
72208	Endrin	0.044 U	0.044 U	0.048 U	0.048 U	0.048 U	0.048 U	0.044 U	0.048 U	
33213659	Endosulfan II	0.044 U	0.044 U	0.048 U	0.048 U	0.048 U	0.048 U	0.044 U	0.048 U	
72548	4,4'-DDD	0.044 U	0.044 U	0.048 U	0.048 U	0.048 U	0.048 U	0.044 U	0.048 U	
7421934	Endrin Aldehyde	0.044 U	0.044 U	0.048 U	0.048 U	0.048 U	0.048 U	0.044 U	0.048 U	
1031078	Endosulfan Sulfate	0.044 U	0.044 U	0.048 U	0.048 U	0.048 U	0.048 U	0.044 U	0.048 U	
50293	4,4'-DDT	0.044 U	0.044 U	0.048 U	0.048 U	0.048 U	0.048 U	0.044 U	0.048 U	
53494705	Endrin Ketone	0.044 U	0.044 U	0.048 U	0.048 U	0.048 U	0.048 U	0.044 U	0.048 U	
72435	Methoxychlor	0.220 U	0.220 U	0.240 U	0.240 U	0.240 U	0.240 U	0.220 U	0.240 U	
8001352	Toxaphene	1.10 U	1.10 U	1.20 U	1.20 U	1.20 U	1.20 U	1.10 U	1.20 U	
12674112	Aroclor-1016	0.550 U	0.550 U	0.600 U	0.600 U	0.600 U	0.600 U	0.550 U	0.600 U	
11104282	Aroclor-1221	0.550 U	0.550 U	0.600 U	0.600 U	0.600 U	0.600 U	0.550 U	0.600 U	
11141165	Aroclor-1232	0.550 U	0.550 U	0.600 U	0.600 U	0.600 U	0.600 U	0.550 U	0.600 U	
53469219	Aroclor-1242	0.550 U	0.550 U	0.600 U	0.600 U	0.600 U	0.600 U	0.550 U	0.600 U	
12672296	Aroclor-1248	0.550 U	0.550 U	0.600 U	0.600 U	0.600 U	0.600 U	0.550 U	0.600 U	
11097691	Aroclor-1254	0.550 U	0.550 U	0.600 U	0.600 U	0.600 U	0.600 U	0.550 U	0.600 U	
11096825	Aroclor-1260	0.550 U	0.550 U	0.600 U	0.600 U	0.600 U	0.600 U	0.550 U	0.600 U	
UG/L	Micrograms per Liter, equivalent to parts per billion.			J	Compound concentration found below MDL.					
FB	Field Blank.			D	Result is based on a dilution.					
TB	Trip Blank.			E	Result exceeds highest calibration standard.					
U	Compound analyzed for but not detected.			B	Compound in method blank.					

TABLE IX  
Summary of Results for Metals/TPHC Analysis of Groundwater Samples

		PA-NYNJ Sample ID:	MW-3	PAMW-4	MW-5	MW-6	MW-7	MW-8	DUP	FB
		Laboratory Sample ID:	0005401	0005402	0005403	0005404	0005405	0005406	0005407	0005408
		Sampling Date:	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00	05/15/00
CAS #	Analyte	Units								
7440-36-0	Antimony	ug/L	10.0 U							
7440-38-2	Arsenic	ug/L	10.0 U							
7740-41-7	Beryllium	ug/L	5.76	5.00 U	5.88	19.8	5.00 U	21.6	5.00 U	5.00 U
7440-43-9	Cadmium	ug/L	10.5	10.0 U	13.8	42.6	10.0 U	47.1	10.0 U	10.0 U
7440-47-3	Chromium	ug/L	30.0 U							
7440-50-8	Copper	ug/L	30.0 U							
7439-92-1	Lead	ug/L	10.0 U							
7439-97-6	Mercury	ug/L	0.200 U							
7440-02-0	Nickel	ug/L	40.0 U							
7782-49-2	Seelenium	ug/L	10.0 U							
7440-22-4	Silver	ug/L	10.0 U							
7440-28-0	Thallium	ug/L	10.0 U							
7440-66-6	Zinc	ug/L	100 U							
	Cyanide, Total	mg/L	0.01 U							
	Total Petroleum Hydrocarbons (TPHC)	mg/L	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.7 U

ug/L Micrograms per Liter, equivalent to parts per billion.  
mg/L Milligrams per Liter, equivalent to parts per million.  
U Compound analyzed for but n Compound analyzed for but not detected.

# APPENDIX "A"

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 1

PROJECT FK - Bldg 197		NAME OF CONTRACTOR Craiz		BORING NO. BH-5	SURFACE ELEV.
LOCATION raid out as per drawing				CONTRACT NO. 426-99-006	DATE 4/24/00
DRILLER D. Osuch	OPERATOR T. Rya	CASING SIZE	HOLE TYPE 1	GROUND WATER LEVEL	
"O.D.	"I.D.	HAMMER		Date	Time
# FALL	"	# FALL		Depth	Remarks

SING WS/FT.	DEPTH	SPOON BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0	Hand Auger	Full Rec	1	ASPHALT 0.4'
					Fill - Br M-F Sand, some Gr, to Cobbles 2.0'
	5				Hit Obst, moved 2' east to attempt MW-5-
					Bottom of Boring

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used  
 2 — U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 4

PROJECT JFK - Bldg 197		NAME OF CONTRACTOR Cray		BORING NO. MW-5	SURFACE ELEV.
DESCRIPTION -aid out as per drawing (S.E. corner of Bldg)				CONTRACT NO. 426-99-006	DATE 4/24/00
BOON 3	O.D. 2 3/8	I.D.	CASING SIZE Augers	HOLE TYPE A Monitor	GROUND WATER LEVEL
HAMMER 40	# FALL 30	HAMMER	# FALL		
OPERATOR D. Oruch		SPECTOR T. Ryan		Date 4/24/00	Time AM
				Depth 6.0'	Remarks In 5-4

CASING DEPTH	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS
0	0				ASPHALT 0.4'
		Hand Auger	Full Rec.	1	Fill. Br M-F Sand, to Silt, to G.
				2	Same
	5			3	Same
		3-3		4	Same
		4-6	18"		
		3-5		5	Same
	10	5-5	17"		
		4-4			
		5-4	20"	6	Same
					Bottom of Boring 12.0'

Note: Sample # 3 was saved for testing. All other samples were screened w/ AID & then discarded

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

**PORT AUTHORITY OF NY & NJ**  
**Engineering Department - Materials Division**

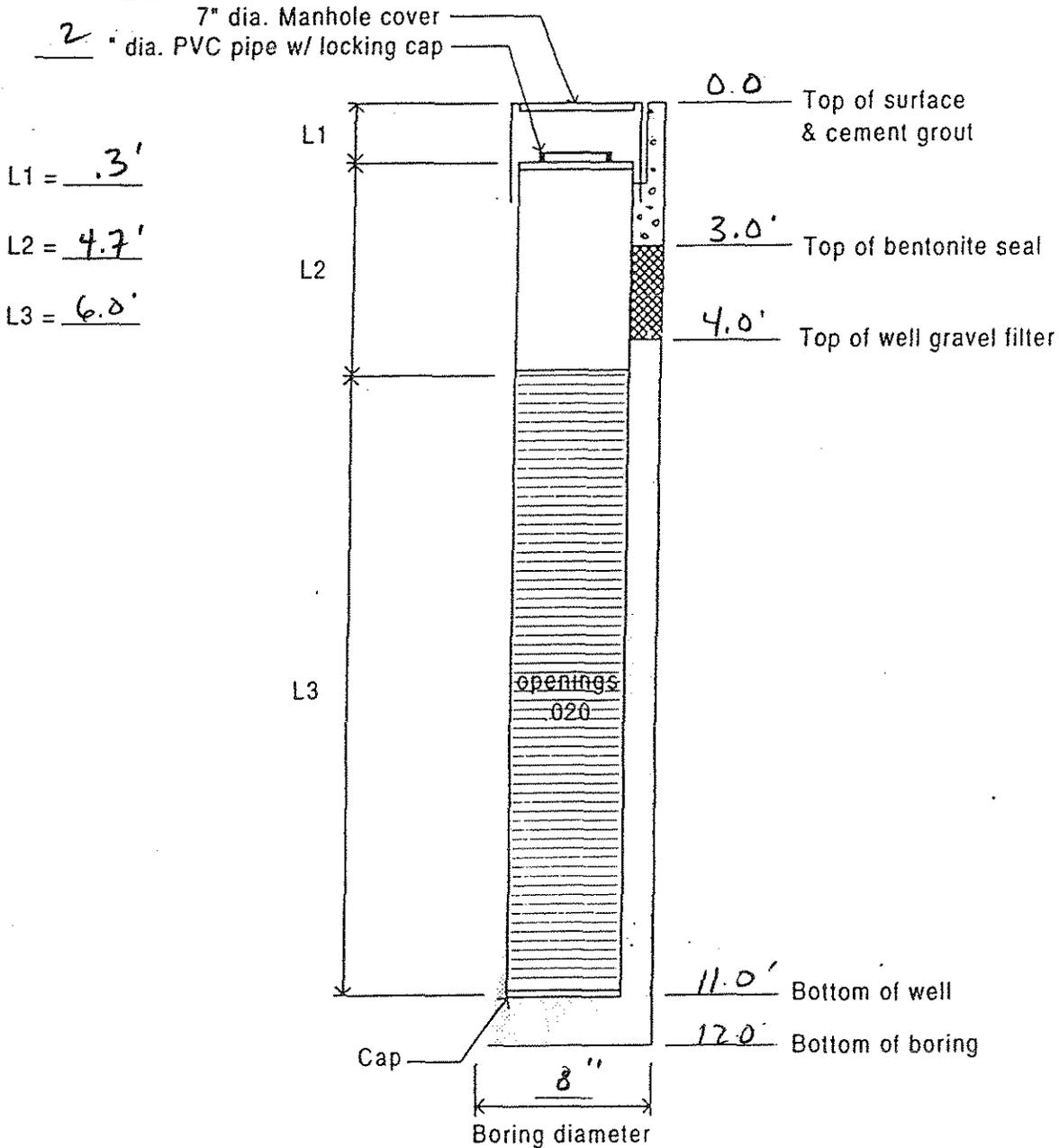
**Installation Report**

Sheet 2 of 4

PROJECT JFK-Bldg 197	CONTRACT NO. 426-99-006		
DESCRIPTION aid out as per drawing	CONTRACTOR Craig		
NO. MW-5	WELL TYPE A monitor	INSPECTOR T. Ryan	DRILLER D. O. Smith
			DATE 4/24/00

**Development Report** (NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

124/00	WATER LEVEL BEFORE 6.1'	WATER LEVEL AFTER 6.2'	TAKEN 15 MINUTES AFTER
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KS: Back filled w/ bentonite from 12'-11'.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4 of 4

PROJECT: JFK - Bldg 197  
LOCATION: laid out as per drawing DATE: 4/24/00  
BORING No: MW-5 TOTAL No. OF SAMPLES: 1

SIGNATURE OF ALL

PRESENT AT SAMPLING

*T. Gyo*

RELINQUISHED

DATE 4/24/00 RECEIVED

BY (SIGN)

*T. Gyo*

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY (SIGN)

RELINQUISHED

DATE

RECEIVED

BY (SIGN)

TIME

BY LAB

REMARKS:

1 sample in 1-16 oz jar & 1-Voa jar

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 4

PROJECT <b>JFK- Bldg 197</b>	NAME OF CONTRACTOR <b>Craig</b>	BORING NO. <b>MW-6</b>	SURFACE ELEV.
LOCATION <b>Laid out as per drawing (East of N.E. corner)</b>		CONTRACT NO. <b>426-99-006</b>	DATE <b>4/24/00</b>
DIAMETER <b>3" O.D. 2 3/8" I.D.</b>	CASING SIZE <b>Augers</b>	GROUND WATER LEVEL	
HAMMER <b>140 # FALL 30"</b>	HOPE TYPE <b>Air motor</b>	Date <b>4/24/00</b>	Time <b>AM</b>
OPERATOR <b>D. Osuch</b>	# FALL <b>-</b>	Depth <b>60'</b>	Remarks <b>In S-4</b>
INSPECTOR <b>T. Ryan</b>			

CASING INCHES/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
	0	Hard Auger	Full Rec	1	<b>ABSTRACT</b> <span style="float:right">0.5'</span>
				2	Same
	5			3	Same
		4-3		4	Same
		5-5	20"		
		3-5		5	Same
	10	4-5	19"		
		2-4		6	Same
		4-4	19"		
	15				Bottom of Boring <span style="float:right">12.0'</span>

*Note: Sample # 3 was saved for testing. All other samples were screened w/ PID & then discarded.*

NOTES: 1 — Length recovered; 0" — Loss of Sample, T — Trap used  
 2 — U = undisturbed; A = auger; OER = open end rod; V = vane  
 3 — Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

**PORT AUTHORITY OF NY & NJ**  
**Engineering Department - Materials Division**

**Well Installation Report**

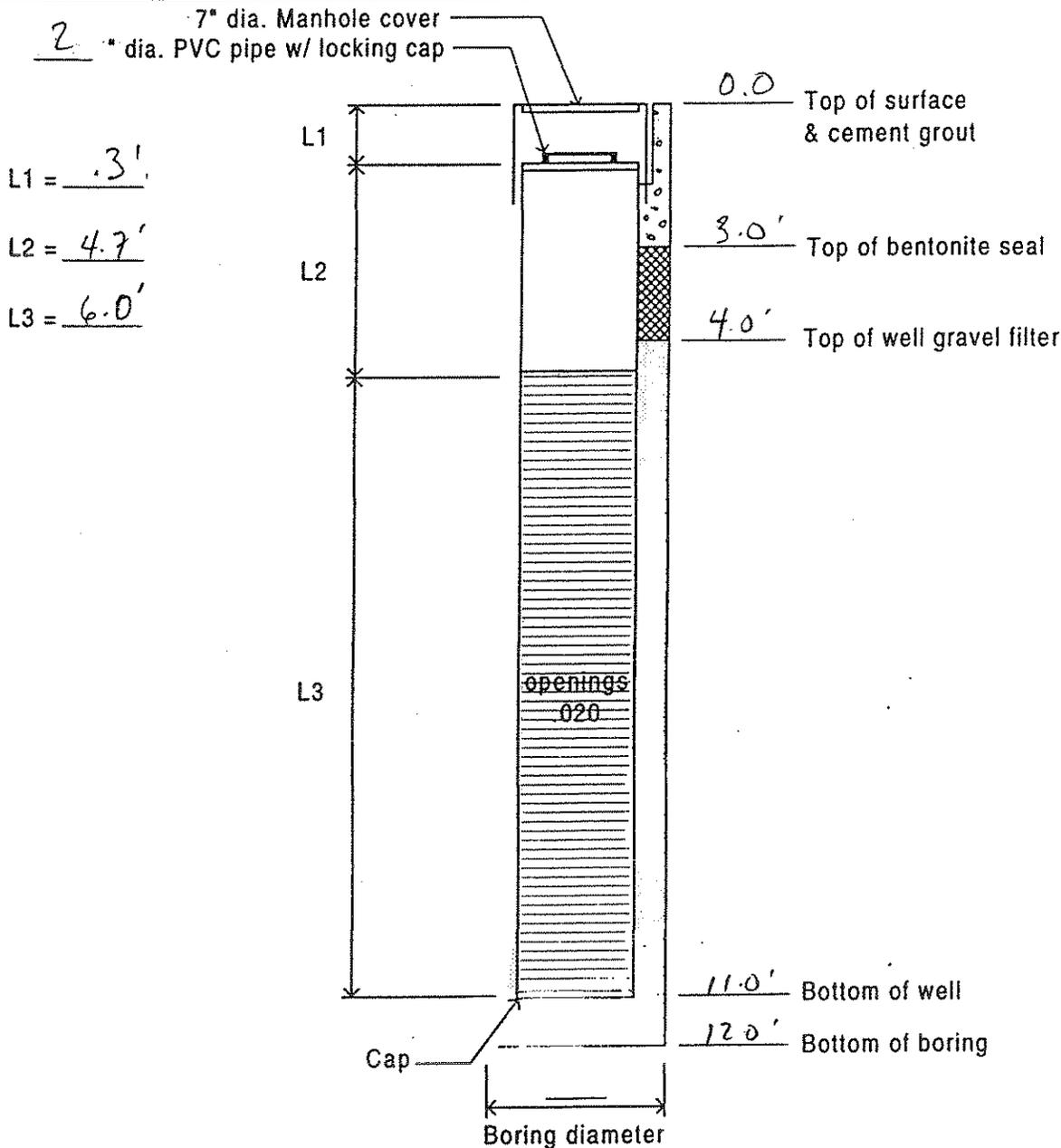
Sheet 2 of 4

PROJECT JFK- Bldg 197		CONTRACT NO. 426-99-006		
LOCATION Laid out as per drawing		CONTRACTOR Craig		
WELL NO. MW-6	WELL TYPE A' monitor	INSPECTOR T. Ryan	DRILLER D. Orzech	DATE 4/24/06

**Well Development Report**

(NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE 4/24/06	WATER LEVEL BEFORE 6.0'	WATER LEVEL AFTER 6.0'	TAKEN 15	MINUTES AFTER
-----------------	----------------------------	---------------------------	-------------	---------------



REMARKS:  
 Backfilled w/ bentonite from 12'-11'.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4 of 4

PROJECT: JFK-Bldg 197  
LOCATION: laid out as per drawing DATE: 4/24/00  
BORING No: MW-6 TOTAL No. OF SAMPLES: 1 + FB

SIGNATURE OF ALL PRESENT AT SAMPLING  
*T. Kora*

RELINQUISHED BY (SIGN)	DATE	TIME	RECEIVED BY (SIGN)
	4/24/00		

REMARKS: 1-sample in 1-16oz jar & 1-Voa jar  
1-FB in 2-Vials.

THE STATE OF NY & NJ

Engineering Department  
Construction Division  
Materials Engineering Section

**BORING REPORT**

SHEET 1 OF 4

PROJECT FK - Bldg 197		NAME OF CONTRACTOR Craig		BORING NO. MW-7		SURFACE ELEV.	
LOCATION sid out as per drawings (West of Bldg)				CONTRACT NO. 426-99-006		DATE 4/24/00	
Casing Size 3" O.D. 2 3/8" I.D.		HOLE TYPE Augers A monitor		GROUND WATER LEVEL			
HAMMER 140 # FALL 30		HAMMER # FALL		Date	Time	Depth	Remarks
OPERATOR D. Orzech				4/24/00	PM	6.0'	In S-3
SUPERVISOR T. Ryan							

DEPTH DWS/FT.	DEPTH	SPOON BLOWS/6"	RE- COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE
0	0	Hand Auger	Full Rec	1	Fill - Br M-f Sand, to Silt, to G. ASPHALT 0.4'
				2	Same
	5			3	Same
		6-12		4	Fill - Br C-f Sand, some G, to Silt
		15-17	22"		
		4-5		5	Same
	10	8-10	15"		
		6-7		6	Fill - Br M-f Sand, to Silt, to G.
		7-5	20"		
					Bottom of Boring 12.0'

Note: Sample # was saved for testing. All other samples were screened w/ P10 & then discarded

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

**PORT AUTHORITY OF NY & NJ**  
**Engineering Department - Materials Division**

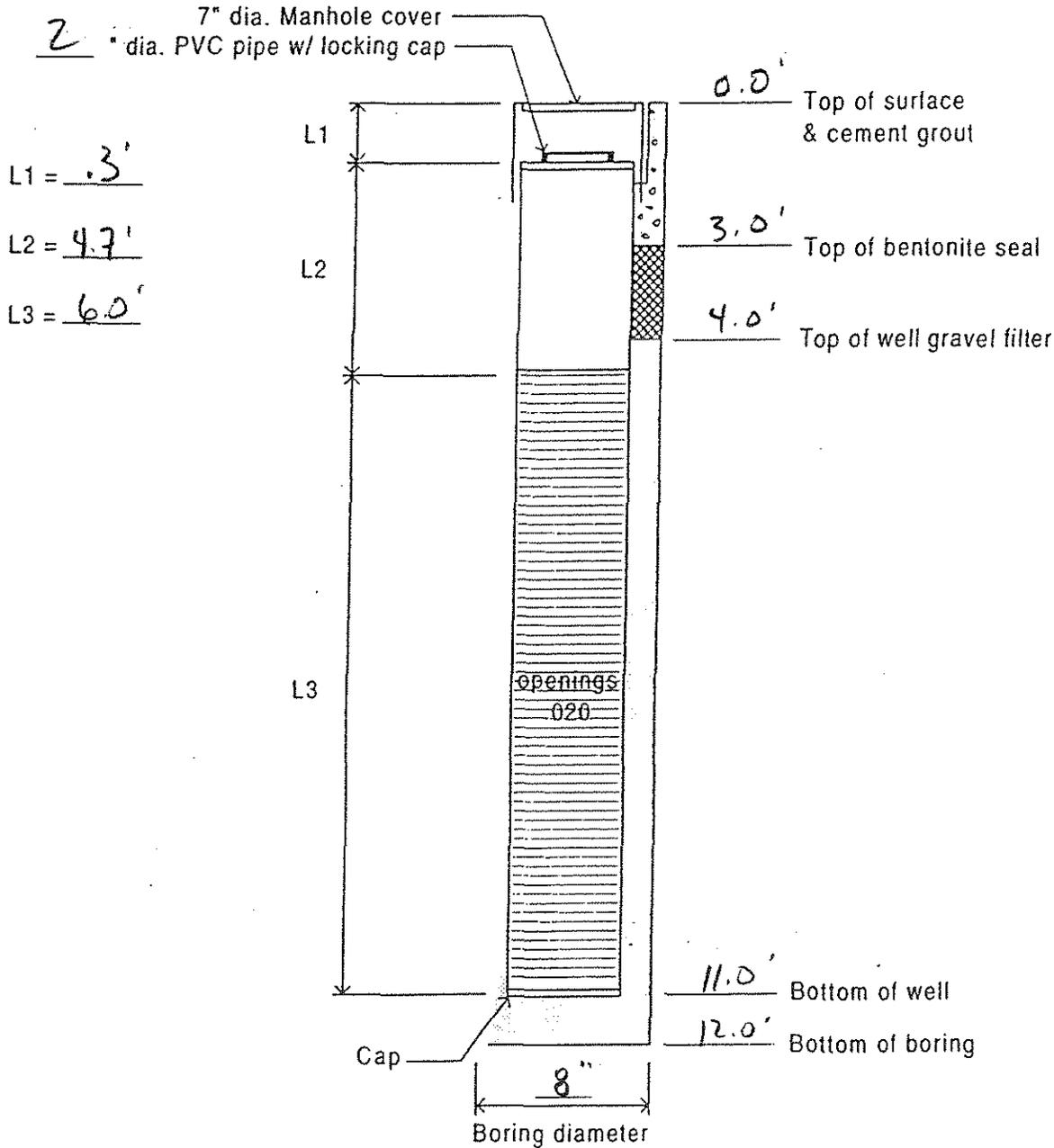
**Installation Report**

Sheet 2 of 4

ECT 5FK-Bldg 197			CONTRACT NO. 426-99-006	
TION aid out as per drawing			CONTRACTOR Craig	
NO. MW-7	WELL TYPE A monitor	INSPECTOR T. Ryan	DRILLER D. Orzech	DATE 4/24/00

**Development Report** (NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

124/00	WATER LEVEL BEFORE 6.0'	WATER LEVEL AFTER 6.2'	TAKEN 15 MINUTES AFTER
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REMARKS: Backfilled w/ bent. from 12'-11'.



# THE PORT AUTHORITY OF N.Y & N.J.

ENGINEERING DEPARTMENT  
MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY RECORD

Sheet 4 of 4

PROJECT: JFK-Bldg 197  
LOCATION: laid out as per drawing DATE: 4/24/00  
BORING No: MW-7 TOTAL No. OF SAMPLES: 1

SIGNATURE OF ALL PRESENT AT SAMPLING  
*T. Ryan*

RELINQUISHED DATE 4/24/00 RECEIVED  
BY (SIGN) *T. Ryan* TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY (SIGN)

RELINQUISHED DATE RECEIVED  
BY (SIGN) TIME BY LAB

REMARKS: 1 sample in 1-16 oz jar & 1-100 jar

**THE PORT AUTHORITY OF NY & NJ**

Engineering Department  
Construction Division  
Materials Engineering Section  
**BORING REPORT**

SHEET 1 OF 4

PROJECT FFK - Bldg 197		NAME OF CONTRACTOR Craig		BORING NO. MW-8	SURFACE ELEV.
LOCATION aid out as per drawing				CONTRACT NO. 426-99-006	DATE 4/21/00
DIAMETER 3	CASING SIZE O.D. 2 3/8	HOLE TYPE Augers	GROUND WATER LEVEL		
HAMMER 140	HAMMER # FALL 30	HAMMER # FALL	Date 4/21/00	Time Am	Depth 7.0'
OPERATOR D Osuch			Remarks In S-4		
SUPERVISOR T Ryan					

DEPTH	SPoon BLOWS/6"	RE-COV'D	SAMP. NO.	SAMPLE DESCRIPTION AND REMARKS LINE LOCATES CHANGE OF PROFILE (GRAVEL)
0	Hand Auger	Full Rec	1	Fill - Br M-F Sand & Gr.
			2	Same
5			3	Fill - Br M-F Sand, to Silt, det Gr.
	19-18		4	Same
	14-10	22"		
	7-3		5	Same
10	2-4	17"		
	4-4		6	Same
	5-4	18"		
12.0				Bottom of Boring

Note: Sample # 4 was saved for testing. All other samples were screened w/ #10; then discarded.

NOTES: 1 - Length recovered; 0" - Loss of Sample, T - Trap used  
2 - U = undisturbed; A = auger; OER = open end rod; V = vane  
3 - Log depth of change in color of wash water, loss of water, artesian water, sand heave in casing, etc.

**PORT AUTHORITY OF NY & NJ**  
**Engineering Department - Materials Division**

Installation Report

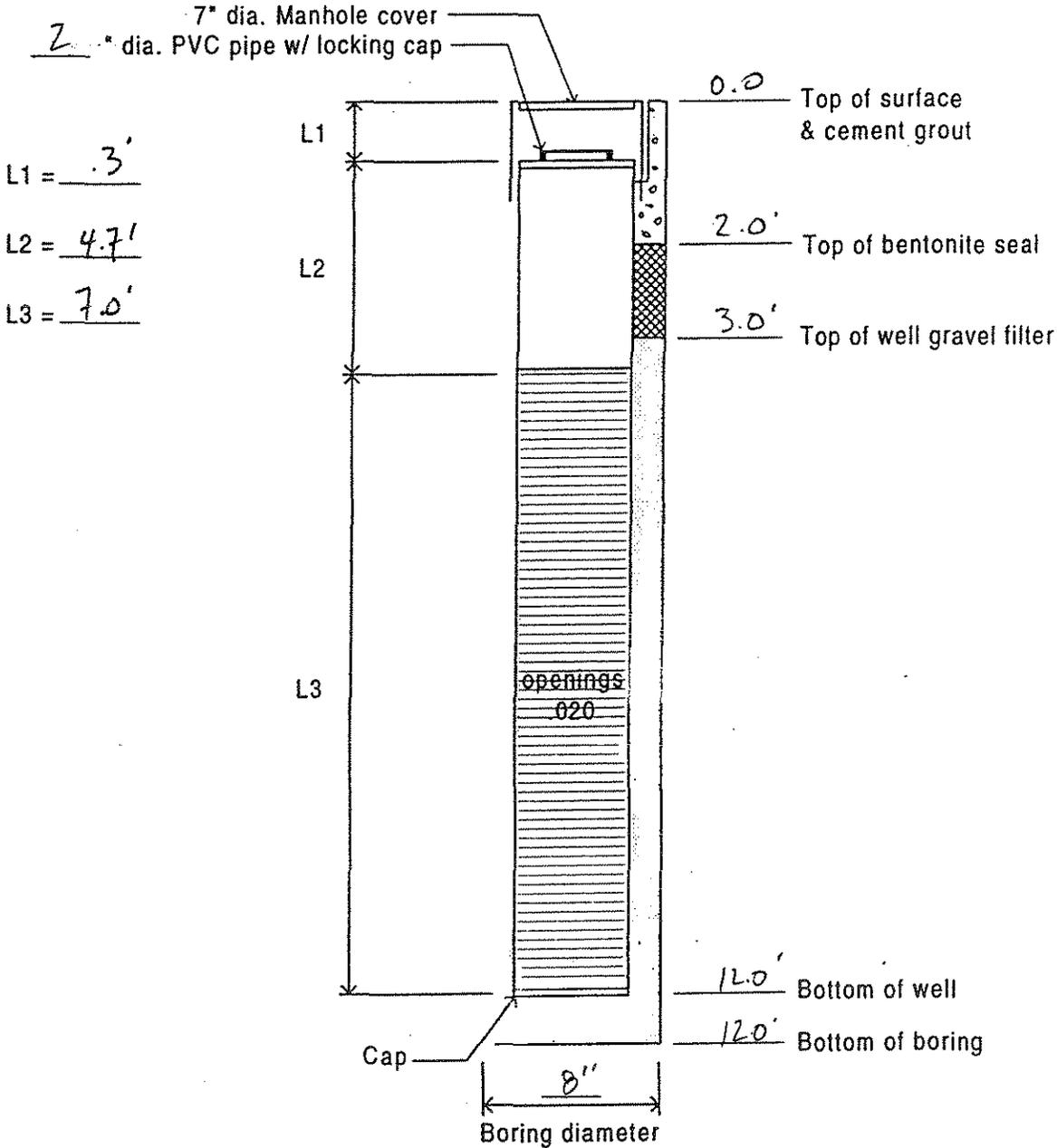
Sheet 2 of 4

PROJECT JFK-Bldg 197			CONTRACT NO. 424-99-006	
LOCATION Laid out as per drawing			CONTRACTOR Craig	
WELL NO. MW-8	WELL TYPE A monitor	INSPECTOR T. Ryan	DRILLER D. Osuch	DATE 4/21/00

Development Report

(NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

4/21/00	WATER LEVEL BEFORE 6.7'	WATER LEVEL AFTER 6.9'	TAKEN 15 MINUTES AFTER
---------	-------------------------	------------------------	------------------------



REMARKS:



# THE PORT AUTHORITY OF N.Y & N.J.

## ENGINEERING DEPARTMENT MATERIALS ENGINEERING DIVISION CHAIN OF CUSTODY RECORD

Sheet 4 of 4

PROJECT: *JFK - Bldg 197*

LOCATION: *laid out as per drawing* DATE: *4/21/00*

BORING No: *MW-8* TOTAL No. OF SAMPLES: *1 + Dup + FB*

SIGNATURE OF ALL PRESENT AT SAMPLING			
RELINQUISHED	DATE	RECEIVED	
BY (SIGN)	TIME	BY (SIGN)	
RELINQUISHED	DATE	RECEIVED	
BY (SIGN)	TIME	BY (SIGN)	
RELINQUISHED	DATE	RECEIVED	
BY (SIGN)	TIME	BY LAB	

REMARKS: *1 sample in 2-16oz jars & 2-100ml jars (Dup taken)*  
*1-FB in 2-vials*

## APPENDIX "B"















FIELD COMPUTATION SHEET

File No. 86 Acc. No. \_\_\_\_\_ Page No. 12971

Sheet No. 1 Of 1

Project JFK IA Contract No. A3-992.029 Office \_\_\_\_\_

Computer Barry Jones Date 5-3-00 Checked By \_\_\_\_\_ Date \_\_\_\_\_

Subject Locations and Elevations Monitor Wells and B.Hole @ BLDG-197

LOCATIONS AND ELEVATIONS AT BLDG 197

SOUTH	EAST	GRND ELEV.	T.O.P. ELEV.	MONITOR WELL#
51802	72874	12.97	12.49	"197MW-5"
51631	72965	12.39	12.14	"197MW-6"
51602	72450	12.77	12.57	"197MW-7"
51593	73146	12.93	12.58	"197MW-8"
51802	72872	12.94		BOR. HOLE "197BH-5"

# **APPENDIX "C"**

**John F. Kennedy International Airport (JFK)  
Comprehensive Environmental Compliance Audit  
Exit Interview Summary**

*FINAL*

**Virgin Atlantic Cargo  
Building 197**

***I. GENERAL***

On behalf of the Port Authority of New York and New Jersey (PA), Camp Dresser & McKee (CDM) performed an environmental compliance audit of the Virgin Atlantic Cargo (VAC) facility located in Building 197, John F. Kennedy International Airport (JFKIA), Jamaica, New York. CDM conducted the environmental compliance audit for the purpose of demonstrating the status of the facility's compliance with federal and state environmental laws and regulations in effect in November 1995, including, but not limited to, the Environmental Programs set forth in the New York State Department of Environmental Conservation (NYSDEC) 1994-1995 State Agency Environmental Audit Guidance Manual. The audit satisfies a requirement of the Order on Consent between the PA and the NYSDEC for JFK.

The audit was limited to, except at certain PA facilities, environmental compliance and did not include an assessment of compliance with the Occupational Safety and Health Act (OSHA) regulations. Any OSHA observations made and reported herein are incidental and random; they are not intended to provide a comprehensive assessment of the facility operations at major tenanted areas with respect to OSHA laws and regulations.

The CDM audit team, consisting of Miriam Kubiska and Gregory Scott, P.E., visited the site on May 28, 1996. During the site visit, the audit team interviewed the following VAC personnel:

- Rudy Ruthman, Station Manager
- Joseph D'Esposito, Manager Support Services

At the end of the site visit, the audit team presented the findings of the audit along with a Preliminary Exit Interview Form to Messrs. Ruthman and D'Esposito. The completed form summarized potential non-compliance issues identified by the audit team and listed any outstanding information required to complete the audit.

On June 4, 1996, CDM contacted MAF Mechanical (MAF), the HVAC maintenance contractor, and spoke to Flip Scherr regarding the heating and air conditioning equipment at the facility.

**Virgin Atlantic Cargo  
Building 197  
Final Exit Interview Summary**

**1.1 Description of Operations**

Building 197 was constructed in 1955, and has been used as an active terminal, an office building and a warehouse. Previous tenants included Air Freight Warehouse, the Taxi and Limousine Commission, and Ogden Allied. VAC took over the leasehold in April 1992. VAC operates a 47,000-square foot warehouse on three and one half acres of property.

VAC's facility is not rampside. VAC handles cargo for BWIA, Air Europa, Avianca, Aeromex Express, Tower Air and American West. For all the aforementioned carriers, except Air Europa, VAC collects cargo at the terminals and transports it to their warehouse in Building 197. American Airlines transports Air Europa's cargo to VAC's facility and VAC provides warehouse space for the cargo. VAC contracts North American Aviation Services to perform cargo handling.

VAC leases 15 forklifts from G.E. Maintenance. The maintenance is performed off-site. G.E. Maintenance reportedly ships waste oil from the forklifts to J&B Waste Oil Recycling in Brooklyn, New York. In addition, VAC leases a van, a jeep, a pick-up, and two trucks. Any maintenance of these vehicles is performed at an off-site service station.

Building cleaning is performed by John's Cleaning Service.

The offices in Building 197 are heated by natural gas. The warehouse is heated by an overhead infrared heating system. Additionally, there are two roof-mounted five-ton HVAC units. VAC leases two refrigeration storage containers. The containers use Freon-12 and are stored outside the warehouse.

*Site Investigations*

A Site Assessment Report of Building 197 was prepared by Lawler, Matusky, & Skelly in December 1992. The report was a baseline environmental assessment that described past and present site activities, and identified any site contamination. The results of the study indicated that low levels of several metals and semi-VOAs were present in soils underlying the site. It appeared that the contaminants were not the result of site activities, but possibly associated with fill material used during site development.

**Virgin Atlantic Cargo  
Building 197  
Final Exit Interview Summary**

**1.2 Regulatory Programs**

*1.2.1 Audit Scope*

The following regulatory areas were evaluated for applicability during the facility audit:

- Petroleum Bulk Storage;
- Emergency Planning and Community Right to Know (EPCRA);
- Chemical Bulk Storage;
- Pesticide Usage;
- Toxic Substances Control Act (TSCA);
- Water Quality Management;
- Air Emissions;
- Hazardous Waste Management;
- Solid Waste Management; and
- Wetlands and Wildlife Management.

*1.2.2 Applicable Regulatory Programs*

Based on the records review, the information provided by the tenant in the questionnaire, and the information provided during the site visit, the following areas were determined to be applicable to the facility with respect to the audit:

- EPCRA;
- Pesticide Usage;
- Water Quality Management;
- Air Emissions; and
- Solid Waste Management.

**1.3 Accuracy and Completeness of Facility Provided Data**

A copy of the pre-visit questionnaire for VAC's activities in Building 197 was mailed by VAC to CDM. This information was received by CDM on May 3, 1996. According to facility personnel, the original questionnaire along with some facility drawings were submitted previously by mail, but it was never received by the auditors.

The details of this narrative summary and of all audit findings are accurate and complete based on the information provided through the questionnaire, the records review, and the facility visit.

**Virgin Atlantic Cargo  
Building 197  
Final Exit Interview Summary**

**1.4 Outstanding Information**

The following information was not available during the audit:

- As-built drawings of facility plumbing and piping systems, identifying sanitary and storm drainage systems were not available during the site visit. According to the tenant, these drawings were submitted with the original questionnaire.
- The facility representatives provided limited information regarding the heating and CFC-containing equipment on-site. VAC did provide the name of the HVAC maintenance contractor for CDM to follow-up.

**2. REGULATORY AREAS**

**2.1 EPCRA**

**2.1.1 Observations**

- Some of VAC's employees have received Dangerous Goods Training.
- The facility does not have a written hazard communication program.
- According to VAC, the only hazardous chemical used at the facility is propane to fuel the forklifts. VAC uses approximately 720 cylinders of propane annually.
- Based on the information provided by the tenant in the questionnaire and the observations of the auditors, it appears that on the day of the audit, chemicals were stored below threshold planning quantities. Note that a detailed chemical inventory (i.e., exact quantities of constituents in each product) for the tenant facility was not performed. Additionally, at this facility, the type and quantity of chemicals stored can vary on a daily basis.

**2.1.2 Compliance Issues**

No EPCRA-specific compliance issues were identified during this environmental audit.

**Virgin Atlantic Cargo  
Building 197  
Final Exit Interview Summary**

**2.2 Pesticide Usage**

*2.2.1 Observations*

- Pesticides are applied at the facility by the PA's contractor. VAC representatives reported that they did not have any information related to the type of pesticide applied at the facility.
- The PA does maintain documentation (i.e., signature of tenant representatives) indicating that the tenant has been notified that the pesticide, herbicide, and/or rodenticide application has occurred.

*2.2.2 Compliance Issues*

No regulatory compliance issues specific to pesticide usage were identified during this environmental audit.

**2.3 Water Quality Management**

*2.3.1 Observations*

- There are floor drains within the warehouse. The facility representatives had no information available to confirm the discharge points of the drains.
- Facility representatives indicated that condensate from the roof-mounted HVAC units may discharge into the storm drain.
- Stormwater runoff from the facility enters the stormwater drainage system at the Airport and is discharged through Outfall No. 023. Based on information provided by the PA, requested modifications to the Airport's existing SPDES permit will authorize, from this leasehold, discharges of stormwater only.
- According to facility representatives, there are no oil/water separators at the facility.
- One floor drain was observed in the boiler room. A pipe, which appeared to originate from the hot water tank, drained into the floor drain. The tenant indicated that the boiler has been disconnected.

**Virgin Atlantic Cargo  
Building 197  
Final Exit Interview Summary**

**2.3.2 Compliance Issues**

An assessment/verification of compliance requires a review of the drawings to determine the discharge points of the floor drains; however, drawings were not available to the auditors.

The exact discharge point of the floor drains in Building 197 could not be verified. This is a potential compliance issue.

If the floor drains discharge to the storm drainage system, then the following applies:

- [6 NYCRR Part 751.1] - No person shall discharge or cause a discharge of any pollutant without a SPDES permit having been issued to such person pursuant to 6 NYCRR Part 751.1 and ECL, Article 17, Title 8.

If the floor drains discharge to the sanitary system, compliance with the requirements of the local publicly owned treatment works should be ascertained:

- [40 CFR 403.5] - A user of public sewers may not introduce any pollutants that may cause pass through or interference (i.e., a discharge which inhibits or disrupts a water pollution control plant, causing a violation of the plant's SPDES permit).

**2.4 Air Emissions**

**2.4.1 Observations**

- VAC leases two refrigeration containers from Airline Container Leasing. Each container uses 14 pounds of Freon-12.
- MAF Mechanical services two roof-mounted air conditioners. One unit has approximately 18 pounds of refrigerant and the other unit has 12 pounds of refrigerant. According to Flip Scherr of MAF, all of MAF's technicians are certified in the recovery of refrigerant.
- According to MAF, the following heating units exist in Building 197: a furnace which heats the office space, an infrared system which heats the warehouse, and a duct furnace. Neither the tenant nor Flip Scherr of MAF had any information regarding the heating input to any of the systems.
- There is one 745,000 BTU/hr boiler which is currently disconnected.

#### *2.4.2 Compliance Issues*

Because of a lack of information related to the heat input of the gas-fired furnace, the infrared system, and the duct furnace, compliance with applicable air regulations could not be ascertained.

### **2.5 Solid Waste Management**

#### *2.5.1 Observations*

- VAC does not generate any used oil on-site.
- VAC has two solid waste dumpsters at Building 197. Approximately 20 cubic yards per week of paper, plastic, and other office waste are disposed into a compactor and are compacted to 10 cubic yards. Wood waste (i.e., skids and pallets) is disposed into a 30 cubic yard dumpster. VAC generates approximately 10 cubic yards of wood waste per week.

#### *2.5.2 Compliance Issues*

No regulatory compliance issues were noted in this environmental area.

## APPENDIX "D"



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	8110
SAMPLE NUMBER	0005401
DATA FILE	>C0436
CLIENT NAME	PAONYKJ
FIELD ID	MW-3

MATRIX	Aqueous
DILUTION FACTOR	1.0
DATE EXTRACTED	
DATE ANALYZED	05/18/00
ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
107028	Acrolein	U	6.1	156605	trans-1,2-Dichloroethene	U	.4
107131	Acrylonitrile	U	6.6	78875	1,2-Dichloropropane	U	.4
71432	Benzene	U	.4	10061015	cis-1,3-Dichloropropene	U	.4
75274	Bromodichloromethane	U	.4	10061026	trans-1,3-Dichloropropene	U	.4
75252	Bromoform	U	.4	100414	Ethylbenzene	U	1.0
74839	Bromomethane	U	2.0	75092	Methylene Chloride	U	1.0
56235	Carbon Tetrachloride	U	.4	1634044	Methyl t-butyl ether	U	4.2
108907	Chlorobenzene	U	.4	75650	T-butyl alcohol	U	9.6
75003	Chloroethane	U	2.0	79345	1,1,2,2-Tetrachloroethane	U	.6
110750	2-Chloroethylvinylether	U	2.0	127184	Tetrachloroethene	U	.4
67663	Chloroform	U	.4	108883	Toluene	U	.5
74873	Chloromethane	U	2.0	71556	1,1,1-Trichloroethane	U	.4
124481	Dibromochloromethane	U	.4	79005	1,1,2-Trichloroethane	U	.4
95501	1,2-Dichlorobenzene	U	.5	79016	Trichloroethene	U	.4
541731	1,3-Dichlorobenzene	U	.4	75694	Trichlorofluoromethane	U	.4
106467	1,4-Dichlorobenzene	U	.4	75014	Vinyl Chloride	U	2.0
75343	1,1-Dichloroethane	U	.4	1330207	m,p-Xylene	U	2.8
107062	1,2-Dichloroethane	U	.4	95476	o-Xylene	U	2.1
75354	1,1-Dichloroethene	U	.4				

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	103 %	76-114	OK
Toluene-d8	100 %	88-110	OK
Bromofluorobenzene	97 %	86-115	OK

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	0110
SAMPLE NUMBER	0005407
DATA FILE	200457
CLIENT NAME	PRONTIUS
FIELD ID	PRM-4

MATRIX	Aqueous
DILUTION FACTOR	1.0
DATE EXTRACTED	
DATE ANALYZED	05/18/00
ANALYZED BY	WILLIAMS

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
107020	Acrolein	0	6.1	156605	trans-1,2-Dichloroethene	0	.4
107151	Acrylonitrile	0	6.6	78675	1,2-Dichloropropane	0	.4
71452	Benzene	0	.4	10061015	cis-1,3-Dichloropropene	0	.4
75274	Bromodichloromethane	0	.4	10061026	trans-1,3-Dichloropropene	0	.4
75252	Bromoform	0	.4	100414	Ethylbenzene	0	1.0
74879	Bromomethane	0	2.0	75092	Methylene Chloride	0	1.0
56255	Carbon Tetrachloride	0	.4	1654044	Methyl t-butyl ether	0	4.2
108907	Chlorobenzene	0	.4	75650	T-butyl alcohol	0	9.6
75003	Chloroethane	0	2.0	79345	1,1,2,2-Tetrachloroethane	0	.6
110750	2-Chloroethoxyvinyl ether	0	2.0	127184	Tetrachloroethene	0	.4
67663	Chloroform	0	.4	100883	Toluene	0	.5
74873	Chloromethane	0	2.0	71556	1,1,1-Trichloroethane	0	.4
124481	Dibromochloromethane	0	.4	79605	1,1,2-Trichloroethane	0	.4
95501	1,2-Dichlorobenzene	0	.5	79016	Trichloroethene	0	.4
541731	1,3-Dichlorobenzene	0	.4	75694	Trichlorofluoromethane	0	.4
106467	1,4-Dichlorobenzene	0	.4	75014	Vinyl Chloride	0	2.0
75345	1,1-Dichloroethane	0	.4	1330207	m,p-Xylene	0	2.8
107062	1,2-Dichloroethane	0	.4	75476	o-Xylene	0	2.1
75354	1,1-Dichloroethene	0	.4				

<u>SUBSTITUTE COMPOUNDS</u>	<u>RECOVERY</u>	<u>LIMITS</u>	<u>STATUS</u>
1,2-Dichloroethane-d4	101 %	76-114	OK
Toluene-d8	98 %	86-110	OK
Bromofluorobenzene	98 %	86-115	OK

J - Indicates compound concentration found below MDL.  
 0 - Indicates compound analyzed for but not detected,  
 0 - indicates result is based on a dilution.

0 - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005403  
 DATA FILE >C0438  
 CLIENT NAME PAONYNJ  
 FIELD ID MW-5

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 05/18/00  
 ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
107028	Acrolein	U	6.1	156605	trans-1,2-Dichloroethene	U	.4
107131	Acrylonitrile	U	6.6	78875	1,2-Dichloropropane	U	.4
71432	Benzene	U	.4	10061015	cis-1,3-Dichloropropene	U	.4
75274	Bromodichloromethane	U	.4	10061026	trans-1,3-Dichloropropene	U	.4
75252	Bromoform	U	.4	100414	Ethylbenzene	U	1.0
74839	Bromomethane	U	2.0	75092	Methylene Chloride	U	1.0
56235	Carbon Tetrachloride	U	.4	1634044	Methyl t-butyl ether	U	4.2
108907	Chlorobenzene	.6	.4	75650	T-butyl alcohol	U	9.6
75003	Chloroethane	U	2.0	79345	1,1,2,2-Tetrachloroethane	U	.6
110758	2-Chloroethylvinylether	U	2.0	127184	Tetrachloroethene	U	.4
67663	Chloroform	U	.4	108883	Toluene	U	.5
74873	Chloromethane	U	2.0	71556	1,1,1-Trichloroethane	U	.4
124481	Dibromochloromethane	U	.4	79005	1,1,2-Trichloroethane	U	.4
95501	1,2-Dichlorobenzene	U	.5	79016	Trichloroethene	U	.4
541731	1,3-Dichlorobenzene	U	.4	75694	Trichlorofluoromethane	U	.4
106467	1,4-Dichlorobenzene	U	.4	75014	Vinyl Chloride	U	2.0
75343	1,1-Dichloroethane	U	.4	1330207	m,p-Xylene	U	2.8
107062	1,2-Dichloroethane	U	.4	95476	o-Xylene	U	2.1
75554	1,1-Dichloroethene	U	.4				

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	<u>103</u> %	76-114	<u>OK</u>
Toluene-d8	<u>98</u> %	88-110	<u>OK</u>
Bromofluorobenzene	<u>99</u> %	86-115	<u>OK</u>

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005406  
 DATA FILE PC0437  
 CLIENT NAME FRONTIER  
 FIELD ID FW-6

MATRIX AQUEOUS  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 05/18/00  
 ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/L	MUL
107020	Acrolein	U	0.1
107131	Acrylonitrile	U	0.6
71432	Benzene	5.8	.4
75274	Bromodichloromethane	U	.4
75252	Bromoform	U	.4
74877	Bromomethane	U	2.0
56233	Carbon Tetrachloride	U	.4
108907	Chlorobenzene	21	.4
75003	Chloroethane	U	2.0
110756	2-Chloroethoxyvinylether	U	2.0
67663	Chloroform	U	.4
74873	Chloromethane	U	2.0
124481	Dibromochloromethane	U	.4
75501	1,2-Dichlorobenzene	U	.5
541731	1,3-Dichlorobenzene	U	.4
106467	1,4-Dichlorobenzene	5.2	.4
75343	1,1-Dichloroethane	U	.4
107062	1,2-Dichloroethane	U	.4
75354	1,1-Dichloroethene	U	.4

CAS #	COMPOUND	UG/L	MUL
156605	trans-1,2-Dichloroethene	U	.4
78875	1,2-Dichloropropane	U	.4
10061015	cis-1,3-Dichloropropene	U	.4
10061026	trans-1,3-Dichloropropene	U	.4
100414	Ethylbenzene	U	1.0
75072	Ethylene Chloride	U	1.0
1634044	Methyl t-butyl ether	U	4.2
75050	T-butyl alcohol	U	9.6
79345	1,1,2,2-Tetrachloroethane	U	.6
127184	Tetrachloroethene	U	.4
108863	Toluene	U	.5
71556	1,1,1-Trichloroethane	U	.4
79005	1,1,2-Trichloroethane	U	.4
79016	Trichloroethene	U	.4
75694	Trichlorofluoromethane	U	.4
75014	Vinyl Chloride	U	2.0
1330207	m,p-Xylene	U	2.8
95476	o-Xylene	U	2.1

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	100 %	76-114	OK
Toluene-d8	78 %	88-110	OK
Bromofluorobenzene	78 %	86-115	OK

J - Indicates compound concentration found below MUL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005405  
 DATA FILE >C0440  
 CLIENT NAME PRONYNJ  
 FIELD ID MU-7

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 05/18/00  
 ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
07028	Acrolein	U	6.1	156605	trans-1,2-Dichloroethene	U	.4
07131	Acrylonitrile	U	6.6	78875	1,2-Dichloropropane	U	.4
1432	Benzene	U	.4	10061015	cis-1,3-Dichloropropene	U	.4
5274	Bromodichloromethane	U	.4	10061026	trans-1,3-Dichloropropene	U	.4
5252	Bromoform	U	.4	100414	Ethylbenzene	U	1.0
4839	Bromomethane	U	2.0	75092	Methylene Chloride	U	1.0
6235	Carbon Tetrachloride	U	.4	1634044	Methyl t-butyl ether	U	4.2
08907	Chlorobenzene	U	.4	75650	T-butyl alcohol	U	9.6
5003	Chloroethane	U	2.0	79345	1,1,2,2-Tetrachloroethane	U	.6
10758	2-Chloroethylvinylether	U	2.0	127184	Tetrachloroethene	U	.4
7663	Chloroform	U	.4	108883	Toluene	U	.5
4873	Chloromethane	U	2.0	71556	1,1,1-Trichloroethane	U	.4
24481	Dibromochloromethane	U	.4	79005	1,1,2-Trichloroethane	U	.4
5501	1,2-Dichlorobenzene	U	.5	79016	Trichloroethene	U	.4
41731	1,3-Dichlorobenzene	U	.4	75694	Trichlorofluoromethane	U	.4
06467	1,4-Dichlorobenzene	U	.4	75014	Vinyl Chloride	U	2.0
5343	1,1-Dichloroethane	U	.4	1330207	m,p-Xylene	U	2.8
07062	1,2-Dichloroethane	U	.4	95476	o-Xylene	U	2.1
5354	1,1-Dichloroethene	U	.4				

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	101 %	76-114	OK
Toluene-d8	97 %	88-110	OK
Bromofluorobenzene	97 %	86-115	OK

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 0 - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005406  
 DATA FILE >T0441  
 CLIENT NAME PAQUINO  
 FIELD ID MW-8

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 05/18/00  
 ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
107020	Acrolein	0	6.1	158605	trans-1,2-Dichloroethene	0	.4
107151	Acrylonitrile	0	6.6	78875	1,2-Dichloropropane	0	.4
71452	Benzene	0	.4	10061015	cis-1,3-Dichloropropene	0	.4
75274	Bromodichloromethane	0	.4	10061026	trans-1,3-Dichloropropene	0	.4
75252	Bromoform	0	.4	100414	Ethylbenzene	0	1.0
74859	Bromomethane	0	2.0	75092	Methylene Chloride	0	1.0
56235	Carbon Tetrachloride	0	.4	1634044	Methyl t-butyl ether	0	4.2
108907	Chlorobenzene	0	.4	75650	T-butyl alcohol	0	9.6
75005	Chloroethane	0	2.0	77545	1,1,2,2-Tetrachloroethane	0	.6
110750	2-Chloroethylvinylether	0	2.0	127184	Tetrachloroethene	0	.4
37665	Chloroform	0	.4	108805	Toluene	0	.5
74875	Chloromethane	0	2.0	71556	1,1,1-Trichloroethane	0	.4
124401	Dibromochloromethane	0	.4	77005	1,1,2-Trichloroethane	0	.4
75501	1,2-Dichlorobenzene	0	.5	77010	Trichloroethene	0	.4
541751	1,3-Dichlorobenzene	0	.4	75694	Trichlorofluoromethane	0	.4
06467	1,4-Dichlorobenzene	0	.4	75014	Vinyl Chloride	0	2.0
75545	1,1-Dichloroethane	0	.4	1550207	m,p-Xylene	0	2.8
07062	1,2-Dichloroethane	0	.4	95476	o-Xylene	0	2.1
75554	1,1-Dichloroethene	0	.4				

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	102 %	76-114	OK
Toluene-d8	98 %	80-110	OK
Bromofluorobenzene	94 %	86-115	OK

0 - Indicates compound concentration found below MDL.  
 0 - Indicates compound analyzed for but not detected.  
 0 - Indicates result is based on a dilution.

0 - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

ASE NUMBER	8110
SAMPLE NUMBER	0005407
ATA FILE	>C0442
CLIENT NAME	PADNYNJ
FIELD ID	DUP

MATRIX	Aqueous
DILUTION FACTOR	1.0
DATE EXTRACTED	
DATE ANALYZED	05/18/00
ANALYZED BY	WILLIAM

AS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
07028	Acrolein	U	6.1	156605	trans-1,2-Dichloroethene	U	.4
07131	Acrylonitrile	U	6.6	78875	1,2-Dichloropropane	U	.4
1432	Benzene	U	.4	10061015	cis-1,3-Dichloropropene	U	.4
5274	Bromodichloromethane	U	.4	10061026	trans-1,3-Dichloropropene	U	.4
5252	Bromoform	U	.4	100414	Ethylbenzene	U	1.0
4839	Bromomethane	U	2.0	75092	Methylene Chloride	U	1.0
6235	Carbon Tetrachloride	U	.4	1634044	Methyl t-butyl ether	U	4.2
08907	Chlorobenzene	U	.4	75650	T-butyl alcohol	U	9.6
5003	Chloroethane	U	2.0	79345	1,1,2,2-Tetrachloroethane	U	.6
10758	2-Chloroethylvinylether	U	2.0	127184	Tetrachloroethene	U	.4
7663	Chloroform	U	.4	108803	Toluene	U	.5
4873	Chloromethane	U	2.0	71556	1,1,1-Trichloroethane	U	.4
24481	Dibromochloromethane	U	.4	79005	1,1,2-Trichloroethane	U	.4
5501	1,2-Dichlorobenzene	U	.5	79016	Trichloroethene	U	.4
41731	1,3-Dichlorobenzene	U	.4	75694	Trichlorofluoromethane	U	.4
06467	1,4-Dichlorobenzene	U	.4	75014	Vinyl Chloride	U	2.0
5343	1,1-Dichloroethane	U	.4	1330207	m,p-Xylene	U	2.8
07062	1,2-Dichloroethane	U	.4	95476	o-Xylene	U	2.1
5354	1,1-Dichloroethene	U	.4				

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	99 %	76-114	OK
Toluene-d8	97 %	88-110	OK
Bromofluorobenzene	89 %	86-115	OK

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005408  
 DATA FILE >C0434  
 CLIENT NAME FRONTNJ  
 FIELD ID FB

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 05/18/00  
 ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
107028	Acroiein	0	6.1	156605	trans-1,2-Dichloroethene	0	.4
107151	Acrylonitrile	0	6.6	76675	1,2-Dichloropropane	0	.4
71432	Benzene	0	.4	10061015	cis-1,3-Dichloropropene	0	.4
75274	Bromodichloromethane	0	.4	10061026	trans-1,3-Dichloropropene	0	.4
75272	Bromoform	0	.4	100414	Ethylbenzene	0	1.0
74659	Bromomethane	0	2.0	75072	Methylene Chloride	5.6	1.0
56277	Carbon Tetrachloride	0	.4	1654044	Methyl t-butyl ether	0	4.2
100907	Chlorobenzene	0	.4	75650	T-butyl alcohol	0	9.6
75005	Chloroethane	0	2.0	79345	1,1,2,2-Tetrachloroethane	0	.6
110758	2-Chloroethylvinylether	0	2.0	127104	Tetrachloroethene	0	.4
67665	Chloroform	0	.4	108883	Toluene	0	.5
74673	Chloromethane	0	2.0	71556	1,1,1-Trichloroethane	0	.4
124461	Dibromochloromethane	0	.4	79005	1,1,2-Trichloroethane	0	.4
95501	1,2-Dichlorobenzene	0	.5	79016	Trichloroethene	0	.4
541731	1,3-Dichlorobenzene	0	.4	75694	Trichlorofluoromethane	0	.4
106467	1,4-Dichlorobenzene	0	.4	75014	Vinyl Chloride	0	2.0
75345	1,1-Dichloroethane	0	.4	1556207	m,p-Xylene	0	2.8
107062	1,2-Dichloroethane	0	.4	95476	o-Xylene	0	2.1
75354	1,1-Dichloroethene	0	.4				

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	97 %	76-114	OK
Toluene-d8	98 %	86-110	OK
Bromofluorobenzene	95 %	86-110	OK

0 - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	8110
SAMPLE NUMBER	0005409
DATA FILE	>C0435
CLIENT NAME	PAOMYHJ
FIELD ID	TB

MATRIX	Aqueous
DILUTION FACTOR	1.0
DATE EXTRACTED	
DATE ANALYZED	05/18/00
ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
107028	Acrolein	U	6.1	156605	trans-1,2-Dichloroethene	U	.4
107131	Acrylonitrile	U	6.6	78875	1,2-Dichloropropane	U	.4
71432	Benzene	U	.4	10061015	cis-1,3-Dichloropropene	U	.4
75274	Bromodichloromethane	U	.4	10061026	trans-1,3-Dichloropropene	U	.4
75252	Bromoform	U	.4	100414	Ethylbenzene	U	1.0
74839	Bromomethane	U	2.0	75092	Methylene Chloride	3.0	1.0
56235	Carbon Tetrachloride	U	.4	1634044	Methyl t-butyl ether	U	4.2
108907	Chlorobenzene	U	.4	75650	T-butyl alcohol	U	9.6
75003	Chloroethane	U	2.0	79345	1,1,2,2-Tetrachloroethane	U	.6
110758	2-Chloroethylvinylether	U	2.0	127184	Tetrachloroethene	U	.4
67663	Chloroform	U	.4	108883	Toluene	U	.5
74873	Chloromethane	U	2.0	71556	1,1,1-Trichloroethane	U	.4
124481	Dibromochloromethane	U	.4	79005	1,1,2-Trichloroethane	U	.4
95501	1,2-Dichlorobenzene	U	.5	79016	Trichloroethene	U	.4
541731	1,3-Dichlorobenzene	U	.4	75694	Trichlorofluoromethane	U	.4
106467	1,4-Dichlorobenzene	U	.4	75014	Vinyl Chloride	U	2.0
75343	1,1-Dichloroethane	U	.4	1330207	m,p-Xylene	U	2.8
107062	1,2-Dichloroethane	U	.4	95476	o-Xylene	U	2.1
75354	1,1-Dichloroethene	U	.4				

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	103 %	76-114	OK
Toluene-d8	98 %	88-110	OK
Bromofluorobenzene	99 %	86-115	OK

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank,  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER B110  
 SAMPLE NUMBER 0005407  
 DATA FILE >F0818  
 CLIENT NAME PRONYNJ  
 FIELD ID MU-3

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 05/17/00  
 DATE ANALYZED 05/18/00  
 ANALYZED BY DANIEL

AS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
3329	Acenaphthene	U	10	51285	2,4-Dinitrophenol	U	10
00968	Acenaphthylene	U	10	121142	2,4-Dinitrotoluene	U	10
20127	Anthracene	U	10	606202	2,6-Dinitrotoluene	U	10
6553	Benzo(a)Anthracene	U	10	117840	Di-n-octyl phthalate	U	10
3328	Benzo(a)Pyrene	U	10	206440	Fluoranthene	U	10
05992	Benzo(b)fluoranthene	U	10	86737	Fluorene	U	10
71242	Benzo(g,h,i)Perylene	U	10	118741	Hexachlorobenzene	U	10
07089	Benzo(k)Fluoranthene	U	10	87683	Hexachlorobutadiene	U	10
3850	Benzoic Acid	U	50	77474	Hexachlorocyclopentadiene	U	10
00516	Benzyl Alcohol	U	10	67721	Hexachloroethane	U	10
11444	bis(-2-Chloroethyl)Ether	U	10	193395	Indeno(1,2,3-cd)Pyrene	U	10
08601	bis(2-Chloroisopropyl)ether	U	10	78591	Isophorone	U	10
17817	Bis(2-Ethylhexyl)Phthalate	U	10	91576	2-Methylnaphthalene	U	10
11911	bis(-2-Chloroethoxy)Methane	U	10	95487	2-Methylphenol	U	10
11553	4-Bromophenyl-phenylether	U	10	108394	3,6-Dimethylphenol	U	10
5687	Butylbenzylphthalate	U	10	91203	Naphthalene	U	10
16478	4-Chloroaniline	U	10	88744	2-Nitroaniline	U	10
1587	2-Chloronaphthalene	U	10	99092	3-Nitroaniline	U	10
7507	4-Chloro-3-methylphenol	U	10	100016	4-Nitroaniline	U	10
5578	2-Chlorophenol	U	10	98953	Nitrobenzene	U	10
105723	4-Chlorophenyl-phenylether	U	10	88755	2-Nitrophenol	U	10
18019	Chrysene	U	10	100027	4-Nitrophenol	U	10
1703	Dibenzo(a,h)Anthracene	U	10	62759	N-Nitrosodimethylamine	U	10
32649	Dibenzofuran	U	10	86306	N-Nitrosodiphenylamine	U	10
7501	1,2-Dichlorobenzene	U	10	621647	N-Nitroso-Di-n-propylamine	U	10
11731	1,3-Dichlorobenzene	U	10	87865	Pentachlorophenol	U	10
16467	1,4-Dichlorobenzene	U	10	85018	Phenanthrene	U	10
1941	3,3'-Dichlorobenzidine	U	10	108952	Phenol	U	10
10832	2,4-Dichlorophenol	U	10	129000	Pyrene	U	10
1662	Diethylphthalate	U	10	120821	1,2,4-Trichlorobenzene	U	10
15679	2,4-Dimethylphenol	U	10	95954	2,4,5-Trichlorophenol	U	10
31113	Dimethyl Phthalate	U	10	88062	2,4,6-Trichlorophenol	U	10
742	Di-n-Butylphthalate	U	10	92875	Benzidine	U	10
34521	4,6-Dinitro-2-methylphenol	U	10	122667	1,2-Diphenylhydrazine	U	10

## SURROGATE COMPOUNDS

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	55 %	35-114	OK
2-Fluorobiphenyl	59 %	43-116	OK
Terphenyl-d14	66 %	33-141	OK
Phenol-d5	75 %	10-94	OK
2-Fluorophenol	36 %	21-100	OK
2,4,6-Tribromophenol	77 %	10-123	OK

U - Indicates compound concentration found below MDL.

L - Indicates compound analyzed for but not detected.

D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.

E - Concentration exceeds highest calibration standard.

\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005402  
 DATA FILE >F0819  
 CLIENT NAME PRONYM3  
 FIELD ID PAMW-4

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 05/17/00  
 DATE ANALYZED 05/18/00  
 ANALYZED BY DANIEL

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
83329	Acenaphthene	U	10	51285	2,4-Dinitrophenol	U	10
208968	Acenaphthylene	U	10	121142	2,4-Dinitrotoluene	U	10
120127	Anthracene	U	10	606202	2,6-Dinitrotoluene	U	10
56553	Benzo(a)Anthracene	U	10	117840	Di-n-octyl phthalate	U	10
50528	Benzo(a)Pyrene	U	10	206440	Fluoranthene	U	10
205992	Benzo(b)fluoranthene	U	10	86737	Fluorene	U	10
191242	Benzo(g,h,i)Perylene	U	10	118741	Hexachlorobenzene	U	10
207089	Benzo(k)Fluoranthene	U	10	87683	Hexachlorobutadiene	U	10
65850	Benzoic Acid	U	50	77474	Hexachlorocyclopentadiene	U	10
100516	Benzyl Alcohol	U	10	67721	Hexachloroethane	U	10
111444	bis(-2-Chloroethyl)Ether	U	10	193395	Indeno(1,2,3-cd)Pyrene	U	10
108601	bis(2-Chloroisopropyl)ether	U	10	78591	Isophorone	U	10
117817	Bis(2-Ethylhexyl)Phthalate	U	10	91576	2-Methylnaphthalene	U	10
111911	bis(-2-Chloroethoxy)methane	U	10	95487	2-Methylphenol	U	10
101553	4-Bromophenyl-phenylether	U	10	108394	3,6-Methylphenol	U	10
35687	Butylbenzylphthalate	U	10	91203	Naphthalene	U	10
106478	4-Chloroaniline	U	10	88744	2-Nitroaniline	U	10
11587	2-Chloronaphthalene	U	10	99092	3-Nitroaniline	U	10
59507	4-Chloro-3-methylphenol	U	10	100016	4-Nitroaniline	U	10
15578	2-Chlorophenol	U	10	98953	Nitrobenzene	U	10
7005723	4-Chlorophenyl-phenylether	U	10	88755	2-Nitrophenol	U	10
118019	Chrysene	U	10	100027	4-Nitrophenol	U	10
53703	Dibenzo(a,h)Anthracene	U	10	62759	N-Nitrosodimethylamine	U	10
132649	Dibenzofuran	U	10	86306	N-Nitrosodiphenylamine	U	10
95501	1,2-Dichlorobenzene	U	10	621647	N-Nitroso-Di-n-propylamine	U	10
741731	1,3-Dichlorobenzene	U	10	87865	Pentachlorophenol	U	10
106467	1,4-Dichlorobenzene	U	10	85018	Phenanthrene	U	10
11941	3,3'-Dichlorobenzidine	U	10	108952	Phenol	U	10
120832	2,4-Dichlorophenol	U	10	129008	Pyrene	U	10
14662	Diethylphthalate	U	10	120821	1,2,4-Trichlorobenzene	U	10
105679	2,4-Dimethylphenol	U	10	95954	2,4,5-Trichlorophenol	U	10
131113	Dimethyl Phthalate	U	10	88062	2,4,6-Trichlorophenol	U	10
84742	Di-n-Butylphthalate	U	10	92875	Benzidine	U	10
534521	4,6-Dinitro-2-methylphenol	U	10	122667	1,2-Diphenylhydrazine	U	10

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	47 %	35-114	OK
2-Fluorobiphenyl	52 %	43-116	OK
Terphenyl-d14	57 %	33-141	OK
Phenol-d5	22 %	10-94	OK
2-Fluorophenol	28 %	21-100	OK
2,4,6-Tribromophenol	68 %	10-123	OK

J - Indicates compound concentration found below MDL.

U - Indicates compound analyzed for but not detected.

0 - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.

E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER 0110  
 SAMPLE NUMBER 0005403  
 DATA FILE >F0870  
 CLIENT NAME PAONYM  
 FIELD ID MU-5

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 05/17/00  
 DATE ANALYZED 05/18/00  
 ANALYZED BY DANIEL

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
83329	Acenaphthene	U	10	51285	2,4-Dinitrophenol	U	10
208968	Acenaphthylene	U	10	121142	2,4-Dinitrotoluene	U	10
120127	Anthracene	U	10	606202	2,6-Dinitrotoluene	U	10
56553	Benzo(a)Anthracene	U	10	117840	Di-n-octyl phthalate	U	10
50328	Benzo(a)Pyrene	U	10	206440	Fluoranthene	U	10
205992	Benzo(b)fluoranthene	U	10	86737	Fluorene	U	10
191242	Benzo(g,h,i)Perylene	U	10	118741	Hexachlorobenzene	U	10
207089	Benzo(k)Fluoranthene	U	10	87683	Hexachlorobutadiene	U	10
65850	Benzoic Acid	U	50	77474	Hexachlorocyclopentadiene	U	10
100516	Benzyl Alcohol	U	10	67721	Hexachloroethane	U	10
111444	bis(-2-Chloroethyl)Ether	U	10	193395	Indeno(1,2,3-cd)Pyrene	U	10
108601	bis(2-Chloroisopropyl)ether	U	10	78591	Isophorone	U	10
117817	Bis(2-Ethylhexyl)Phthalate	U	10	91576	2-Methylnaphthalene	U	10
111911	bis(-2-Chloroethoxy)Methane	U	10	95487	2-Methylphenol	U	10
101553	4-Bromophenyl-phenylether	U	10	108394	3,6-Methylphenol	U	10
85687	Butylbenzylphthalate	U	10	91203	Naphthalene	U	10
106478	4-Chloroaniline	U	10	88744	2-Nitroaniline	U	10
91587	2-Chloronaphthalene	U	10	99892	3-Nitroaniline	U	10
95907	4-Chloro-3-methylphenol	U	10	100016	4-Nitroaniline	U	10
95578	2-Chlorophenol	U	10	98953	Nitrobenzene	U	10
7005723	4-Chlorophenyl-phenylether	U	10	88755	2-Nitrophenol	U	10
218019	Chrysene	U	10	100027	4-Nitrophenol	U	10
53703	Dibenzo(a,b)Anthracene	U	10	62759	N-Nitrosodimethylamine	U	10
132649	Dibenzofuran	U	10	86306	N-Nitrosodiphenylamine	U	10
95501	1,2-Dichlorobenzene	U	10	621647	N-Nitroso-Di-n-propylamine	U	10
541731	1,3-Dichlorobenzene	U	10	87865	Pentachlorophenol	U	10
106467	1,4-Dichlorobenzene	U	10	85018	Phenanthrene	U	10
91941	3,3'-Dichlorobenzidine	U	10	108952	Phenol	U	10
120832	2,4-Dichlorophenol	U	10	129000	Pyrene	U	10
84662	Diethylphthalate	U	10	120821	1,2,4-Trichlorobenzene	U	10
105679	2,4-Dimethylphenol	U	10	95954	2,4,5-Trichlorophenol	U	10
131113	Dimethyl Phthalate	U	10	88062	2,4,6-Trichlorophenol	U	10
34742	Di-n-Butylphthalate	U	10	92875	Benzidine	U	10
534521	4,6-Dinitro-2-methylphenol	U	10	122667	1,2-Diphenylhydrazine	U	10

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	51 %	35-114	OK
2-Fluorobiphenyl	53 %	43-116	OK
Terphenyl-d14	60 %	33-141	OK
Phenol-d5	74 %	18-94	OK
2-Fluorophenol	76 %	21-100	OK
2,4,6-Tribromophenol	75 %	10-123	OK

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

ACCREDITED LABORATORIES, INC.  
BMA ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005404  
 DATA FILE >F0821  
 CLIENT NAME PAOHYNJ  
 FIELD ID MW-6

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 05/17/00  
 DATE ANALYZED 05/18/00  
 ANALYZED BY DANIEL

AS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
3329	Acenaphthene	U	10	51285	2,4-Dinitrophenol	U	10
18968	Acenaphthylene	U	10	121142	2,4-Dinitrotoluene	U	10
20127	Anthracene	U	10	606202	2,6-Dinitrotoluene	U	10
553	Benzo(a)Anthracene	U	10	117840	Di-n-octyl phthalate	U	10
1328	Benzo(a)Pyrene	U	10	206440	Fluoranthene	U	10
5992	Benzo(b)fluoranthene	U	10	86737	Fluorene	U	10
11242	Benzo(g,h,i)Perylene	U	10	118741	Hexachlorobenzene	U	10
7089	Benzo(k)Fluoranthene	U	10	87683	Hexachlorobutadiene	U	10
10850	Benzoic Acid	U	50	77474	Hexachlorocyclopentadiene	U	10
0516	Benzyl Alcohol	U	10	67721	Hexachloroethane	U	10
1444	bis(-2-Chloroethyl)Ether	U	10	193395	Indeno(1,2,3-cd)Pyrene	U	10
8601	bis(2-Chloroisopropyl)ether	U	10	78591	Isophorone	U	10
17017	Bis(2-Ethylhexyl)Phthalate	U	10	91576	2-Methylnaphthalene	U	10
1911	bis(-2-Chloroethoxy)Methane	U	10	95487	2-Methylphenol	U	10
11553	4-Bromophenyl-phenylether	U	10	108394	3&4-Methylphenol	U	10
687	Butylbenzylphthalate	U	10	91203	Naphthalene	U	10
16478	4-Chloroaniline	U	10	88744	2-Nitroaniline	U	10
587	2-Chloronaphthalene	U	10	99092	3-Nitroaniline	U	10
1507	4-Chloro-3-methylphenol	U	10	100016	4-Nitroaniline	U	10
578	2-Chlorophenol	U	10	98953	Nitrobenzene	U	10
105723	4-Chlorophenyl-phenylether	U	10	88755	2-Nitrophenol	U	10
8019	Chrysene	U	10	100027	4-Nitrophenol	U	10
1703	Dibenzo(a,h)Anthracene	U	10	62759	N-Nitrosodimethylamine	U	10
2649	Dibenzofuran	U	10	86306	N-Nitrosodiphenylamine	U	10
1501	1,2-Dichlorobenzene	U	10	621647	N-Nitroso-Di-n-propylamine	U	10
1731	1,3-Dichlorobenzene	U	10	87865	Pentachlorophenol	U	10
16467	1,4-Dichlorobenzene	2 J	10	85018	Phenanthrene	U	10
941	3,3'-Dichlorobenzidine	U	10	108952	Phenol	U	10
10832	2,4-Dichlorophenol	U	10	129000	Pyrene	U	10
662	Diethylphthalate	U	10	120821	1,2,4-Trichlorobenzene	U	10
15679	2,4-Dimethylphenol	U	10	95954	2,4,5-Trichlorophenol	U	10
1113	Dimethyl Phthalate	U	10	88062	2,4,6-Trichlorophenol	U	10
1742	Di-n-Butylphthalate	U	10	92875	Benzidine	U	10
4521	4,6-Dinitro-2-methylphenol	U	10	122667	1,2-Diphenylhydrazine	U	10

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	51 %	35-114	OK
2-Fluorobiphenyl	57 %	43-116	OK
Terphenyl-d14	56 %	33-141	OK
Phenol-d5	25 %	10- 94	OK
2-Fluorophenol	33 %	21-100	OK
2,4,6-Tribromophenol	71 %	10-123	OK

U - Indicates compound concentration found below MDL.  
 B - Indicates compound found in associated blank.  
 - Indicates compound analyzed for but not detected.  
 E - Concentration exceeds highest calibration standard.  
 - Indicates result is based on a dilution.

\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER B110  
 SAMPLE NUMBER 0005405  
 DATA FILE >F0022  
 CLIENT NAME PRONYNJ  
 FIELD ID MW-7

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 05/17/00  
 DATE ANALYZED 05/18/00  
 ANALYZED BY GANTEL

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
83329	Acenaphthene	U	10	51285	2,4-Dinitrophenol	U	10
208968	Acenaphthylene	U	10	121142	2,4-Dinitrotoluene	U	10
120127	Anthracene	U	10	606202	2,6-Dinitrotoluene	U	10
56553	Benzo(a)Anthracene	U	10	117840	Di-n-octyl phthalate	U	10
50328	Benzo(a)Pyrene	U	10	206440	Fluoranthene	U	10
205992	Benzo(b)fluoranthene	U	10	86737	Fluorene	U	10
191242	Benzo(g,h,i)Perylene	U	10	118741	Hexachlorobenzene	U	10
207089	Benzo(k)Fluoranthene	U	10	87683	Hexachlorobutadiene	U	10
45850	Benzoic Acid	U	50	77474	Hexachlorocyclopentadiene	U	10
100516	Benzyl Alcohol	U	10	67721	Hexachloroethane	U	10
111444	bis(-2-Chloroethyl)Ether	U	10	193395	Indeno(1,2,3-cd)Pyrene	U	10
108601	bis(2-Chloroisopropyl)ether	U	10	78591	Isophorone	U	10
117817	Bis(2-Ethylhexyl)Phthalate	U	10	91576	2-Methylnaphthalene	U	10
111911	bis(-2-Chloroethoxy)Methane	U	10	95487	2-Methylphenol	U	10
101553	4-Bromophenyl-phenylether	U	10	108394	3&4-Methylphenol	U	10
85687	Butylbenzylphthalate	U	10	91203	Naphthalene	U	10
106478	4-Chloroaniline	U	10	88744	2-Nitroaniline	U	10
91587	2-Chloronaphthalene	U	10	99092	3-Nitroaniline	U	10
59507	4-Chloro-3-methylphenol	U	10	100016	4-Nitroaniline	U	10
95578	2-Chlorophenol	U	10	98953	Nitrobenzene	U	10
7005723	4-Chlorophenyl-phenylether	U	10	88755	2-Nitrophenol	U	10
218019	Chrysene	U	10	100027	4-Nitrophenol	U	10
53703	Dibenzo(a,h)Anthracene	U	10	62759	N-Nitrosodimethylamine	U	10
132649	Dibenzofuran	U	10	86306	N-Nitrosodiphenylamine	U	10
95501	1,2-Dichlorobenzene	U	10	621447	N-Nitroso-Di-n-propylamine	U	10
541731	1,3-Dichlorobenzene	U	10	87865	Pentachlorophenol	U	10
106467	1,4-Dichlorobenzene	U	10	85018	Phenanthrene	U	10
91941	3,3'-Dichlorobenzidine	U	10	108952	Phenol	U	10
120832	2,4-Dichlorophenol	U	10	129800	Pyrene	U	10
84662	Diethylphthalate	U	10	120821	1,2,4-Trichlorobenzene	U	10
105679	2,4-Dimethylphenol	U	10	95954	2,4,5-Trichlorophenol	U	10
131113	Dimethyl Phthalate	U	10	88062	2,4,6-Trichlorophenol	U	10
84742	Di-n-Butylphthalate	U	10	92875	Benzidine	U	10
534521	4,6-Dinitro-2-methylphenol	U	10	122667	1,2-Diphenylhydrazine	U	10

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	44 %	35-114	OK
2-Fluorobiphenyl	46 %	43-116	OK
Terphenyl-d14	54 %	33-141	OK
Phenol-d5	19 %	10-94	OK
2-Fluorophenol	30 %	21-100	OK
2,4,6-Tribromophenol	69 %	10-123	OK

J - Indicates compound concentration found below MDL.

U - Indicates compound analyzed for but not detected.

D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.

E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

ACCREDITED LABORATORIES, INC.  
BMA ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005406  
 DATA FILE >F0823  
 CLIENT NAME PRONYNJ  
 FIELD ID MU-8

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 05/17/00  
 DATE ANALYZED 05/18/00  
 ANALYZED BY DANIEL

CAS #	COMPOUND	UG/L	MOL	CAS #	COMPOUND	UG/L	MOL
83329	Acenaphthene	U	10	51285	2,4-Dinitrophenol	U	10
208968	Acenaphthylene	U	10	121142	2,4-Dinitrotoluene	U	10
120127	Anthracene	U	10	606202	2,6-Dinitrotoluene	U	10
56553	Benzo(a)Anthracene	U	10	117840	Di-n-octyl phthalate	U	10
50328	Benzo(a)Pyrene	U	10	206440	Fluoranthene	U	10
205992	Benzo(b)fluoranthene	U	10	86737	Fluorene	U	10
191242	Benzo(g,h,i)Perylene	U	10	118741	Hexachlorobenzene	U	10
207089	Benzo(k)Fluoranthene	U	10	87683	Hexachlorobutadiene	U	10
65850	Benzoic Acid	U	50	77474	Hexachlorocyclopentadiene	U	10
100516	Benzyl Alcohol	U	10	67721	Hexachloroethane	U	10
111444	bis(-2-Chloroethyl)Ether	U	10	193395	Indeno(1,2,3-cd)Pyrene	U	10
108601	bis(2-Chloroisopropyl)ether	U	10	78591	Isophorone	U	10
117817	Bis(2-Ethylhexyl)Phthalate	U	10	91576	2-Methylnaphthalene	U	10
111911	bis(-2-Chloroethoxy)Methane	U	10	95487	2-Methylphenol	U	10
101553	4-Bromophenyl-phenylether	U	10	108394	3,4-Methylphenol	U	10
85687	Butylbenzylphthalate	U	10	91203	Naphthalene	U	10
106478	4-Chloroaniline	U	10	88744	2-Nitroaniline	U	10
91587	2-Chloronaphthalene	U	10	99092	3-Nitroaniline	U	10
59507	4-Chloro-3-methylphenol	U	10	100016	4-Nitroaniline	U	10
95578	2-Chlorophenol	U	10	98953	Nitrobenzene	U	10
7005723	4-Chlorophenyl-phenylether	U	10	88755	2-Nitrophenol	U	10
218019	Chrysene	U	10	100027	4-Nitrophenol	U	10
53703	Dibenzo(a,h)Anthracene	U	10	62759	N-Nitrosodimethylamine	U	10
132649	Dibenzofuran	U	10	86306	N-Nitrosodiphenylamine	U	10
95501	1,2-Dichlorobenzene	U	10	621647	N-Nitroso-Di-n-propylamine	U	10
541731	1,3-Dichlorobenzene	U	10	87865	Pentachlorophenol	U	10
106467	1,4-Dichlorobenzene	U	10	85018	Phenanthrene	U	10
91941	3,3'-Dichlorobenzidine	U	10	108952	Phenol	U	10
120832	2,4-Dichlorophenol	U	10	129000	Pyrene	U	10
84662	Diethylphthalate	U	10	120821	1,2,4-Trichlorobenzene	U	10
105679	2,4-Dimethylphenol	U	10	95954	2,4,5-Trichlorophenol	U	10
131113	Dimethyl Phthalate	U	10	88062	2,4,6-Trichlorophenol	U	10
84742	Di-n-Butylphthalate	U	10	92875	Benzidine	U	10
534521	4,6-Dinitro-2-methylphenol	U	10	122667	1,2-Diphenylhydrazine	U	10

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	39 %	35-114	OK
2-Fluorobiphenyl	44 %	43-116	OK
Terphenyl-d14	58 %	33-141	OK
Phenol-d5	15 %	10- 94	OK
2-Fluorophenol	24 %	21-100	OK
2,4,6-Tribromophenol	69 %	10-123	OK

J - Indicates compound concentration found below MOL.

U - Indicates compound analyzed for but not detected.

D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.

E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

ACCREDITED LABORATORIES, INC.  
SMA ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005407  
 DATA FILE >F0824  
 CLIENT NAME PAOHYNJ  
 FIELD ID DUP

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 05/17/00  
 DATE ANALYZED 05/18/00  
 ANALYZED BY DAMIEL

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
83329	Acenaphthene	U	10	51285	2,4-Dinitrophenol	U	10
208968	Acenaphthylene	U	10	121142	2,4-Dinitrotoluene	U	10
120127	Anthracene	U	10	606202	2,6-Dinitrotoluene	U	10
56553	Benzo(a)Anthracene	U	10	117840	Di-n-octyl phthalate	U	10
50328	Benzo(a)Pyrene	U	10	206440	Fluoranthene	U	10
205992	Benzo(b)fluoranthene	U	10	86737	Fluorene	U	10
191242	Benzo(g,h,i)Perylene	U	10	118741	Hexachlorobenzene	U	10
207089	Benzo(k)Fluoranthene	U	10	87683	Hexachlorobutadiene	U	10
65850	Benzoic Acid	U	50	77474	Hexachlorocyclopentadiene	U	10
100516	Benzyl Alcohol	U	10	67721	Hexachloroethane	U	10
111444	bis(-2-Chloroethyl)Ether	U	10	193395	Indeno(1,2,3-cd)Pyrene	U	10
108601	bis(2-Chloroisopropyl)ether	U	10	78591	Isophorane	U	10
117817	Bis(2-Ethylhexyl)Phthalate	U	10	91576	2-Methylnaphthalene	U	10
111911	bis(-2-Chloroethoxy)Methane	U	10	95487	2-Methylphenol	U	10
101553	4-Bromophenyl-phenylether	U	10	108394	3&4-Methylphenol	U	10
85687	Butylbenzylphthalate	U	10	91203	Naphthalene	U	10
106478	4-Chloroaniline	U	10	88744	2-Nitroaniline	U	10
91587	2-Chloronaphthalene	U	10	99092	3-Nitroaniline	U	10
59507	4-Chloro-3-methylphenol	U	10	100016	4-Nitroaniline	U	10
95578	2-Chlorophenol	U	10	98953	Nitrobenzene	U	10
7005723	4-Chlorophenyl-phenylether	U	10	88755	2-Nitrophenol	U	10
218019	Chrysene	U	10	100027	4-Nitrophenol	U	10
53703	Dibenzo(a,h)Anthracene	U	10	62759	N-Nitrosodimethylamine	U	10
132649	Dibenzofuran	U	10	86306	N-Nitrosodiphenylamine	U	10
95501	1,2-Dichlorobenzene	U	10	621647	N-Nitroso-Di-n-propylamine	U	10
541731	1,3-Dichlorobenzene	U	10	87865	Pentachlorophenol	U	10
106467	1,4-Dichlorobenzene	U	10	85018	Phenanthrene	U	10
91941	3,3'-Dichlorobenzidine	U	10	108952	Phenol	U	10
120832	2,4-Dichlorophenol	U	10	129000	Pyrene	U	10
84662	Diethylphthalate	U	10	120821	1,2,4-Trichlorobenzene	U	10
105679	2,4-Dimethylphenol	U	10	95954	2,4,5-Trichlorophenol	U	10
131113	Dimethyl Phthalate	U	10	88062	2,4,6-Trichlorophenol	U	10
84742	Di-n-Butylphthalate	U	10	92875	Benzidine	U	10
534521	4,6-Dinitro-2-methylphenol	U	10	122667	1,2-Diphenylhydrazine	U	10

## SURROGATE COMPOUNDS

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	48 %	35-114	OK
2-Fluorobiphenyl	52 %	43-116	OK
Terphenyl-d14	58 %	33-141	OK
Phenol-d5	71 %	10-94	OK
2-Fluorophenol	34 %	21-100	OK
2,4,6-Tribromophenol	74 %	10-123	OK

J - Indicates compound concentration found below MDL.

U - Indicates compound analyzed for but not detected.

D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.

E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005408  
 DATA FILE >F0817  
 CLIENT NAME PAONYNJ  
 FIELD ID FB

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 05/17/00  
 DATE ANALYZED 05/18/00  
 ANALYZED BY DANIEL

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
03329	Acenaphthene	U	10	51285	2,4-Dinitrophenol	U	10
208968	Acenaphthylene	U	10	121142	2,4-Dinitrotoluene	U	10
120127	Anthracene	U	10	606202	2,6-Dinitrotoluene	U	10
56553	Benzo(a)Anthracene	U	10	117840	Di-n-octyl phthalate	U	10
50328	Benzo(a)Pyrene	U	10	206440	Fluoranthene	U	10
205992	Benzo(b)fluoranthene	U	10	86737	Fluorene	U	10
191242	Benzo(g,h,i)Perylene	U	10	118741	Hexachlorobenzene	U	10
207089	Benzo(k)Fluoranthene	U	10	87683	Hexachlorobutadiene	U	10
65850	Benzoic Acid	U	50	77474	Hexachlorocyclopentadiene	U	10
100516	Benzyl Alcohol	U	10	67721	Hexachloroethane	U	10
111444	bis(-2-Chloroethyl)Ether	U	10	193395	Indeno(1,2,3-cd)Pyrene	U	10
108601	bis(2-Chloroisopropyl)ether	U	10	78591	Isophorone	U	10
117817	Bis(2-Ethylhexyl)Phthalate	U	10	91576	2-Methylnaphthalene	U	10
111911	bis(-2-Chloroethoxy)Methane	U	10	95487	2-Methylphenol	U	10
101553	4-Bromophenyl-phenylether	U	10	108394	3,6-Methylphenol	U	10
85687	Butylbenzylphthalate	U	10	91203	Naphthalene	U	10
106478	4-Chloroaniline	U	10	88744	2-Nitroaniline	U	10
91587	2-Chloronaphthalene	U	10	99092	3-Nitroaniline	U	10
59507	4-Chloro-3-methylphenol	U	10	100016	4-Nitroaniline	U	10
95578	2-Chlorophenol	U	10	98953	Nitrobenzene	U	10
7005723	4-Chlorophenyl-phenylether	U	10	88755	2-Nitrophenol	U	10
218019	Chrysene	U	10	100027	4-Nitrophenol	U	10
53703	Dibenzo(a,h)Anthracene	U	10	62759	N-Nitrosodimethylamine	U	10
132649	Dibenzofuran	U	10	86306	N-Nitrosodiphenylamine	U	10
95501	1,2-Dichlorobenzene	U	10	621647	N-Nitroso-Di-n-propylamine	U	10
541731	1,3-Dichlorobenzene	U	10	87865	Pentachlorophenol	U	10
106467	1,4-Dichlorobenzene	U	10	85018	Phenanthrene	U	10
91941	3,3'-Dichlorobenzidine	U	10	108952	Phenol	U	10
120832	2,4-Dichlorophenol	U	10	129000	Pyrene	U	10
84462	Diethylphthalate	U	10	120821	1,2,4-Trichlorobenzene	U	10
105679	2,4-Dimethylphenol	U	10	95954	2,4,5-Trichlorophenol	U	10
131113	Dimethyl Phthalate	U	10	88062	2,4,6-Trichlorophenol	U	10
84742	Di-n-Butylphthalate	U	10	92875	Benzidine	U	10
534521	4,6-Dinitro-2-methylphenol	U	10	122667	1,2-Diphenylhydrazine	U	10

## SURROGATE COMPOUNDS

Nitrobenzene-d5

2-Fluorobiphenyl

Terphenyl-d14

Phenol-d5

2-Fluorophenol

2,4,6-Tribromophenol

## RECOVERY

50 %

52 %

60 %

24 %

37 %

76 %

## LIMITS

35-114

43-116

33-141

10- 94

21-100

10-123

## STATUS

OK

OK

OK

OK

OK

OK

J - Indicates compound concentration found below MDL.

U - Indicates compound analyzed for but not detected.

D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.

E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
SAMPLE NUMBER 0005401  
DATA FILE >G5825  
CLIENT NAME PADNYNJ  
FIELD ID MU-3

MATRIX Aqueous  
DILUTION FACTOR 1.1  
DATE EXTRACTED 05/18/00  
DATE ANALYZED 05/18/00  
ANALYZED BY JEFF

CAS#	COMPOUND	UG/L	MDL
319846	A-BHC	U	.022
319857	B-BHC	U	.022
58899	G-BHC (Lindane)	U	.022
319868	D-BHC	U	.022
76448	Heptachlor	U	.022
309002	Aldrin	U	.022
1024573	Heptachlor Epoxide	U	.022
959988	Endosulfan I	U	.022
5103719	A-Chlordane	U	.022
5103742	G-Chlordane	U	.022
60571	Dieldrin	U	.044
72559	4,4'-DDE	U	.044
72208	Endrin	U	.044
33213659	Endosulfen II	U	.044
72548	4,4'-DDD	U	.044
7421934	Endrin Aldehyde	U	.044
1031078	Endosulfan Sulfate	U	.044
50293	4,4'-DDT	U	.044
53494705	Endrin Ketone	U	.044
72435	Methoxychlor	U	.220
8001352	Toxaphene	U	1.10
12674112	Aroclor-1016	U	.550
11104282	Aroclor-1221	U	.550
11141165	Aroclor-1232	U	.550
53469219	Aroclor-1242	U	.550
12672296	Aroclor-1248	U	.550
11097691	Aroclor-1254	U	.550
11096825	Aroclor-1260	U	.550

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER	8110	MATRIX	Aqueous
SAMPLE NUMBER	0005402	DILUTION FACTOR	1.1
DATA FILE	>G5826	DATE EXTRACTED	05/18/00
CLIENT NAME	PAONYNJ	DATE ANALYZED	05/19/00
FIELD ID	PAMV-4	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/L	MDL
319846	A-BHC	U	.022
319857	B-BHC	U	.022
58899	G-BHC (Lindane)	U	.022
319868	D-BHC	U	.022
76448	Heptachlor	U	.022
309002	Aldrin	U	.022
1024573	Heptachlor Epoxide	U	.022
959988	Endosulfan I	U	.022
5103719	A-Chlordane	U	.022
5103742	G-Chlordane	U	.022
60571	Dieldrin	U	.044
72559	4,4'-DDE	U	.044
72208	Endrin	U	.044
33213659	Endosulfan II	U	.044
72548	4,4'-DDD	U	.044
7421934	Endrin Aldehyde	U	.044
1031078	Endosulfan Sulfate	U	.044
50293	4,4'-DDT	U	.044
53494705	Endrin Ketone	U	.044
72435	Methoxychlor	U	.220
8001352	Toxaphene	U	1.10
12674112	Aroclor-1016	U	.550
11104282	Aroclor-1221	U	.550
11141165	Aroclor-1232	U	.550
53469219	Aroclor-1242	U	.550
12672296	Aroclor-1248	U	.550
11097691	Aroclor-1254	U	.550
11096825	Aroclor-1260	U	.550

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- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER	8110	MATRIX	Aqueous
SAMPLE NUMBER	0005403	DILUTION FACTOR	1.2
DATA FILE	>65827	DATE EXTRACTED	05/18/00
CLIENT NAME	PAONYNJ	DATE ANALYZED	05/19/00
FIELD ID	MW-5	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/L	MDL
319846	A-BHC	U	.024
319857	B-BHC	U	.024
58899	G-BHC (Lindane)	U	.024
319868	D-BHC	U	.024
76448	Heptachlor	U	.024
309002	Aldrin	U	.024
1024573	Heptachlor Epoxide	U	.024
959988	Endosulfan I	U	.024
5103719	A-Chlordane	U	.024
5103742	G-Chlordane	U	.024
60571	Dieldrin	U	.048
72559	4,4'-DDE	U	.048
72208	Endrin	U	.048
33213659	Endosulfan II	U	.048
72548	4,4'-DDD	U	.048
7421934	Endrin Aldehyde	U	.048
1031078	Endosulfan Sulfate	U	.048
50293	4,4'-DDT	U	.048
53494705	Endrin Ketone	U	.048
72435	Methoxychlor	U	.260
8001352	Toxaphene	U	1.20
12674112	Aroclor-1016	U	.600
11104282	Aroclor-1221	U	.600
11141165	Aroclor-1232	U	.600
53469219	Aroclor-1242	U	.600
12672296	Aroclor-1248	U	.600
11097691	Aroclor-1256	U	.600
11096825	Aroclor-1260	U	.600

B - Indicates compound found in associated blank.  
 J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 E - Indicates result exceeds highest calibration standard.  
 D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005404  
 DATA FILE >G5828  
 CLIENT NAME PAONYNJ  
 FIELD ID MW-6

MATRIX Aqueous  
 DILUTION FACTOR 1.2  
 DATE EXTRACTED 05/18/00  
 DATE ANALYZED 05/19/00  
 ANALYZED BY JEFF

CAS#	COMPOUND	UG/L	MDL
319846	A-BHC	U	.024
319857	B-BHC	U	.024
58899	G-BHC (Lindane)	U	.024
319868	D-BHC	U	.024
76448	Heptachlor	U	.024
309002	Aldrin	U	.024
1024573	Heptachlor Epoxide	U	.024
959988	Endosulfan I	U	.024
5103719	A-Chlordane	U	.024
5103742	G-Chlordane	U	.024
60571	Dieldrin	U	.048
72559	4,4'-DDE	U	.048
72208	Endrin	U	.048
33213659	Endosulfan II	U	.048
72548	4,4'-DDD	U	.048
7421934	Endrin Aldehyde	U	.048
1031078	Endosulfan Sulfate	U	.048
50293	4,4'-DDT	U	.048
53494705	Endrin Ketone	U	.048
72435	Methoxychlor	U	.240
8001352	Toxaphene	U	1.20
12674112	Aroclor-1016	U	.600
11104282	Aroclor-1221	U	.600
11141165	Aroclor-1232	U	.600
53469219	Aroclor-1242	U	.600
12672296	Aroclor-1248	U	.600
11097691	Aroclor-1254	U	.600
11096825	Aroclor-1260	U	.600

- B - Indicates compound found in associated blank.  
 J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 E - Indicates result exceeds highest calibration standard.  
 D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005405  
 DATA FILE >G5829  
 CLIENT NAME PAONYNJ  
 FIELD ID MU-7

MATRIX Aqueous  
 DILUTION FACTOR 1.2  
 DATE EXTRACTED 05/18/00  
 DATE ANALYZED 05/19/00  
 ANALYZED BY JEFF

CAS#	COMPOUND	UG/L	MDL
319846	A-BHC	U	.024
319857	B-BHC	U	.024
58899	G-BHC (Lindane)	U	.024
319868	D-BHC	U	.024
76448	Heptachlor	U	.024
309002	Aldrin	U	.024
1024573	Heptachlor Epoxide	U	.024
959988	Endosulfan I	U	.024
5103719	A-Chlordane	U	.024
5103742	G-Chlordane	U	.024
60571	Dieldrin	U	.048
72559	4,4'-DDE	U	.048
72208	Endrin	U	.048
33213659	Endosulfan II	U	.048
72548	4,4'-DDD	U	.048
7421934	Endrin Aldehyde	U	.048
1031078	Endosulfan Sulfate	U	.048
50293	4,4'-DDT	U	.048
53494705	Endrin Ketone	U	.048
72435	Methoxychlor	U	.240
8001352	Toxaphene	U	1.20
12674112	Aroclor-1016	U	.600
11104282	Aroclor-1221	U	.600
11141165	Aroclor-1232	U	.600
53469219	Aroclor-1242	U	.600
12672296	Aroclor-1248	U	.600
11097691	Aroclor-1254	U	.600
11096825	Aroclor-1260	U	.600

- B - Indicates compound found in associated blank.  
 J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 E - Indicates result exceeds highest calibration standard.  
 D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER	8110	MATRIX	Aqueous
SAMPLE NUMBER	0005406	DILUTION FACTOR	1.2
DATA FILE	>G5830	DATE EXTRACTED	05/18/00
CLIENT NAME	PAONYNJ	DATE ANALYZED	05/19/00
FIELD ID	MW-8	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/L	MDL
319846	A-BHC	U	.024
319857	B-BHC	U	.024
58899	G-BHC (Lindane)	U	.024
319868	D-BHC	U	.024
76448	Heptachlor	U	.024
309002	Aldrin	U	.024
1024573	Heptachlor Epoxide	U	.024
959988	Endosulfan I	U	.024
5103719	A-Chlordane	U	.024
5103742	G-Chlordane	U	.024
60571	Dieldrin	U	.048
72559	4,4'-DDE	U	.048
72208	Endrin	U	.048
33213659	Endosulfan II	U	.048
72548	4,4'-DDD	U	.048
7421934	Endrin Aldehyde	U	.048
1031078	Endosulfan Sulfate	U	.048
50293	4,4'-DDT	U	.048
53494705	Endrin Ketone	U	.048
72435	Methoxychlor	U	.240
8001352	Toxaphene	U	1.20
12674112	Aroclor-1016	U	.600
11104282	Aroclor-1221	U	.600
11141165	Aroclor-1232	U	.600
53469219	Aroclor-1242	U	.600
12672296	Aroclor-1248	U	.600
11097691	Aroclor-1254	U	.600
11096825	Aroclor-1260	U	.600

B - Indicates compound found in associated blank.  
 J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 E - Indicates result exceeds highest calibration standard.  
 D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER	8110	MATRIX	Aqueous
SAMPLE NUMBER	0005407	DILUTION FACTOR	1.1
DATA FILE	>G5831	DATE EXTRACTED	05/18/00
CLIENT NAME	PAONYNJ	DATE ANALYZED	05/19/00
FIELD ID	DUP	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/L	MDL
319846	A-BHC	U	.022
319857	B-BHC	U	.022
58899	G-BHC (Lindane)	U	.022
319868	D-BHC	U	.022
76448	Heptachlor	U	.022
309002	Aldrin	U	.022
1024573	Heptachlor Epoxide	U	.022
959988	Endosulfan I	U	.022
5103719	A-Chlordane	U	.022
5103742	G-Chlordane	U	.022
60571	Dieldrin	U	.044
72559	4,4'-DDE	U	.044
72208	Endrin	U	.044
33213659	Endosulfan II	U	.044
72548	4,4'-DDD	U	.044
7421934	Endrin Aldehyde	U	.044
1031078	Endosulfan Sulfate	U	.044
50293	4,4'-DDT	U	.044
53494705	Endrin Ketone	U	.044
72435	Methoxychlor	U	.220
8001352	Toxaphene	U	1.10
12674112	Aroclor-1016	U	.550
11104282	Aroclor-1221	U	.550
11141165	Aroclor-1232	U	.550
53469219	Aroclor-1242	U	.550
12672296	Aroclor-1248	U	.550
11097691	Aroclor-1254	U	.550
11096825	Aroclor-1260	U	.550

B - Indicates compound found in associated blank.  
 J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 E - Indicates result exceeds highest calibration standard.  
 D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER 8110  
 SAMPLE NUMBER 0005408  
 DATA FILE >G5832  
 CLIENT NAME PAONYNJ  
 FIELD ID FB

MATRIX Aqueous  
 DILUTION FACTOR 1.2  
 DATE EXTRACTED 05/18/00  
 DATE ANALYZED 05/19/00  
 ANALYZED BY JEFF

CAS#	COMPOUND	UG/L	MDL
319846	A-BHC	U	.024
319857	B-BHC	U	.024
58899	G-BHC (Lindane)	U	.024
319868	D-BHC	U	.024
76448	Heptachlor	U	.024
309002	Aldrin	U	.024
1024573	Heptachlor Epoxide	U	.024
959988	Endosulfan I	U	.024
5103719	A-Chlordane	U	.024
5103742	G-Chlordane	U	.024
60571	Dieldrin	U	.048
72559	4,4'-DDE	U	.048
72208	Endrin	U	.048
33213659	Endosulfan II	U	.048
72548	4,4'-DDD	U	.048
7421934	Endrin Aldehyde	U	.048
1031078	Endosulfan Sulfate	U	.048
50293	4,4'-DDT	U	.048
53494705	Endrin Ketone	U	.048
72435	Methoxychlor	U	.240
8001352	Toxaphene	U	1.20
12674112	Aroclor-1016	U	.600
11104282	Aroclor-1221	U	.600
11141165	Aroclor-1232	U	.600
53449219	Aroclor-1242	U	.600
12672296	Aroclor-1248	U	.600
11097691	Aroclor-1254	U	.600
11096825	Aroclor-1260	U	.600

- B - Indicates compound found in associated blank.  
 J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 E - Indicates result exceeds highest calibration standard.  
 D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8110  
 Sample #: 0005401  
 Field ID: MJ-3  
 Client Name: PAONYNJ

Matrix: Aqueous  
 Date Received: 05/16/00

CAS No.	Element	Result UG/L	MDL UG/L	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	10.0	2	F	05/18/00
7440-38-2	Arsenic	ND	10.0	2	F	05/17/00
7440-41-7	Beryllium	5.76	5.00	1	P	05/17/00
7440-43-9	Cadmium	10.5	10.0	1	P	05/17/00
7440-47-3	Chromium	ND	30.0	1	P	05/17/00
7440-50-8	Copper	ND	30.0	1	P	05/17/00
7439-92-1	Lead	ND	10.0	2	F	05/17/00
7439-97-6	Mercury	ND	.200	1	CV	05/17/00
7440-02-0	Nickel	ND	40.0	1	P	05/17/00
7782-49-2	Selenium	ND	10.0	2	F	05/16/00
7440-22-4	Silver	ND	10.0	1	P	05/17/00
7440-28-0	Thallium	ND	10.0	2	F	05/16/00
7440-66-6	Zinc	ND	100	1	P	05/17/00

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8110  
 Sample #: 0005402  
 Field ID: PAMJ-6  
 Client Name: PAOHYNJ

Matrix: Aqueous  
 Date Received: 05/16/00

CAS No.	Element	Result UG/L	MDL UG/L	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	10.0	2	F	05/18/00
7440-38-2	Arsenic	ND	10.0	2	F	05/17/00
7440-61-7	Beryllium	ND	5.00	1	P	05/17/00
7440-63-9	Cadmium	ND	10.0	1	P	05/17/00
7440-67-3	Chromium	ND	30.0	1	P	05/17/00
7440-50-8	Copper	ND	30.0	1	P	05/17/00
7439-92-1	Lead	ND	10.0	2	F	05/17/00
7439-97-6	Mercury	ND	.200	1	CV	05/17/00
7440-02-0	Nickel	ND	40.0	1	P	05/17/00
7782-49-2	Selenium	ND	10.0	2	F	05/16/00
7440-22-6	Silver	ND	10.0	1	P	05/17/00
7440-28-0	Thallium	ND	10.0	2	F	05/16/00
7440-66-6	Zinc	ND	100	1	P	05/17/00

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8110  
 Sample #: 0005403  
 Field ID: MW-5  
 Client Name: PAONYNJ

Matrix: Aqueous  
 Date Received: 05/16/00

CAS No.	Element	Result UG/L	MDL UG/L	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	10.0	2	F	05/18/00
7440-38-2	Arsenic	ND	10.0	2	F	05/17/00
7440-41-7	Beryllium	5.88	5.00	1	P	05/17/00
7440-43-9	Cadmium	13.8	10.0	1	P	05/17/00
7440-47-3	Chromium	ND	30.0	1	P	05/17/00
7440-50-8	Copper	ND	30.0	1	P	05/17/00
7439-92-1	Lead	ND	10.0	2	F	05/17/00
7439-97-6	Mercury	ND	.200	1	CV	05/17/00
7440-02-0	Nickel	ND	40.0	1	P	05/17/00
7782-49-2	Selenium	ND	10.0	2	F	05/16/00
7440-22-4	Silver	ND	10.0	1	P	05/17/00
7440-28-0	Thallium	ND	10.0	2	F	05/16/00
7440-66-6	Zinc	ND	100	1	P	05/17/00

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8110  
 Sample #: 0005404  
 Field ID: MU-6  
 Client Name: PAONYNJ

Matrix: Aqueous  
 Date Received: 05/16/00

CAS No.	Element	Result UG/L	MDL UG/L	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	10.0	2	F	05/18/00
7440-38-2	Arsenic	ND	10.0	2	F	05/17/00
7440-41-7	Beryllium	19.8	5.00	1	P	05/17/00
7440-43-9	Cadmium	42.6	10.0	1	P	05/17/00
7440-47-3	Chromium	ND	30.0	1	P	05/17/00
7440-50-8	Copper	ND	30.0	1	P	05/17/00
7439-92-1	Lead	ND	10.0	2	F	05/17/00
7439-97-6	Mercury	ND	.200	1	CV	05/17/00
7440-02-0	Nickel	ND	40.0	1	P	05/17/00
7782-49-2	Selenium	ND	10.0	2	F	05/16/00
7440-22-6	Silver	ND	10.0	1	P	05/17/00
7440-28-0	Thallium	ND	10.0	2	F	05/16/00
7440-66-6	Zinc	ND	100	1	P	05/17/00

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8110  
 Sample #: 0005405  
 Field ID: MW-7  
 Client Name: PAONYNJ

Matrix: Aqueous  
 Date Received: 05/16/00

CAS No.	Element	Result UG/L	MDL UG/L	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	10.0	2	F	05/18/00
7440-38-2	Arsenic	ND	10.0	2	F	05/17/00
7440-41-7	Beryllium	ND	5.00	1	P	05/17/00
7440-43-9	Cadmium	ND	10.0	1	P	05/17/00
7440-47-3	Chromium	ND	30.0	1	P	05/17/00
7440-50-8	Copper	ND	30.0	1	P	05/17/00
7439-92-1	Lead	ND	10.0	2	F	05/17/00
7439-97-6	Mercury	ND	.200	1	CV	05/17/00
7440-02-0	Nickel	ND	40.0	1	P	05/17/00
7782-49-2	Selenium	ND	10.0	2	F	05/16/00
7440-22-4	Silver	ND	10.0	1	P	05/17/00
7440-28-0	Thallium	ND	10.0	2	F	05/16/00
7440-66-6	Zinc	ND	100	1	P	05/17/00

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8110  
 Sample #: 0005406  
 Field ID: MW-8  
 Client Name: PAONYNJ

Matrix: Aqueous  
 Date Received: 05/16/00

CAS No.	Element	Result UG/L	MDL UG/L	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	10.0	2	F	05/18/00
7440-38-2	Arsenic	ND	10.0	2	F	05/17/00
7440-41-7	Beryllium	21.6	5.00	1	P	05/17/00
7440-43-9	Cadmium	47.1	10.0	1	P	05/17/00
7440-47-3	Chromium	ND	30.0	1	P	05/17/00
7440-50-8	Copper	ND	30.0	1	P	05/17/00
7439-92-1	Lead	ND	10.0	2	F	05/17/00
7439-97-6	Mercury	ND	.200	1	CV	05/17/00
7440-02-0	Nickel	ND	40.0	1	P	05/17/00
7782-49-2	Selenium	ND	10.0	2	F	05/16/00
7440-22-4	Silver	ND	10.0	1	P	05/17/00
7440-28-0	Thallium	ND	10.0	2	F	05/16/00
7440-66-6	Zinc	ND	100	1	P	05/17/00

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8110  
 Sample #: 0005407  
 Field ID: DUP  
 Client Name: PAONYNJ

Matrix: Aqueous  
 Date Received: 05/16/00

CAS No.	Element	Result UG/L	MDL UG/L	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	10.0	2	F	05/18/00
7440-38-2	Arsenic	ND	10.0	2	F	05/17/00
7440-41-7	Beryllium	ND	5.00	1	P	05/17/00
7440-43-9	Cadmium	ND	10.0	1	P	05/17/00
7440-47-3	Chromium	ND	30.0	1	P	05/17/00
7440-50-8	Copper	ND	30.0	1	P	05/17/00
7439-92-1	Lead	ND	10.0	2	F	05/17/00
7439-97-6	Mercury	ND	.200	1	CV	05/17/00
7440-02-0	Nickel	ND	40.0	1	P	05/17/00
7782-49-2	Selenium	ND	10.0	2	F	05/16/00
7440-22-4	Silver	ND	10.0	1	P	05/17/00
7440-28-0	Thallium	ND	10.0	2	F	05/16/00
7440-66-6	Zinc	ND	100	1	P	05/17/00

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 8110  
 Sample #: 0005408  
 Field ID: FB  
 Client Name: PAONYNJ

Matrix: Aqueous  
 Date Received: 05/16/00

CAS No.	Element	Result UG/L	MDL UG/L	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	10.0	2	F	05/18/00
7440-38-2	Arsenic	ND	10.0	2	F	05/17/00
7440-41-7	Beryllium	ND	5.00	1	P	05/17/00
7440-43-9	Cadmium	ND	10.0	1	P	05/17/00
7440-47-3	Chromium	ND	30.0	1	P	05/17/00
7440-50-8	Copper	ND	30.0	1	P	05/17/00
7439-92-1	Lead	ND	10.0	2	F	05/17/00
7439-97-6	Mercury	ND	.200	1	CV	05/17/00
7440-02-0	Nickel	ND	40.0	1	P	05/17/00
7782-49-2	Selenium	ND	10.0	2	F	05/16/00
7440-22-4	Silver	ND	10.0	1	P	05/17/00
7440-28-0	Thallium	ND	10.0	2	F	05/16/00
7440-66-6	Zinc	ND	100	1	P	05/17/00

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATACase #: 8110  
Sample #: 0005401  
Client Name: PAONYNJ  
Field Number: MW-3Matrix: Aqueous  
Date Received: 05/16/00

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK		ANALYSIS DATE
					RESULTS	MDL	
Cyanide, Total	ND	0.01	mg/L	1.	ND	0.01	05/18/00

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8110  
Sample #: 0005402  
Client Name: PAONYNJ  
Field Number: PAMJ-4

Matrix: Aqueous  
Date Received: 05/16/00

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK		ANALYSIS DATE
					RESULTS	MDL	
Cyanide, Total	ND	0.01	mg/L	1.	ND	0.01	05/18/00

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8110  
Sample #: 0005403  
Client Name: PAONYNJ  
Field Number: MW-5

Matrix: Aqueous  
Date Received: 05/16/00

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Cyanide, Total	ND	0.01	mg/L	1.	ND	0.01	05/18/00

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATACase #: 8110  
Sample #: 0005404  
Client Name: PAONYNJ  
Field Number: MW-6Matrix: AQUEOUS  
Date Received: 05/16/00

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Cyanide, Total	ND	0.01	mg/L	1.	ND	0.01	05/18/00

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATACase #: 8110  
Sample #: 0005405  
Client Name: PAONYNJ  
Field Number: MW-7Matrix: Aqueous  
Date Received: 05/16/00

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Cyanide, Total	ND	0.01	mg/L	1.	ND	0.01	05/18/00

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATACase #: 8110  
Sample #: 0005406  
Client Name: PAONYWJ  
Field Number: MW-8Matrix: Aqueous  
Date Received: 05/16/00

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK		ANALYSIS DATE
					RESULTS	MDL	
Cyanide, Total	ND	0.01	mg/L	1.	ND	0.01	05/18/00

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8110  
Sample #: 0005407  
Client Name: PAOHYNJ  
Field Number: DUP

Matrix: Aqueous  
Date Received: 05/16/00

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Cyanide, Total	ND	0.01	mg/L	1.	ND	0.01	05/18/00

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 8110  
Sample #: 0005408  
Client Name: PAONYNJ  
Field Number: FB

Matrix: Aqueous  
Date Received: 05/16/00

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Cyanide, Total	ND	0.01	mg/L	1.	ND	0.01	05/18/00

Accredited Laboratories, Inc.  
Total Petroleum Hydrocarbon Analysis

Client: PAONYNJ  
Case #: 8110  
Analyst: RB

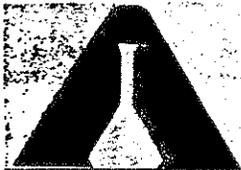
Matrix: Aqueous  
Date Received: 05/16/00  
Date Analyzed: 05/17/00

Field #	Sample #	Amount Used(ml)	DF	ABS	Result mg/L	MDL mg/L
MW-3	0005401	860	1	0	ND	.6
PAMW-4	0005402	830	1	0	ND	.6
MW-5	0005403	820	1	0	ND	.6
MW-6	0005404	920	1	0	ND	.5
MW-7	0005405	900	1	2	ND	.6
MW-8	0005406	860	1	0	ND	.6
DUP	0005407	860	1	0	ND	.6
FB	0005408	740	1	0	ND	.7

Response Factor = .13725395

DF = Dilution Factor  
ABS = Absorbance

Method Blank: < 0.5 mg/L



**ACCREDITED LABORATORIES, INC.**

*Implementing Tomorrow's Technology, Today™...*

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**Analytical Data Report**

for

Port Authority of N Y & N J  
241 Erie Street  
Jersey City, NJ 07310

**Project: J F K - Building 197 Revised: 05/22/00**

Accredited Laboratories Case No.: 7879  
Date Received: 04/24/00

<u>Field ID</u>	<u>Laboratory Sample #</u>
MW-8, S-4	200004402
MW-8S-4DUP	200004403
FB	200004404

Accredited Laboratories, Inc. New Jersey Certification  
Number 12007. This data has been reviewed and accepted by:

Theodore C. Gaydos  
Technical Director

(732) 541-2025

**CORPORATE OFFICES**  
20 Pershing Avenue  
Carteret, New Jersey 07008

FAX (732) 541-1383



## METHODOLOGY SUMMARY

### Volatile Organics - EPA 8260 (soil)

An inert gas is purged through a 5 g sample at elevated temperature. Alternatively the soil is extracted with methanol. A portion of extract is spiked into a purging vessel and purged by an inert gas. The vapor is swept through a sorbent column where the purgeables are trapped. After purging is completed, the sorbent column is heated and back-flushed with the inert gas to desorb the purgeables onto a GC column. The GC is temperature programmed to separate the purgeables which are then detected with a mass spectrometer.

### Base-Neutral/Acid Extractables - EPA 8270 (soil)

A 30 gram portion of soil is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone. The methylene chloride extract is dried and concentrated and a measured amount is injected onto a GC and the analytes are detected with a mass spectrometer.

### Total Cyanide - SW 846, 9010 (solid)

A representative portion of sample is weighed and placed into a cyanide distillation apparatus. The cyanide as hydrocyanic acid is released from cyanide complexes by means of a reflux-distillation operation and absorbed in a scrubber containing sodium hydroxide solution. The cyanide ion in the absorbing solution is then determined colorimetrically according to EPA "Test Methods for Evaluating Solid Wastes", SW 846.

### Pesticides/PCB's - EPA 8081/8082 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

### Metals (soil)

A 1-5 gram portion of soil is digested with nitric acid and hydrogen peroxide. The digestate is then refluxed with either nitric acid or hydrochloric acid. Diluted hydrochloric acid is used as the final reflux acid for the flame AA or ICAP of Ag, Al, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Ni, Sb, Sn, Tl and Zn. Diluted nitric acid is employed as the final dilution acid for the furnace AA analysis of As, Pb and Se. For the graphite furnace analysis, an aliquot of the digestate is spiked with nickel nitrate solution

and is placed into the graphite furnace. The aliquot is then slowly evaporated to dryness, charred and atomized. The absorption of the EDL radiation during atomization is proportional to the element concentration. For the flame AA, the digestate is aspirated and atomized in a flame. The absorption of the HCL radiation during atomization is proportional to the element concentration. The basis of ICAP method is the measurement of atomic emission by an optical spectroscopy technique. The emission spectra are dispersed by a grating spectrometer and the intensities of the line are measured and processed by a computer system. For mercury analysis, a 0.5-1.0 gram portion of sample is digested with potassium permanganate and persulfate at acidic condition in a water bath at 95°C. The mercury in the sample is reduced to the elemental state and detected by the cold vapor technique in a closed system. The analytical procedures are derived from "EPA Methods for Evaluating Solid Waste, 3rd Edition, 1986" The AA technique is specified in Method 7000 series. The ICAP technique is specified in Method 6010.

#### **Petroleum Hydrocarbons - Modified EPA 418.1 (soil)**

A 30 gram portion of soil is extracted with fluorocarbon 113. Interferences are removed with silica gel adsorbent. Infrared analysis of the extract is performed by direct comparison with standards.

#### **Volatile Organics - EPA 8260 (aqueous)**

Volatile organic compounds are purged from a 5 ml sample by bubbling an inert gas through the aqueous sample. The purgeables are trapped in a sorbent column. When purging is completed, the sorbent column is heated and back-flushed with the inert gas to desorb the purgeables onto a GC column. The GC is temperature-programmed to separate the purgeables which are then detected with a mass spectrometer.

CONFORMANCE/NON-CONFORMANCE SUMMARY

Accredited Labs received 2 soil samples and 1 aqueous sample (Project: J F K - Building 197; ALI Case #7879) from Port Authority of NY & NJ on 04/24/00 for the analyses of Total Petroleum Hydrocarbons and Priority Pollutants + 40, including MTBE, TBA and Xylenes.

All analyses were performed within the required holding time.

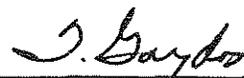
All soil analyses were reported on a dry weight basis.

In the BNA analysis, two surrogates (Phenol-d5 and 2-Fluorophenol) were out of criteria for ALI sample #G004402. The sample was rerun and analyzed and both surrogates were again recovered out of criteria.

In the Metal analyses, the recoveries of certain matrix spike analytes were out of criteria. The matrix spikes were reanalyzed and reported.

On 05/22/00, per client's request, the field ID's for the soil samples were changed. The results are included in this revised data deliverable package.

"The laboratory has reviewed the quality assurance and quality control measurements for the sample analysis stated above."



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Theodore C. Gaydos  
Technical Director

ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 7879  
 SAMPLE NUMBER 0004402  
 DATA FILE >A5733  
 CLIENT NAME PROXYND  
 ELD ID MW-8,S-4

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 04/26/00  
 ANALYZED BY ROBERT

CAS #	COMPOUND	UG/KG	MDL
	Acrolein	U	29
	Acrylonitrile	U	29
	Chloromethane	U	6
	Vinyl Chloride	U	6
	Bromomethane	U	6
	Chloroethane	U	6
	Trichlorofluoromethane	U	6
	1,1-Dichloroethane	U	6
	Methylene Chloride	14 B	6
	trans-1,2-Dichloroethane	U	6
	1,1-Dichloroethane	U	6
	Chloroform	U	6
	1,1,1-Trichloroethane	U	6
	Carbon Tetrachloride	U	6
	1,2-Dichloroethane	U	6
	Benzene	U	6
	Trichloroethene	U	6

CAS #	COMPOUND	UG/KG	MDL
	1,2-Dichloropropane	U	6
	Bromodichloromethane	U	6
	cis-1,3-dichloropropene	U	6
	Toluene	U	6
	trans-1,3-Dichloropropene	U	6
	1,1,2-Trichloroethane	U	6
	Tetrachloroethene	U	6
	Dibromochloromethane	U	6
	Ethylbenzene	U	6
	Chlorobenzene	U	6
	m,p-Xylene	U	12
	Bromoform	U	6
	1,1,2,2-Tetrachloroethane	U	6
	o-Xylene	U	6
	T-butyl alcohol	U	58
	Methyl t-butyl ether	U	58
	2-Chloroethylvinylether	U	6

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	99 %	70-121	OK
Toluene-d8	102 %	81-117	OK
Bromofluorobenzene	101 %	74-121	OK

Percent solid of 86.7 is used for all target compounds.

- Indicates compound concentration found below MDL.
- Indicates compound analyzed for but not detected,
- Indicates result is based on a dilution.

- B - Indicates compound found in associated blank.
- E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 7579  
 SAMPLE NUMBER 0004403  
 DATA FILE 7A5734  
 CLIENT NAME PSONYNJ  
 FIELD ID MW-BS-4DIP

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 04/26/00  
 ANALYZED BY ROBERT

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
	Acrolein	U	29		1,2-Dichloropropane	U	6
	Acrylonitrile	U	29		Bromodichloromethane	U	6
	Chloromethane	U	6		cis-1,3-dichloropropene	U	6
	Vinyl Chloride	U	6		Toluene	U	6
	Bromomethane	U	6		trans-1,3-Dichloropropene	U	6
	Chloroethane	U	6		1,1,2-Trichloroethane	U	6
	Trichlorofluoromethane	U	6		Tetrachloroethene	U	6
	1,1-Dichloroethene	U	6		Dibromochloromethane	U	6
	Methylene Chloride	12 B	6		Ethylbenzene	U	6
	trans-1,2-Dichloroethane	U	6		Chlorobenzene	U	6
	1,1-Dichloroethane	U	6		m,p-Xylene	U	12
	Chloroform	U	6		Bromoform	U	6
	1,1,1-Trichloroethane	U	6		1,1,2,2-Tetrachloroethane	U	6
	Carbon Tetrachloride	U	6		o-Xylene	U	6
	1,2-Dichloroethane	U	6		T-butyl alcohol	U	59
	Benzene	U	6		Methyl t-butyl ether	U	59
	Trichloroethene	U	6		2-Chloroethylvinylether	U	6

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	97 %	70-121	OK
Toluene-d8	101 %	81-117	OK
Bromofluorobenzene	103 %	74-121	OK

Percent solid of 85.0 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 7879  
 SAMPLE NUMBER 0004404  
 VOA FILE >R5730  
 CLIENT NAME EDMUND  
 FIELD ID FS

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 04/26/00  
 ANALYZED BY ROBERT

CAS #	COMPOUND	UG/L	MDL	CAS #	COMPOUND	UG/L	MDL
	Acrolein	U	25		1,2-Dichloropropane	U	5
	Acrylonitrile	U	25		Bromodichloromethane	U	5
	Chloromethane	U	5		cis-1,3-dichloropropene	U	5
	Vinyl Chloride	U	5		Toluene	4 J	5
	Bromomethane	U	5		trans-1,3-Dichloropropene	U	5
	Chloroethane	U	5		1,1,2-Trichloroethane	U	5
	Trichlorofluoromethane	U	5		Tetrachloroethene	U	5
	1,1 Dichloroethene	U	5		Dibromochloromethane	U	5
	Methylene Chloride	10 B	5		Ethylbenzene	U	5
	trans-1,2 Dichloroethene	U	5		Chlorobenzene	U	5
	1,1-Dichloroethane	U	5		m,p-Xylene	U	10
	Chloroform	U	5		Bromoform	U	5
	1,1,1-Trichloroethane	U	5		1,1,2,2-Tetrachloroethane	U	5
	Carbon Tetrachloride	U	5		o-Xylene	U	5
	1,2-Dichloroethane	U	5		T-butyl alcohol	U	50
	Benzene	U	5		Methyl t butyl ether	U	50
	Trichloroethene	U	5		2-Chloroethylvinylether	U	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	96 %	76-114	OK
Toluene-d8	100 %	88-110	OK
Bromofluorobenzene	103 %	86-115	OK

U - Indicates compound concentration found below MDL.  
 J - Indicates compound analyzed for but not detected,  
 B - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER \_\_\_\_\_  
 SAMPLE NUMBER VELKA42  
 DATA FILE 1A5722  
 CLIENT NAME \_\_\_\_\_  
 FIELD ID \_\_\_\_\_

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 04/26/88  
 ANALYZED BY ROBERT

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
	Acrolein	U	25		1,2-Dichloropropane	U	5
	Acrylonitrile	U	25		Bromodichloromethane	U	5
	Chloromethane	U	5		cis-1,3-dichloropropene	U	5
	Vinyl Chloride	U	5		Toluene	U	5
	Bromomethane	U	5		trans-1,3-Dichloropropene	U	5
	Chloroethane	U	5		1,1,2 Trichloroethane	U	5
	Trichlorofluoromethane	U	5		Tetrachloroethene	U	5
	1,1-Dichloroethene	U	5		Dibromochloromethane	U	5
	Methylene Chloride	2 J	5		Ethylbenzene	U	5
	trans-1,2 Dichloroethene	U	5		Chlorobenzene	U	5
	1,1-Dichloroethane	U	5		m,p-Xylene	U	10
	Chloroform	U	5		Bromoform	U	5
	1,1,1-Trichloroethane	U	5		1,1,2,2-Tetrachloroethane	U	5
	Carbon Tetrachloride	U	5		o-Xylene	U	5
	1,2-Dichloroethane	U	5		T-butyl alcohol	U	50
	Benzene	U	5		Methyl t-butyl ether	U	50
	Trichloroethene	U	5		2-Chloroethylvinylether	U	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	98 %	70-121	OK
Toluene-d8	103 %	81-117	OK
Bromofluorobenzene	104 %	74-121	OK

Percent solid of 100 is used for all target compounds.

- U - Indicates compound concentration found below MDL.
- J - Indicates compound analyzed for but not detected,
- D - Indicates result is based on a dilution.

- B - Indicates compound found in associated blank.
- E - Indicates result exceeds highest calibration standard



SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Accredited Labs, Inc. Contract: \_\_\_\_\_  
 Lab Code: GC/MS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Matrix Spike - ALI Sample No.: 0004385

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0	52	104	59-172
Trichloroethene	50	3	49	93	62-137
Benzene	50	0	51	101	66-142
Toluene	50	0	49	98	59-139
Chlorobenzene	50	0	45	89	60-133

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,1-Dichloroethene	50	50	101	4	22 59-172
Trichloroethene	50	47	87	6	24 62-137
Benzene	50	46	93	9	21 66-142
Toluene	50	46	92	7	21 59-139
Chlorobenzene	50	44	87	2	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: \_\_\_\_\_  
 \_\_\_\_\_

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

TEST NUMBER 7879  
 SAMPLE NUMBER 0004402  
 DATA FILE >89538  
 CLIENT NAME PRONYNJ  
 FIELD ID MW-8, S-4

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 04/26/00  
 DATE ANALYZED 04/27/00  
 ANALYZED BY JANICE

IS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
1329	Acenaphthene	U	380	51285	2,4-Dinitrophenol	U	380
08968	Acenaphthylene	U	380	121142	2,4-Dinitrotoluene	U	380
0127	Anthracene	U	380	606202	2,6-Dinitrotoluene	U	380
5553	Benzo(a)Anthracene	U	380	117840	Di-n-octyl phthalate	U	380
1328	Benzo(a)Pyrene	U	380	206440	Fluoranthene	U	380
05992	Benzo(b)fluoranthene	U	380	86737	Fluorene	U	380
1242	Benzo(g,h,i)Perylene	U	380	118741	Hexachlorobenzene	U	380
17089	Benzo(k)Fluoranthene	U	380	87683	Hexachlorobutadiene	U	380
0850	Benzoic Acid	U	1900	77474	Hexachlorocyclopentadiene	U	380
00516	Benzyl Alcohol	U	380	67721	Hexachloroethane	U	380
1444	bis(2-Chloroethyl)Ether	U	380	193395	Indeno(1,2,3-cd)Pyrene	U	380
08601	bis(2-Chloroisopropyl)ether	U	380	78591	Isophorone	U	380
7817	Bis(2-Ethylhexyl)Phthalate	47 J	380	91576	2-Methylnaphthalene	U	380
11911	bis(2-Chloroethoxy)Methane	U	380	95487	2-Methylphenol	U	380
11553	4-Bromophenyl-phenylether	U	380	108394	3,6,4-Methylphenol	U	380
5687	Butylbenzylphthalate	U	380	91203	Naphthalene	U	380
16478	4-Chloroaniline	U	380	88744	2-Nitroaniline	U	380
1587	2-Chloronaphthalene	U	380	99092	3-Nitroaniline	U	380
1507	4-Chloro-3-methylphenol	U	380	100016	4-Nitroaniline	U	380
5578	2-Chlorophenol	U	380	98953	Nitrobenzene	U	380
105723	4-Chlorophenyl-phenylether	U	380	88755	2-Nitrophenol	U	380
18019	Chrysene	U	380	100027	4-Nitrophenol	U	380
1703	Dibenzo(a,h)Anthracene	U	380	62759	N-Nitrosodimethylamine	U	380
12649	Dibenzofuran	U	380	86306	N-Nitrosodiphenylamine	U	380
1501	1,2-Dichlorobenzene	U	380	621647	N-Nitroso-Di-n-propylamine	U	380
41731	1,3-Dichlorobenzene	U	380	87865	Pentachlorophenol	U	380
16467	1,4-Dichlorobenzene	U	380	85018	Phenanthrene	U	380
1941	3,3'-Dichlorobenzidine	U	380	108952	Phenol	U	380
10832	2,4-Dichlorophenol	U	380	129000	Pyrene	U	380
1662	Diethylphthalate	U	380	120821	1,2,4-Trichlorobenzene	U	380
15679	2,4-Dimethylphenol	U	380	95954	2,4,5-Trichlorophenol	U	380
11113	Dimethyl Phthalate	U	380	88062	2,4,6-Trichlorophenol	U	380
1742	Di-n-Butylphthalate	U	380	92875	Benzidine	U	380
34521	4,6-Dinitro-2-methylphenol	U	380	122667	1,2-Diphenylhydrazine	U	380

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	70 %	23-120	OK
2-Fluorobiphenyl	70 %	30-115	OK
Terphenyl-d14	74 %	18-137	OK
Phenol-d5	172 %	24-113	OUT
2-Fluorophenol	126 %	25-121	OUT
2,4,6-Tribromophenol	106 %	19-122	OK

Percent solid of 86.7 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
 J - Indicates compound analyzed for but not detected.  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied



ACCREDITED LABORATORIES, INC.  
SNA ORGANIC ANALYSIS DATA

ASE NUMBER 7879  
 SAMPLE NUMBER 0004402  
 ATA FILE >R9547  
 CLIENT NAME PRONYN  
 TELE ID MW-8, S-4

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 04/26/00  
 DATE ANALYZED 04/28/00  
 ANALYZED BY JANTCE

AS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
3329	Acenaphthene	U	380	51285	2,4-Dinitrophenol	U	380
08968	Acenaphthylene	U	380	121142	2,4-Dinitrotoluene	U	380
20127	Anthracene	U	380	606202	2,6-Dinitrotoluene	U	380
6553	Benzo(a)Anthracene	U	380	117840	Di-n-octyl phthalate	U	380
0328	Benzo(a)Pyrene	U	380	206440	Fluoranthene	U	380
95992	Benzo(b)fluoranthene	U	380	86737	Fluorene	U	380
91242	Benzo(g,h,i)Perylene	U	380	118741	Hexachlorobenzene	U	380
07089	Benzo(k)Fluoranthene	U	380	87683	Hexachlorobutadiene	U	380
5850	Benzoic Acid	U	1900	77474	Hexachlorocyclopentadiene	U	380
00516	Benzyl Alcohol	U	380	67721	Hexachloroethane	U	380
11444	bis(-2-Chloroethyl)Ether	U	380	193395	Indeno(1,2,3-cd)Pyrene	U	380
08601	bis(2-Chloroisopropyl)ether	U	380	78591	Isophorone	U	380
17817	Bis(2-Ethylhexyl)Phthalate	48 J	380	91576	2-Methylnaphthalene	U	380
11911	bis(-2-Chloroethoxy)Methane	U	380	95487	2-Methylphenol	U	380
01553	4-Bromophenyl-phenylether	U	380	108394	3&4-Methylphenol	U	380
5687	Butylbenzylphthalate	U	380	91203	Naphthalene	U	380
06478	4-Chloroaniline	U	380	88744	2-Nitroaniline	U	380
1587	2-Chloronaphthalene	U	380	99092	3-Nitroaniline	U	380
9507	4-Chloro-3-methylphenol	U	380	100016	4-Nitroaniline	U	380
5578	2-Chlorophenol	U	380	98953	Nitrobenzene	U	380
005723	4-Chlorophenyl-phenylether	U	380	88755	2-Nitrophenol	U	380
18019	Chrysene	U	380	100027	4-Nitrophenol	U	380
3703	Dibenzo(a,h)Anthracene	U	380	62759	N-Nitrosodimethylamine	U	380
32649	Dibenzofuran	U	380	86306	N-Nitrosodiphenylamine	U	380
5501	1,2-Dichlorobenzene	U	380	621647	N-Nitroso-Di-n-propylamine	U	380
41731	1,3-Dichlorobenzene	U	380	87865	Pentachlorophenol	U	380
06467	1,4-Dichlorobenzene	U	380	85018	Phenanthrene	U	380
1941	3,3'-Dichlorobenzidine	U	380	108952	Phenol	U	380
20832	2,4-Dichlorophenol	U	380	129000	Pyrene	U	380
4662	Diethylphthalate	U	380	120821	1,2,4-Trichlorobenzene	U	380
05679	2,4-Dimethylphenol	U	380	95954	2,4,5-Trichlorophenol	U	380
31113	Dimethyl Phthalate	U	380	88062	2,4,6-Trichlorophenol	U	380
14742	Di-n-Butylphthalate	U	380	92875	Benzidine	U	380
34521	4,6-Dinitro-2-methylphenol	U	380	122667	1,2-Diphenylhydrazine	U	380

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	74 %	23-120	OK
2-Fluorobiphenyl	61 %	30-115	OK
Terphenyl-d14	71 %	18-137	OK
Phenol-d5	237 %	24-113	OUT
2-Fluorophenol	161 %	25-121	OUT
2,4,6-Tribromophenol	114 %	19-122	OK

Percent solid of 86.7 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied

ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

TEST NUMBER 7879  
SAMPLE NUMBER 0004403  
DATA FILE >B9539  
IDENT NAME PAONYNJ  
FIELD ID MW-85-4DUP

MATRIX Soil  
DILUTION FACTOR 1.0  
DATE EXTRACTED 04/26/00  
DATE ANALYZED 04/27/00  
ANALYZED BY JANICE

IS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
329	Acenaphthene	U	390	51285	2,4-Dinitrophenol	U	390
38968	Acenaphthylene	U	390	121142	2,4-Dinitrotoluene	U	390
30127	Anthracene	U	390	606202	2,6-Dinitrotoluene	U	390
3553	Benzo(a)Anthracene	U	390	117840	Di-n-octyl phthalate	U	390
328	Benzo(a)Pyrene	U	390	206440	Fluoranthene	U	390
35992	Benzo(b)fluoranthene	U	390	86737	Fluorene	U	390
31242	Benzo(g,h,i)Perylene	U	390	118741	Hexachlorobenzene	U	390
37089	Benzo(k)Fluoranthene	U	390	87683	Hexachlorobutadiene	U	390
3850	Benzoic Acid	U	2000	77474	Hexachlorocyclopentadiene	U	390
30516	Benzyl Alcohol	U	390	67721	Hexachloroethane	U	390
31444	bis(-2-Chloroethyl)Ether	U	390	193395	Indeno(1,2,3-cd)Pyrene	U	390
38601	bis(2-Chloroisopropyl)ether	U	390	78591	Isophorone	U	390
37817	Bis(2-Ethylhexyl)Phthalate	U	390	91576	2-Methylnaphthalene	U	390
311911	bis(-2-Chloroethoxy)Methane	U	390	95487	2-Methylphenol	U	390
31553	4-Bromophenyl-phenylether	U	390	108394	3&4-Methylphenol	U	390
35687	Butylbenzylphthalate	U	390	91203	Naphthalene	U	390
36478	4-Chloroaniline	U	390	88744	2-Nitroaniline	U	390
31587	2-Chloronaphthalene	U	390	99092	3-Nitroaniline	U	390
37507	4-Chloro-3-methylphenol	U	390	100016	4-Nitroaniline	U	390
3578	2-Chlorophenol	U	390	98953	Nitrobenzene	U	390
305723	4-Chlorophenyl-phenylether	U	390	88755	2-Nitrophenol	U	390
38019	Chrysene	U	390	100027	4-Nitrophenol	U	390
3703	Dibenzo(a,h)Anthracene	U	390	62759	N-Nitrosodimethylamine	U	390
32649	Dibenzofuran	U	390	86306	N-Nitrosodiphenylamine	U	390
3501	1,2-Dichlorobenzene	U	390	621647	N-Nitroso-Di-n-propylamine	U	390
41731	1,3-Dichlorobenzene	U	390	87865	Pentachlorophenol	U	390
36467	1,4-Dichlorobenzene	U	390	85018	Phenanthrene	U	390
31941	3,3'-Dichlorobenzidine	U	390	108952	Phenol	U	390
30832	2,4-Dichlorophenol	U	390	129000	Pyrene	U	390
4662	Diethylphthalate	U	390	120821	1,2,4-Trichlorobenzene	U	390
35679	2,4-Dimethylphenol	U	390	95954	2,4,5-Trichlorophenol	U	390
31113	Dimethyl Phthalate	U	390	88062	2,4,6-Trichlorophenol	U	390
3742	Di-n-Butylphthalate	U	390	92875	Benzidine	U	390
34521	4,6-Dinitro-2-methylphenol	U	390	122667	1,2-Diphenylhydrazine	U	390

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	63 %	23-120	OK
2-Fluorobiphenyl	66 %	30-115	OK
Terphenyl-d14	71 %	18-137	OK
Phenol-d5	100 %	24-113	OK
2-Fluorophenol	76 %	25-121	OK
2,4,6-Tribromophenol	96 %	19-122	OK

Percent solid of 85.0 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied



ACCREDITED LABORATORIES, INC.  
BMA ORGANIC ANALYSIS DATA

CASE NUMBER \_\_\_\_\_  
SAMPLE NUMBER SBLK34  
DATA FILE >B9529  
CLIENT NAME \_\_\_\_\_  
FIELD ID \_\_\_\_\_

MATRIX Soil  
DILUTION FACTOR 1.0  
DATE EXTRACTED 04/26/00  
DATE ANALYZED 04/27/00  
ANALYZED BY JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	330	51285	2,4-Dinitrophenol	U	330
208968	Acenaphthylene	U	330	121142	2,4-Dinitrotoluene	U	330
120127	Anthracene	U	330	606202	2,6-Dinitrotoluene	U	330
56553	Benzo(a)Anthracene	U	330	117840	Di-n-octyl phthalate	U	330
50328	Benzo(a)Pyrene	U	330	206440	Fluoranthene	U	330
205992	Benzo(b)fluoranthene	U	330	86737	Fluorene	U	330
191242	Benzo(g,h,i)Perylene	U	330	118741	Hexachlorobenzene	U	330
207089	Benzo(k)Fluoranthene	U	330	87683	Hexachlorobutadiene	U	330
65850	Benzoic Acid	U	1700	77474	Hexachlorocyclopentadiene	U	330
100516	Benzyl Alcohol	U	330	67721	Hexachloroethane	U	330
111444	bis(-2-Chloroethyl)Ether	U	330	193395	Indeno(1,2,3-cd)Pyrene	U	330
108601	bis(2-Chloroisopropyl)ether	U	330	78591	Isophorone	U	330
117817	Bis(2-Ethylhexyl)Phthalate	U	330	91576	2-Methylnaphthalene	U	330
111911	bis(-2-Chloroethoxy)Methane	U	330	95487	2-Methylphenol	U	330
101553	4-Bromophenyl-phenylether	U	330	108394	3,6-Methylphenol	U	330
85687	Butylbenzylphthalate	U	330	91203	Naphthalene	U	330
106478	4-Chloroaniline	U	330	88744	2-Nitroaniline	U	330
91587	2-Chloronaphthalene	U	330	99092	3-Nitroaniline	U	330
59507	4-Chloro-3-methylphenol	U	330	100016	4-Nitroaniline	U	330
95578	2-Chlorophenol	U	330	98953	Nitrobenzene	U	330
7005723	4-Chlorophenyl-phenylether	U	330	88755	2-Nitrophenol	U	330
218019	Chrysene	U	330	100027	4-Nitrophenol	U	330
53703	Dibenzo(a,h)Anthracene	U	330	62759	N-Nitrosodimethylamine	U	330
132649	Dibenzofuran	U	330	86306	N-Nitrosodiphenylamine	U	330
95501	1,2-Dichlorobenzene	U	330	621647	N-Nitroso-Di-n-propylamine	U	330
541731	1,3-Dichlorobenzene	U	330	87865	Pentachlorophenol	U	330
106467	1,4-Dichlorobenzene	U	330	85018	Phenanthrene	U	330
91941	3,3'-Dichlorobenzidine	U	330	108952	Phenol	U	330
120832	2,4-Dichlorophenol	U	330	129000	Pyrene	U	330
84662	Diethylphthalate	U	330	120821	1,2,4-Trichlorobenzene	U	330
105679	2,4-Dimethylphenol	U	330	95954	2,4,5-Trichlorophenol	U	330
131113	Dimethyl Phthalate	U	330	88062	2,4,6-Trichlorophenol	U	330
84742	Di-n-Butylphthalate	U	330	92875	Benzidine	U	330
534521	4,6-Dinitro-2-methylphenol	U	330	122667	1,2-Diphenylhydrazine	U	330

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	66 %	23-120	OK
2-Fluorobiphenyl	70 %	30-115	OK
Terphenyl-d14	72 %	18-137	OK
Phenol-d5	99 %	24-113	OK
2-Fluorophenol	83 %	25-121	OK
2,4,6-Tribromophenol	97 %	19-122	OK

Percent solid of 100 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
U - Indicates compound analyzed for but not detected.  
D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied



## SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Accredited Laboratories, Inc.

Matrix Spike - Lab Sample No.: 0004423

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	6700	0	5400	80	26- 90
2-Chlorophenol	6700	0	4900	73	25-102
1,4-Dichlorobenzene	3300	0	2700	82	28-104
N-Nitroso-Di-n-prop. (1)	3300	0	3000	91	41-126
1,2,4-Trichlorobenzene	3300	0	2400	73	38-107
4-Chloro-3-methylphenol	6700	0	4700	70	26-103
Acenaphthene	3300	0	2500	76	31-137
4-Nitrophenol	6700	0	3100	46	11-114
2,4-Dinitrotoluene	3300	0	2200	67	28- 89
Pentachlorophenol	6700	0	5300	79	17-109
Pyrene	3300	0	2400	73	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	MSD % RPD #	QC LIMITS RPD   REC.
Phenol	6700	5000	75	6	35   26- 90
2-Chlorophenol	6700	4800	72	1	50   25-102
1,4-Dichlorobenzene	3300	2500	76	8	27   28-104
N-Nitroso-Di-n-prop. (1)	3300	2600	79	14	38   41-126
1,2,4-Trichlorobenzene	3300	2100	64	13	23   38-107
4-Chloro-3-methylphenol	6700	4700	70	0	33   26-103
Acenaphthene	3300	2300	70	8	19   31-137
4-Nitrophenol	6700	2700	40	14	50   11-114
2,4-Dinitrotoluene	3300	2200	67	0	47   28- 89
Pentachlorophenol	6700	5300	79	0	47   17-109
Pyrene	3300	2100	64	13	36   35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk  
 Values outside of QC limits

PD: 0 out of 11 outside limits  
 Spike Recovery: 0 out of 22 outside limits

REMARKS:

ACCREDITED LABORATORIES, INC  
 PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER 7879  
 SAMPLE NUMBER 0004402  
 DATA FILE >G5514  
 CLIENT NAME PAONYNJ  
 FIELD ID MW-8,S-4

MATRIX Soil  
 DILUTION FACTOR 1  
 DATE EXTRACTED 04/25/00  
 DATE ANALYZED 04/28/00  
 ANALYZED BY JEFF

CAS#	COMPOUND	UG/KG	MDL
319846	A-BHC	U	.769
319857	B-BHC	U	.769
58899	G-BHC (Lindane)	U	.769
319868	D-BHC	U	.769
76448	Heptachlor	.260 J	.769
309002	Aldrin	U	.769
1024573	Heptachlor Epoxide	U	.769
959988	Endosulfan I	U	.769
5103719	A-Chlordane	U	.769
5103742	G-Chlordane	U	.769
60571	Dieldrin	U	1.54
72559	4,4'-DDE	U	1.54
72208	Endrin	U	1.54
33213659	Endosulfan II	U	1.54
72548	4,4'-DDD	U	1.54
7421934	Endrin Aldehyde	U	1.54
1031078	Endosulfan Sulfate	U	1.54
50293	4,4'-DDT	U	1.54
53494705	Endrin Ketone	U	1.54
72435	Methoxychlor	U	7.69
8001352	Toxaphene	U	38.4
12674112	Aroclor-1016	U	19.2
11104282	Aroclor-1221	U	19.2
11141165	Aroclor-1232	U	19.2
53469219	Aroclor-1242	U	19.2
12672296	Aroclor-1248	U	19.2
11097691	Aroclor-1254	U	19.2
11096825	Aroclor-1260	U	19.2

Percent Solid of 86.7 is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER	<u>7879</u>	MATRIX	<u>Soil</u>
SAMPLE NUMBER	<u>0004403</u>	DILUTION FACTOR	<u>1</u>
DATA FILE	<u>&gt;G5515</u>	DATE EXTRACTED	<u>04/25/00</u>
CLIENT NAME	<u>PAOHYNJ</u>	DATE ANALYZED	<u>04/28/00</u>
FIELD ID	<u>MW-8S-4DUP</u>	ANALYZED BY	<u>JEFF</u>

CAS#	COMPOUND	UG/KG	MDL
319846	A-BHC	U	.784
319857	B-BHC	U	.784
58899	G-BHC (Lindane)	U	.784
319868	D-BHC	U	.784
76448	Heptachlor	U	.784
309002	Aldrin	U	.784
1024573	Heptachlor Epoxide	U	.784
959988	Endosulfan I	U	.784
5103719	A-Chlordane	U	.784
5103742	G-Chlordane	U	.784
60571	Dieldrin	U	1.57
72559	4,4'-DDE	U	1.57
72208	Endrin	U	1.57
33213659	Endosulfan II	U	1.57
72548	4,4'-DDD	U	1.57
7421934	Endrin Aldehyde	U	1.57
1031078	Endosulfan Sulfate	U	1.57
50293	4,4'-DDT	U	1.57
53494705	Endrin Ketone	U	1.57
72435	Methoxychlor	U	7.84
8001352	Toxaphene	U	39.2
12674112	Aroclor-1016	U	19.6
11104282	Aroclor-1221	U	19.6
11141165	Aroclor-1232	U	19.6
53469219	Aroclor-1242	U	19.6
12672296	Aroclor-1248	U	19.6
11097691	Aroclor-1254	U	19.6
11096825	Aroclor-1260	U	19.6

Percent Solid of 85.0 is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
 PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER  
 SAMPLE NUMBER  
 DATA FILE  
 CLIENT NAME  
 FIELD ID

\_\_\_\_\_

PBLK23

\_\_\_\_\_

>G5494

\_\_\_\_\_

\_\_\_\_\_

MATRIX \_\_\_\_\_ Soil

DILUTION FACTOR \_\_\_\_\_ 1

DATE EXTRACTED \_\_\_\_\_ 04/25/00

DATE ANALYZED \_\_\_\_\_ 04/27/00

ANALYZED BY \_\_\_\_\_ JEFF

CAS#	COMPOUND	UG/KG	MDL
319846	A-BHC	U	.667
319857	B-BHC	U	.667
58899	G-BHC (Lindane)	U	.667
319868	D-BHC	U	.667
76448	Heptachlor	U	.667
309002	Aldrin	U	.667
1024573	Heptachlor Epoxide	U	.667
959988	Endosulfan I	U	.667
5103719	A-Chlordane	U	.667
5103742	G-Chlordane	U	.667
60571	Dieldrin	U	1.33
72559	4,4'-DDE	U	1.33
72208	Endrin	U	1.33
33213659	Endosulfan II	U	1.33
72548	4,4'-DDD	U	1.33
7421934	Endrin Aldehyde	U	1.33
1031078	Endosulfan Sulfate	U	1.33
50293	4,4'-DDT	U	1.33
53494705	Endrin Ketone	U	1.33
72435	Methoxychlor	U	6.67
8001352	Toxaphene	U	33.3
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.  
SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spike Sample Number: 0004405

Sample Data File: >G5520

Date Extracted: 04/25/00

MS Data File: >G5521

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC ** LIMITS REC
Aroclor-1260	333	0.000	354	106	40-140

MSD Data File: >G5522

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS ** RPD	REC
Aroclor-1260	333	284	85	22	25	40-140

# Column used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

\*\* Values were generated within ALI for advisory purposes only

COMMENTS:

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ACCREDITED LABORATORIES, INC.  
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spike Sample No.: PBLK23

Sample Data File: >G5494

Date Extracted: 04/25/00

MS Data file: >G5495

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
G-BHC (Lindane)	8.33	0.00	8.99	108	46-120
Heptachlor	8.33	0.00	9.02	108	35-130
Aldrin	8.33	0.00	9.15	110	34-130
Dieldrin	16.7	0.00	20.2	121	31-130
Endrin	16.7	0.00	19.5	117	42-130
4,4'-DDT	16.7	0.00	18.4	110	23-130

MSD Data File: >G5495

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC.
G-BHC (Lindane)	8.33	8.99	108	0	50	46-120
Heptachlor	8.33	9.02	108	0	31	35-130
Aldrin	8.33	9.15	110	0	43	34-130
Dieldrin	16.7	20.2	121	0	38	31-130
Endrin	16.7	19.5	117	0	45	42-130
4,4'-DDT	16.7	18.4	110	0	50	23-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 6 outside limits  
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

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ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 7879  
 Sample #: 0004402  
 Field ID: MW-8,S-4  
 Client Name: PAONYNJ

Matrix: Soil  
 Date Received: 04/24/00

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	7.25	1	P	04/27/00
7440-38-2	Arsenic	ND	1.50	4	F	05/01/00
7440-41-7	Beryllium	ND	.363	1	P	04/27/00
7440-43-9	Cadmium	ND	.725	1	P	04/27/00
7440-47-3	Chromium	4.59	2.18	1	P	04/27/00
7440-50-8	Copper	ND	2.18	1	P	04/27/00
7439-92-1	Lead	ND	18.1	1	P	04/27/00
7439-97-6	Mercury	ND	.231	1	CV	04/26/00
7440-02-0	Nickel	ND	2.90	1	P	04/27/00
7782-49-2	Selenium	ND	1.87	5	F	05/01/00
7440-22-4	Silver	ND	.725	1	P	04/27/00
7440-28-0	Thallium	ND	1.87	5	F	05/01/00
7440-66-6	Zinc	8.70	7.25	1	P	04/27/00

Percent Solid of 86.7 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP  
 F - Analyzed by GFA

CV - Analyzed by Cold Vapor  
 A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 7879  
 Sample #: 0004403  
 Field ID: MW-8,S-4DUP  
 Client Name: PAONYNJ

Matrix: Soil  
 Date Received: 04/24/00

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	7.45	1	P	04/27/00
7440-38-2	Arsenic	ND	1.49	4	F	05/01/00
7440-41-7	Beryllium	ND	.372	1	P	04/27/00
7440-43-9	Cadmium	ND	.745	1	P	04/27/00
7440-47-3	Chromium	4.33	2.23	1	P	04/27/00
7440-50-8	Copper	ND	2.23	1	P	04/27/00
7439-92-1	Lead	ND	18.6	1	P	04/27/00
7439-97-6	Mercury	ND	.235	1	CV	04/28/00
7440-02-0	Nickel	ND	2.98	1	P	04/27/00
7782-49-2	Selenium	ND	1.86	5	F	05/01/00
7440-22-4	Silver	ND	.745	1	P	04/27/00
7440-28-0	Thallium	ND	1.86	5	F	05/01/00
7440-66-6	Zinc	9.68	7.45	1	P	04/27/00

Percent Solid of 85.0 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP                      CV - Analyzed by Cold Vapor  
 F - Analyzed by GFA                      A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Sample #: PBS1641  
Field ID: PREPBLANK

Matrix: Soil  
Date Prepared: 04/26/00

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	10.0	1	P	04/27/00
7440-38-2	Arsenic	ND	.500	1	F	05/01/00
7440-41-7	Beryllium	ND	.500	1	P	04/27/00
7440-43-9	Cadmium	ND	1.00	1	P	04/27/00
7440-47-3	Chromium	ND	3.00	1	P	04/27/00
7440-50-8	Copper	ND	3.00	1	P	04/27/00
7439-92-1	Lead	ND	25.0	1	P	04/27/00
7439-97-6	Mercury	ND	.200	1	CV	04/26/00
7440-02-0	Nickel	ND	4.00	1	P	04/27/00
7782-49-2	Selenium	ND	.500	1	F	05/01/00
7440-22-4	Silver	ND	1.00	1	P	04/27/00
7440-28-0	Thallium	ND	.500	1	F	05/01/00
7440-66-6	Zinc	ND	10.0	1	P	04/27/00

Percent Solid of 100. is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP                      CV - Analyzed by Cold Vapor  
F - Analyzed by GFA                      A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
SPIKE SAMPLE RECOVERY

Sample #: 0004397

Matrix: Soil

Concentration Units: mg/kg

Analyte	Spike Added	Sample Result	Spiked Sample Result	% Recovery	Q	QC Limits %Rec	Date Analyzed	M
Antimony	32.05	ND	42.2	131.7	*	75-125	04/27/00	P
Arsenic	3.18	11.2	15.9	147.6	*	75-125	05/01/00	F
Beryllium	3.21	1.54	4.95	106.4	—	75-125	04/27/00	P
Cadmium	3.21	4.19	6.86	83.3	—	75-125	04/27/00	P
Chromium	12.82	23.7	36.7	101.4	—	75-125	04/27/00	P
Copper	16.03	181	185	25.0	—		04/27/00	P
Lead	32.05	549	579	93.6	—	75-125	04/27/00	P
Mercury	1.00	.998	2.02	102.2	—	75-125	04/26/00	CV
Nickel	32.05	35.4	67.9	101.4	—	75-125	04/27/00	P
Selenium	3.18	ND	2.83	88.9	—	75-125	05/01/00	F
Silver	3.21	1.12	4.10	93.0	—	75-125	04/27/00	P
Thallium	3.18	ND	3.34	104.9	—	75-125	05/01/00	F
Zinc	32.05	917	910	-21.8	—		05/01/00	P

Comments:

- ND - Element analyzed for but not detected.
- P - Analyzed by ICP
- F - Analyzed by GFA
- CV - Analyzed by cold vapor
- A - Analyzed by flame AA

ALI FORM V (Part I) - INORGANICS

ACCREDITED LABORATORIES, INC.  
SPIKE SAMPLE RECOVERY

Sample #: 0004397

Matrix: Soil

Concentration Units: mg/kg

Analyte	Spike Added	Sample Result	Spiked Sample Result	% Recovery	Q	QC Limits %Rec	Date Analyzed	M
Antimony	32.05	ND	41.2	128.5	*	75-125	04/27/00	P
Arsenic	3.18	11.2	15.4	131.9	*	75-125	05/01/00	F

Comments:

- ND - Element analyzed for but not detected.
- P - Analyzed by ICP
- F - Analyzed by GFA
- CV - Analyzed by cold vapor
- A - Analyzed by flame AA

ALI FORM V (Part I) - INORGANICS

ACCREDITED LABORATORIES, INC.  
DUPLICATES

Sample #: 0004397

Matrix: Soil

% Solids: 82.4

Concentration Units ( $\mu\text{G/L}$ ,  $\text{MG/L}$  or  $\text{MG/KG}$  dry weight): MG/KG

Analyte	Control Limit	Sample Result	Duplicate Result	RPD	Q	Date Analyzed	M
Antimony		ND	ND			04/27/00	P
Arsenic		13.6	12.1	11.7		05/01/00	F
Beryllium	.389	1.87	1.86	.5		04/27/00	P
Cadmium		5.09	4.70	8.0		04/27/00	P
Chromium		28.7	29.1	1.4		04/27/00	P
Copper		220	214	2.8		04/27/00	P
Lead		666	671	.7		04/27/00	P
Mercury	.243	1.21	1.19	1.7		04/26/00	CV
Nickel		42.9	42.4	1.2		04/27/00	P
Selenium		ND	ND			05/01/00	F
Silver	.778	1.35	1.64	19.4		04/27/00	P
Thallium		ND	ND			05/01/00	F
Zinc		1110	1090	1.8		04/27/00	P

ND - Element analyzed for but not detected or detected below MDL.

ALI FORM VI - INORGANICS

ACCREDITED LABORATORIES, INC.  
LABORATORY CONTROL SAMPLE

Solid LCS Source: ALI

Aqueous LCS Source: ALI

Analyte	Aqueous ( $\mu\text{g/L}$ )					Solid (mg/kg)				
	True	Found	%Rec	Q	M	True	Found	%Rec	Q	M
Antimony						50.0	51.0	102.0		P
Arsenic						5.0	5.0	100.0		F
Beryllium						5.0	5.0	100.0		P
Cadmium						5.0	5.0	100.0		P
Chromium						20.0	18.0	90.0		P
Copper						25.0	25.0	100.0		P
Lead						50.0	46.0	92.0		P
Mercury						2.0	1.9	95.0		CV
Nickel						50.0	49.0	98.0		P
Selenium						5.0	5.0	100.0		F
Silver						5.0	5.0	100.0		P
Thallium						5.0	5.0	100.0		F
Zinc						50.0	51.0	102.0		P

ALI FORM VII - INORGANICS

ACCREDITED LABORATORIES, INC.  
 GENERAL CHEMISTRY ANALYSIS DATA

Case #: 7879  
 Sample #: 0004402  
 Client Name: PAONYNJ  
 Field Number: MW-8,S-4

Matrix: Soil  
 Date Received: 04/24/00  
 % Moisture: 13.3

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK		ANALYSIS DATE
					RESULTS	MDL	
Solids, Percent	86.7	0.10	%	1.			04/26/00
Cyanide, Total	ND	1.03	mg/Kg	1.	ND	0.01	05/01/00

ACCREDITED LABORATORIES, INC.  
 GENERAL CHEMISTRY ANALYSIS DATA

Case #: 7879  
 Sample #: 0004403  
 Client Name: PAONYNJ  
 Field Number: MW-8S-4DUP

Matrix: Soil  
 Date Received: 04/24/00  
 % Moisture: 15.0

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK		ANALYSIS DATE
					RESULTS	MDL	
Solids, Percent	85.0	0.10	%	1.			04/26/00
Cyanide, Total	ND	0.94	mg/Kg	1.	ND	0.01	05/01/00

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY MATRIX SPIKE SUMMARY

Matrix: Soil

ANALYTES	SAMPLE #	SPIKE ADDED	UNITS	SAMPLE CONCENTRATION	SPIKE CONCENTRATION	% RECOVERY	QC LIMITS
Cyanide, Total	0004451	18.8	mg/Kg	ND	18.5	98.4	75-125

Accredited Laboratories, Inc.  
Total Petroleum Hydrocarbon Analysis

Client: PAONYNJ  
Case #: 7879  
Analyst: RB

Matrix: Soil  
Date Received: 04/24/00  
Date Analyzed: 04/25/00

Field #	Sample #	Amount Used (g)	% S	DF	ABS	Result mg/Kg	MDL mg/Kg
MW-8,S-4	0004402	15.91	86.7	1	0	ND	43
MW-8S-4DUP	0004403	15.38	85.0	1	0	ND	46

Response Factor = .13725395

% S = Percent Solids  
DF = Dilution Factor  
ABS = Absorbance

Method Blank: < 20 mg/Kg

ACCREDITED LABORATORIES, INC.

TOTAL PETROLEUM HYDROCARBONS  
SOIL DUPLICATE AND MATRIX SPIKE SUMMARY

DUPLICATE SAMPLE #: 200004449

ORIGINAL CONCENTRATION (mg/Kg)	DUPLICATE CONCENTRATION (mg/Kg)	RPD	RPD QC LIMIT
ND	ND	0.0	25

MATRIX SPIKE SAMPLE #: 200004449

SPIKE ADDED (mg/Kg)	SAMPLE CONC (mg/Kg)	MS CONC (mg/Kg)	% RECOVERY	RECOVERY QC LIMITS
185	ND	186	100.5	75-125



**ACCREDITED LABORATORIES, INC.**

*Implementing Tomorrow's Technology, Today™*

**Analytical Data Report**

for

**Port Authority of N Y & N J**

241 Erie Street  
Jersey City, NJ 07310

**Project: J F K - Building 197**

Accredited Laboratories Case No.: 7892

Date Received: 04/25/00

<u>Field ID</u>	<u>Laboratory Sample #</u>
MW-5 S-3	200004450
MW-6 S-3	200004451
MW-7 S-3	200004452
FB	200004453

Accredited Laboratories, Inc. New Jersey Certification  
Number 12007. This data has been reviewed and accepted by:

Theodore C. Gaydos  
Technical Director

(732) 541-2025

**CORPORATE OFFICES**  
20 Pershing Avenue  
Carteret, New Jersey 07008

FAX (732) 541-1383

MATERIALS ENGINEERING DIVISION  
CHAIN OF CUSTODY REPORT

LABORATORY DESTINATION: ACCREDITED

PAGE 01 OF 01

BILLING INFORMATION

BILL TO: PA OF NY & NJ  
ADDRESS: 241 ERIE STREET  
JERSEY CITY, NJ, 07310  
ATTENTION: C. BOGNACKI  
PHONE #: 201 216-2984  
FAX #: 201 216-2188

PROJECT INFORMATION

PROJECT: SFK - BUILDING 197  
JOB #: A03-992.029  
LOCATION: NY  
CONTACT: Dorian Bailey / Angelos Zafiroglou  
SAMPLED BY: Terry Ryan  
ANALYTICAL PROTOCOL:

SAMPLE ID	DATE	TIME	METHANOL BOTTLE #	SAMPLE TYPE		SAMPLE MATRIX	# OF BOTTLES	ANALYSIS (METHOD)	PRESERVATIVES						
				COMPOSITE	GRAB				METHANOL	H2SO4	HCl	HNO3	NaOH	NON PRESENT	
W-5, S-3	4/24/00					SOIL	2	Excel D5, ketone							2
W-6, S-3	↓					↓	2	Excel D5, ketone							2
W-7, S-3	↓					↓	2	Excel D5, ketone							2
F.B. 4/24	↓					AQ	2	Excel D5, ketone							2

TURNAROUND (INDICATE IN CALENDAR DAYS): \_\_\_\_\_ FAX: \_\_\_\_\_ HARD COPY: \_\_\_\_\_

RELINQUISHED BY: [Signature] DATE: 4/25/00 TIME: 13:00 DELIVERABLES (CIRCLE ONE) DATA SUM RED/DELIV CLP NY/ASP OTHER: \_\_\_\_\_

RECEIVED BY: [Signature] DATE: 4/25/00 TIME: 13:00 One week TAT Fax

RELINQUISHED BY: [Signature] DATE: 4/25/00 TIME: 13:00 COMMENTS: \_\_\_\_\_

RECEIVED BY: [Signature] DATE: 4/25/00 TIME: 14:00 C-7892  
code Top 5°

## METHODOLOGY SUMMARY

### Volatile Organics - EPA 8260 (aqueous)

Volatile organic compounds are purged from a 5 ml sample by bubbling an inert gas through the aqueous sample. The purgeables are trapped in a sorbent column. When purging is completed, the sorbent column is heated and back-flushed with the inert gas to desorb the purgeables onto a GC column. The GC is temperature-programmed to separate the purgeables which are then detected with a mass spectrometer.

### Volatile Organics - EPA 8260 (soil)

An inert gas is purged through a 5 g sample at elevated temperature. Alternatively the soil is extracted with methanol. A portion of extract is spiked into a purging vessel and purged by an inert gas. The vapor is swept through a sorbent column where the purgeables are trapped. After purging is completed, the sorbent column is heated and back-flushed with the inert gas to desorb the purgeables onto a GC column. The GC is temperature programmed to separate the purgeables which are then detected with a mass spectrometer.

### Base-Neutral/Acid Extractables - EPA 8270 (soil)

A 30 gram portion of soil is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone. The methylene chloride extract is dried and concentrated and a measured amount is injected onto a GC and the analytes are detected with a mass spectrometer.

### Total Cyanide - SW 846, 9010 (solid)

A representative portion of sample is weighed and placed into a cyanide distillation apparatus. The cyanide as hydrocyanic acid is released from cyanide complexes by means of a reflux-distillation operation and absorbed in a scrubber containing sodium hydroxide solution. The cyanide ion in the absorbing solution is then determined colorimetrically according to EPA "Test Methods for Evaluating Solid Wastes", SW 846.

### Pesticides/PCB's - EPA 8081/8082 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

## Metals (soil)

A 1-5 gram portion of soil is digested with nitric acid and hydrogen peroxide. The digestate is then refluxed with either nitric acid or hydrochloric acid. Diluted hydrochloric acid is used as the final reflux acid for the flame AA or ICAP of Ag, Al, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Ni, Sb, Sn, Tl and Zn. Diluted nitric acid is employed as the final dilution acid for the furnace AA analysis of As, Pb and Se. For the graphite furnace analysis, an aliquot of the digestate is spiked with nickel nitrate solution and is placed into the graphite furnace. The aliquot is then slowly evaporated to dryness, charred and atomized. The absorption of the EDL radiation during atomization is proportional to the element concentration. For the flame AA, the digestate is aspirated and atomized in a flame. The absorption of the HCL radiation during atomization is proportional to the element concentration. The basis of ICAP method is the measurement of atomic emission by an optical spectroscope technique. The emission spectra are dispersed by a grating spectrometer and the intensities of the line are measured and processed by a computer system. For mercury analysis, a 0.5-1.0 gram portion of sample is digested with potassium permanganate and persulfate at acidic condition in a water bath at 95°C. The mercury in the sample is reduced to the elemental state and detected by the cold vapor technique in a closed system. The analytical procedures are derived from "EPA Methods for Evaluating Solid Waste, 3rd Edition, 1986" The AA technique is specified in Method 7000 series. The ICAP technique is specified in Method 6010.

## Petroleum Hydrocarbons - Modified EPA 418.1 (soil)

A 30 gram portion of soil is extracted with fluorocarbon 113. Interferences are removed with silica gel adsorbent. Infrared analysis of the extract is performed by direct comparison with standards.

CONFORMANCE/NON-CONFORMANCE SUMMARY

Accredited Labs received 3 soil samples and 1 aqueous sample (Project: J F K - Building 197; ALI Case #7892) from Port Authority of NY & NJ on 04/25/00 for the analyses of PP + 40, including MTBE, TBA and Xylenes and Total Petroleum Hydrocarbons.

All analyses were performed within the required holding time.

All soil analyses were reported on a dry weight basis.

In the Metal analyses, the recoveries of certain matrix spike analytes were out criteria. The matrix spikes were reanalyzed and reported.

"The laboratory has reviewed the quality assurance and quality control measurements for the sample analysis stated above."

  
Theodore C. Gaydos  
Technical Director

ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 7892  
 SAMPLE NUMBER 0004450  
 DATA FILE >A5750  
 CLIENT NAME PRONYNJ  
 FIELD ID MW-5 S-3

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 04/27/00  
 ANALYZED BY ROBERT

CAS #	COMPOUND	UG/KG	MDL
	Acrolein	U	28
	Acrylonitrile	U	28
	Chloromethane	U	6
	Vinyl Chloride	U	6
	Bromomethane	U	6
	Chloroethane	U	6
	Trichlorofluoromethane	U	6
	1,1-Dichloroethene	U	6
	Methylene Chloride	15 B	6
	trans-1,2-Dichloroethene	U	6
	1,1-Dichloroethane	U	6
	Chloroform	U	6
	1,1,1-Trichloroethane	U	6
	Carbon Tetrachloride	U	6
	1,2-Dichloroethane	U	6
	Benzene	U	6
	Trichloroethene	U	6

CAS #	COMPOUND	UG/KG	MDL
	1,2-Dichloropropane	U	6
	Bromodichloromethane	U	6
	cis-1,3-dichloropropene	U	6
	Toluene	U	6
	trans-1,3-Dichloropropene	U	6
	1,1,2-Trichloroethane	U	6
	Tetrachloroethene	U	6
	Dibromochloromethane	U	6
	Ethylbenzene	U	6
	Chlorobenzene	U	6
	m,p-Xylene	U	11
	Bromoform	U	6
	1,1,2,2-Tetrachloroethane	U	6
	o-Xylene	U	6
	T-butyl alcohol	U	56
	Methyl t-butyl ether	U	56
	2-Chloroethylvinylether	U	6

<u>SURROGATE COMPOUNDS</u>	<u>RECOVERY</u>	<u>LIMITS</u>	<u>STATUS</u>
1,2-Dichloroethane-d4	<u>105 %</u>	70-121	<u>OK</u>
Toluene-d8	<u>98 %</u>	81-117	<u>OK</u>
Bromofluorobenzene	<u>93 %</u>	74-121	<u>OK</u>

Percent solid of 88.5 is used for all target compounds.

U - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

TEST NUMBER 7892  
 SAMPLE NUMBER 0004451  
 DATA FILE 789251  
 CLIENT NAME PAONYNJ  
 FIELD ID MW-6 S-3

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 04/27/00  
 ANALYZED BY ROBERT

CAS #	COMPOUND	UG/KG	MDL
	Acrolein	U	28
	Acrylonitrile	U	28
	Chloromethane	U	6
	Vinyl Chloride	U	6
	Bromomethane	U	6
	Chloroethane	U	6
	Trichlorofluoromethane	U	6
	1,1-Dichloroethene	U	6
	Methylene Chloride	13 B	6
	trans-1,2-Dichloroethene	U	6
	1,1-Dichloroethane	U	6
	Chloroform	U	6
	1,1,1-Trichloroethane	U	6
	Carbon Tetrachloride	U	6
	1,2-Dichloroethane	U	6
	Benzene	U	6
	Trichloroethene	U	6

CAS #	COMPOUND	UG/KG	MDL
	1,2-Dichloropropane	U	6
	Bromodichloromethane	U	6
	cis-1,3-dichloropropene	U	6
	Toluene	U	6
	trans-1,3-Dichloropropene	U	6
	1,1,2-Trichloroethane	U	6
	Tetrachloroethene	U	6
	Dibromochloromethane	U	6
	Ethylbenzene	U	6
	Chlorobenzene	U	6
	m,p-Xylene	U	11
	Bromoform	U	6
	1,1,2,2-Tetrachloroethane	U	6
	o-Xylene	U	6
	T-butyl alcohol	U	56
	Methyl t-butyl ether	U	56
	2-Chloroethylvinylether	U	6

<u>SURROGATE COMPOUNDS</u>	<u>RECOVERY</u>	<u>LIMITS</u>	<u>STATUS</u>
1,2-Dichloroethane-d4	98 %	70-121	OK
Toluene-d8	102 %	81-117	OK
Bromofluorobenzene	98 %	74-121	OK

Percent solid of 89.3 is used for all target compounds.

- Indicates compound concentration found below MDL.
- Indicates compound analyzed for but not detected,
- Indicates result is based on a dilution.

- B - Indicates compound found in associated blank.
- E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 7892  
 SAMPLE NUMBER 0004452  
 DATA FILE >A5752  
 CLIENT NAME PAONYNJ  
 FIELD ID MW-7 S-3

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 04/27/00  
 ANALYZED BY ROBERT

CAS #	COMPOUND	UG/KG	MDL
	Acrolein	U	26
	Acrylonitrile	U	26
	Chloromethane	U	5
	Vinyl Chloride	U	5
	Bromomethane	U	5
	Chloroethane	U	5
	Trichlorofluoromethane	U	5
	1,1-Dichloroethene	U	5
	Methylene Chloride	14 B	5
	trans-1,2-Dichloroethene	U	5
	1,1-Dichloroethane	U	5
	Chloroform	U	5
	1,1,1-Trichloroethane	U	5
	Carbon Tetrachloride	U	5
	1,2-Dichloroethane	U	5
	Benzene	U	5
	Trichloroethene	U	5

CAS #	COMPOUND	UG/KG	MDL
	1,2-Dichloropropane	U	5
	Bromodichloromethane	U	5
	cis-1,3-dichloropropene	U	5
	Toluene	U	5
	trans-1,3-Dichloropropene	U	5
	1,1,2-Trichloroethane	U	5
	Tetrachloroethene	U	5
	Dibromochloromethane	U	5
	Ethylbenzene	U	5
	Chlorobenzene	U	5
	m,p-Xylene	U	10
	Bromoform	U	5
	1,1,2,2-Tetrachloroethane	U	5
	o-Xylene	U	5
	T-butyl alcohol	U	52
	Methyl t-butyl ether	U	52
	2-Chloroethylvinylether	U	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	<u>102 %</u>	70-121	<u>OK</u>
Toluene-d8	<u>104 %</u>	81-117	<u>OK</u>
Bromofluorobenzene	<u>101 %</u>	74-121	<u>OK</u>

Percent solid of 96.7 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 7892  
 SAMPLE NUMBER 0004453  
 DATA FILE 789248  
 CLIENT NAME PAONYNJ  
 FIELD ID FB

MATRIX Aqueous  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 04/27/00  
 ANALYZED BY ROBERT

CAS #	COMPOUND	UG/L	MDL
	Acrolein	U	25
	Acrylonitrile	U	25
	Chloromethane	U	5
	Vinyl Chloride	U	5
	Bromomethane	U	5
	Chloroethane	U	5
	Trichlorofluoromethane	U	5
	1,1-Dichloroethene	U	5
	Methylene Chloride	11 B	5
	trans-1,2-Dichloroethene	U	5
	1,1-Dichloroethane	U	5
	Chloroform	U	5
	1,1,1-Trichloroethane	U	5
	Carbon Tetrachloride	U	5
	1,2-Dichloroethane	U	5
	Benzene	U	5
	Trichloroethene	U	5

CAS #	COMPOUND	UG/L	MDL
	1,2-Dichloropropane	U	5
	Bromodichloromethane	U	5
	cis-1,3-dichloropropene	U	5
	Toluene	U	5
	trans-1,3-Dichloropropene	U	5
	1,1,2-Trichloroethane	U	5
	Tetrachloroethene	U	5
	Dibromochloromethane	U	5
	Ethylbenzene	U	5
	Chlorobenzene	U	5
	m,p-Xylene	U	10
	Bromoform	U	5
	1,1,2,2-Tetrachloroethane	U	5
	o-Xylene	U	5
	T-butyl alcohol	U	50
	Methyl t-butyl ether	U	50
	2-Chloroethylvinylether	U	5

<u>SURROGATE COMPOUNDS</u>	<u>RECOVERY</u>	<u>LIMITS</u>	<u>STATUS</u>
1,2-Dichloroethane-d4	94 %	76-114	OK
Toluene-d8	101 %	88-110	OK
Bromofluorobenzene	106 %	86-115	OK

- Indicates compound concentration found below MDL.
- Indicates compound analyzed for but not detected,
- Indicates result is based on a dilution.

- B - Indicates compound found in associated blank.
- E - Indicates result exceeds highest calibration standard



ACCREDITED LABORATORIES, INC.  
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER \_\_\_\_\_  
 SAMPLE NUMBER UPLKA43  
 DATA FILE DA5745  
 CLIENT NAME \_\_\_\_\_  
 FIELD ID \_\_\_\_\_

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED \_\_\_\_\_  
 DATE ANALYZED 04/27/00  
 ANALYZED BY ROBERT

CAS #	COMPOUND	UG/KG	MDL
	Acrolein	U	25
	Acrylonitrile	U	25
	Chloromethane	U	5
	Vinyl Chloride	U	5
	Bromomethane	U	5
	Chloroethane	U	5
	Trichlorofluoromethane	U	5
	1,1-Dichloroethene	U	5
	Methylene Chloride	4 J	5
	trans-1,2-Dichloroethene	U	5
	1,1-Dichloroethane	U	5
	Chloroform	U	5
	1,1,1-Trichloroethane	U	5
	Carbon Tetrachloride	U	5
	1,2-Dichloroethane	U	5
	Benzene	U	5
	Trichloroethene	U	5

CAS #	COMPOUND	UG/KG	MDL
	1,2-Dichloropropane	U	5
	Bromodichloromethane	U	5
	cis-1,3-dichloropropene	U	5
	Toluene	U	5
	trans-1,3-Dichloropropene	U	5
	1,1,2-Trichloroethane	U	5
	Tetrachloroethene	U	5
	Dibromochloromethane	U	5
	Ethylbenzene	U	5
	Chlorobenzene	U	5
	m,p-Xylene	U	10
	Bromoform	U	5
	1,1,2,2-Tetrachloroethane	U	5
	o-Xylene	U	5
	T-butyl alcohol	U	50
	Methyl t-butyl ether	U	50
	2-Chloroethylvinylether	U	5

<u>SURROGATE COMPOUNDS</u>	<u>RECOVERY</u>	<u>LIMITS</u>	<u>STATUS</u>
1,2-Dichloroethane-d4	93 %	70-121	OK
Toluene-d8	97 %	81-117	OK
Bromofluorobenzene	101 %	74-121	OK

Percent solid of 100 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected,  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Indicates result exceeds highest calibration standard



## SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Accredited Labs, Inc. Contract: \_\_\_\_\_  
 Code: GC/MS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Matrix Spike - ALI Sample No.: 0004385

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0	52	104	159-172
1,2-Dichloroethene	50	0	49	99	162-137
Benzene	50	0	51	101	166-142
Toluene	50	0	49	98	159-139
Chlorobenzene	50	0	45	89	160-133

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD   REC.
1,1-Dichloroethene	50	50	101	4	22   159-172
1,2-Dichloroethene	50	47	93	6	24   162-137
Benzene	50	46	93	9	21   166-142
Toluene	50	46	92	7	21   159-139
Chlorobenzene	50	44	87	2	21   160-133

Column to be used to flag recovery and RPD values with an asterisk  
 Values outside of qc limits

0: 0 out of 5 outside limits  
 Spike Recovery: 0 out of 10 outside limits

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_

ACCREDITED LABORATORIES, INC.  
RNA ORGANIC ANALYSIS DATA

CASE NUMBER 7897  
 SAMPLE NUMBER 0004450  
 DATA FILE >89552  
 CLIENT NAME PAONYNJ  
 FIELD ID MW-5 S-3

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 04/28/00  
 DATE ANALYZED 04/28/00  
 ANALYZED BY JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	380	51285	2,4-Dinitrophenol	U	380
208968	Acenaphthylene	U	380	121142	2,4-Dinitrotoluene	U	380
120127	Anthracene	U	380	606202	2,6-Dinitrotoluene	U	380
56553	Benzo(a)Anthracene	47 J	380	117840	Di-n-octyl phthalate	U	380
50328	Benzo(a)Pyrene	47 J	380	206440	Fluoranthene	90 J	380
205992	Benzo(b)fluoranthene	55 J	380	86737	Fluorene	U	380
191242	Benzo(g,h,i)Perylene	39 J	380	118741	Hexachlorobenzene	U	380
207089	Benzo(k)Fluoranthene	40 J	380	87683	Hexachlorobutadiene	U	380
65850	Benzoic Acid	U	1900	77474	Hexachlorocyclopentadiene	U	380
100516	Benzyl Alcohol	U	380	67721	Hexachloroethane	U	380
111444	bis(-2-Chloroethyl)Ether	U	380	193395	Indeno(1,2,3-cd)Pyrene	U	380
108601	bis(2-Chloroisopropyl)ether	U	380	78591	Isophorone	U	380
117817	Bis(2-Ethylhexyl)Phthalate	95 JB	380	91576	2-Methylnaphthalene	U	380
111911	bis(-2-Chloroethoxy)Methane	U	380	95487	2-Methylphenol	U	380
101553	4-Bromophenyl-phenylether	U	380	108394	3,6-Methylphenol	U	380
35687	Butylbenzylphthalate	U	380	91203	Naphthalene	U	380
106478	4-Chloroaniline	U	380	88744	2-Nitroaniline	U	380
21587	2-Chloronaphthalene	U	380	99092	3-Nitroaniline	U	380
59507	4-Chloro-3-methylphenol	U	380	100016	4-Nitroaniline	U	380
25578	2-Chlorophenol	U	380	98953	Nitrobenzene	U	380
7005723	4-Chlorophenyl-phenylether	U	380	88755	2-Nitrophenol	U	380
218019	Chrysene	52 J	380	100027	4-Nitrophenol	U	380
53703	Dibenzo(a,h)Anthracene	U	380	62759	N-Nitrosodimethylamine	U	380
132649	Dibenzofuran	U	380	86306	N-Nitrosodiphenylamine	U	380
95501	1,2-Dichlorobenzene	U	380	621647	N-Nitroso-Di-n-propylamine	U	380
241731	1,3-Dichlorobenzene	U	380	87865	Pentachlorophenol	U	380
106467	1,4-Dichlorobenzene	U	380	85018	Phenanthrene	U	380
21941	3,3'-Dichlorobenzidine	U	380	108952	Phenol	U	380
120832	2,4-Dichlorophenol	U	380	129000	Pyrene	79 J	380
34662	Diethylphthalate	U	380	120821	1,2,4-Trichlorobenzene	U	380
105679	2,4-Dimethylphenol	U	380	95954	2,4,5-Trichlorophenol	U	380
131113	Dimethyl Phthalate	U	380	88062	2,4,6-Trichlorophenol	U	380
84742	Di-n-Butylphthalate	U	380	92875	Benzidine	U	380
234521	4,6-Dinitro-2-methylphenol	U	380	122667	1,2-Diphenylhydrazine	U	380

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	60 %	23-120	OK
2-Fluorobiphenyl	65 %	30-115	OK
Terphenyl-d14	64 %	18-137	OK
Phenol-d5	80 %	24-113	OK
2-Fluorophenol	67 %	25-121	OK
2,4,6-Tribromophenol	76 %	19-122	OK

Percent solid of 88.5 is used for all target compounds.

J - Indicates compound concentration found below MDL.      B - Indicates compound found in associated blank.  
 U - Indicates compound analyzed for but not detected.      E - Concentration exceeds highest calibration standard.  
 0 - Indicates result is based on a dilution.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied



ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER 7892  
 SAMPLE NUMBER 0004451  
 DATA FILE >89550  
 CLIENT NAME PAONYNJ  
 FIELD ID MW-6 S-3

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 04/28/00  
 DATE ANALYZED 04/28/00  
 ANALYZED BY JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	370	51285	2,4-Dinitrophenol	U	370
208968	Acenaphthylene	U	370	121142	2,4-Dinitrotoluene	U	370
120127	Anthracene	U	370	606202	2,6-Dinitrotoluene	U	370
56553	Benzo(a)Anthracene	U	370	117840	Di-n-octyl phthalate	U	370
50328	Benzo(a)Pyrene	U	370	206440	Fluoranthene	U	370
205992	Benzo(b)fluoranthene	U	370	86737	Fluorene	U	370
191242	Benzo(g,h,i)Perylene	U	370	118741	Hexachlorobenzene	U	370
207089	Benzo(k)Fluoranthene	U	370	87683	Hexachlorobutadiene	U	370
65850	Benzoic Acid	U	1900	77474	Hexachlorocyclopentadiene	U	370
00516	Benzyl Alcohol	U	370	67721	Hexachloroethane	U	370
111444	bis(-2-Chloroethyl)Ether	U	370	193395	Indeno(1,2,3-cd)Pyrene	U	370
008601	bis(2-Chloroisopropyl)ether	U	370	78591	Isophorone	U	370
117817	Bis(2-Ethylhexyl)Phthalate	100 JB	370	91576	2-Methylnaphthalene	U	370
11911	bis(-2-Chloroethoxy)Methane	U	370	95487	2-Methylphenol	U	370
101553	4-Bromophenyl-phenylether	U	370	108394	3&4-Methylphenol	U	370
35687	Butylbenzylphthalate	U	370	91203	Naphthalene	U	370
106478	4-Chloroaniline	U	370	88744	2-Nitroaniline	U	370
11587	2-Chloronaphthalene	U	370	99092	3-Nitroaniline	U	370
59507	4-Chloro-3-methylphenol	U	370	100016	4-Nitroaniline	U	370
15578	2-Chlorophenol	U	370	98953	Nitrobenzene	U	370
7005723	4-Chlorophenyl-phenylether	U	370	88755	2-Nitrophenol	U	370
118019	Chrysene	U	370	100027	4-Nitrophenol	U	370
53703	Dibenzo(a,h)Anthracene	U	370	62759	N-Nitrosodimethylamine	U	370
32649	Dibenzofuran	U	370	86306	N-Nitrosodiphenylamine	U	370
95501	1,2-Dichlorobenzene	U	370	621647	N-Nitroso-Di-n-propylamine	U	370
41731	1,3-Dichlorobenzene	U	370	87865	Pentachlorophenol	U	370
106467	1,4-Dichlorobenzene	U	370	85018	Phenanthrene	U	370
11941	3,3'-Dichlorobenzidine	U	370	108952	Phenol	U	370
120832	2,4-Dichlorophenol	U	370	129000	Pyrene	U	370
14662	Diethylphthalate	U	370	120821	1,2,4-Trichlorobenzene	U	370
105679	2,4-Dimethylphenol	U	370	95954	2,4,5-Trichlorophenol	U	370
31113	Dimethyl Phthalate	U	370	88062	2,4,6-Trichlorophenol	U	370
34742	Di-n-Butylphthalate	U	370	92875	Benzidine	U	370
34521	4,6-Dinitro-2-methylphenol	U	370	122667	1,2-Diphenylhydrazine	U	370

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	68 %	23-120	OK
2-Fluorobiphenyl	71 %	30-115	OK
Terphenyl-d14	68 %	18-137	OK
Phenol-d5	87 %	24-113	OK
2-Fluorophenol	80 %	25-121	OK
2,4,6-Tribromophenol	78 %	19-122	OK

Percent solid of 89.3 is used for all target compounds.

- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- 0 - Indicates result is based on a dilution.
- B - Indicates compound found in associated blank.
- E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied



ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER 7897  
 SAMPLE NUMBER 0004452  
 DATA FILE >89551  
 CLIENT NAME PAQNYNJ  
 FIELD ID MW-7 S-3

MATRIX Soil  
 DILUTION FACTOR 1.0  
 DATE EXTRACTED 04/28/00  
 DATE ANALYZED 04/28/00  
 ANALYZED BY JANICE

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
83329	Acenaphthene	U	340	51285	2,4-Dinitrophenol	U	340
208968	Acenaphthylene	U	340	121142	2,4-Dinitrotoluene	U	340
120127	Anthracene	U	340	606202	2,6-Dinitrotoluene	U	340
56553	Benzo(a)Anthracene	U	340	117840	Di-n-octyl phthalate	U	340
50328	Benzo(a)Pyrene	U	340	206440	Fluoranthene	U	340
205992	Benzo(b)fluoranthene	U	340	86737	Fluorene	U	340
191242	Benzo(g,h,i)Perylene	U	340	118741	Hexachlorobenzene	U	340
207089	Benzo(k)Fluoranthene	U	340	87683	Hexachlorobutadiene	U	340
65850	Benzoic Acid	U	1700	77474	Hexachlorocyclopentadiene	U	340
100516	Benzyl Alcohol	U	340	67721	Hexachloroethane	U	340
111444	bis(-2-Chloroethyl)Ether	U	340	193395	Indeno(1,2,3-cd)Pyrene	U	340
108601	bis(2-Chloroisopropyl)ether	U	340	78591	Isophorone	U	340
117817	Bis(2-Ethylhexyl)Phthalate	69 JB	340	91576	2-Methylnaphthalene	U	340
111911	bis(-2-Chloroethoxy)Methane	U	340	95487	2-Methylphenol	U	340
101553	4-Bromophenyl-phenylether	U	340	108394	3&4-Methylphenol	U	340
85687	Butylbenzylphthalate	U	340	91203	Naphthalene	U	340
106478	4-Chloroaniline	U	340	88744	2-Nitroaniline	U	340
91587	2-Chloronaphthalene	U	340	99092	3-Nitroaniline	U	340
59507	4-Chloro-3-methylphenol	U	340	100016	4-Nitroaniline	U	340
95578	2-Chlorophenol	U	340	98953	Nitrobenzene	U	340
7005723	4-Chlorophenyl-phenylether	U	340	88755	2-Nitrophenol	U	340
218019	Chrysene	U	340	100027	4-Nitrophenol	U	340
53703	Dibenzo(a,h)Anthracene	U	340	62759	N-Nitrosodimethylamine	U	340
132649	Dibenzofuran	U	340	86306	N-Nitrosodiphenylamine	U	340
95501	1,2-Dichlorobenzene	U	340	621647	N-Nitroso-Di-n-propylamine	U	340
541731	1,3-Dichlorobenzene	U	340	87865	Pentachlorophenol	U	340
106467	1,4-Dichlorobenzene	U	340	85018	Phenanthrene	U	340
91941	3,3'-Dichlorobenzidine	U	340	108952	Phenol	U	340
120832	2,4-Dichlorophenol	U	340	129000	Pyrene	U	340
84662	Diethylphthalate	U	340	120821	1,2,4-Trichlorobenzene	U	340
105679	2,4-Dimethylphenol	U	340	95954	2,4,5-Trichlorophenol	U	340
131113	Dimethyl Phthalate	U	340	88062	2,4,6-Trichlorophenol	U	340
84742	Di-n-Butylphthalate	U	340	92875	Benzidine	U	340
534521	4,6-Dinitro-2-methylphenol	U	340	122667	1,2-Diphenylhydrazine	U	340

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	60 %	23-120	OK
2-Fluorobiphenyl	66 %	30-115	OK
Terphenyl-d14	66 %	18-137	OK
Phenol-d5	85 %	24-113	OK
2-Fluorophenol	69 %	25-121	OK
2,4,6-Tribromophenol	71 %	19-122	OK

Percent solid of 96.7 is used for all target compounds.

J - Indicates compound concentration found below MDL.  
 U - Indicates compound analyzed for but not detected.  
 D - Indicates result is based on a dilution.

B - Indicates compound found in associated blank.  
 E - Concentration exceeds highest calibration standard.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied



ACCREDITED LABORATORIES, INC.  
BNA ORGANIC ANALYSIS DATA

CASE NUMBER  
SAMPLE NUMBER SBLK39  
DATA FILE >B9549  
CLIENT NAME  
FIELD ID

MATRIX Soil  
DILUTION FACTOR 1.0  
DATE EXTRACTED 04/28/00  
DATE ANALYZED 04/28/00  
ANALYZED BY JANICE

CAS #	COMPOUND	UG/KG	MOL	CAS #	COMPOUND	UG/KG	MOL
83329	Acenaphthene	U	330	51285	2,4-Dinitrophenol	U	330
208968	Acenaphthylene	U	330	121142	2,4-Dinitrotoluene	U	330
120127	Anthracene	U	330	606202	2,6-Dinitrotoluene	U	330
56553	Benzo(a)Anthracene	U	330	117840	Di-n-octyl phthalate	U	330
50328	Benzo(a)Pyrene	U	330	206440	Fluoranthene	U	330
205992	Benzo(b)fluoranthene	U	330	86737	Fluorene	U	330
191242	Benzo(g,h,i)Perylene	U	330	118741	Hexachlorobenzene	U	330
207089	Benzo(k)Fluoranthene	U	330	87683	Hexachlorobutadiene	U	330
65850	Benzoic Acid	U	1700	77474	Hexachlorocyclopentadiene	U	330
100516	Benzyl Alcohol	U	330	67721	Hexachloroethane	U	330
111444	bis(-2-Chloroethyl)Ether	U	330	193395	Indeno(1,2,3-cd)Pyrene	U	330
108601	bis(2-Chloroisopropyl)ether	U	330	78591	Isophorone	U	330
117817	Bis(2-Ethylhexyl)Phthalate	47 J	330	91576	2-Methylnaphthalene	U	330
111911	bis(-2-Chloroethoxy)Methane	U	330	95487	2-Methylphenol	U	330
101553	4-Bromophenyl-phenylether	U	330	108394	3&4-Methylphenol	U	330
85687	Butylbenzylphthalate	U	330	91203	Naphthalene	U	330
106478	4-Chloroaniline	U	330	88744	2-Nitroaniline	U	330
91587	2-Chloronaphthalene	U	330	99092	3-Nitroaniline	U	330
59507	4-Chloro-3-methylphenol	U	330	100016	4-Nitroaniline	U	330
95578	2-Chlorophenol	U	330	98953	Nitrobenzene	U	330
7005723	4-Chlorophenyl-phenylether	U	330	88755	2-Nitrophenol	U	330
218019	Chrysene	U	330	100027	4-Nitrophenol	U	330
53703	Dibenzo(a,h)Anthracene	U	330	62759	N-Nitrosodimethylamine	U	330
132649	Dibenzofuran	U	330	86306	N-Nitrosodiphenylamine	U	330
95501	1,2-Dichlorobenzene	U	330	621647	N-Nitroso-Di-n-propylamine	U	330
541731	1,3-Dichlorobenzene	U	330	87865	Pentachlorophenol	U	330
106467	1,4-Dichlorobenzene	U	330	85018	Phenanthrene	U	330
91941	3,3'-Dichlorobenzidine	U	330	108952	Phenol	U	330
120832	2,4-Dichlorophenol	U	330	129000	Pyrene	U	330
84662	Diethylphthalate	U	330	120821	1,2,4-Trichlorobenzene	U	330
105679	2,4-Dimethylphenol	U	330	95954	2,4,5-Trichlorophenol	U	330
131113	Dimethyl Phthalate	U	330	88062	2,4,6-Trichlorophenol	U	330
84742	Di-n-Butylphthalate	U	330	92875	Benzidine	U	330
534521	4,6-Dinitro-2-methylphenol	U	330	122667	1,2-Diphenylhydrazine	U	330

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	60 %	23-120	OK
2-Fluorobiphenyl	66 %	30-115	OK
Terphenyl-d14	64 %	18-137	OK
Phenol-d5	79 %	24-113	OK
2-Fluorophenol	70 %	25-121	OK
2,4,6-Tribromophenol	69 %	19-122	OK

Percent solid of 100 is used for all target compounds.

J - Indicates compound concentration found below MDL.      B - Indicates compound found in associated blank.  
U - Indicates compound analyzed for but not detected.      E - Concentration exceeds highest calibration standard.  
0 - Indicates result is based on a dilution.

\*\* 3-Methylphenol and 4-Methylphenol can not be separated by the method applied



## SOIL SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Accredited Laboratories, Inc.

Matrix Spike - Lab Sample No.: 0004423

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	6700	0	5400	80	26- 90
2-Chlorophenol	6700	0	4900	73	25-102
1,4-Dichlorobenzene	3300	0	2700	82	28-104
N-Nitroso-Di-n-prop.(1)	3300	0	3000	91	41-126
1,2,4-Trichlorobenzene	3300	0	2400	73	38-107
4-Chloro-3-methylphenol	6700	0	4700	70	26-103
Acenaphthene	3300	0	2500	76	31-137
4-Nitrophenol	6700	0	3100	46	11-114
2,4-Dinitrotoluene	3300	0	2200	67	28- 89
Pentachlorophenol	6700	0	5300	79	17-109
Pyrene	3300	0	2400	73	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD   REC.
Phenol	6700	5000	75	6	35   26- 90
2-Chlorophenol	6700	4800	72	1	50   25-102
1,4-Dichlorobenzene	3300	2500	76	8	27   28-104
N-Nitroso-Di-n-prop.(1)	3300	2600	79	14	38   41-126
1,2,4-Trichlorobenzene	3300	2100	64	13	23   38-107
4-Chloro-3-methylphenol	6700	4700	70	0	33   26-103
Acenaphthene	3300	2300	70	8	19   31-137
4-Nitrophenol	6700	2700	40	14	50   11-114
2,4-Dinitrotoluene	3300	2200	67	0	47   28- 89
Pentachlorophenol	6700	5300	79	0	47   17-109
Pyrene	3300	2100	64	13	36   35-142

1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk  
 Values outside of QC limits

D: 0 out of 11 outside limits

Spike Recovery: 0 out of 22 outside limits

REMARKS:

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER 7892  
 SAMPLE NUMBER 0004450  
 DATA FILE >G5579  
 CLIENT NAME PAONYNJ  
 FIELD ID MW-5 S-3

MATRIX Soil  
 DILUTION FACTOR 1  
 DATE EXTRACTED 05/01/00  
 DATE ANALYZED 05/02/00  
 ANALYZED BY JEFF

CAS#	COMPOUND	UG/KG	MDL
319846	A-BHC	U	.753
319857	B-BHC	U	.753
58899	G-BHC (Lindane)	U	.753
319868	D-BHC	U	.753
76448	Heptachlor	U	.753
309002	Aldrin	U	.753
1024573	Heptachlor Epoxide	U	.753
959988	Endosulfan I	U	.753
5103719	A-Chlordane	U	.753
5103742	G-Chlordane	U	.753
60571	Dieldrin	U	1.51
72559	4,4'-DDE	U	1.51
72208	Endrin	U	1.51
33213659	Endosulfan II	U	1.51
72548	4,4'-DDD	U	1.51
7421934	Endrin Aldehyde	U	1.51
1031078	Endosulfan Sulfate	U	1.51
50293	4,4'-DDT	U	1.51
53494705	Endrin Ketone	U	1.51
72435	Methoxychlor	U	7.53
8001352	Toxaphene	U	37.7
12674112	Aroclor-1016	U	18.8
11104282	Aroclor-1221	U	18.8
11141165	Aroclor-1232	U	18.8
53469219	Aroclor-1242	U	18.8
12672296	Aroclor-1248	U	18.8
11097691	Aroclor-1254	U	18.8
11096825	Aroclor-1260	U	18.8

Percent Solid of 88.5 is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER 7892  
 SAMPLE NUMBER 0004451  
 DATA FILE >G5580  
 CLIENT NAME PAONYNJ  
 FIELD ID MW-6 S-3

MATRIX Soil  
 DILUTION FACTOR 1  
 DATE EXTRACTED 05/01/00  
 DATE ANALYZED 05/02/00  
 ANALYZED BY JEFF

CAS#	COMPOUND	UG/KG	MDL
319846	A-BHC	U	.747
319857	B-BHC	U	.747
58899	G-BHC (Lindane)	U	.747
319868	D-BHC	U	.747
76448	Heptachlor	U	.747
309002	Aldrin	U	.747
1024573	Heptachlor Epoxide	U	.747
959988	Endosulfan I	U	.747
5103719	A-Chlordane	U	.747
5103742	G-Chlordane	U	.747
60571	Dieldrin	U	1.49
72559	4,4'-DDE	U	1.49
72208	Endrin	U	1.49
33213659	Endosulfan II	U	1.49
72548	4,4'-DDD	U	1.49
7421934	Endrin Aldehyde	U	1.49
1031078	Endosulfan Sulfate	U	1.49
50293	4,4'-DDT	U	1.49
53494705	Endrin Ketone	U	1.49
72435	Methoxychlor	U	7.47
8001352	Toxaphene	U	37.3
12674112	Aroclor-1016	U	18.7
11104282	Aroclor-1221	U	18.7
11141165	Aroclor-1232	U	18.7
53469219	Aroclor-1242	U	18.7
12672296	Aroclor-1248	U	18.7
11097691	Aroclor-1254	U	18.7
11096825	Aroclor-1260	U	18.7

Percent Solid of 89.3 is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER 7892  
 SAMPLE NUMBER 0004452  
 DATA FILE >G5581  
 CLIENT NAME PAONYNJ  
 FIELD ID MW-7 S-3

MATRIX Soil  
 DILUTION FACTOR 1  
 DATE EXTRACTED 05/01/00  
 DATE ANALYZED 05/02/00  
 ANALYZED BY JEFF

CAS#	COMPOUND	UG/KG	MDL
319846	A-BHC	U	.689
319857	B-BHC	U	.689
58899	G-BHC (Lindane)	U	.689
319868	D-BHC	U	.689
76448	Heptachlor	U	.689
309002	Aldrin	U	.689
1024573	Heptachlor Epoxide	U	.689
959988	Endosulfan I	U	.689
5103719	A-Chlordane	U	.689
5103742	G-Chlordane	U	.689
60571	Dieldrin	U	1.38
72559	4,4'-DDE	U	1.38
72208	Endrin	U	1.38
33213659	Endosulfan II	U	1.38
72548	4,4'-DDD	U	1.38
7421934	Endrin Aldehyde	U	1.38
1031078	Endosulfan Sulfate	U	1.38
50293	4,4'-DDT	U	1.38
53494705	Endrin Ketone	U	1.38
72435	Methoxychlor	U	6.89
8001352	Toxaphene	U	34.5
12674112	Aroclor-1016	U	17.2
11104282	Aroclor-1221	U	17.2
11141165	Aroclor-1232	U	17.2
53469219	Aroclor-1242	U	17.2
12672296	Aroclor-1248	U	17.2
11097691	Aroclor-1254	U	17.2
11096825	Aroclor-1260	U	17.2

Percent Solid of 96.7 is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER	MATRIX
SAMPLE NUMBER	Soil
DATA FILE	DILUTION FACTOR
CLIENT NAME	1
FIELD ID	DATE EXTRACTED
	05/01/00
	DATE ANALYZED
	05/02/00
	ANALYZED BY
	JEFF

CAS#	COMPOUND	UG/KG	MDL
319846	A-BHC	U	.667
319857	B-BHC	U	.667
58899	G-BHC (Lindane)	U	.667
319868	D-BHC	U	.667
76448	Heptachlor	U	.667
309002	Aldrin	U	.667
1024573	Heptachlor Epoxide	U	.667
959988	Endosulfan I	U	.667
5103719	A-Chlordane	U	.667
5103742	G-Chlordane	U	.667
60571	Dieldrin	U	1.33
72559	4,4'-DDE	U	1.33
72208	Endrin	U	1.33
33213659	Endosulfan II	U	1.33
72548	4,4'-DDD	U	1.33
7421934	Endrin Aldehyde	U	1.33
1031078	Endosulfan Sulfate	U	1.33
50293	4,4'-DDT	U	1.33
53494705	Endrin Ketone	U	1.33
72435	Methoxychlor	U	6.67
8001352	Toxaphene	U	33.3
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.  
SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spike Sample Number: 0004405

Sample Data File: >G5520

Date Extracted: 04/25/00

MS Data File: >G5521

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC ** LIMITS REC
Aroclor-1260	333	0.000	354	106	40-140

MSD Data File: >G5522

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS ** RPD	REC
Aroclor-1260	333	284	85	22	25	40-140

# Column used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

\*\* Values were generated within ALI for advisory purposes only

COMMENTS:

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ACCREDITED LABORATORIES, INC.  
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spike Sample No.: 0004452

Sample Data File: >G5581

Date Extracted: 05/01/00

MS Data file: >G5582

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
G-BHC (Lindane)	8.33	0.00	6.37	76	46-12
Heptachlor	8.33	0.00	6.38	77	35-13
Aldrin	8.33	0.00	7.04	85	34-13
Dieldrin	16.7	0.00	12.5	75	31-13
Endrin	16.7	0.00	13.3	80	42-13
4,4'-DDT	16.7	0.00	14.2	85	23-13

MSD Data File: >G5583

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
G-BHC (Lindane)	8.33	7.01	84	10	50	46-12
Heptachlor	8.33	7.75	93	19	31	35-13
Aldrin	8.33	7.46	90	6	43	34-13
Dieldrin	16.7	14.7	88	16	38	31-13
Endrin	16.7	15.0	90	12	45	42-13
4,4'-DDT	16.7	14.3	86	1	50	23-13

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 6 outside limits  
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

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ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 7892  
 Sample #: 0004450  
 Field ID: MW-5 S-3  
 Client Name: PAONYNJ

Matrix: Soil  
 Date Received: 04/25/00

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	7.15	1	P	04/27/00
7440-38-2	Arsenic	3.27	1.46	4	F	05/01/00
7440-41-7	Beryllium	.373	.358	1	P	04/27/00
7440-43-9	Cadmium	.751	.715	1	P	04/27/00
7440-47-3	Chromium	8.08	2.15	1	P	04/27/00
7440-50-8	Copper	4.48	2.15	1	P	04/27/00
7439-92-1	Lead	24.1	17.9	1	P	04/27/00
7439-97-6	Mercury	ND	.226	1	CV	04/26/00
7440-02-0	Nickel	8.51	2.86	1	P	04/27/00
7782-49-2	Selenium	ND	1.82	5	F	05/01/00
7440-22-4	Silver	ND	.715	1	P	04/27/00
7440-28-0	Thallium	ND	1.82	5	F	05/01/00
7440-66-6	Zinc	14.1	7.15	1	P	04/27/00

Percent Solid of 88.5 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP  
 F - Analyzed by GFA

CV - Analyzed by Cold Vapor  
 A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 7892  
 Sample #: 0004451  
 Field ID: MW-6 S-3  
 Client Name: PAONYNJ

Matrix: Soil  
 Date Received: 04/25/00

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	7.04	1	P	04/27/00
7440-38-2	Arsenic	ND	1.43	4	F	05/01/00
7440-41-7	Beryllium	ND	.352	1	P	04/27/00
7440-43-9	Cadmium	ND	.704	1	P	04/27/00
7440-47-3	Chromium	4.70	2.11	1	P	04/27/00
7440-50-8	Copper	ND	2.11	1	P	04/27/00
7439-92-1	Lead	ND	17.6	1	P	04/27/00
7439-97-6	Mercury	ND	.224	1	CV	04/28/00
7440-02-0	Nickel	ND	2.82	1	P	04/27/00
7782-49-2	Selenium	ND	1.78	5	F	05/01/00
7440-22-4	Silver	ND	.704	1	P	04/27/00
7440-28-0	Thallium	ND	1.78	5	F	05/01/00
7440-66-6	Zinc	ND	7.04	1	P	04/27/00

Percent Solid of 89.3 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP  
 F - Analyzed by GFA

CV - Analyzed by Cold Vapor  
 A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Case #: 7892  
 Sample #: 0004452  
 Field ID: MW-7 S-3  
 Client Name: PAONYNJ

Matrix: Soil  
 Date Received: 04/25/00

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	6.50	1	P	04/27/00
7440-38-2	Arsenic	ND	1.35	4	F	05/01/00
7440-41-7	Beryllium	ND	.325	1	P	04/27/00
7440-43-9	Cadmium	ND	.650	1	P	04/27/00
7440-47-3	Chromium	4.60	1.95	1	P	04/27/00
7440-50-8	Copper	5.09	1.95	1	P	04/27/00
7439-92-1	Lead	ND	16.3	1	P	04/27/00
7439-97-6	Mercury	ND	.207	1	CV	04/28/00
7440-02-0	Nickel	8.59	2.60	1	P	04/27/00
7782-49-2	Selenium	ND	1.69	5	F	05/01/00
7440-22-4	Silver	ND	.650	1	P	04/27/00
7440-28-0	Thallium	ND	1.69	5	F	05/01/00
7440-66-6	Zinc	8.78	6.50	1	P	04/27/00

Percent Solid of 96.7 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP  
 F - Analyzed by GFA

CV - Analyzed by Cold Vapor  
 A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
INORGANIC ANALYSIS DATA SHEET

Sample #: PBS1641  
Field ID: PREPBLANK

Matrix: Soil  
Date Prepared: 04/26/00

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	10.0	1	P	05/01/00
7440-38-2	Arsenic	ND	.500	1	F	05/01/00
7440-41-7	Beryllium	ND	.500	1	P	05/01/00
7440-43-9	Cadmium	ND	1.00	1	P	05/01/00
7440-47-3	Chromium	ND	3.00	1	P	05/01/00
7440-50-8	Copper	ND	3.00	1	P	05/01/00
7439-92-1	Lead	ND	25.0	1	P	05/01/00
7439-97-6	Mercury	ND	.200	1	CV	04/26/00
7440-02-0	Nickel	ND	4.00	1	P	05/01/00
7782-49-2	Selenium	ND	.500	1	F	05/01/00
7440-22-4	Silver	ND	1.00	1	P	05/01/00
7440-28-0	Thallium	ND	.500	1	F	05/01/00
7440-66-6	Zinc	ND	10.0	1	P	05/01/00

Percent Solid of 100. is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP                      CV - Analyzed by Cold Vapor  
F - Analyzed by GFA                      A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.  
SPIKE SAMPLE RECOVERY

Sample #: 0004397

Matrix: Soil

Concentration Units: mg/kg

Analyte	Spike Added	Sample Result	Spiked Sample Result	% Recovery	Q	QC Limits %Rec	Date Analyzed	M
Antimony	32.05	ND	42.2	131.7	*	75-125	04/27/00	P
Arsenic	3.18	11.2	15.9	147.6	*	75-125	05/01/00	F
Beryllium	3.21	1.54	4.95	106.4	—	75-125	04/27/00	P
Cadmium	3.21	4.19	6.86	83.3	—	75-125	04/27/00	P
Chromium	12.82	23.7	36.7	101.4	—	75-125	04/27/00	P
Copper	16.03	181	185	25.0	—	75-125	04/27/00	P
Lead	32.05	549	579	93.6	—	75-125	04/27/00	P
Mercury	1.00	.998	2.02	102.2	—	75-125	04/26/00	CV
Nickel	32.05	35.4	67.9	101.4	—	75-125	04/27/00	P
Selenium	3.18	ND	2.83	88.9	—	75-125	05/01/00	F
Silver	3.21	1.12	4.10	93.0	—	75-125	04/27/00	P
Thallium	3.18	ND	3.34	104.9	—	75-125	05/01/00	F
Zinc	32.05	917	910	-21.8	—	75-125	04/27/00	P

Comments:

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by cold vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ALI FORM V (Part I) - INORGANICS

ACCREDITED LABORATORIES, INC.  
SPIKE SAMPLE RECOVERY

Sample #: 0004397

Matrix: Soil

Concentration Units: mg/kg

Analyte	Spike Added	Sample Result	Spiked Sample Result	% Recovery	Q	QC Limits %Rec	Date Analyzed	M
Antimony	32.05	ND	41.2	128.5	*	75-125	04/27/00	P
Arsenic	3.18	11.2	15.4	131.9	*	75-125	05/01/00	F

Comments:

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by cold vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ALI FORM V (Part I) - INORGANICS

ACCREDITED LABORATORIES, INC.  
DUPLICATES

Sample #: 0004397

Matrix: Soil

% Solids: 82.4

Concentration Units ( $\mu\text{G/L}$ ,  $\text{MG/L}$  or  $\text{MG/KG}$  dry weight): MG/KG

Analyte	Control Limit	Sample Result	Duplicate Result	RPD	Q	Date Analyzed	M
Antimony		ND	ND			04/27/00	P
Arsenic		13.6	12.1	11.7		05/01/00	F
Beryllium	.389	1.87	1.86	.5		04/27/00	P
Cadmium		5.09	4.70	8.0		04/27/00	P
Chromium		28.7	29.1	1.4		04/27/00	P
Copper		220	214	2.8		04/27/00	P
Lead		666	671	.7		04/27/00	P
Mercury	.243	1.21	1.19	1.7		04/26/00	CV
Nickel		42.9	42.4	1.2		04/27/00	P
Selenium		ND	ND			05/01/00	F
Silver	.778	1.35	1.64	19.4		04/27/00	P
Thallium		ND	ND			05/01/00	F
Zinc		1110	1090	1.8		04/27/00	P

ND - Element analyzed for but not detected or detected below MDL.

ALI FORM VI - INORGANICS

ACCREDITED LABORATORIES, INC.  
LABORATORY CONTROL SAMPLE

Solid LCS Source: ALI

Aqueous LCS Source: ALI

Analyte	Aqueous ( $\mu\text{g/L}$ )					Solid (mg/kg)				
	True	Found	%Rec	Q	M	True	Found	%Rec	Q	M
Antimony						50.0	51.0	102.0		P
Arsenic						5.0	5.0	100.0		F
Beryllium						5.0	5.0	100.0		P
Cadmium						5.0	5.0	100.0		P
Chromium						20.0	18.0	90.0		P
Copper						25.0	25.0	100.0		P
Lead						50.0	46.0	92.0		P
Mercury						2.0	1.9	95.0		CV
Nickel						50.0	49.0	98.0		P
Selenium						5.0	5.0	100.0		F
Silver						5.0	5.0	100.0		P
Thallium						5.0	5.0	100.0		F
Zinc						50.0	51.0	102.0		P

ALI FORM VII - INORGANICS

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 7892  
Sample #: 0004450  
Client Name: PAONYNJ  
Field Number: MW-5 S-3

Matrix: Soil  
Date Received: 04/25/00  
% Moisture: 11.5

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK		ANALYSIS DATE
					RESULTS	MDL	
Solids, Percent	88.5	0.10	%	1.			04/26/00
Cyanide, Total	ND	0.73	mg/Kg	1.	ND	0.01	04/28/00

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 7892  
Sample #: 0004451  
Client Name: PAONYNJ  
Field Number: MW-6 S-3

Matrix: Soil  
Date Received: 04/25/00  
% Moisture: 10.7

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK		ANALYSIS DATE
					RESULTS	MDL	
Solids, Percent	89.3	0.10	%	1.			04/26/00
Cyanide, Total	ND	0.74	mg/Kg	1.	ND	0.01	04/28/00

ACCREDITED LABORATORIES, INC.  
 GENERAL CHEMISTRY ANALYSIS DATA

Case #: 7892  
 Sample #: 0004452  
 Client Name: PAONYNJ  
 Field Number: MW-7 S-3

Matrix: Soil  
 Date Received: 04/25/00  
 % Moisture: 3.3

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK		ANALYSIS DATE
					RESULTS	MDL	
Solids, Percent	96.7	0.10	%	1.			04/26/00
Cyanide, Total	ND	0.90	mg/Kg	1.	ND	0.01	04/28/00

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY DUPLICATE SAMPLE RESULTS SUMMARY

Matrix: Soil

ANALYTES	SAMPLE #	ORIGINAL SAMPLE CONCENTRATION	UNITS	DUPLICATE SAMPLE CONCENTRATION	RPD	QC LIMITS
Cyanide, Total	0004451	ND	mg/Kg	ND	.0	20%

Accredited Laboratories, Inc.  
Total Petroleum Hydrocarbon Analysis

Client: PAONYNJ  
Case #: 7892  
Analyst: RB

Matrix: Soil  
Date Received: 04/25/00  
Date Analyzed: 04/26/00

Field #	Sample #	Amount Used (g)	% S	DF	ABS	Result mg/Kg	MDL mg/Kg
MW-5 S-3	0004450	15.16	88.5	1	8	82	45
MW-6 S-3	0004451	15.72	89.3	1	2	ND	43
MW-7 S-3	0004452	15.00	96.7	1	1	ND	41

Response Factor = .13725395

% S = Percent Solids  
DF = Dilution Factor  
ABS = Absorbance

Method Blank: < 20 mg/Kg

ACCREDITED LABORATORIES, INC.

TOTAL PETROLEUM HYDROCARBONS  
SOIL DUPLICATE AND MATRIX SPIKE SUMMARY

DUPLICATE SAMPLE #: 200004449

ORIGINAL CONCENTRATION (mg/Kg)	DUPLICATE CONCENTRATION (mg/Kg)	RPD	RPD QC LIMIT
ND	ND	0.0	25

MATRIX SPIKE SAMPLE #: 200004449

SPIKE ADDED (mg/Kg)	SAMPLE CONC (mg/Kg)	MS CONC (mg/Kg)	% RECOVERY	RECOVERY QC LIMITS
185	ND	186	100.5	75-125