Farrell Fritz, P.C.

1320 RXR Plaza
Uniondale, New York 11556-1320
Telephone 516.227.0700
Fax 516.227.0777
www.farrellfritz.com

Charlotte A. Biblow
Partner

Direct Dial 516.227.0868
Direct Fax 516.336.2266

Our File No.
16501-103

September 26, 2013

Via Federal Express
Beverly Kolenberg, Esq.
Assistant Regional Counsel, Office of Regional Counsel
US Environmental Protection Agency
290 Broadway, 17th Floor
New York, NY 10007-1866

Re: 2632 Realty Development Corp.
New Cassel/Hicksville Superfund Site

Dear Ms. Kolenberg:

As you know, we represent 2632 Realty Development Corp, (2632 RDC). Enclosed please find 2632 RDC's response to the US Environmental Protection Agency's Request for Information, which includes a CD containing responsive documents.

Very truly yours,

Charlotte Biblow

Charlotte A. Biblow

CAB/me
Enclosures

Cc: Jennifer LaPoma (**via federal express**) (w/enclosures)
Remedial Project Manager, Emergency and Remedial Response Division
US Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Paula Scappatura (w/enclosures)

246711

Interwoven\3266246.1

RESPONSE OF 2632 REALTY DEVELOPMENT CORPORATION TO THE US ENVIRONMENTAL PROECTION AGENCY'S REQUEST FOR INFORMATION

1. a. *State the correct legal name and mailing address of your Company.*

2632 Realty Development Corporation
32 Bond Street
Westbury, NY 11590

b. *State the name(s) and address(es) of the President, Chief Executive Officer and the Chairman of the Board (or other presiding officer) of the Company.*

Paula Scappatura is the President and Chief Executive Officer of 2632 Realty Development Corporation.

c. *Identify the state and date of incorporation of the Company and the Company's agents for service of process in the state of incorporation, and in New York State.*

2632 Realty Development Corporation is a New York State corporation and was incorporated on or around September 23, 1986.

It's agent for service of process is Karen Dowd, Esq., Dowd & Dowd, 63 Cherry Lane, Syosset, NY 11791.

d. *If your Company is a subsidiary or affiliate of another corporation or entity, identify each of those other corporations or entities and for each, the President, Chief Executive Officer and Chairman of the Board. Identify that state of incorporation and agents for service of process in the state of incorporation and in New York State for each corporation identified in your response to this question.*

2632 Realty Development Corporation has no affiliates or subsidiaries.

2. *Identify the address, Section, Block and Lot numbers, and the size of each property (hereinafter, "Property" or "Properties") that your Company either presently owns and/or formerly owned within the Site from the date your Company, or any related company had an ownership interest. (See Definitions section for terms.)*

2632 Realty Development Corporation owned 299 Main Street, Westbury, NY 11590 (the "Property") from August 1994 to November 1996 and from November 1998 to January 5, 2006. The Property's Nassau County Tax Map number is Section 11, Block 144, Lots 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, and 46. The Property is approximately 30,000 square feet.

3. *For each Property identified in response to question 2. in which your Company has and/or had an ownership interest currently or in the past, please identify*:

a. *The date your Company acquired an ownership interest. An ownership interest includes, but is not limited to, fee owner, lessor or lessee, licensee and/or operator*;

2632 Realty Development Corporation owned the Property from August 1994 to November 1996 and from November 1998 to January 5, 2006.

b. *The name and address of all other currently and/or previous owners*;

The Property was sold by 2632 Realty Development Corporation on January 5, 2006 to 299 Main Street LLC and 19 Liberty, Ltd. It does not know if the Property was subsequently sold to another entity.

Nicolia Industries Inc. owned the Property from November 1996 to November 1998.

c. *All individuals or entities that have leased, subleased or otherwise operated at each Property at any time currently or in the past, and identify the dates (month and year) that each such individual or entity began and ended its leasehold interest or its operations*;

Former occupants are believed to include the following. Unless indicated, the years they operated at the Property are unknown.

Star Bus Company
Mid-Island Transit
Crestwood Bus Service
Asphalt Petroleum
Frank's Used Cars
Jarrid's Limo Service
Island Transportation Corporation (1971 to 1982)
Sam-Ton Salvage, Inc. (1983 to 1993)
Scibelli Automotive, Inc. (1982 to 1993)
One-Stop Auto Body & Repair, Inc. (1994 to 1996)
Phil's Auto & Truck Repairs, Inc.(1994 to 1996)
Salvage Recovery System, Inc. (1996 to 2001)

Current occupant is

Padilla Construction Services, Inc. (2006 to the present)

d. *Any portion of any Property which was transferred or sold, and the block and lot number, the date of the transfer or sale, the sale price and the entity that acquired the Property*;

The Property was sold by 2632 Realty Development Corporation on January 5, 2006 to 299 Main Street LLC and 19 Liberty, Ltd. The purchase price was $962,590.00.

e. *The relationship, if any, between your Company and each of the individuals and/or other entities identified as having leased or operated at each Property*;

2632 Realty Development Corporation was the landlord when the Property was occupied by One-Stop Auto Body & Repair, Inc. and Phil's Auto & Truck Repairs, Inc. and Salvage Recovery System, Inc.

f. *Your Company's involvement in all operations conducted by each lessee and/or other individual or entity identified in response to question 3c., above; and*

2632 Realty Development Corporation had and has no involvement in the operations conducted by the Property's lessees or occupants.

g. *For each Property, provide all documents relevant to your responses to questions 3a. – 3f., above, and provide copies, including, but not limited to, copies of surveys, title search documents, deeds, rent rolls, leases and correspondence.*

Deeds to and from Nicolia and to 299 Main Street LLC are attached.

4. *Provide copies of all maps, building plans, floor plans and/or drawings for each Property identified in response to questions 2., above. Your response to this question should include, but not be limited to, providing plumbing and drainage system plans for all structures on each Property.*

To the extent 2632 Realty Development Corporation has responsive documents, they are included as figures contained in the attached documents.

For both current (if still in operation) and past operations during the period of time that the Company was at a Property, please identify and provide a description of the following:

2632 Realty Development Corporation never conducted any operations at the Property.

a. *all surface structures and features (e.g., buildings, above-ground storage tanks, paved, unpaved areas and parking lots, and dates when paved areas were paved)*;

2632 Realty Development Corporation never conducted any operations at the Property. To the extent 2632 Realty Development Corporation has responsive documents, they are included as figures contained in the attached documents.

b. *all past and present plumbing systems, above and below-ground discharge piping, sumps, storm water drainage systems, sanitary sewer systems, septic tanks, dry wells, subsurface disposal fields, and underground storage tanks; and*

2632 Realty Development Corporation never conducted any operations at the Property. To the extent 2632 Realty Development Corporation has responsive documents, they are included as figures contained in the attached documents.

c. *all currently existing and previously existing chemical and industrial hazardous substance storage, transfer, spill and disposal areas.*

2632 Realty Development Corporation never conducted any operations at the Property. To the extent 2632 Realty Development Corporation has responsive documents, they are included as figures contained in the attached documents.

5. *For each Property identified in questions 2., above, at which your Company conducted operations, describe in detail the manufacturing processes and/or other operations that your Company conducted at the Property, and identify the years during which your Company conducted operations there. If those operations were not constant throughout your company's operations, describe the nature of all changes in operations, and state the year of each change. If detailed information about your Company's operations is not available, provide, at a minimum, a general description of the nature of your Company's business at the Property, the years of operation, the type of work your Company conducted, and the number of employees for all the operations.*

2632 Realty Development Corporation never conducted any operations at the Property.

6. *With respect to industrial wastes at a Property:*

a. *List all industrial wastes that were used, stored, generated, handled or received by your Company at the Property. Your response to this questions should include, but not be limited to, use, storage, generation and/or handling of trichloroethylene ("TCE"), tetrachloroethylene ("PCE"), 1,1,1-trichloroethane ("1,1,1-TCA") and other chlorinated or non-chlorinated solvents. Be as specific as possible in identifying each chemical, and provide, among other things, the chemical name, brand name, and chemical content*;

2632 Realty Development Corporation never conducted any operations at the Property and never used, stored, generated, handled or received industrial waste at the Property.

b. *State when each industrial waste identified in your response to question 6a., above, was used, stored, generated, handled or received, and state the volume of each industrial waste used, stored, generated and/or handled on an annual basis; and*

2632 Realty Development Corporation never conducted any operations at the Property and never used, stored, generated, handled or received industrial waste at the Property.

c. *Describe the activity or activities in which each industrial waste identified in your response to question 6a., above, was used, stored, handled or received.*

2632 Realty Development Corporation never conducted any operations at the Property and never used, stored, generated, handled or received industrial waste at the Property.

7. *Describe in detail how and where the industrial wastes identified in response to question 6., above, were disposed. For each disposal location and method, state the nature and quantity of the material disposed of on an annual basis. For those time periods when a precise quantity is not available, provide an estimate.*

Not applicable. See response to question 6.

8. *Describe in detail any knowledge your Company has about intentional or unintentional disposal of industrial wastes at each Property identified in response to question 2., above, including, but not limited to, TCE, PCE and/or other chlorinated or non-chlorinated solvents or wastes containing such solvents, at any time currently or in the past. Your response should include instances in which industrial wastes were spilled or otherwise disposed onto or into the floors or the ground from septic systems, pipes, drains, drums, tanks, or by any other means. Provide copies of all documents relevant to your response.*

2632 Realty Development Corporation never conducted any operations at the Property and never used, stored, generated, handled or received industrial waste at the Property. Information about the Property can be found in the attached documents.

9. *Identify all leaks, spills, or releases of any kind of any industrial wastes (including, but not limited to, TCE and PCE or other chlorinated or non-chlorinated solvents or wastes containing such solvents) into the environment that have occurred, or may have occurred, at or from the Property, including any leaks or releases from drums and other containers. Provide copies of all documents relevant to your response.*

2632 Realty Development Corporation never conducted any operations at the Property and never used, stored, generated, handled or received industrial waste at the Property. Information about the Property can be found in the attached documents.

10. *Explain whether any repairs or construction were implemented to address any leaks, spills, releases or threats of releases of any kind, the nature of the work and the dates of any such work. Provide copies of all analyses, characterizations, environmental assessments or studies or any report or other description of any investigations, removal actions, remedial activities, or any other work conducted by your Company or by any other party on your Company's behalf relating to industrial wastes released at or from the Property and/or the Site. If any copies of the records requested in this question are available electronically, kindly submit your answer to this question on a disk.*

2632 Realty Development Corporation never conducted any operations at the Property. 2632 Realty Development Corporation conducted environmental investigations and remedial activities at the Property. See attached documents.

11. *Provide copies of all insurance policies held and indemnification agreements entered into by the Company which may potentially indemnify the Company against any liability which it may be found to have under CERCLA for releases and threatened releases of hazardous substances at and from the Property. In response to this request, please provide not only those insurance policies and agreements which currently are in effect, but also those that were in effect during any portion of the time the Company conducted operations at, or held a property interest at the NCIA. Your response should also identify the specific Property related to each policy and/or agreement.*

    2632 Realty Development Corporation is not aware of any such insurance policies. As noted above, 2632 Realty Development Corporation never conducted any operations at the Property.

12. *State the names, telephone numbers and present or last known addresses of all individuals whom you have reason to believe may have knowledge, information or documents regarding the use, storage, generation, disposal of or handling of industrial wastes at the Site, the transportation of such materials to the Site, or the identity of any companies whose material was treated or disposed of at the Site.*

    Peter and Roseann Fioretti, Island Transportation Corp., 299 Edison Avenue, West Babylon, NY 11704

    Sam Scibelli, Scibelli Auto Group, 13 Sylvester Street, Westbury, NY 11590

    Frank Scibelli a/k/a Joseph Scibelli, Auto Depot, 11 Urban Avenue, Westbury, NY 11590

    Phil Rivera, 520 Main Street, Westbury, NY 11590

    Sam Padilla and Alexander Holuka, Padilla Construction Services, Inc., 299 Main Street, Westbury, NY 11590

13. *If you have information or documents which may help EPA identify other companies that conducted operations, owned property, or were responsible for the handling, use, storage, treatment, or disposal of industrial wastes that potentially contributed to chlorinated solvent contamination at the Site, please provide that information and those documents, and identify the source(s) of your information.*

    2632 Realty Development Corporation never conducted any operations at the Property. To the extent 2632 Realty Development Corporation has responsive information, it is contained within the attached documents.

14. *Please state the name, title and address of each individual who assisted or wad consulted in the preparation of your response to this Request for Information. In addition, state whether each such person has personal knowledge of the answers provided.*

    Paula Scappatura
    President of 2632 Realty Development Corporation
    32 Bond Street
    Westbury, NY 11590

CERTIFICATION OF ANSWERS TO REQUEST FOR INFORMATION

State of New York

County of Nassau

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document (response to EPA Request for Information regarding the New Cassel/Hicksville Site) and all documents submitted herewith, and that I believe that the submitted information is true, accurate, and complete, and that all documents submitted herewith are complete and authentic unless otherwise indicated. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I am also aware that I am under a continuing obligation to supplement my response to EPA's Request for Information if any additional information relevant to the matters addressed in EPA's Request for Information or my response thereto should become known or available to me.

Paula Scappatura
NAME (print or type)

President
TITLE (print or type)

Paula Scappatura
SIGNATURE

Sworn to before me this
21st day of September, 2013.

Charlotte Biblow
Notary Public

CHARLOTTE BIBLOW
Notary Public, State of New York
No. 02BI4796874
Qualified in Queens County
Commission Expires July 31, 2017

Interwoven\3170231.1

WCB1 Standard N.Y.B.T.U. Form 8001 —Bargain and Sale Deed, without Covenant against Grantor's Acts—Individual or Corporation (Single Sheet)

CONSULT YOUR LAWYER BEFO SIGNING THIS INSTRUMENT—THIS INSTRUME SHOULD BE USED BY LAWYERS ONLY.

THIS INDENTURE, made the 7th day of November, nineteen hundred and ninety-six

BETWEEN 2632 REALTY DEVELOPMENT CORP., with an address at
1025 Old Country Road, Westbury, New York 11590

party of the first part, and

NICOLIA INDUSTRIES, INC., with an address at
P.O. Box 1065, West Babylon, New York 11704

party of the second part,

WITNESSETH, that the party of the first part, in consideration of ten dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the

SEE SCHEDULE "A" ANNEXED HERETO AND MADE A PART HEREOF.

TAX MAP
DESIGNATION

DIS.
SEC. 11
BL. 144
LOT 31-
50
TOWN OF
NO. HEMPSTEAD

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof; TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises; TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

IN PRESENCE OF:

2632 REALTY DEVELOPMENT CORP.

BY: Paula Scappatura
PAULA SCAPPATURA
VICE PRESIDENT

2632 RDC-00001

STATE OF NEW YORK, COUNTY OF SS:

On the day of 19 , before me personally came

to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that executed the same.

STATE OF NEW YORK, COUNTY OF SS:

On the day of 19 , before me personally came

to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that executed the same.

STATE OF NEW YORK, COUNTY OF NASSAU SS:

On the 7th day of November 1996 , before me personally came PAULA SCAPPATURRA to me known, who, being by me duly sworn, did depose and say that she resides at No. 1025 Old Country Rd, Westbury ;

that she is the VICE PRESIDENT of 2632 REALTY DEVELOPMENT CORP., , the corporation described in and which executed the foregoing instrument; that she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation, and that she signed her name thereto by like order.

STATE OF NEW YORK, COUNTY OF SS:

On the day of 19 , before me personally came

the subscribing witness to the foregoing instrument, with whom I am personally acquainted, who, being by me duly sworn, did depose and say that he resides at No. ;

that he knows to be the individual described in and who executed the foregoing instrument; that he, said subscribing witness, was present and saw execute the same; and that he, said witness, at the same time subscribed h name as witness thereto.

Notary Public
SEYMOUR ZLOTOLOW
NOTARY PUBLIC, State of New York
No. 4867415
Qualified in Nassau County
Commission Expires Dec. 15, 1996

Bargain and Sale Deed

WITHOUT COVENANT AGAINST GRANTOR'S ACTS

TITLE NO.

2632 REALTY DEVELOPMENT CORP.

TO

NICOLIA INDUSTRIES, INC.

SECTION 11
BLOCK 144
LOT 31-50
COUNTY OR TOWN TOWN OF NORTH HEMPSTEAD

Recorded At Request of
First American Title Insurance Company of New York
RETURN BY MAIL TO:

WEINBERG & KERT LLP
666 OLD COUNTRY ROAD, SUITE 301
GARDEN CITY, NEW YORK 11530
ATTENTION: RICHARD J. WEINBERG, ESQ.

Zip No.

STANDARD FORM OF NEW YORK BOARD OF TITLE UNDERWRITERS
Distributed by
First American Title Insurance Company of New York

RESERVE THIS SPACE FOR USE OF RECORDING OFFICE

Bargain and Sale Deed with Covenant against Grantors Acts

THIS INDENTURE, made the 18th day of November, nineteen hundred and ninety eight

BETWEEN NICOLIA INDUSTRIES, INC., with an address at P.O. Box 1065, West Babylon, New York 11704,

party of the first part, and

2632 REALTY DEVELOPMENT CORP., with an address at 1025 Old Country Road, Westbury, New York 11590

party of the second part,

WITNESSETH, that the party of the first part, in consideration of ten dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever;

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being at New Cassel, near Westbury (unincorporated), Town of North Hempstead, County of Nassau and State of New York, known and designated as Lots Numbered 31 to 50 inclusive, in Block 49, on a certain map entitled, "Second Map of the City of New Cassel," surveyed August 1891 by William E. Hawxhurst, filed April 22, 1892, in the Queens County Clerk's Office, File No. 256, Nassau File No. (Case) 14, and bounded and described as follows:

TAX MAP DESIGNATION
Sec. 11
Block 144
Lot 31 to 50
Town of North Hempstead

BEGINNING at the corner formed by the intersection of the northerly side of Main Street and the westerly side of Hopper Street;

RUNNING THENCE northerly along the westerly side of Hopper Street, 250 feet;

THENCE westerly and parallel with the northerly side of Main Street, 200 feet to the easterly side of Garden Street;

THENCE southerly along the easterly side of Garden Street, 250 feet to the northerly side of Main Street;

THENCE Easterly along the northerly side of Main Street, 200 feet to the corner, the point or place of BEGINNING.

SAID Premises being known as 299 Main Street, Westbury, New York.

This Deed is given in the ordinary and regular course of business actually conducted by Nicolia Industries, Inc., the Grantor corporation.

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof; TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises; TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

In Presence Of:

NICOLIA INDUSTRIES, INC.

BY: Robert Nicolia Pres.

Roberto Nicolia - Pres.

STATE OF NEW YORK)
) s.s.
COUNTY OF)

On the day of , 1998, before me personally came

to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that he executed the same.

STATE OF NEW YORK)
) s.s.
COUNTY OF Nass)

On the 18 day of November, 1998 before me personally came Roberto Nicolia to me known, who, being by me duly sworn, did depose and say that he resides at 130 W. Bayberry Road, West Islip, NY 11795, that he is the President of NICOLIA INDUSTRIES, INC., the corporation described in and which executed the foregoing instrument; that ~~he knows the seal of said corporation; that the seal affixed to said~~ instrument is such corporate seal; ~~that it was so affixed by order of the board of directors of said corporation, and~~ that he signed his name thereto by like order.

BARGAIN AND SALE DEED

With Covenant Against Grantor's Acts

LEGIBILITY POOR FOR MICROFILM

NICOLIA INDUSTRIES, INC.

Section	11
Block	144
Lot	31 to 50
County or Town	Town of No. Hempstead

Record and Return To:

Michael Schlussel, Esq.
1025 Old Country Road
Westbury, NY 11590-9600

28115
Partners Abstract Corp.
1025 OLD COUNTRY ROAD
SUITE 213
WESTBURY, N. Y. 11590
[illegible] FAX (516) [illegible]

2632 RDC-00004

THIS INDENTURE, made the 5th day of January, two thousand and six
BETWEEN

2632 Realty Development Corp.
32 Bond Street
Westbury, New York 11590

party of the first part and

299 Main St., LLC.
299 Main Street
Westbury, New York 11590

Party of the second part,
WITNESSETH, that the part of the first part, in consideration of Ten Dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

ALL that certain plot, piece or parcel of land, situate, lying and being at New Cassel, near Westbury (unincorporated), Town of North Hempstead, County of Nassau and State of New York, known and designated as Lots Numbered 35 to 46 inclusive, in Block 49, on a certain map entitled, "Second Map of the City of New Cassel", surveyed August 1891 by William E. Hawxhurst, filed April 22, 1892, in the Queens County Clerk's Office, File No. (Case) 14, and bounded and described as follows:

BEGINNING at the corner formed by the intersection of the Northerly side of Main Street and the Westerly side of Hopper Street;

RUNNING THENCE Northerly along the westerly side of Hopper Street, 150 feet:

THENCE Westerly and parrallel with the Northerly side of Main Street, 200 feet to the Easterly side of Garden Street;

THENCE Southerly along the Easterly side of Garden Street, 150 feet to the northerly side of Main Street;

THENCE Easterly and parallel with the Northerly side of Main Street, 200 feet, to the corner, the point or place of BEGINNING.

Said premises known as: 299 Main Street, Westbury, New York and being and intended to be the same premises as conveyed to the party of the first part by deed dated 5/28/03 recorded 8/1/03 in the Office of the Clerk of the County of Nassau in Liber 11648, Page 513.

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any street and roads abutting the above described premises to the center lines thereof; TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises; TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part covenants that the party of the first part has not done of suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.
The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

IN PRESENCE OF:

2632 Realty Development Corp.

By: Paula Scappatura

Title: President

State of New York)
County of Nassau) ss.:

On the 5th day of January, 2006 before me, the undersigned, personally appeared Paula Scappatura, President of 2632 Realty Development Corp. a New York Corporation located at 32 Bond Street, Westbury, New York 11590 personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her capacity, and that by her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Signature of individuals taking acknowledgment.

DOMINIQUE R. MARLOW
NOTARY PUBLIC, State of New York
Qualified in Nassau County
No. 01MA4882115
Commission Expires June 16, 2006

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the
Development and Implementation
of a Focussed Remedial Investigation/Focussed Feasibility
Study for an Inactive Hazardous Waste
Disposal Site, Under Article 27, Title 13,
and Article 71, Title 27 of the
Environmental Conservation Law
of the State of New York by
by

2632 Realty Development Corp.
Respondent.

ORDER
ON
CONSENT

INDEX # W1-0843-98-06

Site Code #1-30-043S

WHEREAS,

1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites." This Order is issued pursuant to the Department's authority under, inter alia, ECL Article 27, Title 13 and ECL 3-0301.

2. 2632 Realty Development Corp. ("Respondent"), is the current owner of the site located at 299 Main Street in the western portion of the New Cassel Industrial Area, Westbury, NY 11590, (hereinafter referred to as "the Site"). Groundwater beneath and down gradient of the site is contaminated with TCE and related compounds. The contaminated groundwater is located within an EPA-designated sole source aquifer. Two public water supply wells are located approximately 2,700 ft. down gradient of the site. A site map is attached as an appendix to this Order as Exhibit A.

3. The Department has determined that the Site is an inactive hazardous waste disposal site, as that term is defined at ECL 27-1301.2. The Site has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 01-30-043S. The Department has classified the Site as a Classification "2" pursuant to ECL 27-1305.4.b.

4. A. Pursuant to ECL 27-1313.3.a, whenever the Commissioner of Environmental Conservation (the "Commissioner") "finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department, at such site, and (ii) to implement such program within reasonable time limits specified in the order."

B. Any person under order pursuant to ECL 27-1313.3.a has a duty imposed by

ECL Article 27, Title 13 to carry out the remedial program committed to under order. ECL 71-2705 provides that any person who fails to perform any duty imposed by ECL Article 27, Title 13 shall be liable for civil, administrative and/or criminal sanctions.

C. The Department also has the power, inter alia, to provide for the prevention and abatement of all water, land, and air pollution. ECL 3-0301.1.i.

5. The Department and Respondent agree that the goals of this Order are for Respondents to (i) develop and implement a Focussed Remedial Investigation/Focussed Feasibility Study ("FRI/FFS") for the Site; and (ii) reimburse the State's administrative costs with reservation of the State's rights as to all administrative costs not provided for in this consent order.

6. Respondent, having waived Respondent's right to a hearing herein as provided by law, and having consented to the issuance and entry of this Order, agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms.

7. Notwithstanding Respondent's agreement to carry out the terms of this Order, Respondent does not admit or acknowledge any liability, fault or wrongdoing or violation of law, regulation, permit of any kind whatsoever in any way related to the Site.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Initial Submittal

Within 30 days after the effective date of this Order, Respondent shall submit to the Department all data within Respondent's possession or control regarding environmental conditions on-Site, and other information described below, unless the Department informs Respondent that such data have previously been provided to the Department. The data and other information shall include:

A. A brief history and description of the Site, including the types, quantities, physical state, location, and dates of disposal of hazardous waste including methods of disposal and spillage of such wastes;

B. (1) A concise summary of information held by Respondent and Respondent's attorneys and consultants with respect to all persons responsible for such disposal of hazardous wastes, including but not limited to names, addresses, dates of disposal and any proof linking each such person responsible with hazardous wastes identified pursuant to Subparagraph I.A; and

(2) Respondent with respect to any documents for which a privilege may

be claimed, will disclose such data or documents but need not disclose (a) the privileged mental impressions, conclusions, opinions or legal theories that are Respondent attorney's or consultant's work product or (b) Respondent's privileged communications to Respondent's attorney seeking legal counsel, and Respondent's attorney's communications with Respondent; and

C. A comprehensive list and copies of all existing relevant reports with titles, authors, and subject matter, as well as a description of the results of all previous investigations of the Site and areas in the vicinity of the Site, including copies of all available topographic and property surveys, engineering studies and aerial photographs.

II. Performance and Reporting of Remedial Investigation

A. Within 30 days after the effective date of this Order, Respondent shall commence the Remedial Investigation in accordance with the schedule contained in the Department-approved FRI/FFS Work Plan attached to this Order as Exhibit B and made a part of this Order.

B. Respondent shall perform the Focussed Remedial Investigation in accordance with the Department-approved FRI/FFS Work Plan.

C. During the performance of the Focussed Remedial Investigation, Respondent shall have on-Site a full-time representative who is qualified to supervise the work done.

D. Within the time frame set forth in the Department-approved FRI/FFS Work Plan, Respondent shall prepare a Focussed Remedial Investigation Report that shall:

(1) include all data generated and all other information obtained during the Focussed Remedial Investigation:

(2) provide all of the assessments and evaluations set forth in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") [42 USC 9601 et seq.], as amended, the National Contingency Plan ("NCP") of March 8, 1990 [40 CFR Part 300], the USEPA guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," dated October 1988, and any subsequent revisions to that guidance document in effect at the time the FRI/FFS Work Plan is submitted, and appropriate USEPA and Department technical and administrative guidance documents as applicable to the approved FRI/FFS work plan.

(3) identify any additional data that must be collected; and

(4) include a certification by the individual or firm with primary responsibility for the day to day performance of the Focussed Remedial Investigation that all activities that comprised the Focussed Remedial Investigation were performed in full accordance with the Department-approved FRI/FFS Work Plan.

III. Focussed Feasibility Study

A. In accordance with the schedule contained in the Department-approved FRI/FFS Work Plan, Respondents shall submit a Focussed Feasibility Study evaluating on-Site remedial actions to eliminate, to the maximum extent practicable, all health and environmental hazards and potential hazards on-Site. The Focussed Feasibility Study shall be prepared by and have the signature and seal of a professional engineer who shall certify that the Focussed Feasibility Study was prepared in accordance with this Order.

B. Respondent shall perform and prepare the Focussed Feasibility Study in accordance with the Department-approved FRI/FFS Work Plan and in a manner consistent with CERCLA, the NCP, and the guidance documents identified in Subparagraph II.D.2.

C. After the Department's approval of the Focussed Feasibility Study, Respondent shall cooperate and assist the Department in soliciting public comment on the FRI/FFS and on the proposed remedial action plan, in accordance with CERCLA, the NCP, the guidance documents identified in Subparagraph II.D.2, and with any Department policy and guidance documents in effect at the time the public comment period is initiated.

IV. Interim Remedial Measures

A. 1. Respondent may propose one or more IRMs for the Site.

2. In proposing each IRM, Respondent shall submit to the Department a work plan that includes a chronological description of the anticipated IRM activities together with a schedule for performance of those activities (an "IRM Work Plan" for that Site).

3. Upon the Department's determination that the proposal is an appropriate IRM and upon the Department's approval of such work plan, the IRM Work Plan shall be incorporated into and become an enforceable part of this Order; and Respondent shall submit to the Department for its review and (as appropriate) approval, in accordance with the schedule contained in the Department-approved IRM Work Plan, detailed documents and specifications prepared, signed, and sealed by a professional engineer to implement the Department-approved IRM. Such documents shall include a health and safety plan and contingency plan. Respondent shall then carry out such IRM in accordance with the requirements of the approved IRM Work Plan, detailed documents and specifications, and this Order. Respondent shall notify the Department of any significant difficulties that may be encountered in implementing the Department-approved work plan, detailed documents, or specifications and shall not modify any obligation unless first approved by the Department.

4. During implementation of all construction activities identified in the Department-approved IRM Work Plan, Respondent shall have on-Site a full-time representative who is qualified to supervise the work done.

5. Within the schedule contained in the Department-approved IRM Work Plan, Respondent shall submit to the Department a final engineering report prepared by a professional engineer that includes a certification by that individual that all activities that comprised the Department-approved IRM were completed in accordance with the Department-approved IRM Work Plan and this Order.

a. If the performance of the Department-approved IRM encompassed construction activities, the final engineering report also shall include a detailed post-remedial operation and maintenance plan ("IRM O&M Plan"); "as-built" drawings and a final engineering report (each including all changes made to the Remedial Design during construction); and a certification by a professional engineer that the IRM was implemented and all construction activities were completed in accordance with the Department-approved detailed documents and specifications for the IRM and all such activities were personally witnessed by him or her or by a person under his or her direct supervision. The IRM O&M Plan, "as built" drawings, final engineering report, and certification must be prepared, signed, and sealed by a professional engineer.

b. Upon the Department's approval of the IRM O&M Plan, Respondent shall implement the IRM O&M Plan in accordance with the requirements of the Department-approved IRM O&M Plan.

6. After receipt of the final engineering report and certification, the Department shall notify Respondent in writing whether the Department is satisfied that the IRM was completed in compliance with the Department-approved IRM Work Plan and design.

V. Progress Reports

Respondent shall submit to the parties identified in Subparagraph XIII.B in the numbers specified therein copies of written monthly progress reports that:

A. describe the actions which have been taken toward achieving compliance with this Order during the previous month;

B. include all results of sampling and tests and all other data received or generated by Respondent or Respondent's contractors or agents in the previous month, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent;

C. identify all work plans, reports, and other deliverables required by this Order that were completed and submitted during the previous month;

D. describe all actions, including, but not limited to, data collection and implementation of work plans, that are scheduled for the next month and provide other information relating to the progress at the Site;

E. include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of Respondent's obligations under the Order, and efforts made to mitigate those delays or anticipated delays; and

F. include any modifications to any work plans that Respondent has proposed to the Department or that the Department has approved.

Respondent also shall allow the Department to attend, and shall provide the Department at least seven days advance notice of, any of the following: prebid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.

VI. Review of Submittals

A. 1. The Department shall review each of the submittals Respondent makes pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. The Department shall notify Respondent in writing of its approval or disapproval of the submittal. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. a. If the Department disapproves a submittal, it shall so notify Respondent in writing and shall specify the reasons for its disapproval. Within 30 days after receiving written notice that Respondent's submittal has been disapproved, Respondent shall make a revised submittal to the Department that addresses and resolves all of the Department's stated reasons for disapproving the first submittal.

b. After receipt of the revised submittal, the Department shall notify Respondent in writing of its approval or disapproval. If the Department disapproves the revised submittal, the parties shall take all reasonable efforts to resolve their differences regarding the revised submittal. If the parties are unable to resolve their differences Respondent shall be in violation of this Order and the Department may take any action or pursue whatever rights they have pursuant to any provision of statutory or common law. If the Department approves the revised submittal, it shall be incorporated into and become an enforceable part of this Order.

B. Respondent shall modify and/or amplify and expand a submittal upon the Department's direction to do so if the Department determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts, that further work is necessary.

VII. Penalties

A. 1. Respondent's failure to comply with any term of this Order constitutes a violation of this Order and the ECL.

2. Respondent shall be liable for payment to the Department of the sums set forth below as stipulated penalties for each day or part thereof that Respondent is in violation of the terms of this Order. All penalties begin to accrue on the first day Respondent is in violation of the terms of this Order and continue to accrue through the final day of correction of any violation. Such sums shall be due and payable within 15 days after receipt of notification from the Department assessing the penalties. If such payment is not received within 15 days after Respondent receives such notification from the Department, interest shall be payable at the annual rate of nine per centum on the overdue amount from the day on which it was due through, and including, date of payment. Penalties shall be paid by certified check or money order, made payable to "New York State Department of Environmental Conservation" and shall be delivered personally or by certified mail, return receipt requested, to the Director, Division of Environmental Enforcement, N.Y.S.D.E.C., 50 Wolf Road, Albany, New York 12233-5500. Payment of the penalties shall not in any way alter Respondent's obligation to complete performance under the terms of this Order. Stipulated penalties shall be due and payable under this Subparagraph pursuant to the following schedule:

Period of Non-Compliance	Penalty Per Day
First through 15th day	$ 5,000
16th through 30th day	$ 10,000
31st day and thereafter	$ 15,000

B. Respondent shall not suffer any penalty under this Order or be subject to any proceeding or action if it cannot comply with any requirement hereof because of war, riot, or an unforeseeable disaster arising exclusively from natural causes which the exercise of ordinary human prudence could not have prevented. Respondent shall, within five days of when it obtains knowledge of any such condition, notify the Department in writing. Respondent shall include in such notice the measures taken and to be taken by Respondent to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Failure to give such notice within such five-day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall have the burden of proving that an event is a defense to compliance with this Order pursuant to this Subparagraph.

VIII. Entry upon Site

Respondent hereby consents to the entry upon the Site or areas in the vicinity of the Site which may be under the control of Respondent by any duly designated employee. consultant, contractor, or agent of the Department or any State agency for purposes of inspection, sampling, and testing and to ensure Respondent's compliance with this Order.

During Remedial Construction, Respondent shall provide the Department with suitable office space at the Site, including access to a telephone, and shall permit the Department full access to all records relating to matters addressed by this Order and job meetings.

IX. Payment of State Costs

Within 30 days after receipt of an itemized invoice from the Department, Respondent shall pay to the Department a sum of money which shall represent reimbursement for the State's expenses including, but not limited to, direct labor, fringe benefits, indirect costs, travel, analytical costs, and contractor costs incurred by the State of New York for work related to the Site from the effective date of this Order, as well as for reviewing and revising submittals made pursuant to this Order, overseeing activities conducted pursuant to this Order, collecting and analyzing samples, and administrative costs associated with this Order. Respondent's obligation to reimburse the state for expenses incurred in any one year under this Paragraph commencing from the effective date of the Order, shall not exceed $30,000; however, the Department may aggregate billings for more than one year. Respondent shall make quarterly installment payments of no less than $4,000.00 each, with the first installment due and owing on the first day of the month next following the month in which the Department sends its first invoice to Respondent; and Respondent shall continue making such quarterly installment payments of no less than $4,000.00 each until Respondent pays off in full all invoices sent to it under the provisions of this Paragraph. Such payment shall be made by certified check payable to the Department of Environmental Conservation and shall be sent to:

Bureau of Program Management
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010.

Personal service costs shall be documented by reports of Direct Personal Service, which shall identify the employee name, title, biweekly salary, and time spent (in hours) on the project during the billing period, as identified by an assigned time and activity code. Approved agency fringe benefit and indirect cost rates shall be applied. Non-personal service costs shall be summarized by category of expense (e.g., supplies, materials, travel, contractual) and shall be documented by expenditure reports.

X. Department Reservation of Rights

A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's civil, criminal, or administrative rights (including, but not limited to, nor exemplified by, the right to recover natural resource damages) or authorities.

B. Nothing contained in this Order shall be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

C. Nothing in this Order shall be construed as barring diminishing, adjudicating, or in any way affecting any of the Department's rights including, but not limited to nor exemplified by the Department's right to address groundwater plumes migrating off site resulting from Respondent's disposal of hazardous wastes at the Site, if any.

D. Nothing in this Order shall be construed as barring diminishing, adjudicating, or in any way affecting any of the Department's rights including, but not limited to nor exemplified by the Department's right to bring any action or proceeding to recover expenses incurred prior to the effective date of this Order by the State that are related to the disposal of hazardous wastes at the Site and are appropriate and reasonable and not inconsistent with the NCP.

E. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Respondent's rights as against third parties.

XI. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, and their representatives, consultants and employees harmless for all claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors, and assigns.

However, Respondent shall not be required to indemnify the Department, the State of New York, and their representatives, consultants and employees regarding any liability arising as a result of the gross negligence or reckless, wanton or intentional misconduct by the Department, the State of New York, and their representatives and employees during the course of any activities conducted pursuant to this Order.

XII. Public Notice

A. Within 30 days after the effective date of this Order, Respondent shall file a Notice with the Clerk of the County wherein the Site is located to give all parties who may acquire any interest in the Site notice of this Order and shall within 45 days thereafter proide to the Department a copy of such Notice as filed showing the liber and page number at which the Notice was filed and the date of the filing.

B. If Respondent proposes to convey the whole or any part of Respondent's ownership interest in the Site, Respondent shall, not fewer than 60 days before the date of conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed date of the conveyance and shall notify the transferee in writing, with a

copy to the Department, of the applicability of this Order.

XIII. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

1. Communication from Respondent shall be sent to:

Jeanna E. Hussey, Esq.
Division of Environmental Enforcement
Eastern Field Unit
New York State Department of Environmental Conservation
200 White Plains Road, 5th Floor
Tarrytown, NY 10591-5805

with copies to:

Chittibabu Vasudevan, P.E., Ph.D.
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

Anna C. Ruepp
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

G. Anders Carlson, Ph.D.
Director, Bureau of Environmental Exposure Investigation
New York State Department of Health
2 University Place
Albany, New York 12203

Ray Cowen, Director
Region 1
New York State Department of Environmental Conservation
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

2. Communication to be made from the Department to Respondent shall be sent to:

Paula Scappatura, President
2632 Realty Development Corp.
1025 Old Country Road
Westbury, N.Y. 11590

Charlotte Biblow, Esq.
Rivkin, Radler & Kremer
EAB Plaza Uniondale, NY 11556
Uniondale, NY 11532

Richard Parrish, P.G., C.E.I
Impact Environmental, Inc.
46 East North Port Road
Kings Park, NY 11754

B. Copies of work plans and reports shall be submitted as follows:

Four copies (one unbound) to:
Anna C. Ruepp
Division of Environmental Remediation

Two copies to:
G. Anders Carlson, Ph. D.
Director, Bureau of Environmental Exposure Investigation

One copy to:
Ray Cowen, Director
Region 1

and

Jeanna E. Hussey, Esq.
Division of Environmental Enforcement

C. 1. Within 30 days of the Department's approval of any report submitted pursuant to this Order, Respondent shall submit to Director, Division of Environmental Remediation, a computer readable magnetic media copy of the approved report in American Standard Code for Information Interchange (ASCII) format.

2. Within 30 days after the Department's approval of the FRI/FFS. Respondent shall submit one microfilm copy of the FRI/FFS to Director, Division of Environmental Remediation.

D. The Department and Respondent reserve the right to designate additional or different addressees for communication or written notice to the other.

XIV. Miscellaneous

A. 1. All activities and submittals required by this Order shall address on-Site contamination resulting from the disposal of hazardous wastes at the Site, if any.

2. All activities Respondent is required to undertake under this Order are ordinary and necessary expenses for the continued operation of Respondent.

B. Respondent shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and third party data validators acceptable to the Department to perform the technical, engineering, and analytical obligations required by this Order. The experience, capabilities, and qualifications of the firms or individuals selected by Respondent shall be submitted to the Department within 15 days after the effective date of this Order. The Department's approval of these firms or individuals shall be obtained before the start of any activities for which Respondent and such firms or individuals will be responsible. The responsibility for the performance of the professionals retained by Respondent shall rest solely with Respondent.

C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondent, and the Department also shall have the right to take its own samples. Respondent shall make available to the Department the results of all sampling and/or tests or other data generated by Respondent with respect to implementation of this Order and shall submit these results in the progress reports required by this Order.

D. Respondent shall notify the Department at least 10 working days in advance of any field activities to be conducted pursuant to this Order.

E. Respondent shall obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform Respondent's obligations under this Order.

F. Respondent and Respondent's officers, directors, agents, servants, employees, successors, and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondent's responsibilities under this Order. Respondent's officers, directors, employees, servants, and agents shall be obliged to comply with the relevant provisions of this Order in the performance of their designated duties on behalf of Respondent.

G. Respondent shall provide a copy of this Order to each contractor hired to perform work required by this Order and to each person representing Respondent with respect to the Site and shall condition all contracts entered into in order to carry out the obligations identified in this Order upon performance in conformity with the terms of this Order. Respondent or Respondent's contractors shall provide written notice of this Order to

all subcontractors hired to perform any portion of the work required by this Order. Respondent shall nonetheless be responsible for ensuring that Respondent's contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

H. All references to "professional engineer" in this Order are to an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law. If such individual is a member of a firm, that firm must be authorized to offer professional engineering services in the State of New York in accordance with Article 145 of the New York State Education Law.

I. All references to "days" in this Order are to calendar days unless otherwise specified.

J. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

K. 1. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order.

2. If Respondent desires that any provision of this Order be changed, Respondent shall make timely written application, signed by Respondent, to the Commissioner setting forth reasonable grounds for the relief sought. Copies of such written application shall be delivered or mailed to Jeanna E. Hussey and to Anna Ruepp.

L. The effective date of this Order is the date the Commissioner or his designee signs it.

DATED: 5/21/99

JOHN P. CAHILL, COMMISSIONER
New York State Department
of Environmental Conservation

By:

Michael J. O'Toole, Jr.

CONSENT BY RESPONDENT
2362 Realty Development Corp.

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

By: Paula Scappatura

Title: Pres

Date: 4/30/99

STATE OF NEW YORK)
) s.s.:
COUNTY OF)

On this 30 day of April, 1999, before me personally came PAULA SCAPPATURA, to me known, who being duly sworn, did depose and say that she resides at 1025 Old Country Rd, Suite 100M Westbury NY; that she is the President of 2632 Realty Development Corp., the corporation described in and which executed the foregoing instrument; and that she signed her name hereto by the order of the Board of Directors of said corporation.

[illegible] SCHUSSER
[illegible] State of New York
[illegible]
Qualified in Nassau County
Commission Expires January 27, 2014

Notary Public

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Development and Implementation of a Focussed Remedial Investigation/Focussed Feasibility Study for an Inactive Hazardous Waste Disposal Site, Under Article 27, Title 13, and Article 71, Title 27 of the Environmental Conservation Law of the State of New York by by 2632 Realty Development Corp. Respondent.	ORDER ON CONSENT INDEX # W1-0843-98-06 Site Code #1-30-043S

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Development and Implementation of a Remedial Program for an Inactive Hazardous Waste Disposal Site under Article 27, Title 13 of the Environmental Conservation Law by 299 Main St., LLC 19 Liberty, LTD. Respondent.	**ORDER ON CONSENT** Index #W1-1072-05-07 Site #130043S

WHEREAS,

1. A. The New York State Department of Environmental Conservation ("Department") is responsible for inactive hazardous waste disposal site remedial programs pursuant to Article 27, Title 13 of the Environmental Conservation Law ("ECL") and may issue orders consistent with the authority granted to the Commissioner by such statute.

B. The Department is responsible for carrying out the policy of the State of New York to conserve, improve and protect its natural resources and environment and control water, land, and air pollution consistent with the authority granted to the Department and the Commissioner by Article 1, Title 3 of the ECL.

C. This Order is issued pursuant to the Department's authority under, *inter alia,* ECL Article 27, Title 13 and ECL 3-0301, and resolves Respondent's liability to the State under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. § 9601 et seq., to the extent set forth herein. Accordingly, pursuant to CERCLA Section 113(f)(3)(B), 42 U.S.C. § 9613(f)(3)(B), Respondent may seek contribution from persons not parties to this Order to the extent set forth in Subparagraph XIV.I.

2. 299 Main St., LLC ("299 Main"), a real estate holding company, is a contract vendee of the 299 Main Street Site located at 299 Main Street, New Cassel Industrial Area ("NCIA"), Town of North Hempstead, Nassau County, New York (hereinafter the "Site"). On or about December 30, 2005, 2632 Realty Development Corp. ("2632 Realty"), the current owner of the Site, will transfer title and control of the Site to 299 Main. Within approximately 90 days of obtaining title and control of the Site, 299 Main intends to transfer title and control of the Site to 19 Liberty, LTD. ("19 Liberty"), a real estate holding company affiliated with 299 Main. 299 Main and 19 Liberty are collectively referred to as the "Respondent". Exhibit "A" is a map of the Site showing its general location.

3. 2632 Realty (i) executed a Focused Remedial Investigation/Focused Feasibility Study

Order on Consent for the Site, Index #W1-0843-98-06, dated May 21, 1999 ("the Focused RI/FS Order"), (ii) submitted, and the Department approved a Focused Remedial Investigation Work Plan dated March 17,1999 and a Interim Remedial Measures ("IRM") Work Plan dated April 2002; and (iii) has not completed the work covered in the Focused RI/FS Order and the IRM Work Plan. This Order does not supersede or otherwise alter the obligations of 2632 Realty under the Focused RI/FS Order.

4. The Site is currently listed in the *Registry of Inactive Hazardous Waste Disposal Sites in New York State* as Site Number 130043S with a Classification "2" pursuant to ECL 27-1305.

5. Respondent consents to the issuance of this Order without (i) an admission or finding of liability, fault, wrongdoing, or violation of any law, regulation, permit, order, requirement, or standard of care of any kind whatsoever; (ii) an acknowledgment that there has been a release or threatened release of hazardous waste at or from the Site; or (iii) an acknowledgment that a release or threatened release of hazardous waste at or from the Site constitutes a significant threat to the public health or environment.

6. Solely with regard to the matters set forth below, Respondent hereby waives any right to a hearing as may be provided by law, consents to the issuance and entry of this Order, and agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms or the validity of data submitted to the Department by Respondent pursuant to this Order.

NOW, having considered this matter and being duly advised, **IT IS ORDERED THAT:**

I. Initial Submittal

Within thirty (30) Days after the effective date of this Order, Respondent shall submit to the Department a Records Search Report in accordance with the requirements of Exhibit "F" attached hereto. The Records Search Report can be limited if the Department notifies Respondent that prior submissions satisfy specific items required for the Records Search Report. Such Records Search Report shall be submitted in a format acceptable to the Department.

II. Development, Performance, and Reporting of Work Plans

A. Work Plans

All activities at the Site that comprise any element of an Inactive Hazardous Waste Disposal Site Remedial Program shall be conducted pursuant to one or more Department-approved work plans ("Work Plan" or "Work Plans") and this Order, and all activities shall be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300, as required under CERCLA, 42 U.S.C. §§ 9605, 9607(a). The Work Plan(s) under this Order shall address both on-Site and off-Site conditions (excluding OU-3 for the

NCIA Sites which encompasses groundwater contamination primarily south of Old Country Road and Grand Boulevard) and shall be developed and implemented in accordance with 6 NYCRR Part 375, applicable guidance documents then in effect, and/or Exhibits G, H, I, J, and K. All Department-approved Work Plans shall be incorporated into and become enforceable parts of this Order and shall be attached as Exhibit "B." Upon approval of a Work Plan by the Department, Respondent shall implement such Work Plan in accordance with the schedule contained in such Work Plan. Nothing in this Subparagraph shall mandate that any particular Work Plan be submitted.

Each Work Plan submitted shall use one of the following captions on the cover page:

1. "Site Characterization Work Plan" ("SC Work Plan"): a Work Plan whose objective is to identify the presence of any hazardous waste disposed of at the Site. Such Work Plan shall be developed in accordance with Exhibit "G";

2. "Remedial Investigation/Feasibility Study Work Plan" ("RI/FS Work Plan"): a Work Plan whose objective is to perform a Remedial Investigation and a Feasibility Study. Such Work Plan shall be developed and implemented in accordance with Exhibit "H";

3. "IRM Work Plan": a Work Plan whose objective is to provide for an Interim Remedial Measure. Such Work Plan shall be developed in accordance with Exhibit "I";

4. "Remedial Design/Remedial Action Work Plan" ("RD/RA Work Plan"): a Work Plan whose objective is to provide for the development and implementation of final plans and specifications for implementing the remedial alternative set forth in the ROD. Such Work Plan shall be developed in accordance with Exhibit "J"; or

5. "OM&M Work Plan": a Work Plan whose objective is to provide for all activities required to maintain and monitor the effectiveness of the Remedial Action or an IRM. Such Work Plan shall be developed in accordance with Exhibit "K."

B. Submission/Implementation of Work Plans

1. (a) The Respondent shall implement the Department approved IRM Work Plan for the Site dated April 2002 which IRM Work Plan is attached to this Order as Exhibit "B" and is incorporated as an enforceable part of this Order.

(b) The Department may request that Respondent submit additional or supplemental Work Plans for the Site. Within thirty (30) Days after the Department's written request, Respondent shall advise the Department in writing whether it will submit and implement the requested additional or supplemental Work Plan or whether it elects to terminate this Order pursuant to Paragraph XIII. If Respondent elects to submit and implement such Work Plan, Respondent shall submit the requested Work Plan within sixty (60) Days after such election. If

Respondent elects to terminate this Order or fails to make a timely election, this Order shall terminate pursuant to Paragraph XIII.

(c) Respondent may, at Respondent's option, propose one or more additional or supplemental Work Plans (including one or more IRM Work Plans) at any time, which the Department shall review for appropriateness and technical sufficiency.

(d) Any request made by the Department under Subparagraph II.B.1.(b) shall be subject to dispute resolution pursuant to Paragraph XII.

2. A Professional Engineer must stamp and sign all Work Plans other than a Work Plan for an RI/FS or an SC.

3. During all field activities, Respondent shall have on-Site a representative who is qualified to supervise the activities undertaken. Such representative may be an employee or a consultant retained by Respondent to perform such supervision.

C. Modifications to Work Plans

The Department shall notify Respondent in writing if the Department determines that any element of a Department-approved Work Plan needs to be modified in order to achieve the objectives of the Work Plan as set forth in Subparagraph II.A or to ensure that the Remedial Program otherwise protects human health and the environment. Upon receipt of such notification, Respondent shall, subject to Respondent's right to invoke dispute resolution pursuant to Paragraph XII or to terminate pursuant to Paragraph XIII, submit a Work Plan for such requested work to the Department within sixty (60) Days after the date of the Department's written notice pursuant to this Subparagraph.

D. Submission of Final Reports and Annual Reports

1. In accordance with the schedule contained in a Work Plan, Respondent shall submit a final report that includes the caption of that Work Plan on the cover page and a certification that all requirements of the Work Plan have been complied with and all activities have been performed in full accordance with such Work Plan. Such certification shall be by the person with primary responsibility for the day to day performance of the activities under this Order and, except for RI and SC final reports, shall be by a Professional Engineer.

2. Any final report that includes construction activities shall include "as built" drawings showing any changes made to the remedial design or the IRM.

3. In the event that any ROD or Work Plan for the Site requires operation, maintenance, and monitoring (OM&M), including reliance upon institutional or engineering controls, Respondent shall submit an annual report by the 1st Day of the month following the anniversary of the start of the OM&M. Such annual report shall be signed by a Professional

Engineer or by such other expert as the Department may find acceptable and shall contain a certification under penalty of perjury that any institutional and/or engineering controls required by this Order are unchanged from the previous certification and that nothing has occurred that would impair the effectiveness of such control or constitute a violation of or failure to comply with the approved OM& M Plan. Respondent may petition the Department for a determination that the institutional and/or engineering controls may be terminated. Such petition must be supported by a statement by a Professional Engineer that such controls are no longer necessary for the protection of public health and the environment. The Department shall not unreasonably withhold its approval of such petition.

E. Review of Submittals other than Progress Reports and Health and Safety Plans

1. The Department shall make a good faith effort to review and respond in writing to each submittal Respondent makes pursuant to this Order within sixty (60) Days. The Department's response shall include an approval or disapproval of the submittal, in whole or in part. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. If the Department disapproves a submittal, it shall specify the reasons for its disapproval. Within thirty (30) Days after the date of the Department's written notice that Respondent's submittal has been disapproved, Respondent shall elect, in writing, to either (i) modify the submittal to address the Department's comments, (ii) invoke dispute resolution pursuant to Paragraph XII, or (iii) in the event the rejected submittal is a Work Plan submitted prior to the Department's approval of the RD/RA Work Plan, terminate this Order pursuant to Paragraph XIII. If Respondent elects to modify the submittal, Respondent shall, within sixty (60) Days after such election, make a revised submittal that addresses all of the Department's stated reasons for disapproving the first submittal. In the event that Respondent's revised submittal is disapproved, the Department shall set forth its reasons for such disapproval in writing and Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XII and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.

3. Within thirty (30) Days after the Department's approval of a final report, Respondent shall submit such final report, as well as all data gathered and drawings and submittals made pursuant to such Work Plan, in an electronic format acceptable to the Department. If any document cannot be converted into electronic format, Respondent shall submit such document in an alternative format acceptable to the Department.

F. Department's Issuance of a ROD

Respondent shall cooperate with the Department and provide reasonable assistance, consistent with the Citizen Participation Plan, in soliciting public comment on the proposed remedial action plan ("PRAP"), if any. After the close of the public comment period, the Department shall select a final remedial alternative for the Site in a ROD. Nothing in this Order

shall be construed to abridge the rights of Respondent, as provided by law, to judicially challenge the Department's ROD.

G. Release and Covenant Not to Sue

Upon (i) the Department's approval of either the RD/RA Work Plan final report or an IRM Work Plan final report evidencing that no further remedial action (other than OM&M activities) is required to meet the goals of the Remedial Program, and (ii) the Department's acceptance of any environmental easement required pursuant to Paragraph X, then, except for the provisions of Paragraphs VI and VIII, and except for the future OM&M of the Site and any Natural Resource Damage claims, such acceptance shall constitute a release and covenant not to sue for each and every claim, demand, remedy, or action whatsoever against Respondent, its directors, officers, employees, agents, servants, successors, and assigns (except successors and assigns who were responsible under law for the development and implementation of a Remedial Program at the Site prior to the effective date of this Order), and their respective secured creditors, which the Department has or may have pursuant to Article 27, Title 13 of the ECL or pursuant to any other provision of State or Federal statutory or common law, including but not limited to section 9607(a) of CERCLA, 42 U.S.C. § 9607(a), involving or relating to investigative or remedial activities relative to or arising from the disposal of hazardous wastes (or other contaminants remediated by Respondent to the Department's satisfaction pursuant to the ROD or Work Plans) at the Site; provided, however, that the Department specifically reserves all of its rights concerning, and any such release and covenant not to sue shall not extend to any further investigation or remediation the Department deems necessary due to newly discovered environmental conditions on-Site or off-Site which are related to the disposal of hazardous wastes at the Site and which indicate that the Remedial Program is not protective of public health and/or the environment. The Department shall notify Respondent in writing of such environmental conditions or information and its basis for determining that the Remedial Program is not protective of public health and/or the environment. This release and covenant not to sue does not extend to any on-Site groundwater remediation, any off-Site groundwater remediation other than OU-3 for the NCIA Sites which encompasses groundwater contamination primarily south of Old Country Road and Grand Boulevard.

This release and covenant not to sue shall be null and void, *ab initio*, in the event of fraud relating to the execution or implementation of this Order or in the event of Respondent's failure to materially comply with any provision of this Order subsequent to issuance of a release and covenant not to sue. The Department's determination that Respondent has committed fraud or has materially failed to comply with this Order shall be subject to dispute resolution pursuant to Paragraph XII.

Nothing herein shall be construed as barring, diminishing, adjudicating, or in any way affecting any legal or equitable rights or claims, actions, suits, causes of action, or demands whatsoever that (i) Respondent may have against anyone other than the Department, including but not limited to rights of contribution under section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), and (ii) the Department may have against anyone other than Respondent, its

directors, officers, employees, agents, and servants, and those successors and assigns of Respondent that were not responsible under law for the development and implementation of a Remedial Program at the Site prior to the effective date of this Order, and their respective secured creditors. Nothing herein is intended to, or shall be construed as, extending this release and covenant not to sue to 2632 Realty, its directors, officers, employees, agents, servants, successors and assigns, excluding Respondent herein.

III. Progress Reports

Respondent shall submit written progress reports to the parties identified in Subparagraph XI.A.1 by the 10th Day of each month commencing with the month subsequent to the approval of the first Work Plan and ending with the Termination Date, unless a different frequency is set forth in a Work Plan. Such reports shall, at a minimum, include: all actions taken pursuant to this Order during the reporting period and those anticipated for the upcoming reporting period; all approved modifications to work plans and/or schedules; all results of sampling and tests and all other data received or generated by or on behalf of Respondent in connection with the Site, during the reporting period, including quality assurance/quality control information; and information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule, efforts made to mitigate such delays, and information regarding activities undertaken in support of the Citizen Participation Plan during the reporting period and those anticipated for the upcoming reporting period.

IV. Penalties

A. 1. Respondent's failure to comply with any term of this Order constitutes a violation of this Order, the ECL, and 6 NYCRR Part 375. Nothing herein abridges Respondent's right to contest any allegation that it has failed to comply with this Order.

2. Payment of any penalties shall not in any way alter Respondent's obligations under this Order.

B. 1. Respondent shall not suffer any penalty or be subject to any proceeding or action in the event it cannot comply with any requirement of this Order as a result of any event arising from causes beyond the reasonable control of Respondent, of any entity controlled by Respondent, and of Respondent's contractors, that delays or prevents the performance of any obligation under this Order despite Respondent's best efforts to fulfill the obligation ("Force Majeure Event"). The requirement that Respondent exercise best efforts to fulfill the obligation includes using best efforts to anticipate the potential Force Majeure Event, best efforts to address any such event as it is occurring, and best efforts following the Force Majeure Event to minimize delay to the greatest extent possible. "Force Majeure" does not include Respondent's economic inability to comply with any obligation, the failure of Respondent to make complete and timely application for any required approval or permit, and non-attainment of the goals, standards, and requirements of this Order.

2. Respondent shall notify the Department in writing within seven (7) Days after it obtains knowledge of any Force Majeure Event. Respondent shall include in such notice the measures taken and to be taken to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Failure to give such notice within such seven (7) Day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall be deemed to know of any circumstance which it, any entity controlled by it, or its contractors knew or should have known.

3. Respondent shall have the burden of proving by a preponderance of the evidence that (i) the delay or anticipated delay has been or will be caused by a Force Majeure Event; (ii) the duration of the delay or the extension sought warranted under the circumstances; (iii) best efforts were exercised to avoid and mitigate the effects of the delay; and (iv) Respondent complied with the requirements of Subparagraph IV.B.2 regarding timely notification.

4. If the Department agrees that the delay or anticipated delay is attributable to a Force Majeure Event, the time for performance of the obligations that are affected by the Force Majeure Event shall be extended for such time as is reasonably necessary to complete those obligations.

5. If the Department rejects Respondent 's assertion that an event provides a defense to non-compliance with this Order pursuant to Subparagraph IV.B, Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XII and Respondent's position prevails.

V. Entry upon Site

A. Respondent hereby consents, upon reasonable notice under the circumstances presented, to entry upon the Site (or areas in the vicinity of the Site which may be under the control of Respondent) by any duly designated officer or employee of the Department or any State agency having jurisdiction with respect to matters addressed pursuant to this Order, and by any agent, consultant, contractor, or other person so authorized by the Commissioner, all of whom shall abide by the health and safety rules in effect for the Site, for inspecting, sampling, copying records related to the contamination at the Site, testing, and any other activities necessary to ensure Respondent's compliance with this Order. Upon request, Respondent shall (i) provide the Department with suitable office space at the Site, including access to a telephone, to the extent available, and (ii) permit the Department full access to all non-privileged records relating to matters addressed by this Order. Raw data is not considered privileged and that portion of any privileged document containing raw data must be provided to the Department. In the event Respondent is unable to obtain any authorization from third-party property owners necessary to perform its obligations under this Order, the Department may, consistent with its legal authority, assist in obtaining such authorizations.

B. The Department shall have the right to take its own samples and scientific measurements and the Department and Respondent shall each have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled. The Department shall make the results of any such sampling and scientific measurements available to Respondent.

VI. Payment of State Costs

A. The Respondent shall pay to the Department the sum of $129,087.83, which shall represent reimbursement for State Costs as set forth on the cost summary attached as Exhibit "C." The sum shall be paid in three equal installments of $32,271.95, and the fourth installment in the amount of $32,271.98. The first installment shall be due and payable on January 30, 2006, the second installment on May 29, 2006, the third installment on September 29, 2006, and the fourth installment on January 1, 2007. Respondent shall pay an additional sum of Fifty Dollars ($50.00) with each quarterly installment payment for the State's administrative costs associated with the installment payments. Respondent shall be obligated to pay the Department a penalty in the amount of Two Hundred Dollars ($200.00), in addition to the penalties provided for in Paragraph IV of the Order, for each failure to make timely payments of the costs provided for herein. Respondent acknowledges that all past State Costs are not itemized on the cost summary, and that additional charges may be billed at a later date for State Costs incurred prior to the effective date of this Order and for response costs associated with preliminary site assessments in the NCIA and off-site investigations for OU-3 for the NCIA Sites incurred prior to the effective date of the Order. Respondent agrees to pay all such State Costs incurred prior to the effective date of the Order not itemized on the cost summary.

B. Within forty-five (45) Days after receipt of an itemized invoice from the Department, Respondent shall pay to the Department a sum of money which shall represent reimbursement for State Costs, other than those identified in Subparagraph VI.A, through and including the Termination Date and for response costs associated with preliminary site assessments in the NCIA and off-site investigations for OU-3 for the NCIA Sites incurred prior to the effective date of the Order.

C. Personal service costs shall be documented by reports of Direct Personal Service, which shall identify the employee name, title, biweekly salary, and time spent (in hours) on the project during the billing period, as identified by an assigned time and activity code. Approved agency fringe benefit and indirect cost rates shall be applied. Non-personal service costs shall be summarized by category of expense (*e.g.*, supplies, materials, travel, contractual) and shall be documented by expenditure reports. The Department shall not be required to provide any other documentation of costs, provided however, that the Department's records shall be available consistent with, and in accordance with, Article 6 of the Public Officers Law.

D. Such invoice shall be sent to Respondent at the following address:

299 Main St., LLC
299 Main Street
Westbury, New York 11590
Attention: Alexander Holuka

E. Each such payment shall be made payable to the Department of Environmental Conservation and shall be sent to:

Bureau of Program Management
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7010.

F. Each party shall provide written notification to the other within ninety (90) Days of any change in the foregoing addresses.

G. Respondent may contest, in writing, invoiced costs under Subparagraph VI.B, other than response costs associated with preliminary site assessments in the NCIA and off-site investigations for OU-3 for the NCIA Sites incurred prior to the effective date of this Order, if it believes that (i) the cost documentation contains clerical, mathematical, or accounting errors; (ii) the costs are not related to the State's activities with respect to the Remedial Program for the Site; or (iii) the Department is not otherwise legally entitled to such costs. If Respondent objects to an invoiced cost, Respondent shall pay all costs not objected to within the time frame set forth in Subparagraph VI.B and shall, within thirty (30) Days after its receipt of an invoice, identify, in writing, all costs objected to and the basis of the objection. This objection shall be filed with the BPM Director. The BPM Director or the BPM Director's designee shall have the authority to relieve Respondent of the obligation to pay invalid costs. Within forty-five (45) Days after the date of the Department's determination of the objection, Respondent shall either pay to the Department the amount which the BPM Director or the BPM Director's designee determines Respondent is obligated to pay or commence an action or proceeding seeking appropriate judicial relief.

H. If any negotiable instrument submitted to the Department pursuant to this Order is not honored when presented for payment, Respondent shall be in violation of this Order, provided that (i) the Department gives Respondent written notice of same, and (ii) the Department does not receive a certified check or bank check in the amount of the uncollected funds within fourteen (14) Days after the date of the Department's written notification.

VII. Reservation of Rights

A. Except as provided in Subparagraph II.G, nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's rights or authorities, including, but not limited to, the right to require performance of further

investigations and/or response action(s), to recover natural resource damages, and/or to exercise any summary abatement powers with respect to any person, including Respondent.

B. Except as otherwise provided in this Order, Respondent specifically reserves all rights and defenses under applicable law respecting any Departmental assertion of remedial liability and/or natural resource damages against Respondent, and further reserves all rights respecting the enforcement of this Order, including the rights to notice, to be heard, to appeal, and to any other due process. The existence of this Order or Respondent's compliance with it shall not be construed as an admission of liability, fault, wrongdoing, or breach of standard of care by Respondent, and shall not give rise to any presumption of law or finding of fact, or create any rights, or grant any cause of action, which shall inure to the benefit of any third party. Further, Respondent reserves such rights as it may have to seek and obtain contribution, indemnification, and/or any other form of recovery from its insurers and from other potentially responsible parties or their insurers for past or future response and/or cleanup costs or such other costs or damages arising from the contamination at the Site as may be provided by law, including but not limited to rights of contribution under section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

VIII. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all third-party claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors, and assigns except for liability arising from (i) vehicular accidents occurring during travel to or from the Site; or (ii) willful, wanton, or malicious acts or omissions, and acts or omissions constituting gross negligence or criminal behavior by the Department, the State of New York, and/or their representatives and employees during the course of any activities conducted pursuant to this Order. The Department shall provide Respondent with written notice no less than thirty (30) Days prior to commencing a lawsuit seeking indemnification pursuant to this Paragraph.

IX. Public Notice

A. Within thirty (30) Days after the effective date of this Order, Respondent shall cause to be filed a Department-approved Notice of Order, which Notice shall be substantially similar to the Notice of Order attached to this Order as Exhibit "D," with the recording officer of the county wherein the Site is to give all parties who may acquire any interest in the Site notice of this Order. Within sixty (60) Days of such filing, Respondent shall also provide the Department with a copy of such instrument certified by the recording officer to be a true and faithful copy.

B. If Respondent proposes to convey the whole or any part of Respondent's ownership interest in the Site, or becomes aware of such conveyance, Respondent shall, not fewer than forty-five (45) Days before the date of conveyance, or within forty-five (45) Days

after becoming aware of such conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed or actual date of the conveyance, and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order. However, such obligation shall not extend to a conveyance by means of a corporate reorganization or merger or the granting of any rights under any mortgage, deed, trust, assignment, judgment, lien, pledge, security agreement, lease, or any other right accruing to a person not affiliated with Respondent to secure the repayment of money or the performance of a duty or obligation.

X. Environmental Easement

A. 1. If a Department-approved Work Plan or the ROD for the Site, if any, relies upon one or more institutional and/or engineering controls, Respondent (or the owner of the Site) shall execute an environmental easement pursuant to ECL Article 71, Title 13 which shall be substantially similar to Exhibit "E." Respondent shall cause such instrument to be recorded with the recording officer of the county wherein the Site is located within thirty (30) Days of the Department's approval of such instrument. Respondent shall provide the Department with a copy of such instrument certified by the recording officer to be a true and faithful copy within sixty (60) Days after such recording.

2. Respondent or the owner of the Site may petition the Department to modify or extinguish the Environmental Easement filed pursuant to Subparagraph X.A.1 at such time as it can certify that the Site is protective of human health and the environment without reliance upon the restrictions set forth in such instrument. Such certification shall be made by a Professional Engineer or other expert approved by the Department. The Department will not unreasonably withhold its consent.

B. If the ROD provides for "no action" other than implementation of one or more institutional controls, Respondent shall cause an environmental easement to be recorded under the provisions of Subparagraph X.A.1. If Respondent does not cause such environmental easement to be recorded, Respondent cannot obtain a release and covenant not to sue pursuant to Subparagraph. II.G.

XI. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

1. Communication from Respondent shall be sent to:

Guy Bobersky, P.E
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7015

Note: four copies (one unbound) of work plans are required to be sent.

with copies to:

Gary Litwin
Bureau of Environmental Exposure Investigation
New York State Department of Health
Flanigan Square
547 River Street
Troy, New York 12180-2216

Joseph Jones
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7015

Alali M. Tamuno, Esq.
Division of Environmental Enforcement
New York State Department of Environmental Conservation
200 White Plains Road
Tarrytown, New York 10591

2. Communication to be made from the Department to Respondent shall be sent to:

299 Main St., LLC
299 Main Street
Westbury, New York 11590
Attention: Alexander Holuka

Lawrence P. Schnapf, Esq.
55 E.87th Street, #8B/8C
New York, New York 10128

Steven Sobstyl
CA Rich Consultants, Inc.
17 Dupont Street
Plainview, New York 11803

B. The Department and Respondent reserve the right to designate additional or different addressees for communication upon written notice to the other.

C. Each party shall notify the other within ninety (90) Days after any change in the addresses in this Paragraph XI or in Paragraph VI.

XII. Dispute Resolution

A. If Respondent disagrees with the Department's notice under (i) Subparagraph II.B requesting additional or supplemental Work Plans; (ii) Subparagraph II.C requesting modification of a Department-approved Work Plan; (iii) Subparagraph II.E disapproving a submittal, a proposed Work Plan, or a final report; (iv) Subparagraph II. G. finding that Respondent materially failed to comply with the Order; (v) Subparagraph IV.B rejecting Respondent's assertion of a Force Majeure Event; or (vi) Subparagraph XIV.H.2.iii requesting modification of a time frame, Respondent may, within thirty (30) Days of its receipt of such notice, make a written request for informal negotiations with the Department in an effort to resolve the dispute. A copy of such request shall be sent by Respondent to the appropriate Remedial Bureau Chief in the Department's Central Office. The Department and Respondent shall consult together in good faith and exercise best efforts to resolve any differences or disputes without resort to the procedures described in Subparagraph XII.B. The period for informal negotiations shall not exceed thirty (30) Days from the date of the Department's initial response to the Respondent's request for informal negotiations. If the parties cannot resolve a dispute by informal negotiations during this period, the Department's position shall be considered binding unless Respondent notifies the Department in writing within thirty (30) Days after the conclusion of the thirty (30) Day period for informal negotiations that it invokes the dispute resolution provisions provided under Subparagraph XII.B.

B. 1. Respondent shall file with the OH&M a request for formal dispute resolution and a written statement of the issues in dispute, the relevant facts upon which the dispute is based, factual data, analysis, or opinion supporting its position, and all supporting documentation upon which Respondent relies (hereinafter called the "Statement of Position"). A copy of such request and written statement shall be provided contemporaneously to the Director and to the parties listed under Subparagraph XI.A.1.

2. The Department shall serve its Statement of Position no later than twenty (20) Days after receipt of Respondent's Statement of Position.

3. Respondent shall have the burden of proving by substantial evidence that the Department's position does not have a rational basis and should not prevail. The OH&M can conduct meetings, in person or via telephone conferences, and request additional information from either party if such activities will facilitate a resolution of the issues.

4. The OH&M shall prepare and submit a report and recommendation to the Director. The Director shall issue a final decision in a timely manner. The final decision shall constitute a final agency action and Respondent shall have the right to seek judicial review of the decision pursuant to Article 78 of the CPLR provided that Respondent notifies the Department within thirty (30) Days after receipt of a copy of the final decision of its intent to commence an

Article 78 proceeding and commences such proceeding within sixty (60) Days after receipt of a copy of the Director's final decision. Respondent shall be in violation of this Order if it fails to comply with the final decision resolving this dispute within forty-five (45) Days after the date of such final decision, or such other time period as may be provided in the final decision, unless it seeks judicial review of such decision within the sixty (60) Day period provided. In the event that Respondent seeks judicial review, Respondent shall be in violation of this Order if it fails to comply with the final Court Order or any settlement within thirty (30) Days after the effective date of such Order or settlement, unless otherwise directed by the Court. For purposes of this Subparagraph, a Court Order or settlement shall not be final until the time to perfect an appeal of same has expired.

5. The invocation of dispute resolution shall not extend, postpone, or modify Respondent's obligations under this Order with respect to any item not in dispute unless or until the Department agrees or a Court orders otherwise. Except as otherwise provided in this Order, the invocation of the procedures set forth in this Paragraph XII shall constitute an election of remedies and such election shall constitute a waiver of any and all other administrative remedies which may otherwise be available to Respondent regarding the issue in dispute.

6. The Department shall keep an administrative record of any proceedings under this Paragraph XII that shall be available consistent with Article 6 of the Public Officers Law.

7. Nothing in this Paragraph XII shall be construed as an agreement by the parties to resolve disputes through administrative proceedings pursuant to the State Administrative Procedure Act, the ECL, or 6 NYCRR Part 622 or Part 375.

8. Nothing contained in this Order shall be construed to authorize Respondent to invoke dispute resolution with respect to the remedy selected by the Department in the ROD or any element of such remedy, nor to impair any right of Respondent to seek judicial review of the Department's selection of any remedy.

XIII. Termination of Order

A. This Order will terminate upon the earlier of the following events:

1. Respondent's election to terminate pursuant to Subparagraphs II.B.1.b, II.C or II.E.3 so long as such election is made prior to the Department's approval of the RD/RA Work Plan. In the event of termination in accordance with this Subparagraph XIII.A.1, this Order shall terminate effective the 5th Day after the Department's receipt of the written notification terminating this Order or the 5 th Day after the time for Respondent to make its election has expired, whichever is earlier, provided, however, that if there are one or more Work Plan(s) for which a final report has not been approved at the time of Respondent's notification of its election to terminate this Order pursuant to Subparagraphs II.B.1.b or II.E.3 or its failure to timely make such an election pursuant to Subparagraphs II.B.1.b or II.E.3, Respondent shall

promptly complete the activities required by such previously approved Work Plan(s)consistent with the schedules contained therein. Thereafter, this Order shall terminate effective the 5th Day after the Department's approval of the final report for all previously approved Work Plans; or

2. the Department's written determination that Respondent has completed all phases of the Remedial Program (including OM&M), in which event the termination shall be effective on the 5th Day after the date of the Department's approval of the final report relating to the final phase of the Remedial Program.

B. Notwithstanding the foregoing, the provisions contained in Paragraphs VI and VIII shall survive the termination of this Order and any violation of such surviving Paragraphs shall be a violation of this Order, the ECL, and 6 NYCRR Part 375, subjecting Respondent to penalties as provided under Paragraph IV so long as such obligations accrued on or prior to the Termination Date.

C. If the Order is terminated pursuant to Subparagraph XIII.A.1, neither this Order nor its termination shall affect any liability of Respondent for remediation of the Site and/or for payment of State Costs, including implementation of removal and remedial actions, interest, enforcement, and any and all other response costs as defined under CERCLA, nor shall it affect any defenses to such liability that may be asserted by Respondent. Respondent shall also ensure that it does not leave the Site in a condition, from the perspective of human health and environmental protection, worse than that which existed before any activities under this Order were commenced. Further, the Department's efforts in obtaining and overseeing compliance with this Order shall constitute "reasonable efforts" under law to obtain a voluntary commitment from Respondent for any further activities to be undertaken as part of a Remedial Program for the Site.

XIV. Miscellaneous

A. Respondent shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and third party data validators ("Respondent's Contractors") acceptable to the Department to perform its obligations under this Order If the Department has not previously approved Respondent's Contractors for the work required by this Order, Respondent shall submit the Contractors' qualifications to the Department a minimum of thirty (30) Days before the start of any activities for which each such Contractor will be responsible. The Department's approval of each such Contractor shall be obtained prior to the start of work by that Contractor. The responsibility for the performance of all Contractors retained by Respondent shall rest solely with Respondent. Subject to the requirements of this Subparagraph, Respondent retains the right to select or change firms or individuals in its sole discretion.

B. Respondent shall allow the Department to attend and shall notify the Department at least seven (7) Days in advance of any field activities as well as any pre-bid meetings, job progress meetings, the substantial completion meeting and inspection, and the final inspection and meeting; nothing in this Order shall be construed to require Respondent to allow the

Department to attend portions of meetings where privileged matters are discussed.

C. Respondent shall use "best efforts" to obtain all Site access, permits, easements, rights-of-way, rights-of-entry, approvals, institutional controls, or authorizations necessary to perform Respondent's obligations under this Order.

1. The Department may exempt Respondent from the requirement to obtain any state or local permit or other authorization for any activity on the Site needed to implement this Order that the Department determines is conducted in a manner which satisfies all substantive technical requirements applicable to like activity conducted pursuant to a permit.

2. If, despite Respondent's best efforts, any necessary Site access, easements, rights-of-way, rights-of-entry, approvals, institutional controls, or authorizations required to perform this Order are not obtained within forty-five (45) Days after the effective date of this Order, or within forty-five (45) Days after the date the Department notifies Respondent in writing that additional access beyond that previously secured is necessary, Respondent shall promptly notify the Department, and shall include in that notification a summary of the steps Respondent has taken to obtain access. The Department may, as it deems appropriate and within its authority, assist Respondent in obtaining access. If any interest in property is needed to implement an institutional control required by a Work Plan and such interest cannot be obtained, the Department may require Respondent to modify the Work Plan pursuant to Subparagraph II.C of this Order to reflect changes necessitated by the lack of access and/or approvals.

D. Respondent and Respondent's successors and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondent shall in no way alter Respondent's responsibilities under this Order.

E. Respondent shall provide a copy of this Order to each contractor hired to perform work required by this Order and shall condition all contracts entered into pursuant to this Order upon performance in conformity with the terms of this Order. Respondent or its contractor(s) shall provide written notice of this Order to all subcontractors hired to perform any portion of the work required by this Order. Respondent shall nonetheless be responsible for ensuring that Respondent's contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

F. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any provisions of this Order.

G. 1. The terms of this Order constitute the entire agreement between the Department and Respondent concerning implementation of the activities required by this Order. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department shall be construed as

relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order. In the event of a conflict between the terms of this Order and any Work Plan submitted pursuant to this Order, the terms of this Order shall control over the terms of the Work Plan(s) attached as Exhibit "B."

2. i. Except as set forth herein, if Respondent desires that any provision of this Order be changed, other than a provision of a Work Plan or a time frame, Respondent shall make timely written application to the Commissioner with copies to the parties listed in Subparagraph XI.A.1. The Commissioner or the Commissioner's designee shall timely respond.

ii. Changes to a Work Plan shall be accomplished as set forth in Subparagraph II.C of this Order.

iii. Changes to a time frame set forth in this Order shall be sought by a written request to the Department's project attorney and project manager, which request shall be timely responded to in writing. The Department's decision relative to the request for a time frame change shall be subject to dispute resolution pursuant to Paragraph XII.

H. 1. If multiple parties sign this Order, the term "Respondent" shall be read in the plural where required to give meaning to this Order. Further, the obligations of such Respondents under this Order are joint and several and the insolvency of or failure by any Respondent to implement any obligations under this Order shall not affect the obligations of the remaining Respondent(s).

2. If Respondent is a partnership, the obligations of all general partners, including limited partners who act as general partners, to finance and perform obligations under this Order and to pay amounts owed to the Department under this Order are joint and several. In the event of the insolvency of or the failure of any of the general partners to implement the requirements of this Order, the remaining general partners shall implement all such requirements.

3. Notwithstanding the foregoing Subparagraphs XIV.H. 1 and 2, if multiple parties sign this Order as Respondents but not all of the signing parties elect, pursuant to Subparagraph II.B, to implement a Work Plan, then all Respondents are jointly and severally liable for each and every obligation under this Order through the completion of the activities in such Work Plan that all such parties consented to; thereafter, only those Respondents electing to perform additional work shall be jointly and severally liable under this Order for the obligations and activities under such additional Work Plan(s). The parties electing not to implement the additional Work Plan(s) shall have no obligations under this Order relative to the activities set forth in such Work Plan(s). Only those Respondents electing to implement such additional Work Plan(s) shall be eligible to receive the release and covenant not to sue provided under Subparagraph II.G.

I. To the extent authorized under 42 U.S.C. Section 9613, New York General Obligations Law § 15-108, and any other applicable law, Respondent shall be deemed to have

resolved its liability to the State for purposes of contribution protection provided by CERCLA Section 113(f)(2) for "matters addressed" pursuant to and in accordance with this Order. "Matters addressed" in this Order shall mean all response actions taken by Respondent to implement this Order for the Site and all response costs incurred and to be incurred by any person or party in connection with the work performed under this Order, which costs have been paid by Respondent, including reimbursement of State Costs pursuant to this Order. In addition, Respondent shall be deemed to have resolved its liability to the State for purposes of contribution protection provided by CERCLA Section 113(f)(2) upon payment of response costs associated with preliminary site assessments in the NCIA and off-site investigations for OU-3 for the NCIA Sites incurred prior to the effective date of the Order and for response costs incurred after the effective date of this order associated with OU-3 for the NCIA Sites. Remediation associated with OU-3 for the NCIA Sites is not considered a "matter addressed" in this Order. Furthermore, under 42 U.S.C. Section 9613(f)(3)(B), by entering into this administrative settlement of liability, for some or all of the response action and/or for some or all of the costs of such action, Respondent is entitled to seek contribution under CERCLA from any person except those who are entitled to contribution protection under 42 U.S.C. Section 9613(f)(2).

J. Unless otherwise expressly provided herein, terms used in this Order which are defined in ECL Article 27, Title 13, ECL Article 71, Title 36, or in regulations promulgated under such statute shall have the meaning assigned to them under said statute or regulations. Whenever terms listed in the Glossary attached hereto are used in this Order or in the attached Exhibits, the definitions set forth in the Glossary shall apply. In the event of a conflict, the definition set forth in the Glossary shall control.

K. Respondent's obligations under this Order represent payment for or reimbursement of response costs, and shall not be deemed to constitute any type of fine or penalty.

L. This Order may be executed for the convenience of the parties hereto, individually or in combination, in one or more counterparts, each of which for all purposes shall be deemed to have the status of an executed original and all of which shall together constitute one and the same.

M. The effective date of this Order is the 10th Day after the date the Commissioner or the Commissioner's designee signs this Order.

DATED: JAN - 6 2006

DENISE M. SHEEHAN
Commissioner
New York State Department
of Environmental Conservation

By: _____
Dale A. Desnoyers
Director
Division of Environmental Remediation

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

299 Main St., LLC

By: _____

Title: Principle

Date: 12/23/05

STATE OF NEW YORK)
COUNTY OF Richmond) s.s.:

VALERY HESIN
Notary Public, State of New York
No. 01HE5033380
Qualified in Richmond County
Commission Expires Sept. 19, 200 6

On the 23 day of Dec, in the year 2005, before me, the undersigned, personally appeared Samuel Padilla, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Signature and Office of individual
taking acknowledgment

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

19 Liberty, LTD.

By: _____

Title: Principle

Date: 12/23/05

STATE OF NEW YORK)
) s.s.:
COUNTY OF Richmond

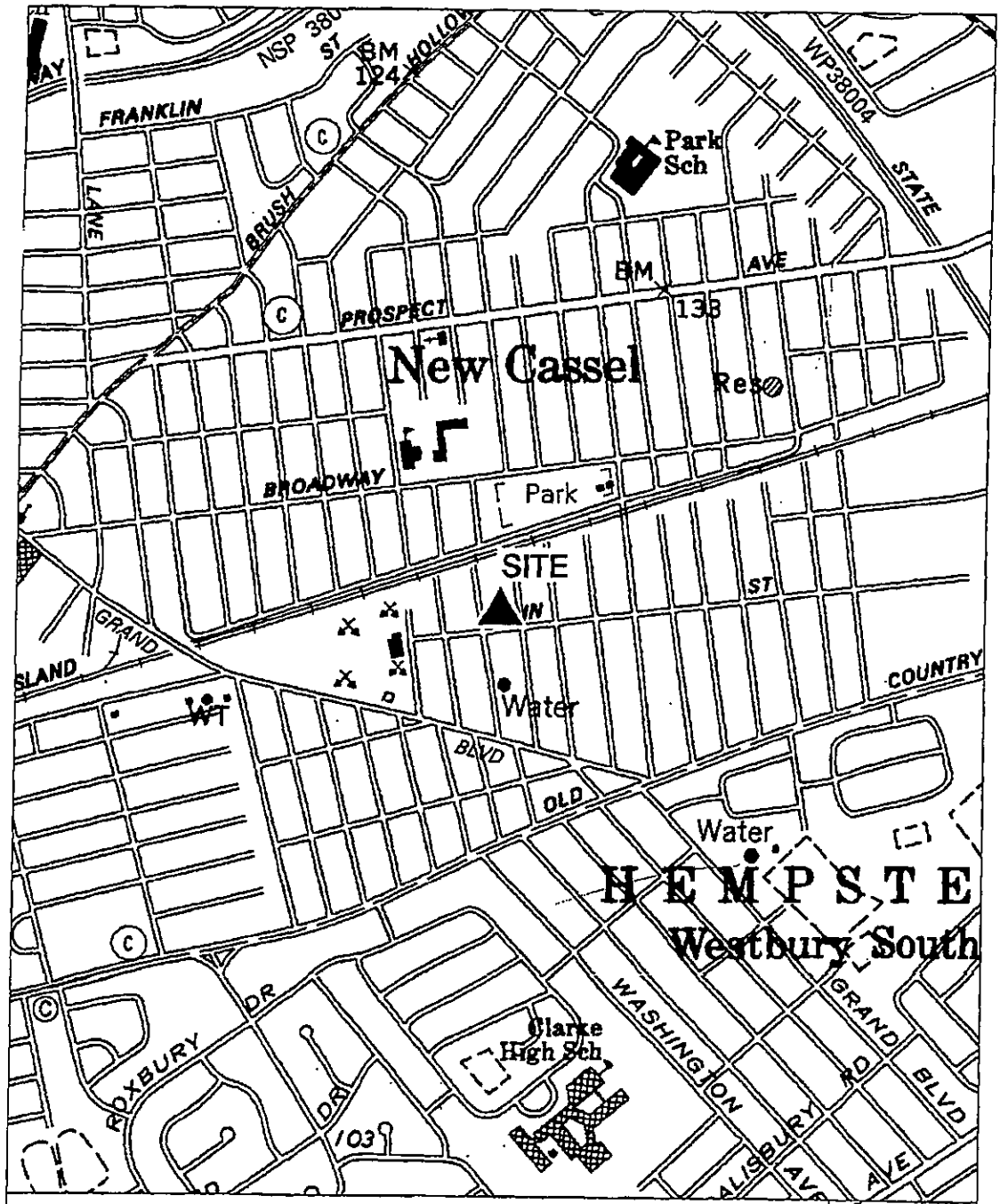
VALERY HESIN
Notary Public, State of New York
No. 01HE5033380
Qualified in Richmond County
Commission Expires Sept. 19, 2006

On the 23 day of Dec, in the year 2005, before me, the undersigned, personally appeared Samuel Padilla, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Signature and Office of individual taking acknowledgment

EXHIBIT "A"

Map of Site



Site Location Map

130043S 299 Main Street

Map Source: NYSDOT 1:24,000-scale planimetric quadrangles

N

0 250 500 750 1000 Feet

Scale: 1:12,000
April 1, 2002

County: Nassau

EXHIBIT "B"

Department-Approved Work Plan(s)

EXHIBIT "C"

Cost Summary

EXHIBIT I

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
BUREAU OF PROGRAM MANAGEMENT

COST SUMMARY - MULTI-SITE COSTS

SITE NAME:	299 MAIN STREET - NCIA MULTI SITE
SITE NO.:	1-30-043S
ORDER/AGREEMENT NO.:	N/A
BILL NO.:	N/A

COST CATEGORY	AMOUNTS	EXHIBIT NO.
PERSONAL SERVICES	*$48,499.77*	II
CONTRACTUAL	$56,268.46	III
LABS	$1,173.21	III
TRAVEL	$0.00	
OTHER NPS	$0.00	
DEC SUBTOTAL	*$105,941.44*	
DOH	$8,318.20	III
MINUS DOH CREDIT FROM PREVIOUS BILL (IF APPLICABLE)	$0.00	
MINUS PREVIOUSLY REIMBURSED AMOUNT (IF APPLICABLE)	$0.00	
TOTAL	*$114,259.64*	
COST CAP (IF APPLICABLE)	$0.00	
GRAND TOTAL	**$114,259.64**	

EXHIBIT II

09/15/2005

SUMMARY OF PERSONAL SERVICE COSTS FOR THE NEW CASSEL INDUSTRIAL AREA WESTERN PLUME SITES THROUGH MARCH 23, 2005

		PSA 1995	PSA 1996	PSA 1997	PSA 1998	OFFSITE	TOTAL
1-30-043A	IMC MAGNETICS	$6,707.77	$0.00	$0.00	$0.00	$40,433.89	$47,141.66
1-30-043B	ATLAS GRAPHICS	$6,707.77	$0.00	$0.00	$0.00	$40,433.89	$47,141.66
1-30-043P	118-130 SWALM AVE	$0.00	$2,320.51	$5,745.37	$0.00	$40,433.89	$48,499.77
1-30-043S	299 MAIN STREET	$0.00	$2,320.51	$5,745.37	$0.00	$40,433.89	$48,499.77
	TOTAL - 4 SITES	$13,415.55	$4,641.02	$11,490.75	$0.00	$161,735.56	$191,282.87

PLEASE NOTE - THE TOTAL COLUMN MAY BE OFF BY A FEW CENTS DUE TO THE ROUNDING FORMULA USED IN LOTUS.

EXHIBIT III

09/15/2005

SUMMARY OF NON-PERSONAL SERVICE COSTS FOR THE NEW CASSEL INDUSTRIAL AREA WESTERN PLUME SITES
CONTRACTUAL COSTS INCLUDE BOTH EXPENDITURES AND OBLIGATIONS THROUGH APRIL 29, 2005 *

		Multi-Site 1995 PSA	Multi-Site 1996 PSA	Multi-Site 1997 PSA	Multi-Site OFFSITE IIWA	Multi-Site GUARDWELLS	Multi-Site OFFSITE RIFS	Multi-Site OFFSITE RIFS	Multi-Site 1998 PSA	Multi-Site IRM	Multi-Site LABS	Multi-Site DOH	TOTAL
1-30-043A	IMC MAGNETICS	$17,381.63	$0.00	$0.00	$4,628.57	$0.00	$32,758.42	$0.00	$0.00	$0.00	$1,173.21	$8,318.20	$64,260.04
1-30-043B	ATLAS GRAPHICS	$17,381.63	$0.00	$0.00	$4,628.57	$0.00	$32,758.42	$0.00	$0.00	$0.00	$1,173.21	$8,318.20	$64,260.04
1-30-043P	118-130 SWALM AVE	$0.00	$7,643.01	$11,238.46	$4,628.57	$0.00	$32,758.42	$0.00	$0.00	$0.00	$1,173.21	$8,318.20	$65,759.88
1-30-043S	299 MAIN STREET	$0.00	$7,643.01	$11,238.46	$4,628.57	$0.00	$32,758.42	$0.00	$0.00	$0.00	$1,173.21	$8,318.20	$65,759.88
	TOTAL - 4 SITES	$34,763.26	$15,286.02	$22,476.92	$18,514.29	$0.00	$131,033.69	$0.00	$0.00	$0.00	$4,692.84	$33,272.80	$260,039.83

* PLEASE NOTE: NPS COSTS ARE INCLUDED THRU 4/29/05; DOH ARE INCLUDED THROUGH 3/31/05.

PLEASE NOTE - THE TOTAL COLUMN MAY BE OFF BY A FEW CENTS DUE TO THE ROUNDING FORMULA USED IN LOTUS.

EXHIBIT I

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
BUREAU OF PROGRAM MANAGEMENT

COST SUMMARY

SITE NAME: 299 Main Street
SITE NO.: 1-30-043S
ORDER/AGREEMENT NO.: W1-0843-98-06*
BILL NO.: N/A

COST CATEGORY	TOTAL AMOUNTS	COSTS PRIOR TO ORDER AMOUNTS	EXHIBIT NO.	BILLABLE COSTS UNDER ORDER* SINCE BILL NO. 2 THRU 3/23/05 AMOUNTS	EXHIBIT NO.
DIRECT PERSONAL SERVICES	$8,457.26	$7,420.28		$1,036.98	
FRINGE	$2,653.20	$2,217.78		$435.42	
INDIRECT	$3,285.28	$2,780.26		$505.02	
PERSONAL SERVICES SUBTOTAL	$14,395.74	*$12,418.32*	II-A	*$1,977.42*	II-B
CONTRACTUAL	$0.00	$0.00		$0.00	
LABS	$0.00	$0.00		$0.00	
TRAVEL	$0.00	$0.00		$0.00	
OTHER NPS	$0.00	$0.00		$0.00	
DEC SUBTOTAL	$14,395.74	*$12,418.32*		*$1,977.42*	
DOH	$432.45	$395.39	III-A	$37.06	III-B
MINUS DOH CREDIT FROM PREVIOUS BILL (IF APPLICABLE)	$0.00	$0.00		$0.00	
MINUS PREVIOUSLY REIMBURSED AMOUNT (IF APPLICABLE)	$0.00	$0.00		$0.00	
TOTAL	$14,828.19	*$12,813.71*		*$2,014.48*	
COST CAP (IF APPLICABLE)	$0.00	$0.00		$0.00	
GRAND TOTAL	**$14,828.19**	**$12,813.71**		**$2,014.48**	

New York State Department of Environmental Conservation
Bureau of Federal and Municipal Accounts
Time & Activity Detail Report

EXHIBIT II-A

T&A Period	T&A Code	Description	Item No.	Payroll Header (Cost Center)	Name	Title	Progm & Loc Code	Average Biweekly Salary	Time Hours	Amount (Including Leave)
**										
*Time & Activity Code :	B944									
05/28/1997	B944	130043S 299 MAIN ST	47826	430116 L2 97	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2310.60	2.00	72.07
06/25/1997	B944	130043S 299 MAIN ST	47170	430221 L2 97	TRAD, JEFFREY E	ENVIRNL ENGINEER 2	QD/00	2075.48	7.50	241.63
07/23/1997	B944	130043S 299 MAIN ST	47826	430116 L2 97	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2310.60	2.00	74.25
08/20/1997	B944	130043S 299 MAIN ST	47170	430221 L2 97	TRAD, JEFFREY E	ENVIRNL ENGINEER 2	QD/00	2075.48	1.50	49.85
09/17/1997	B944	130043S 299 MAIN ST	47170	430221 L2 97	TRAD, JEFFREY E	ENVIRNL ENGINEER 2	QD/00	2075.48	0.50	16.29
10/15/1997	B944	130043S 299 MAIN ST	47170	430221 L2 97	TRAD, JEFFREY E	ENVIRNL ENGINEER 2	QD/00	2111.80	3.00	101.11
12/10/1997	B944	130043S 299 MAIN ST	47170	430221 L2 97	TRAD, JEFFREY E	ENVIRNL ENGINEER 2	QD/00	2148.12	1.00	33.84
02/04/1998	B944	130043S 299 MAIN ST	47170	430221 L2 97	TRAD, JEFFREY E	ENVIRNL ENGINEER 2	QD/00	2148.12	3.00	99.41
04/29/1998	B944	130043S 299 MAIN ST	47170	430221 L2 98	TRAD, JEFFREY E	ENVIRNL ENGINEER 2	QD/00	2428.32	1.00	37.28
04/29/1998	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	732.30	1.50	23.17
05/27/1998	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	1013.95	6.00	95.57
06/24/1998	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	1070.29	3.50	59.38
06/24/1998	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2391.49	9.50	358.96
06/24/1998	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2391.49	12.50	472.31
07/22/1998	B944	130043S 299 MAIN ST	47143	430221 L2 98	VASUDEVAN, CHITTIBABU	ENVIRNL ENGINEER 3	QD/00	2616.37	6.00	250.86
07/22/1998	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	1126.63	6.75	121.71
07/22/1998	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2391.49	14.50	539.09
08/19/1998	B944	130043S 299 MAIN ST	47153	430221 L2 98	SWARTWOUT JR, JOHN B	ENVIRNL ENGINEER 3	QC/00	2616.37	1.00	42.30
08/19/1998	B944	130043S 299 MAIN ST	47143	430221 L2 98	VASUDEVAN, CHITTIBABU	ENVIRNL ENGINEER 3	QD/00	2616.37	1.50	63.03
08/19/1998	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	1126.63	11.50	203.32
08/19/1998	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2391.49	2.50	96.34
09/16/1998	B944	130043S 299 MAIN ST	47143	430221 L2 98	VASUDEVAN, CHITTIBABU	ENVIRNL ENGINEER 3	QD/00	2616.37	7.50	315.13
09/16/1998	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	1126.63	9.00	162.83

New York State Department of Environmental Conservation
Bureau of Federal and Municipal Accounts
Time & Activity Detail Report

T&A Period	T&A Code	Description	Item No.	Payroll Header (Cost Center)	Name	Title	Progm & Loc Code	Average Biweekly Salary	Time Hours	Amount (Including Leave)
**										
*Time & Activity Code :	B944									
09/16/1998	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2391.49	5.00	193.35
09/16/1998	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2391.49	7.00	270.69
10/14/1998	B944	130043S 299 MAIN ST	47143	430221 L2 98	VASUDEVAN, CHITTIBABU	ENVIRNL ENGINEER 3	QD/00	2662.15	5.00	212.39
10/14/1998	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QA/00	1146.35	13.75	251.93
10/14/1998	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2433.34	14.50	566.70
11/11/1998	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	1166.06	13.75	255.44
11/11/1998	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2475.18	3.50	139.59
12/09/1998	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	1166.06	1.50	27.20
12/09/1998	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2475.19	7.50	299.12
01/06/1999	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	1166.06	1.50	27.71
01/06/1999	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2475.19	0.50	19.49
02/03/1999	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	1166.06	0.50	9.02
02/03/1999	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2475.19	2.00	80.03
03/03/1999	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QD/00	1166.06	17.25	322.97
03/03/1999	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2475.19	2.50	89.85
03/31/1999	B944	130043S 299 MAIN ST	47143	430221 L2 98	VASUDEVAN, CHITTIBABU	ENVIRNL ENGINEER 3	QD/00	2707.93	1.00	42.93
03/31/1999	B944	130043S 299 MAIN ST	47198	430221 L2 98	RUEPP, ANNA C	ENVIRNL ENGINEER	QA/00	1166.06	21.50	398.78
03/31/1999	B944	130043S 299 MAIN ST	47826	430116 L2 98	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2475.19	15.50	616.12
04/28/1999	B944	130043S 299 MAIN ST	47143	430221 L2 99	VASUDEVAN, CHITTIBABU	ENVIRNL ENGINEER 3	QD/00	3325.52	0.50	25.66
04/28/1999	B944	130043S 299 MAIN ST	47198	430221 L2 99	RUEPP, ANNA C	ENVIRNL ENGINEER 1	QD/00	1417.27	1.00	22.09
04/28/1999	B944	130043S 299 MAIN ST	47826	430116 L2 99	HUSSEY, JEANNA E	SENR ATTORNEY	CC/00	2468.41	0.50	19.49
* Subsubtotal *									250.50	7420.28
** Subtotal **									250.50	7420.28

*** Total ***

*** Total ***	250.50	7420.28
Calculated Fringe Benefits Costs		2,217.78
Calculated Indirect Overhead Costs		2,780.26
Total T&A Costs plus Fringe and Indirect		12,418.32

EXHIBIT III-A

Ne York State Department of I ..ith

Cost Recovery

299 Main Street

(130043S)

Fiscal Year 90/91	Personal Services	$0.00
	Fringe @ 28.96%	$0.00
	Indirect*	$0.00
Fiscal Year 91/92	Personal Services	$0.00
	Fringe @ 24.44%	$0.00
	Indirect*	$0.00
Fiscal Year 92/93	Personal Services	$0.00
	Fringe @ 28.61%	$0.00
	Indirect*	$0.00
Fiscal Year 93/94	Personal Services	$0.00
	Fringe @ 30.5%	$0.00
	Indirect*	$0.00
Fiscal Year 94/95	Personal Services	$0.00
	Fringe @ 30.72%	$0.00
	Indirect*	$0.00
Fiscal Year 95/96	Personal Services	$0.00
	Fringe @ 31.27%	$0.00
	Indirect*	$0.00
Fiscal Year 96/97	Personal Services	$0.00
	Fringe @ 34%	$0.00
	Indirect*	$0.00
Fiscal Year 97/98	Personal Services	$229.53
	Fringe @ 32.65%	$74.94
	Indirect*	$72.77
Fiscal Year 98/99	Personal Services	$11.22
	Fringe @ 29.6%	$3.32
	Indirect*	$3.61
Fiscal Year 99/00	Personal Services	$31.19
	Fringe @ 30.17%	$9.41
	Indirect*	$11.04
Fiscal Year 00/01	Personal Services	$0.00
	Fringe @ 30.16%	$0.00
	Indirect*	$0.00
Fiscal Year 01/02	Personal Services	$74.36
	Fringe @ 31.86%	$23.69
	Indirect*	$20.45
Fiscal Year 02/03 (April - Sept. 2002)	Personal Services	$412.00
	Fringe @ 33.96%	$139.92
	Indirect*	$103.52
Travel Costs		$0.00
Laboratory costs:		$0.00
	Total:	$1,220.97

B 2-15

TH Purchase and Travel Expenditur eport
Si Cost Recovery Report Ordered by ! End Date
(130043S) 299 MAIN STREET
For the period April 1, 1990 thru September 30, 2002

Fiscal Year	Pay End Date	Hours	Amount	Employee
1997	04/30/1997	1.50	$90.11	Bates, Steven M
1997	04/30/1997	4.50	$101.16	Nealon, Jacquelyn
1997	11/26/1997	1.00	$21.43	Nealon, Jacquelyn
1997	02/18/1998	.75	$16.83	Nealon, Jacquelyn
Total Cost			$229.53	
1998	10/28/1998	.50	$11.22	Wilkinson, Linda M
Total Cost			$11.22	
1999	02/16/2000	1.00	$31.19	Laccetti, Geoffrey J
Total Cost			$31.19	
2001	12/19/2001	2.00	$74.36	Fedigan, Richard J
Total Cost			$74.36	
2002	05/22/2002	1.50	$81.48	Bates, Steven M
2002	05/22/2002	4.00	$149.92	Fedigan, Richard J
2002	05/22/2002	5.25	$180.60	Nealon, Jacquelyn
Total Cost			$412.00	
Total For All Years			$758.30	

New York State Department of Environmental Conservation
Bureau of Federal and Municipal Accounts
Time & Activity Detail Report

EXHIBIT II-B

T&A Period	T&A Code	Description	Item No.	Payroll Header (Cost Center)	Name	Title	Progm & Loc Code	Average Biweekly Salary	Time Hours	Amount (Including Leave)
**										
*Time & Activity Code :	B944									
12/29/2004	B944	130043S 299 MAIN ST	47826	430116 L6 04	TAMUNO, ALALI	SENR ATTORNEY	CC/00	2744.37	1.25	54.68
01/26/2005	B944	130043S 299 MAIN ST	47826	430116 L6 04	TAMUNO, ALALI	SENR ATTORNEY	CC/00	2744.37	1.25	53.27
02/23/2005	B944	130043S 299 MAIN ST	47066	430221 L6 04	JONES, JOSEPH	ENGRG GEOLOGIST 2	QD/00	2702.07	6.00	261.00
03/23/2005	B944	130043S 299 MAIN ST	47043	430221 L6 04	BOBERSKY, GUY	ENVIRNL ENGINEER 3	QD/00	3109.83	0.75	37.23
03/23/2005	B944	130043S 299 MAIN ST	47066	430221 L6 04	JONES, JOSEPH	ENGRG GEOLOGIST 2	QD/00	2702.07	12.00	521.99
03/23/2005	B944	130043S 299 MAIN ST	47826	430116 L6 04	TAMUNO, ALALI	SENR ATTORNEY	CC/00	2744.37	2.50	108.81
* Subsubtotal *									23.75	1036.98
** Subtotal **									23.75	1036.98
*** Total ***						*** Total ***			23.75	1036.98

Calculated Fringe Benefits Costs	435.42
Calculated Indirect Overhead Costs	505.02
Total T&A Costs plus Fringe and Indirect	1,977.42

EXHIBIT III-B

New York State Department of Health
Cost Recovery
299 Main Street
(130043S)

Fiscal Year 04/05	Personal Services	$21.92
	Fringe @ 41.99%	$9.20
	Indirect*	$5.94
Travel Costs		$0.00
	Total:	**$37.06**

September 14, 2005
8:53 AM

New York State Department of Health
CEH Leave and Accrual Tracking Report
Site Cost Recovery Report Ordered by Pay End Date
(130043S) 299 MAIN STREET
For the period January 1, 2005 thru March 31, 2005

Fiscal Year	Pay End Date	Hours	Amount	Employee
2004	01/26/2005	.50	$21.92	Arnold, Michael H
Total Hours and Cost		0.50	$21.92	
Total For Entire Period		0.50	$21.92	

New York State Department of Health
Bi-weekly Salary Report
(130043S) 299 Main Street
For the period January 1, 2005 thru March 31, 2005

1/26/2005	$2,846.51	Arnold	Michael	H	HPA 2

09/15/2005

EXHIBIT II

SUMMARY OF PERSONAL SERVICE COSTS FOR THE NEW CASSEL INDUSTRIAL AREA WESTERN PLUME SITES THROUGH MARCH 23, 2005

		PSA 1995	PSA 1996	PSA 1997	PSA 1998	OFFSITE	TOTAL
1-30-043A	IMC MAGNETICS	$6,707.77	$0.00	$0.00	$0.00	$40,433.89	$47,141.66
1-30-043B	ATLAS GRAPHICS	$6,707.77	$0.00	$0.00	$0.00	$40,433.89	$47,141.66
1-30-043P	118-130 SWALM AVE	$0.00	$2,320.51	$5,745.37	$0.00	$40,433.89	$48,499.77
1-30-043S	299 MAIN STREET	$0.00	$2,320.51	$5,745.37	$0.00	$40,433.89	$48,499.77
	TOTAL - 4 SITES	$13,415.55	$4,641.02	$11,490.75	$0.00	$161,735.56	$191,282.87

PLEASE NOTE - THE TOTAL COLUMN MAY BE OFF BY A FEW CENTS DUE TO THE ROUNDING FORMULA USED IN LOTUS.

EXHIBIT III

09/15/2005

SUMMARY OF NON-PERSONAL SERVICE COSTS FOR THE NEW CASSEL INDUSTRIAL AREA WESTERN PLUME SITES
CONTRACTUAL COSTS INCLUDE BOTH EXPENDITURES AND OBLIGATIONS THROUGH APRIL 29, 2005 *

		Multi-Site 1995 PSA	Multi-Site 1996 PSA	Multi-Site 1997 PSA	Multi-Site OFFSITE IIWA	Multi-Site GUARDWELLS	Multi-Site OFFSITE RIFS	Multi-Site OFFSITE RIFS	Multi-Site 1998 PSA	Multi-Site IRM	Multi-Site LABS	Multi-Site DOH	TOTAL
1-30-043A	IMC MAGNETICS	$17,381.63	$0.00	$0.00	$4,628.57	$0.00	$32,758.42	$0.00	$0.00	$0.00	$1,173.21	$8,318.20	$64,260.04
1-30-043B	ATLAS GRAPHICS	$17,381.63	$0.00	$0.00	$4,628.57	$0.00	$32,758.42	$0.00	$0.00	$0.00	$1,173.21	$8,318.20	$64,260.04
1-30-043P	118-130 SWALM AVE	$0.00	$7,643.01	$11,238.46	$4,628.57	$0.00	$32,758.42	$0.00	$0.00	$0.00	$1,173.21	$8,318.20	$65,759.88
1-30-043S	299 MAIN STREET	$0.00	$7,643.01	$11,238.46	$4,628.57	$0.00	$32,758.42	$0.00	$0.00	$0.00	$1,173.21	$8,318.20	$65,759.88
	TOTAL - 4 SITES	$34,763.26	$15,286.02	$22,476.92	$18,514.29	$0.00	$131,033.69	$0.00	$0.00	$0.00	$4,692.84	$33,272.80	$260,039.83

* PLEASE NOTE: NPS COSTS ARE INCLUDED THRU 4/29/05; DOH ARE INCLUDED THROUGH 3/31/05.

PLEASE NOTE - THE TOTAL COLUMN MAY BE OFF BY A FEW CENTS DUE TO THE ROUNDING FORMULA USED IN LOTUS.

EXHIBIT "D"

NOTICE OF ORDER

299 Main St., LLC and 19 Liberty LTD. (The "Respondent") is subject to an Order On Consent (Index # W1-1072-05-07) (the "Order") issued by the Commissioner of the New York State Department of Environmental Conservation (the "Department"under Article 27, Title 13, and Article 71, Title 27 of the Environmental Conservation Law of the State of New York ("ECL") for a site located at 299 Main Street, NCIA, Town of North Hempstead, Nassau County, New York (the "Site").

The Site has been designated by the Department as an inactive hazardous waste disposal site, as that term is defined at ECL Section 27-1301.2, and has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site # 130043S. The Department has classified the Site as a Class "2" site pursuant to ECL Section 27-1305.4.b. This classification means that the Department has determined that the Site presents a significant threat to the public health or environment. The Site is more particularly described in the legal description that is attached hereto as Schedule "A."

The purpose of the Order is to provide for the development and implementation of an inactive hazardous waste disposal site remedial program for the Site. The effective date of the Order was _____. A copy of the Order, as well as any and all Department-approved Work Plans under this Order can be reviewed at the Department's Central office located at 625 Broadway, Albany, New York by contacting Joseph Jones.

This Notice of Order is being filed with the Nassau County recording officer in accordance with Paragraph IX of the Order to give all parties who may acquire any interest in the Site notice of this Order.

WHEREFORE, the undersigned has signed this Notice of Order in compliance with the terms of the Order.

_____
Respondent

By:_____

Title:_____

Date:_____

STATE OF NEW YORK

) ss.:

COUNTY OF_____

On the _____ day of _____ in the year _____ before me, the undersigned, a notary public in and for said State, personally appeared _____ _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individuals) or the person upon behalf of which the individual(s) acted, executed this instrument.

_____
Notary Public

Appendix "A"

(to Exhibit "D")

Map of the Property

EXHIBIT "E"

ENVIRONMENTAL EASEMENT

ENVIRONMENTAL EASEMENT

THIS INDENTURE made this ____day of _____, 200__, between _ *Owner(s)*_____ residing at (or having an office at) _____ (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("brownfield sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of environmental easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and of ensuring the potential restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that environmental easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a brownfield site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and;

WHEREAS, Grantor, is the owner of real property located in the City/Town/Village of _____, _____County, New York known and designated on the tax map of the _____ of _____ as tax map parcel number_____, section ___block ___ lot____ , being the same as that property conveyed to Grantor by deed on _____, and recorded in the Land Records of the _____ County Clerk at page ____, liber _____ of Deeds, comprised of approximately ____ acres, and hereinafter more fully described in Schedule A attached hereto and made a part hereof (the " Controlled Property"); and;

Attach an adequate legal description of the property subject to the easement, or reference a recorded map. If the easement is on only a part of a parcel of land which is not subdivided into encumbered and unencumbered portions, a legal description needs to be created by a survey bearing the seal and signature of a licensed land surveyor with reference to a metes and bounds description.

WHEREAS, the Commissioner does hereby acknowledge that the Department accepts this Environmental Easement in order to ensure the protection of human health and the environment and to achieve the requirements for remediation established at this Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36;and

NOW THEREFORE, in consideration of the covenants and mutual promises contained herein and the terms and conditions of **Brownfield Cleanup Agreement Number**_____ /State **Assistance Contract Number**_____ **/Order on Consent Number**_____, Grantor grants, conveys and releases to Grantee a permanent Environmental Easement pursuant to Article 71, Title 36 of the ECL in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the potential restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The following controls apply to the use of the Controlled Property, run with the land are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees, and any person using the Controlled Property:

A. The Controlled Property may be used for

residential
commercial
industrial
use as long as the following long-term engineering controls are employed:

B. The Controlled Property may not be used for a higher level of use such as **unrestricted/ residential / commercial** use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an environmental easement held by the New York State Department of

Environmental Conservation pursuant of Title 36 to Article 71 of the Environmental Conservation Law.

D. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

E. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Controlled Property, including:

1. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

2. The right to give, sell, assign, or otherwise transfer the underlying fee interest to the Controlled Property by operation of law, by deed, or by indenture, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This environmental easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this environmental easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person intentionally violates this environmental easement, the Grantee may revoke the Certificate of Completion provided under ECL Article 27, Title 14, or the

Satisfactory Completion of Project provided under ECL Article 56, Title 5 with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach. Grantor shall then have a reasonable amount of time from receipt of such notice to cure. At the expiration of said second period, Grantee may commence any proceedings and take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement in accordance with applicable law to require compliance with the terms of this Environmental Easement.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar its enforcement rights in the event of a subsequent breach of or noncompliance with any of the terms of this Environmental easement.

6. Notice. Whenever notice to the State (other than the annual certification) or approval from the State is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing its County tax map number or the Liber and Page or computerized system tracking identification number and address correspondence to:

Division of Environmental Enforcement
Office of General Counsel
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-5500

Such correspondence shall be delivered by hand, or by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. This environmental easement may be amended only by an amendment executed by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This environmental easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Grantor's Name

By:_____

Title:_____

Date:_____

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the _____ day of _____, in the year 200_, before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

D

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation

By: _____
Denise M. Sheehan, Commissioner

Grantee's Acknowledgment

R

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the _____ day of _____, in the year 200_, before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

F

T

EXHIBIT "F"

RECORDS SEARCH REPORT

1. Detail all environmental data and information within Respondent's or Respondent's agents' or consultants' possession or control regarding environmental conditions at or emanating from the Site.

2. A comprehensive list of all existing relevant reports with titles, authors, and subject matter, as well as a description of the results of all previous investigations of the Site and of areas immediately surrounding the Site which are or might be affected by contamination at the Site, including all available topographic and property surveys, engineering studies, and aerial photographs.

3. A concise summary of information held by Respondent and Respondent's attorneys and consultants with respect to:

(i) a history and description of the Site, including the nature of operations;

(ii) the types, quantities, physical state, locations, methods, and dates of disposal or release of hazardous waste at or emanating from the Site;

(iii) a description of current Site security (i.e. fencing, posting, etc.); and

(iv) the names and addresses of all persons responsible for disposal of hazardous waste, including the dates of such disposal and any proof linking each such person responsible with the hazardous wastes identified.

EXHIBIT "G"

SC WORK PLAN REQUIREMENTS

The SC Work Plan shall include but not be limited to:

1. A chronological description of the anticipated SC activities together with a schedule for the performance of these activities.

2. A Sampling and Analysis Plan that shall include:

(i) A quality assurance project plan that describes the quality assurance and quality control protocols necessary to achieve the initial data quality objectives. This plan shall designate a data validation expert and must describe such individual's qualifications and experience;

(ii) A field sampling plan that defines sampling and data gathering methods in a manner consistent with the "Field Methods Compendium," OSWER Directive 9285.2-11 (draft June 1993), as supplemented by the Department; and

(iii) A health and safety plan to protect persons at and in the vicinity of the Site during the performance of the SC which shall be prepared in accordance with 29 CFR 1910 and all other applicable standards by a certified health and safety professional. Respondent shall add supplemental items to this plan necessary to ensure the health and safety of all persons at or in the vicinity of the Site during the performance of any work pursuant to this Order.

3. The Work Plan shall incorporate all elements of an SC as set forth in Department technical and administrative guidance documents including, but not limited to, investigations of surface and subsurface soils, surface waters, ground water, and air.

4. The SC must be sufficiently comprehensive to allow the Department to determine whether a consequential amount of hazardous waste has been disposed at the Site and, if so, whether the contamination presents a significant threat to public health and/or the environment.

EXHIBIT "H"

RI/FS WORK PLAN REQUIREMENTS

The Investigation Work Plan shall include but not be limited to:

1. A chronological description of the anticipated RI/FS activities together with a schedule for the performance of these activities.

2. A Sampling and Analysis Plan that shall include:

(i) A quality assurance project plan that describes the quality assurance and quality control protocols necessary to achieve the initial data quality objectives. This plan shall designate a data validation expert and must describe such individual's qualifications and experience;

(ii) A field sampling plan that defines sampling and data gathering methods in a manner consistent with the "Field Methods Compendium," OSWER Directive 9285.2-11 (draft June 1993), as supplemented by the Department;

(iii) A health and safety plan to protect persons at and in the vicinity of the Site during the performance of the RI/FS which shall be prepared in accordance with 29 CFR 1910 and all other applicable standards by a certified health and safety professional. Respondent shall add supplemental items to this plan necessary to ensure the health and safety of all persons at or in the vicinity of the Site during the performance of any work pursuant to this Order; and

(iv) A citizen participation plan that is, at a minimum, consistent with the Department's publication "Citizen Participation in New York's Hazardous Waste Site Remediation Program: A Guidebook," dated June 1998, any subsequent revisions thereto, and 6 NYCRR Part 375.

3. The Work Plan shall incorporate all elements of an RI/FS as set forth in CERCLA, as amended, the NCP, the USEPA guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," dated October 1988, and any subsequent revisions thereto in effect at the time the RI/FS Work Plan is submitted, and appropriate USEPA and Department technical and administrative guidance documents.

4. The Work Plan shall provide for an FS evaluating on-Site and off-Site remedial actions to restore the Site to pre-disposal conditions, to the extent feasible and authorized by law. At a minimum, alternatives shall evaluate the elimination or mitigation of all significant threats to the public health and to the environment presented by hazardous waste disposed at the Site through the proper application of scientific and engineering principals.

EXHIBIT "I"

IRM WORK PLAN REQUIREMENTS

The IRM Work Plan shall include, at a minimum, the following:

1. a summary of the data supporting the extent of the proposed IRM;

2. a chronological description of the anticipated IRM activities;

3. a schedule for performance of the IRM activities;

4. detailed documents and/or specifications prepared, signed, and sealed by a Professional Engineer providing sufficient detail to implement the Department-approved IRM, including, as appropriate, a description of soil and sediment erosion control, storm water management and monitoring, and dust, odor, and organic vapor control and monitoring procedures to be implemented during remedial activities, and a detailed description of confirmation sampling and site restoration plans;

5. a health and safety plan, including a community air monitoring plan;

6. a contingency plan, including a description of procedures for dismantling and removing remedial structures and equipment from the Site, if applicable;

7. a citizen participation plan, if required, that incorporates appropriate activities outlined in the Department's publication "Citizen Participation in New York's Hazardous Waste Site Remediation Program: A Guidebook," dated June 1998, any subsequent revisions thereto, and 6 NYCRR Part 375;

8. an OM&M Plan, if the performance of the Department-approved IRM results in a treatment system which is expected to operate for greater than 18 months. If the system will not operate for greater than 18 months, or if only monitoring is required, only a monitoring plan will be needed; and

9. a description of institutional controls to be implemented as well as written approval from the owner of the affected property if the remedy selected requires implementation of an institutional control at an off-Site location or if the person responsible for the remedy is not the Site owner.

EXHIBIT "J"

REMEDIATION WORK PLAN REQUIREMENTS

The Remediation ("RD/RA") Work Plan shall include the following:

1. A detailed description of the remedial objectives and the means by which each element of the selected remedial alternative will be implemented to achieve those objectives, including, but not limited to:

(i) the construction and operation of any structures;

(ii) the collection, destruction, treatment, and/or disposal of hazardous wastes and substances and their constituents and degradation products, and of any soil or other materials contaminated thereby;

(iii) the collection, destruction, treatment, and/or disposal of contaminated groundwater, leachate, and air;

(iv) physical security and posting of the Site;

(v) quality control and quality assurance procedures and protocols to be applied during implementation of the Remedial Construction; and

(vi) monitoring which integrates needs which are present on-Site and off-Site during implementation of the Department-selected remedial alternative.

2. A schedule for submission of "Biddable Quality" documents for the Remedial Design including, but not limited to, documents and specifications prepared, signed, and sealed by a Professional Engineer. These plans shall satisfy all applicable local, state, and federal laws, rules, and regulations;

3. A time schedule to implement the Remedial Design;

4. The parameters, conditions, procedures, and protocols to determine the effectiveness of the Remedial Design, including a schedule for periodic sampling of all media of concern, including groundwater monitoring wells on-Site and off-Site;

5. A description of operation, maintenance, and monitoring activities to be undertaken after the Department has approved construction of the Remedial Design, including the number of years during which such activities will be performed (where appropriate) and a specific description of the criteria to be used to decide when operation of such activities may be discontinued.

6. A contingency plan to be implemented if any element of the Remedial Design fails to achieve any of its objectives or otherwise fails to protect human health or the environment;

7. A health and safety plan for the protection of persons at and in the vicinity of the Site during and after construction. This plan shall be prepared in accordance with 29 CFR 1910 by a certified health and safety professional; and

8. A citizen participation plan which incorporates appropriate activities outlined in the Department's publication "Citizen Participation in New York's Hazardous Waste Site Remediation Program: A Guidebook," dated June 1998, any subsequent revisions thereto, and 6 NYCRR Part 375.

EXHIBIT "K"

OM&M WORK PLAN REQUIREMENTS

The OM&M Work Plan shall provide for:

1. Operation and maintenance of engineering controls and/or treatment systems;

2. Maintenance of institutional controls, where applicable;

3. Yearly certification by a Professional Engineer of the continued effectiveness of any institutional and/or engineering controls, where applicable. The certification must identify the required controls and evaluate whether the controls should remain in place and effective for the protection of public health and/or the environment;

4. A monitoring plan which describes the measures for monitoring the performance and effectiveness of the remedy at the Site;

5. A contingency plan which describes procedures which may be required to protect and/or maintain the operation of the remedy in the event of an emergency, such as a fire, spill, tank or drum overflow or rupture, severe weather, or vandalism;

6. A health and safety plan and a list of records and references;

7. Monitoring and reporting of the performance and effectiveness of the remedy, both short and long-term, by:

   (i) Assessing compliance with actual or equivalent discharge permit limits;

   (ii) Assessing achievement of the remedial performance criteria; and,

   (iii) Sampling and analysis of appropriate media.

8. A determination that the remedy is complete by demonstrating that the remedial action objectives have been achieved.

EXHIBIT "L"

RECORD OF DECISION

Glossary of Terms

The following terms shall have the following meanings:

"BPM Director": the Director of the Bureau of Program Management within the Division of Environmental Remediation.

"CERCLA": the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. 9601 et seq.

"Day": a calendar day. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday or State holiday, the period shall run until the close of business of the next working day.

"Department": the New York State Department of Environmental Conservation.

"Director": the Division Director, Division of Environmental Remediation.

"ECL": the Environmental Conservation Law, Chapter 43-B of the Consolidated Laws of New York, as amended.

"Feasibility study": a study undertaken to develop and evaluate options for remedial action. The feasibility study emphasizes data analysis and is generally performed concurrently and in an interactive fashion with the remedial investigation, using data gathered during the remedial investigation. The term also refers to a report that describes the results of the study. (See 6 NYCRR Part 375)

"Force Majeure Event": an event which is brought on as a result of fire, lightning, earthquake, flood, adverse weather conditions, strike, shortages of labor and materials, war, riot, obstruction or interference by adjoining landowners, or any other fact or circumstance beyond Respondent's reasonable control.

"Inactive Hazardous Waste Disposal Site Remedial Program" or "Remedial Program": activities undertaken to eliminate, remove, abate, control, or monitor existing health hazards, existing environmental hazards, potential health hazards, and/or potential environmental hazards in connection with the Site and all activities to manage wastes and contaminated materials at or removed from the Site. (See ECL 27-1301(3) and 6 NYCRR Part 375)

"Interim Remedial Measure" or "IRM": a discrete set of activities, including removal activities, to address both emergency and non-emergency Site conditions, which can be undertaken without extensive investigation or evaluation, to prevent, mitigate, or remedy environmental damage or the consequences of environmental damage attributable to the Site. (See 6 NYCRR Part 375)

"National Contingency Plan" or "NCP": the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. 9605, and codified at 40 C.F.R. Part 300, and any amendments thereto.

"NL": the Navigation Law, Chapter 37 of the Consolidated Laws of New York, as amended.

"OH&M": the Office of Hearings and Mediation Services.

"OM&M": post-construction operation, maintenance, and monitoring; the last phase of a remedial program, which continues until the remedial action objectives for the Site are met.

"Order": this Order and all exhibits attached hereto.

"Professional Engineer": an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law. If such individual is a member of a firm, that firm must be authorized to offer professional engineering services in the State of New York in accordance with Article 145 of the New York State Education Law.

"Record of Decision" or "ROD": the document reflecting the Department's selection of a remedy relative to the Site or any Operable Unit thereof. The ROD shall be attached to and made enforceable under this Order as Exhibit "L."

"Remedial Action": those activities, except for OM&M, to be undertaken under this Order to implement the ROD.

"Remedial Investigation" or "RI": a process undertaken to determine the nature and extent of contamination. The remedial investigation emphasizes data collection and site characterization and generally is performed concurrently with the feasibility study. It includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for and the proposed extent of the program and to support the evaluation of proposed alternatives. (See 6 NYCRR Part 375)

"Site Characterization"or "SC": a process undertaken to allow the Department to determine whether a consequential amount of hazardous waste has been disposed at a Site and, if so, whether the contamination presents a significant threat to public health and/or the environment.

"Spill Fund": the New York State Environmental Protection and Spill Compensation Fund as established by Article 12, Part Three of the NL.

"State Costs": all the State's response expenses related to this Site, including, but not limited to, direct labor, fringe benefits, indirect costs, travel, analytical costs, and contractor costs incurred by the State of New York for negotiating, implementing, overseeing, administering, or enforcing this Order, and any other response costs as defined under CERCLA. Approved agency fringe benefit and indirect cost rates will be applied.

"Termination Date": the date that this Order is terminated pursuant to Paragraph XIII.

"USEPA": the United States Environmental Protection Agency.

Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

299 Main Street
Operable Unit No. 1
Town of North Hempstead, Nassau County
New York
Site No. 1-30-043S

February 2008

New York State Department of Environmental Conservation
ELIOT SPITZER, *Governor* ALEXANDER B. GRANNIS, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

299 Main Street Inactive Hazardous Waste Disposal Site
Operable Unit No. 1
Town of North Hempstead, Nassau County, New York
Site No. 1-30-043S

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for Operable Unit 1 of the 299 Main Street site, a Class 2 inactive hazardous waste disposal site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Unit 1 of the 299 Main Street inactive hazardous waste disposal site, and the public's input to the Proposed Remedial Action Plan (PRAP) presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site have been addressed by implementing the interim remedial measures identified in this ROD. The removal of contaminated soil from the site has significantly reduced the threat to public health and the environment. Therefore, a groundwater monitoring program will be implemented to monitor the effectiveness of previous remedial actions in preventing further contamination of the groundwater.

Description of Selected Remedy

Based on the results of the Remedial Investigation and Feasibility Study (RI/FS) and the implementation of the on-site IRMs for the 299 Main Street site, and the criteria identified for evaluation of alternatives, the Department has selected No Further Action with continued operation of the Soil Vapor Extraction (SVE) system and institutional controls restricting the usage of groundwater at the site. The components of the remedy are as follows:

1. Cleanout of two abandoned service pits within the site building with excavation and disposal of contaminated materials.

2. Removal of underground petroleum storage tanks and excavation and disposal of associated contaminated materials.

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3. Cleanout of the on-site drywell and associated overflow drywell with disposal of associated contaminated materials.

4. Installation and operation of four SVE wells with ancillary equipment.

5. Imposition of an institutional control in the form of an environmental easement that will require (a) compliance with the approved site management plan; (b) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (c) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.

6. Development of a site management plan which will include the following institutional and engineering controls: (a) continued evaluation of the potential for vapor intrusion, including any buildings currently developed or constructed in the future on the site, including provision for mitigation of any impacts identified; (b) monitoring of groundwater; (c) identification of any use restrictions on the site; and (d) provisions for the continued proper operation and maintenance of the components of the remedy.

7. The property owner will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

8. The operation of the components of the SVE system built as an IRM will continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

9. Since the remedy results in untreated hazardous wastes remaining at the site, a long-term monitoring program will be instituted. The program will include groundwater sampling at a minimum of three locations, one on-site and two downgradient of the site, and soil vapor monitoring both on-site and downgradient of the site. The effectiveness of the SVE system will be evaluated and will be a component of the long term management of the site.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy selected for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

MAR - 5 2008

Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

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RECORD OF DECISION

299 Main Street Site
Operable Unit No. 1
Town of North Hempstead, Nassau County, New York
Site No. 130043 S
February 2008

SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the 299 Main Street site, Operable Unit No. 1; on-site soil and groundwater. As more fully described in Sections 3 and 5 of this document, truck cleaning and petroleum storage operations at the site resulted in the disposal of hazardous wastes, including volatile organic compounds (VOCs). These wastes contaminated the soils, soil vapor and groundwater at the site, and resulted in:

- a significant threat to human health associated with potential exposure to contaminated soils and groundwater.

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the 299 Main Street site in response to the threats identified above. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation/feasibility study (RI/FS). The IRMs undertaken at this site included:

- Cleanout and backfilling of two (2) abandoned service pits located in the main building on the site
- Removal of four (4) underground storage tanks, removal of contaminated soils in the tank area, and backfilling with clean imported sand
- Removal of a contaminated underground injection well and an associated overflow drywell, coupled with excavation of contaminated soil
- Installation of a Soil Vapor Extraction (SVE) system at the northeast corner of the site building

Based on the implementation of the above IRMs, the findings of the investigation of this site indicate that the site no longer poses a significant threat to human health or the environment, therefore, No Further Action with continued operation of the SVE system, was selected as the remedy for this site.

The selected remedy, discussed in detail in Section 6, is intended to attain the remediation goals identified for this site in Section 6. The remedy must conform with officially promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, criteria and guidance are hereafter called SCGs.

SECTION 2: SITE LOCATION AND DESCRIPTION

The site is located at 299 Main Street, Westbury, New York. It is located in the Town of North Hempstead, Nassau County. The site is bordered by Main Street to the south, Hopper Street to the east, Garden Street to the west and a salvage yard to the north. Figure 1 shows the site location. The site encompasses an areal extent of approximately 35,700 square feet. The site has one single story building of approximately 9,450 square feet, and is in an urban, industrial setting. Figure 2 shows the site layout.

The site is located in the New Cassel Industrial Area (NCIA), a 170 acre industrial and commercial area. Currently, eleven (11) Class 2 sites exist in the NCIA. The NCIA is highly developed and no significant surface water sources exist near the site.

The site is underlain by Upper Pleistocene deposits of poorly sorted sand and gravel that make up the Upper Glacial Aquifer (UGA) to a depth of approximately 80 ft below ground surface (bgs). The UGA is an unconfined aquifer. The Magothy aquifer is located beneath the UGA and consists of finer sands, silt and small amounts of clay. At this site, there are no other geologic units located between the UGA and the underlying Magothy formation. The UGA and the Magothy are in direct hydraulic connection; however, clay lenses are often found in the upper Magothy in this area. Depth to the water table is between 50 and 80 ft bgs, and groundwater flows in a southwesterly direction. Both the UGA and the Magothy have been designated as sole source aquifers and are protected under state and federal legislation.

Operable Unit (OU) No. 1, which is the subject of this document, consists of on-site soil and groundwater. An operable unit represents a portion of the site remedy that for technical or administrative reasons can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

The remaining operable unit for this site is for the New Cassel Industrial Area Sites, OU No. 3 - Off-site Groundwater, for the area south of Old Country Road and Grand Boulevard. The October 2003 Record of Decision describes the remedy to address the impact of groundwater contamination that has migrated from the NCIA sites, including the 299 Main Street site. The remedy selected was full plume remediation of upper and deep portions of the aquifer (to 225 feet below ground surface) with in-well vapor stripping/localized vapor treatment.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The site was initially developed around 1956 with a single-story, steel-framed, masonry building. Subsequently, the building was improved with several additions, including a shed addition on the eastern edge of the main building which currently houses the soil vapor extraction equipment. The existing building is approximately 9,450 square feet. The site has been used for light industrial applications, including automotive repair, automotive storage, automotive sales, automotive salvage, and bulk petroleum transportation. Former occupants include Mid-Island Transit, Crestwood Bus Service, Asphalt Petroleum, Island Transportation Corp., Frank's Used Auto, Jarrid Limo Service, Sam-Ton Salvage, Scibelli Automotive and One Stop Auto & Truck Center (COLE, 1971-1999). Currently, Construction Services Inc., owns the site. Island Transportation Corp. has been identified as having been a RCRA hazardous waste generator (NYD020576898). The site is also listed on the Active Petroleum Spill Logs for the release of waste oil, antifreeze and other unknown petroleum products to the ground surface due to poor housekeeping practices. The building was connected to the sanitary sewer system in late 2007 under the direction of the Nassau County Department of Health (NCDH). The cesspool and overflow pool formerly used for sanitary waste disposal were sampled per the NCDH Sewer Connection Program which is authorized by Article II, Section 5 of the Nassau County Public Health Ordinance. The results indicated they were contaminated with petroleum based volatile organic chemicals. The site is listed in the Nassau County Department of Health Industrial Chemical Survey. The survey, completed in 1977, indicated that the site occupant (Island Transportation Corp.) used eighty gallons of trichloroethene (TCE) per year. The TCE was used to coat the inside of bituminous asphalt cement tank trucks on the east side of the building.

3.2: Remedial History

In 1997, the Department listed the site as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites in New York. A Class 2 site is a site where hazardous waste presents a significant threat to the public health or the environment and action is required.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The Department and the 2632 Realty Development Corporation entered into Consent Order No. WI-0843-98-06 on May 5, 1999. The Order obligated the responsible party to implement a RI/FS remedial program. In 2005, the property was sold to 299 Main St. LLC. The Department and the 299 Main St. LLC entered into Consent Order No. W1-1072-05-07 on January 6, 2006. The Order obligates the responsible party to complete the RI/FS remedial program specified in the previous order. After the remedy is selected, the Department will approach the PRPs to implement the selected remedy under the Order on Consent.

SECTION 5: SITE CONTAMINATION

A remedial investigation/feasibility study (RI/FS) has been conducted to evaluate the alternatives for addressing the significant threats to human health.

5.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The RI was conducted between June 1999 and September 2000. The field activities and findings of the investigation are described in the RI report.

During the RI, a site background study was performed, in which previous investigations of the NCIA and the 299 Main Street site were reviewed. Federal, state and local records of hazardous material usage were reviewed, and a geological background for the site was assembled. Following this, site visits were conducted from June 1999 to September 1999. During the site visits, the building interior and exterior were inspected and potential pollution sources were identified. A ground penetrating radar survey was performed to identify any subsurface structures not previously found. Subsurface investigations were performed at points of interest. Finally, soil and groundwater samples were taken with Geoprobe® to quantify the nature and extent of contamination at areas of interest on the site.

5.1.1: Standards, Criteria, and Guidance (SCGs)

To determine whether the soil and groundwater on the site contain contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater, drinking water, and surface water SCGs are based on the Department's "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.

- Soil SCGs are based on the Department's Cleanup Objectives (Technical and Administrative Guidance Memorandum [TAGM] 4046; Determination of Soil Cleanup Objectives and Cleanup Levels and 6 NYCRR Subpart 375.6 - Remedial Program Soil Cleanup Objectives).

Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site required remediation. These are summarized in Section 5.1.2. More complete information can be found in the RI report.

5.1.2: Nature and Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated.

As described in the RI report, many soil and groundwater samples were collected to characterize the nature and extent of contamination. Figures 3 and 4 show soil sampling locations, and Figure 5 shows the groundwater sampling locations and groundwater sampling results for the RI. As seen in Figure 5 and summarized in Table 1, the main categories of contaminants that exceed their SCGs are

volatile organic compounds (VOCs). For comparison purposes, where applicable, SCGs are provided for each medium.

Chemical concentrations are reported in parts per billion (ppb) for water and in parts per million (ppm) for soil.

Figure 5 and Table 1 summarize the degree of contamination for the contaminants of concern in on-site soil and groundwater and compare the data with the SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Subsurface Soil

The majority of the soil contamination detected on-site was near the three abandoned underground petroleum storage tanks and within the underground injection well formerly connected to the eastern wash bay (PS-1). See Figure 2. The soil samples from around the tanks (locations GP-013 through GP-020) and from the grid sample in the area of the tanks (location GP-008) were all contaminated with gasoline and diesel related target analytes. The soil samples generated the highest contaminant concentrations at a depth of 12 ft bgs. This depth corresponds to the base of the storage tanks. The highest single concentration of any organic analyte detected from these sample locations was 20.5 ppm of 1,2,4-trimethylbenzene at GP-016 at a depth of 12 ft bgs. The concentrations of target analytes detected within samples from 7 of 8 probes located around the storage tanks were elevated above the applicable SCGs.

At UIW PS-1, the soil samples from its center (location GP-009) were contaminated with chlorinated organic, and gasoline and diesel related target analytes. The highest single concentration of any chlorinated organic analyte detected from this sample location was 43.8 ppm of cis-1,2-dichloroethene. Concentrations decreased to below that of the applicable SCGs in samples taken at 30-45 ft bgs. At 10 ft bgs in this location, elevated concentrations of beryllium, cadmium, copper, nickel, vanadium and zinc were detected.

At UIW PS-2, the soil sample from its center, location GP–12 at a depth of 15 ft bgs, contained low (less than 10 ppb) concentrations of gasoline and diesel related analytes. There were no target analytes detected in any of the samples from this location below 15 ft bgs.

At PS-3, the soil sample from its center, location GP-010 at a depth of 15 ft bgs, contained low concentrations (less than 1.4 ppm) of gasoline and diesel related analytes. These concentrations decreased with depth in the samples obtained at 30 and 45 ft bgs. The concentrations of these target analytes in each of the samples obtained from the location were below the applicable SCGs.

At PS-4, the soil sample from its center (location GP-011) at a depth of 15 ft bgs contained concentrations below SCGs of gasoline and diesel related analytes. Concentrations further decreased with depth.

With respect to the non-point source soil samples obtained on a grid, the samples from these locations (GP-001 through GP-008) at depths of 10, 15, 20 and 45 ft bgs failed to show contamination with two exceptions. The first exception, GP-008, cited above, was near the underground petroleum storage

tanks. The second exception was sample GP-005 at 45 ft bgs. Both analyses detected concentrations of gasoline and diesel related analytes below SCGs.

Subsurface soil contamination identified during the RI/FS was addressed during the IRMs described in Section 5.2.

Groundwater

Contamination detected in groundwater was limited to the southeast portion of the site and a small area north of the building beneath the three underground petroleum storage tanks (See Figure 5). The groundwater samples from the southeast portion of the site (locations GP-029 through GP-032 and MW-3) were contaminated with both chlorinated organic and gasoline and diesel related compounds. The area north of the building was contaminated with gasoline and diesel related compounds. The highest single concentration of any chlorinated VOC contaminant was 562 ppb of cis-1,2-dichloroethene (location GP-032). This concentration, as well as ten others from five other sample locations, was in excess of the applicable SCG of 5 ppb. The highest concentration of gasoline and diesel related target analytes was 96 ppb of toluene at GP-30. This concentration, as well as twenty-three others from five other sample locations, was in excess of the applicable 5 ppb SCG value. Contaminated groundwater leaving this site contributes to the contaminant plumes migrating southwest from the New Cassel Industrial Area, as described in the October 2003 ROD for Off-Site Groundwater South of the New Cassel Industrial Area, Site No. 1-30-043, Operable Unit No. 3.

5.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS. The following IRMs were performed at the site, in accordance with the April 2002 Interim Remedial Measures Work Plan:

- Two former vehicle service pits were located within the garage area of the building. PS-7 was located on the east side of the building and PS-8 was located on the west side. See Figure 2. Both service pits were apparently abandoned by a former tenant of the building by being backfilled and then covered with a concrete surface. Beginning in June 2004, each service pit was initially investigated by drilling through the concrete surface and advancing a hand-operated soil auger to observe the character, appearance, odor and depth of the materials backfilled inside each pit. Petroleum impacted sand was found in PS-7. The cleanout of the former service pits included the excavation of the backfilled material with waste classification testing for disposal purposes. Approximately 18 cubic yards of impacted material were characterized as a nonhazardous petroleum contaminated solid waste and were disposed accordingly. In each service pit, two soil borings were advanced through the concrete bottoms for the purposes of inspecting and testing the sub-floor soil. All laboratory test results confirmed that the sub-floor soils beneath PS-7 and PS-8 had not been impacted. In March 2004, PS-7 and PS-8 were backfilled with clean sand and capped with concrete. See Figure 6 for the location of this portion of the IRM.

- In June 2004, the out-of-service underground storage tanks (USTs) and aboveground storage tanks (ASTs) were removed from the site. This included an approximate 8,500 gallon

gasoline tank, one 1,000 gallon fuel oil tank and one 550-gallon waste oil tank. The two ASTs were of 275 gallon capacity. The removal was conducted under the supervision of a representative from the Nassau County Department of Health (NCDH). The removal of the 8,500 gallon gasoline tank occurred without incident and there was no evidence of contamination. The representative from NCDH authorized the backfilling of the tank excavation. During the removal of the fuel and waste oil tanks, petroleum impacted soil was encountered. The Department's Region 1 office was notified and Spill Number 04-25135 was generated. The tank excavation continued until the surrounding soil appeared visually clean. The south sidewall abutting the building and the bottom of the excavation was advanced as far as possible without compromising the footing of the building before endpoint soil samples were collected from four sidewalls and bottom. The excavation was then backfilled with clean imported sand to stabilize the building. Approximately 135 tons of impacted soil was characterized as a nonhazardous petroleum contaminated solid waste and was disposed accordingly. Endpoint sample results indicated some residual petroleum-related compounds remained in soils at the bottom and south sidewall of the excavation. The residual contamination was addressed through the installation of a soil vapor extraction well. See Figure 6 for the location of this portion of the IRM.

- In March 2005, the underground injection well (UIW) identified as PS-1 was cleaned out. See Figure 2. The cleanout was accomplished by installing a series of ten-foot diameter concrete cast rings over the existing eight-foot diameter concrete rings to stabilize and shore the excavation. A crane was used to crush and remove the existing eight-foot rings. Soil from within the drywell was excavated down to a depth of approximately 32 ft bgs at which time an excavation endpoint soil sample was taken. Endpoint samples showed concentrations in excess of soil cleanup objectives for a broad range of petroleum related VOCs. The residual contamination was addressed through the installation of two soil vapor extraction wells. During the remediation of PS-1, an overflow pipe was discovered and found to be connected to an overflow drywell designated OF-1. See Figure 2. In December 2005, the overflow drywell was remediated by the same method as PS-1. Endpoint samples showed concentrations in excess of soil cleanup objectives for a broad range of petroleum related VOCs. Approximately 140 tons of impacted material was excavated and characterized as nonhazardous petroleum contaminated solid waste, and disposed accordingly. The residual contamination was addressed through the installation of a soil vapor extraction well. See Figure 6 for the location of this portion of the IRM.

- In April 2006, a total of four soil vapor extraction (SVE) wells and two soil vapor monitoring points were installed at the site. Groundwater was measured to be at approximately 50 ft bgs, and the SVE wells were installed to a terminal depth of 45 ft bgs with 15 feet of 20-slot screen. The SVE wells were installed directly down into the former drywell locations of PS-1 and OF-1 and a cluster down through the UST excavation associated with the fuel and waste oil tanks. The cluster SVE wells installed in the tank excavation were screened at shallow and deep intervals to efficiently capture any residual VOCs at variable depths. The two soil vapor monitoring points were installed to a terminal depth of 35 feet bgs. The SVE system began full time operation in November 2006. See Figure 6 for the location of this portion of the IRM.

5.3: Summary of Human Exposure Pathways

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the human exposure pathways can be found in Section 8.3.1 of the RI report.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

Pathways which are known to or may exist include:

- Ingestion of contaminated groundwater
- Inhalation of soil vapor

The contaminated groundwater at the NCIA sites and at locations downgradient of these sites presents a potential route of exposure to humans. The area is served by public water, however, the underlying aquifer is the source of the water supply for the Bowling Green Water District customers. A supplemental treatment system, air stripping followed by carbon polishing, was constructed in 1996 to mitigate the impact of the groundwater contamination on the Bowling Green water supply wells. Bowling Green water supply wells are routinely monitored for VOCs and other contaminants. To date, no site specific contaminants exceeding groundwater or drinking water standards were detected in water distributed to the public. Early warning monitoring wells were installed south of Old Country Road, upgradient of the water supply wells as a precautionary measure. Therefore, use of the groundwater in the area is not currently considered to be an exposure pathway of concern.

The soil vapor intrusion exposure pathway has not been evaluated at the site so whether it is an exposure pathway of concern is currently unknown. A soil vapor extraction system currently in place will be monitored as part of a long-term management plan and soil vapor intrusion will be evaluated as part of that plan.

5.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site prior to the IRMs. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

Site contamination has impacted the groundwater resource in the upper glacial aquifer. This is a sole source aquifer, underlain by and hydraulically connected to the Magothy aquifer, which provides groundwater used for private, public and industrial use in the area.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND SELECTED REMEDY

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous wastes disposed at the site through the proper application of scientific and engineering principles.

Prior to the completion of the IRMs described in Section 5.2, the remediation goals for this site were to eliminate or reduce to the extent practicable:

- the release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards

The main SCGs applicable to this project are as follows:

- ambient groundwater quality standards

  Soil removal and Soil Vapor Extraction performed during the IRMs at contaminated on-site areas will prevent further contamination of groundwater beneath the site.

- Soil SCGs based on the Department's Soil Cleanup Objectives

  Soil removal and Soil Vapor Extraction performed during the on-site IRMs have directly removed and will further reduce contamination in on-site soils and will address soil vapor contamination, if any.

The Department believes that the IRMs have accomplished the remediation goals and satisfied the SCGs for the site provided that the SVE system continues to be operated and maintained in a manner consistent with the design.

Based on the results of the investigations at the site, the IRMs that have been performed, and the evaluation presented here, the Department has selected No Further Action with continued operation of the SVE system and institutional controls restricting the usage of groundwater at the site as the preferred alternative for the site. The Department believes that this alternative will be protective of

human health and the environment and will satisfy all SCGs as described above. Overall protectiveness is achieved through meeting the remediation goals listed above.

Therefore, the Department concludes that No Further Action is needed other than operation, maintenance, monitoring, and institutional and engineering controls. The elements of the IRMs already completed and the institutional and engineering controls are listed below:

1. Cleanout of two abandoned service pits within the site building with excavation and disposal of contaminated materials.

2. Removal of underground petroleum storage tanks and excavation and disposal of associated contaminated materials.

3. Cleanout of the on-site drywell and associated overflow drywell with disposal of associated contaminated materials.

4. Installation and operation of four SVE wells with ancillary equipment.

5. Imposition of an institutional control in the form of an environmental easement that will require (a) compliance with the approved site management plan; (b) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (c) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.

6. Development of a site management plan which will include the following institutional and engineering controls: (a) continued evaluation of the potential for vapor intrusion, including any buildings currently developed or constructed in the future on the site, including provision for mitigation of any impacts identified; (b) monitoring of groundwater; (c) identification of any use restrictions on the site; and (d) provisions for the continued proper operation and maintenance of the components of the remedy.

7. The property owner will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

8. The operation of the components of the SVE system built as an IRM will continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

9. Since the remedy results in untreated hazardous wastes remaining at the site, a long-term monitoring program will be instituted. The program will include groundwater sampling at a minimum of three locations, one on-site and two downgradient of the site, and soil vapor monitoring both on-site and downgradient of the site. The effectiveness of the SVE system will be evaluated and will be a component of the long term management of the site.

SECTION 7: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- Repositories for documents pertaining to the site were established.
- A public contact list, which included nearby property owners, elected officials, local media and other interested parties, was established.
- A public meeting was held on June 19, 2007 to present and receive comment on the PRAP.
- A responsiveness summary (Appendix A) was prepared to address the comments received during the public comment period for the PRAP.

No significant public comments were received.

TABLE 1
Nature and Extent of Contamination
July 1999-September 2000

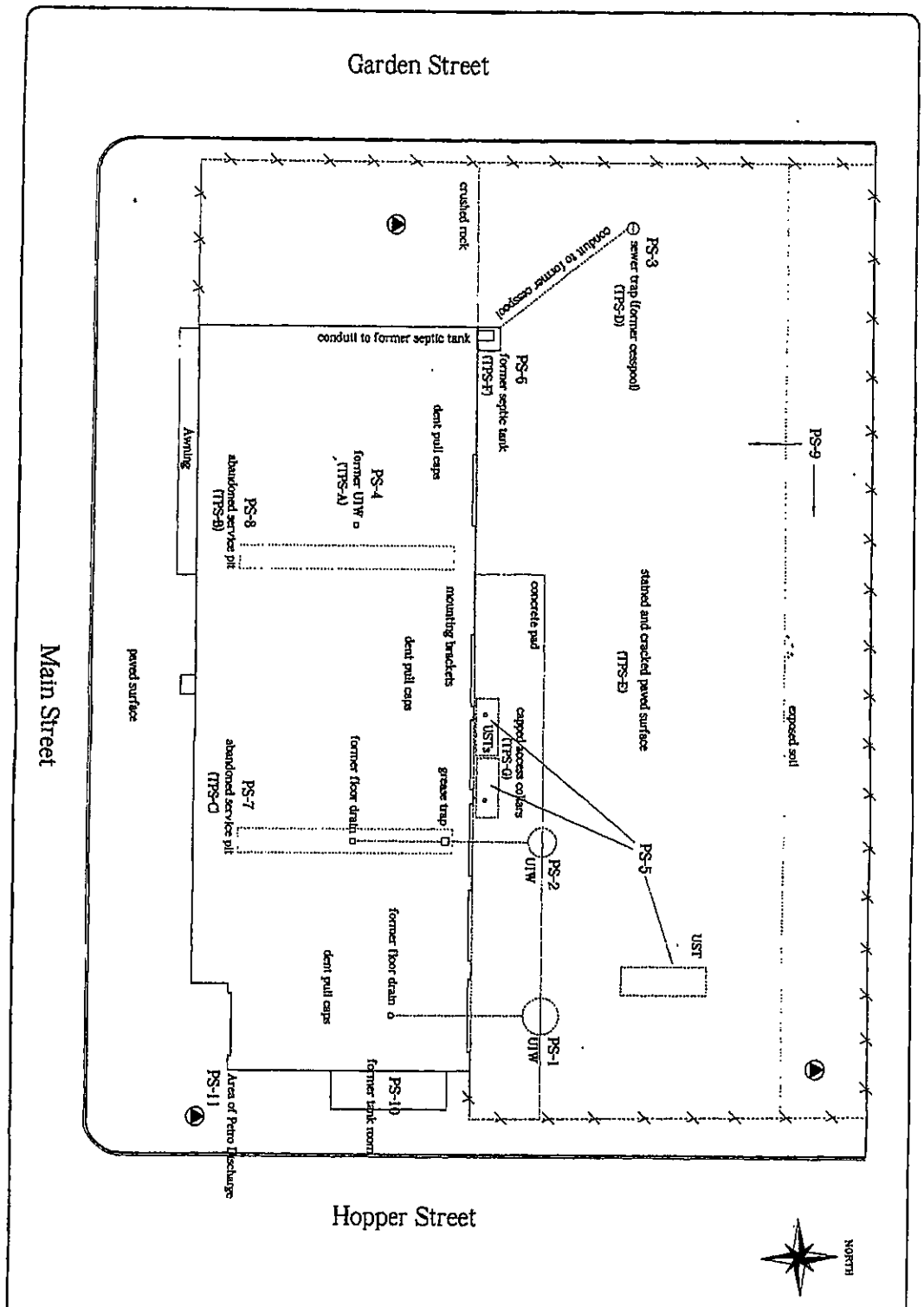
SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	1,2,4-Trimethylbenzene	ND to 20.5	0.1	22 of 46
	Ethylbenzene	ND to 39.8	1.0	4 of 46
	cis-1,2-Dichloroethene	ND to 43.8	0.1	3 of 46
	1,3,5-Trimethylbenzene	ND to 40.8	0.1	17 of 46
	M and P Xylenes	ND to 154.8	0.2	11 of 46
	O-Xylene	ND to 68.9	1.2	17 of 46
	tert-Butylbenzene	ND to 10.6	0.1	2 of 46
	Toluene	ND to 89.1	1.5	10 of 46
Semivolatile Organic Compounds (SVOCs)	Naphthalene	ND to 2.7	0.2	6 of 46
	Fluoranthene	ND to 1.3	1.0	4 of 46
Inorganic Compounds	Vanadium	ND to 1810	300	1 of 46
	Beryllium	ND to 2.5	1.75	1 of 46
	Zinc	ND to 62	50	1 of 46
	Nickel	ND to 388	25	1 of 46
	Copper	ND to 90	50	3 of 46

[a] ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;
ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
ug/m^3 = micrograms per cubic meter

[b] SCG = standards, criteria, and guidance values;
ND = Not Detected

Figure 1

Plate 1: Site Location Map, Westbury, New York.



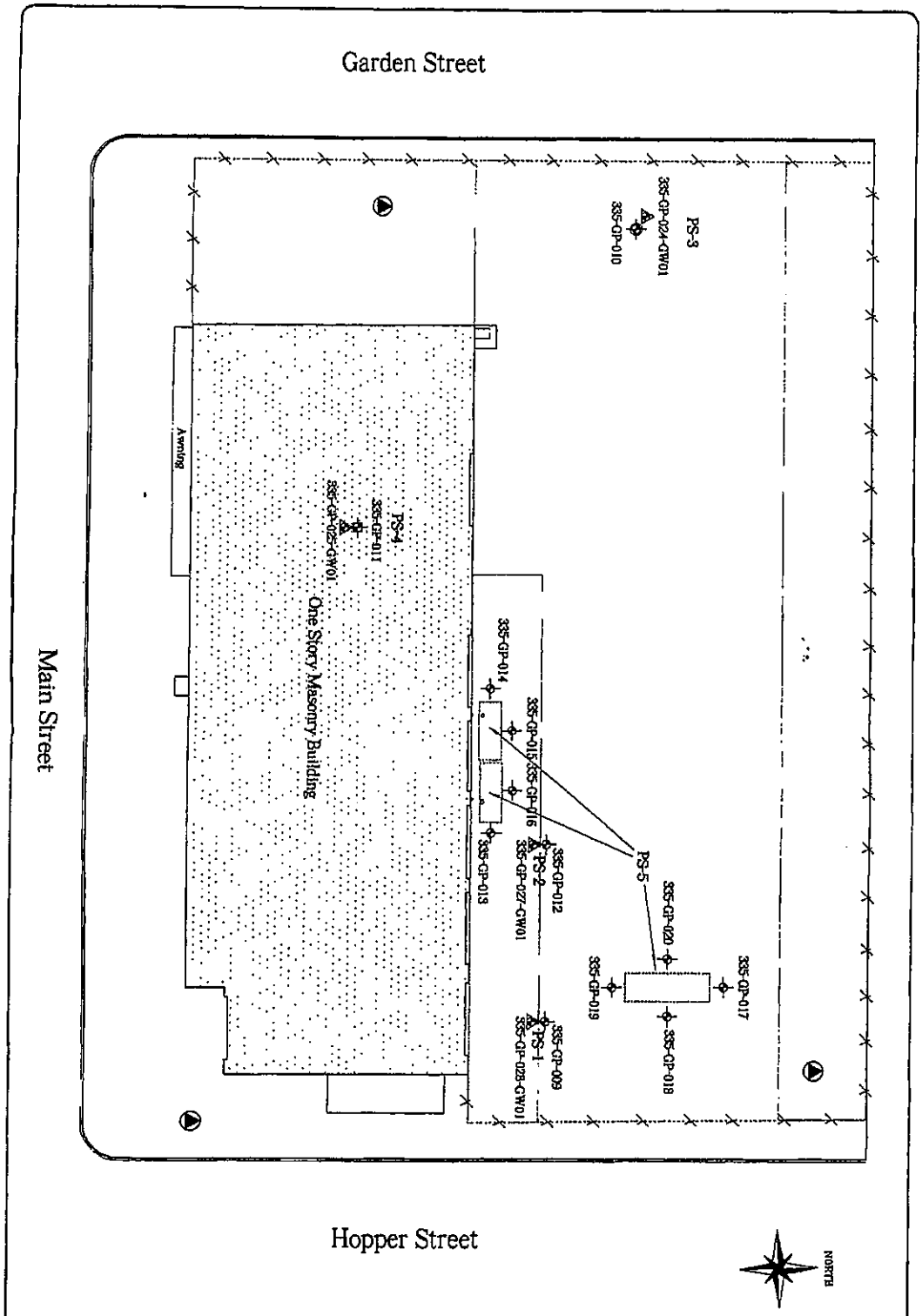
i.e. Impact Environmental
a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754
[illegible] Telephone
[illegible] Facsimile

Figure 2

Legend:
- groundwater probe node
- soil probe node
- monitoring well

scale: 1" = 20'

2632 RDC-00101



i.e. Impact Environmental
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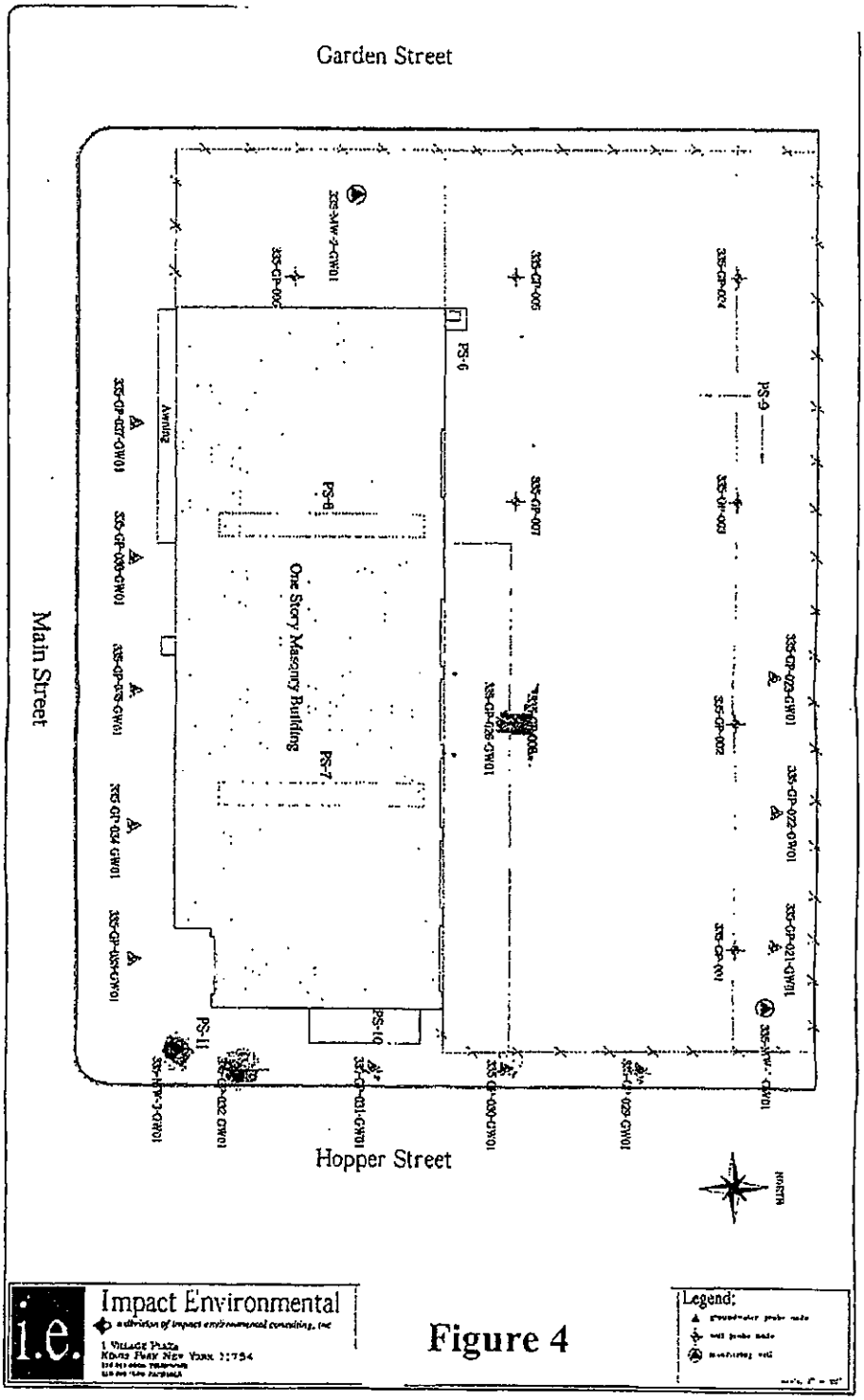
1 Village Plaza
Kings Park, New York 11754

Figure 3

Legend:
- groundwater probe node
- soil probe node
- monitoring well

scale: 1" = 20'


Garden Street
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Hopper Street
One Story Masonry Building
Avenue
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PS-7
PS-8
PS-9
PS-10
PS-11
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335-GP-002
335-GP-001
335-GP-003
335-GP-005
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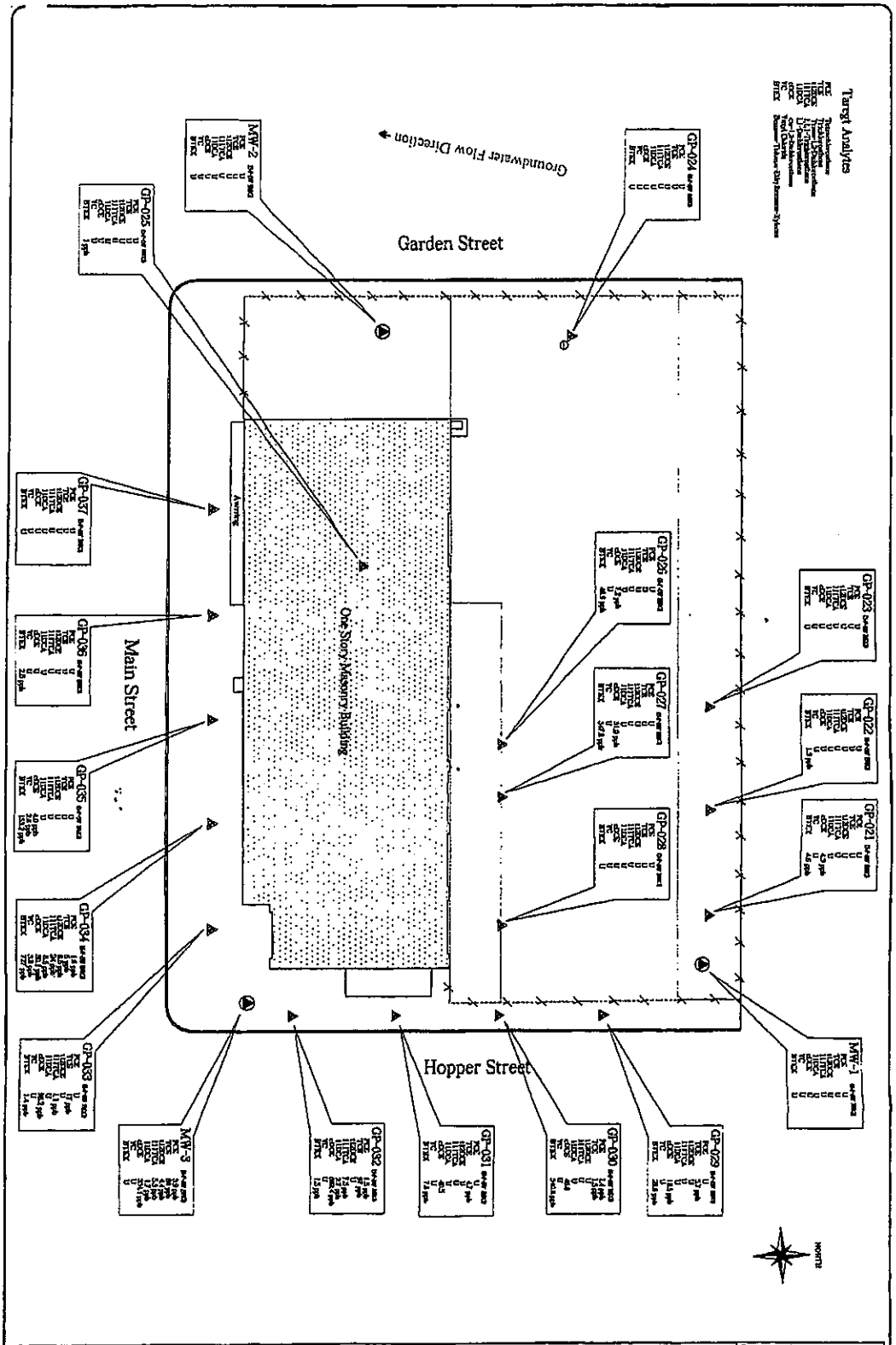
Figure 4


Target Analytes
Groundwater Flow Direction
Garden Street
Main Street
Hopper Street
One Story Masonry Building
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GP-024
GP-025
GP-037
GP-036
GP-035
GP-034
GP-033
GP-026
GP-027
GP-028
GP-023
GP-022
GP-021
MW-1
MW-3
GP-032
GP-031
GP-030
GP-029
NORTH
Impact Environmental
a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754
Legend:
groundwater probe node
soil probe node
monitoring well

Figure 5

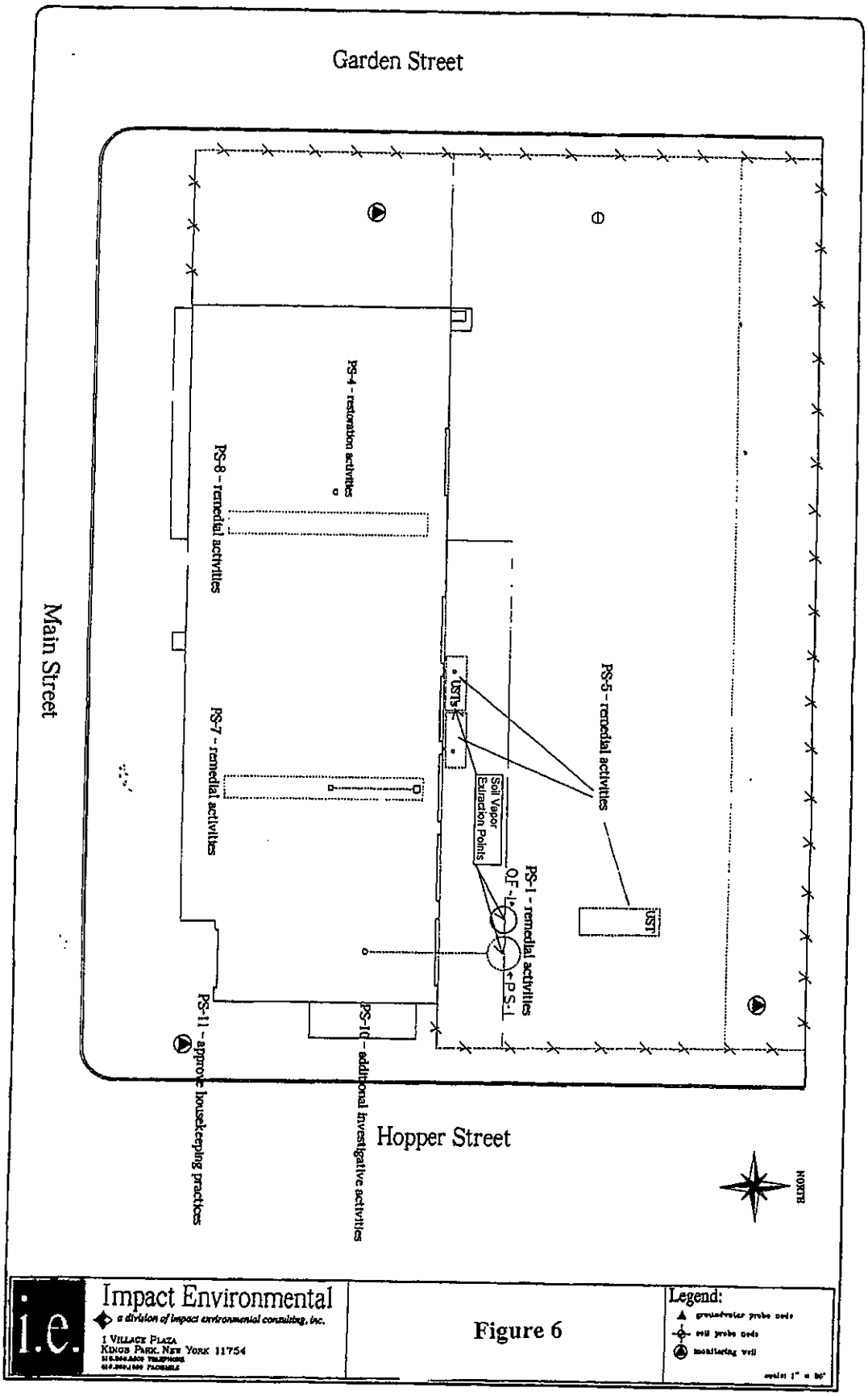

Garden Street
Main Street
Hopper Street
PS-4 - restoration activities
PS-8 - remedial activities
PS-7 - remedial activities
PS-5 - remedial activities
UST
UST
Soil Vapor Extraction Points
PS-1 - remedial activities
OF-1
PS-1
PS-11 - approve housekeeping practices
PS-10 - additional investigative activities
NORTH
i.e.
Impact Environmental
a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754
Legend:
groundwater probe node
soil probe node
monitoring well

Figure 6

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

299 Main Street
Operable Unit No. 1
Town of North Hempstead, Nassau County, New York
Site No. 1-30-043S

The Proposed Remedial Action Plan (PRAP) for the 299 Main Street site, was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on June 12, 2007. The PRAP outlined the remedial measure proposed for the contaminated on-site soil and groundwater at the 299 Main Street site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on June 19, 2007, which included a presentation of the Remedial Investigation (RI)as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on July 19, 2007.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: What institutional controls will be required for the 299 Main Street site?

RESPONSE 1: Section 6 of the ROD specifies the imposition of an institutional control in the form of an environmental easement that will require (a) compliance with the approved site management plan; (b) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (c) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls. Further, Section 6 of the ROD also specifies that the selected remedy will include the development of the site management plan which will include the following institutional and engineering controls: (a) continued evaluation of the potential for vapor intrusion, including any buildings currently developed or constructed in the future on the site, including provision for mitigation of any impacts identified; (b) monitoring of groundwater; (c) identification of any use restrictions on the site; and (d) provisions for the continued proper operation and maintenance of the components of the remedy.

COMMENT 2: How will it be ensured that the institutional controls are followed?

RESPONSE 2: Section 6 of the ROD specifies that the property owner will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department. Additionally, the Department may conduct site inspections and will coordinate, as required under law, with the local municipality relative to any required permits.

APPENDIX B

Administrative Record

ADMINISTRATIVE RECORD

299 Main Street
Operable Unit No. 1
Site No. 1-30-043S

1. Proposed Remedial Action Plan for the 299 Main Street site, Operable Unit No. 1 dated June 2007, prepared by the Department.

2. Order on Consent, Index No. WI-0843-98-06, between the Department and 2632 Realty Development Corporation, executed May 1999.

3. "Site Investigation Report, New Cassel Industrial Site, North Hempstead, Nassau County, Work assignment No. D002676-2.2", February 2005, prepared by Lawler, Matusky and Skelley Engineers

4. "Multisite PSA Report, New Cassel Industrial Area Site, Work Assignment No. D002676-2.2, Lawler Matusky and Skelley Engineers, prepared March 1996

5. "Focused Remedial Investigation Work Plan to be conducted at the 299 Main Street Site", March 1999, prepared by Impact Environmental

6. "Focused Remedial Investigation Report for the 299 Main Street Site", September 2000, prepared by Impact Environmental

7. "New Cassel Industrial Area Offsite Groundwater Remedial Investigation/Feasibility Study (RI/FS) Report, Volumes I, II, and III, September 2000, prepared by Lawler, Matusky and Skelley Engineers

8. "Supplemental Investigation Report for Pollution Source PS-10, FRI 299 Main Street Site-1-30-043S", October 2001, prepared by Impact Environmental

9. "Interim Remedial Measures Work Plan for the 299 Main Street Site", April 2002, prepared by Impact Environmental

10. "Interim Remedial Measures Report for the 299 Main Street Site", June 2006, prepared by CA Rich Consultants, Inc.

299 Main Street

STATE OF NEW YORK
DEPARTMENT OF STATE
ALBANY, NY 12231-0001

ALEXANDER F. TREADWELL
SECRETARY OF STATE

RECEIVED
JUN 10 1997
NYSDEC DIV. ENV. ENF.
EASTERN FIELD UNIT

NYS DEPT OF ENVIRONMENTAL CONSERVATION
DIV OF ENFORCEMENT
200 WHITE PLAINSRD 5TH FL
TARRYTOWN NY 10591-5805

JUNE 03, 1997

Dear Sir/Madam,

The following represents the most complete and current information available in response to your recent inquiry.

A Certificate of Incorporation of ISLAND TRANSPORTATION CORPORATION was filed on 08/25/1952. Its principal location is NASSAU county.

Status: Active

Biennial Statement: Current

Service of Process Address:
PETER FIORETTI, JR.
299 EDISON AVENUE
WEST BABYLON, NY 11704

Registered Agent (optional in NY):
NO ADDRESS STATED

Chairman of the Board:
PETER FIORETTI, JR.
299 EDISON AVENUE
WEST BABYLON, NY

Principal Business Location:
PETER FIORETTI, JR.
299 EDISON AVENUE
WEST BABYLON, NY 11704

Current Stock Information:

Stock Type	Num.Shares	Value/Share
Non Par Value	6000	.00000

printed on recycled paper

There is no requirement that the names and addresses of officers or directors, other than the chairman of the board, be filed with this or any other state agency.

Sincerely,

DIVISION OF CORPORATIONS 199706040402 64

New York State Department of Environmental Conservation
Division of Environmental Enforcement
State Superfund and Voluntary Cleanup Practice Group
Eastern Field Unit
200 White Plains Road, 5th Floor
Tarrytown, New York 10591-5805
Telephone: (914) 332-1835
Fax (914)332-5116 (not for service of process)

John P. Cahill
Acting
Commissioner

June 11, 1997

NOTICE LETTER
URGENT LEGAL MATTER - PROMPT REPLY NECESSARY
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Peter Fioretti, Jr.
299 Edison Avenue
West Babylon, NY 11704

Re: Island Transportation Corp., 299 Main Street, Site # 01-30-043S

Dear Mr. Fioretti :

New York State, through the efforts of the Department of Environmental Conservation (the "Department"), has documented a release and/or threatened release of "hazardous substances" as defined by the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC 9601 et seq. ("CERCLA") and the presence of "hazardous wastes" as defined in Environmental Conservation Law (ECL) 27-1301.1 at property located at 299 Main Street, in the western portion of the New Cassel Industrial Area, Westbury, NY 11590. This site is listed in the New York State Registry of Inactive Hazardous Waste Sites as Site No. 01-30-043S. It is a Class "2" site. In response to these releases and the threat of future such releases, the Department has spent public funds and anticipates spending additional public funds. These actions have been and will be taken by the Department pursuant to ECL Article 27, Title 13 and State Finance Law §97-b.

Under ECL Article 27, Title 13 and CERCLA, responsible parties are liable for monies expended by the State in taking response actions at and around sites where hazardous substances have been released, including investigative, planning, removal, and remedial actions. You have been determined to be a responsible party based on your ownership of the site during the disposal of the hazardous waste.

The process of remediating this site will consist of two phases. In the first phase, a remedial investigation will be conducted to determine the nature and extent of the problem presented by the releases or threatened releases. This will include sampling, monitoring and gathering information to determine the necessity for and proposed extent of remedial actions. Using this data, a Feasibility Study will be performed which will define the objectives of the response action, develop and screen remedial action alternatives, and analyze selected alternatives in detail. The second step of the remediation process involves the design and implementation of the final remedial alternative selected for the site.

The purpose of this Notice Letter is to inform you of your potential liability as a responsible

party, and to determine whether you are willing to conduct or finance the Remedial Investigation and Feasibility Study for this site. Any agreement by you to finance or undertake such activities must be memorialized in an administrative consent order. You must indicate within twenty-one (21) days whether you are willing to enter negotiations with the Department for this purpose.

If within twenty-one (21) days you do not notify the Department that you are willing to enter into negotiations, the Department, at its sole discretion, may perform the necessary work at the site using the Hazardous Waste Remedial Fund. If the Fund is used to investigate or to remediate the site, the Department is required to seek recovery from you as a responsible party for any expenses it incurs in conducting such activities, in which event this letter also serves as a demand for payment of all monies the Department may expend for the investigation and remediation of this site, plus any and all interest recoverable under 42 USC 9607 and any other provision of law. In accordance with 42 USC 9607(a), interest on such amount shall accrue as of the date of this letter.

It is imperative that negotiations concerning the site begin as early as possible. Your decision whether to negotiate should be provided to me no later than twenty-one (21) days from receipt of this letter. In order to coordinate correspondence with the Department and facilitate possible negotiations, we suggest that you designate a member of your organization or an attorney to represent your interests to the Department. I enclose a copy of a draft Consent Order for your review, and I request that if you wish to negotiate with the Department in this matter, you provide me with comments on this draft Consent Order within twenty-one days of your receipt of this letter.

If you decide to negotiate a Consent Order, please note that such negotiations must be completed and I must have in hand a Consent Order executed by you no later than August 29, 1997. If I do not have a signed Consent Order in hand by that date, all further negotiations will terminate, and the Department will undertake the investigation directly and may pursue you in the future to reimburse its expenditures.

Information obtained by the Department indicates that the following companies are also potentially liable for the investigation and remediation of the site:

One Stop Auto & Truck Center
Sam-Ton Towing & Salvage Inc.

The Department also demands a response to the following questions within twenty-one (21) days of your receipt of this letter pursuant to its authority under ECL 27-1307 and 27-1309:

1. A detailed description of your ownership interest or your relationship to an owner currently or in the past at the site including type of interest, dates the interest was or is held, location on the property of the ownership interest.

2. To the best of your knowledge, a detailed description of products manufactured or service provided at the facility; for each product listed or service provided, provide a description of the type of process or operation used.

3. For each process or operation identified pursuant to Item 2, an identification of all waste resulting from that process or operation; an identification of those wastes resulting from that process which, if generated today may be deemed hazardous wastes pursuant to 6 NYCRR, Part 371 and the hazardous waste constituents which are or may be present in the waste and the periods of time such wastes were disposed of at the above-referenced site.

4. For each waste identified pursuant to Item 3, a description of the typical physical characteristics of such waste, time periods in which it was generated, the annual quantities generated of such waste, and the manner of disposal for all wastes.

5. The name and last known address of each individual or firm which disposed of the waste at the site and the location, time period, frequency, type, quantity and method of such disposal.

6. The names, positions, and addresses of present and former employees who had knowledge of past waste disposal practices at the site, their time of employment.

7. An identification of the methods employed, the names of personnel and the source, nature and availability of records, files, or other references utilized in the compilation of information to respond to this inquiry.

If you have any questions or wish to discuss any matters addressed in this letter, please contact me as soon as possible. My telephone number is (914) 332-1835, ext. 320.

Sincerely,

Jeanna E. Hussey

Jeanna E. Hussey
Senior Attorney
Division of Environmental
Enforcement

cc: Vasudevan/Trad

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Development and Implementation of a Remedial Investigation/Feasibility Study for an Inactive Hazardous Waste Disposal Site, Under Article 27, Title 13, and Article 71, Title 27 of the Environmental Conservation Law of the State of New York by Peter Fioretti and Island Transportation Corporation Respondents.	ORDER ON CONSENT INDEX # Site Code # 01-30-043S

WHEREAS,

1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites." This Order is issued pursuant to the Department's authority under, inter alia, ECL Article 27, Title 13 and ECL 3-0301.

2. Peter Fioretti and Island Transportation Corporation ("Respondents"), are the prior owners of the site located at 299 Main Street in the western portion of the New Cassel Industrial Area, Westbury, NY 11590, (hereinafter referred to as "the Site"). Documentary evidence indicates that past site operations have led to groundwater contamination beneath and downgradient of the site with TCE and related compounds. The contaminated groundwater is located within an EPA- designated sole source aquifer. Two public water supply wells are located approximately 2,700 ft downgradient of the site. A site map is attached as an appendix to this Order as Exhibit A.

3. The Site is an inactive hazardous waste disposal site, as that term is defined at ECL 27-1301.2, and presents a significant threat to the public health or environment. The Site has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 01-30-043S. The Department has classified the Site as a Classification "2" pursuant to ECL 27-1305.4.b.

4. A. Pursuant to ECL 27-1313.3.a, whenever the Commissioner of Environmental Conservation (the "Commissioner") "finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department,

at such site, and (ii) to implement such program within reasonable time limits specified in the order."

B. Any person under order pursuant to ECL 27-1313.3.a has a duty imposed by ECL Article 27, Title 13 to carry out the remedial program committed to under order. ECL 71-2705 provides that any person who fails to perform any duty imposed by ECL Article 27, Title 13 shall be liable for civil, administrative and/or criminal sanctions.

C. The Department also has the power, inter alia, to provide for the prevention and abatement of all water, land, and air pollution. ECL 3-0301.1.i.

5. The Department and Respondents agree that the goals of this Order are for Respondents to (i) develop and implement a Remedial Investigation/Feasibility Study ("RI/FS") for the Site; and (ii) reimburse the State's administrative costs.

6. Respondents, having waived Respondents' right to a hearing herein as provided by law, and having consented to the issuance and entry of this Order, agree to be bound by its terms. Respondents consent to and agree not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agree not to contest the validity of this Order or its terms.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Initial Submittal

Within 30 days after the effective date of this Order, Respondents shall submit to the Department all data within Respondents' possession or control regarding environmental conditions on-Site and off-Site, and other information described below, unless the Department informs Respondents that such data have previously been provided to the Department. The data and other information shall include:

A. A brief history and description of the Site, including the types, quantities, physical state, location, and dates of disposal of hazardous waste including methods of disposal and spillage of such wastes;

B. A concise summary of information held by Respondents and Respondents' attorneys and consultants with respect to all persons responsible for such disposal of hazardous wastes, including but not limited to names, addresses, dates of disposal and any proof linking each such person responsible with hazardous wastes identified pursuant to Subparagraph I.A; and

C. A comprehensive list and copies of all existing relevant reports with titles, authors, and subject matter, as well as a description of the results of all previous investigations of the Site and areas in the vicinity of the Site, including copies of all available topographic and property surveys, engineering studies and aerial photographs.

II. RI/FS Work Plan Contents and Submittals

A. Within 30 days after the effective date of this Order, Respondents shall submit to the Department a detailed work plan describing the methods and procedures to be implemented in performing an RI/FS for the Site ("RI/FS Work Plan").

B. (1) The RI/FS Work Plan shall include, but not be limited to, the following:

a. A chronological description of the anticipated RI/FS activities together with a schedule for the performance of these activities.

b. A Sampling and Analysis Plan that shall include:

(i) A quality assurance project plan that describes the quality assurance and quality control protocols necessary to achieve the initial data quality objectives. This plan shall designate a data validation expert and must describe such individual's qualifications and experience.

(ii) A field sampling plan that defines sampling and data gathering methods in a manner consistent with the "Field Methods Compendium," OSWER Directive 9285.2-11 (draft June 1993), as supplemented by the Department.

c. A health and safety plan to protect persons at and in the vicinity of the Site during the performance of the RI/FS which shall be prepared in accordance with 29 CFR 1910 and all other applicable standards by a certified health and safety professional. Respondents shall add supplemental items to this plan necessary to ensure the health and safety of all persons at or in the vicinity of the Site during the performance of any work pursuant to this Order.

d. A citizen participation plan that is, at a minimum, consistent with the Department's publication, "New York State Inactive Hazardous Waste Site Citizen Participation Plan," dated August 30, 1988, and any subsequent revisions thereto, and 6 NYCRR Part 375.

(2) The RI/FS Work Plan shall incorporate all elements of a RI/FS as set forth in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") [42 USC 9601 et seq.], as amended, the National Contingency Plan ("NCP") of March 8, 1990 [40 CFR Part 300], the USEPA guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," dated October 1988, and any subsequent revisions to that guidance document in effect at the time the RI/FS Work Plan is submitted, and appropriate USEPA and Department technical and administrative guidance documents.

III. Performance and Reporting of Remedial Investigation

A. Respondents shall commence the Remedial Investigation in accordance with the schedule contained in the Department-approved RI/FS Work Plan.

B. Respondents shall perform the Remedial Investigation in accordance with the Department-approved RI/FS Work Plan.

C. During the performance of the Remedial Investigation, Respondents shall have on-Site a full-time representative who is qualified to supervise the work done.

D. Within the time frame set forth in the Department-approved RI/FS Work Plan, Respondents shall prepare a Remedial Investigation Report that shall:

(1) include all data generated and all other information obtained during the Remedial Investigation:

(2) provide all of the assessments and evaluations set forth in CERCLA, the NCP, and the guidance documents identified in Subparagraph II.B.2;

(3) identify any additional data that must be collected; and

(4) include a certification by the individual or firm with primary responsibility for the day to day performance of the Remedial Investigation that all activities that comprised the Remedial Investigation were performed in full accordance with the Department-approved RI/FS Work Plan.

IV. Feasibility Study

A. In accordance with the schedule contained in the Department-approved RI/FS Work Plan, Respondents shall submit a complete Feasibility Study evaluating on-Site and off-Site remedial actions to eliminate, to the maximum extent practicable, all health and environmental hazards and potential hazards at the Site. The Feasibility Study shall be prepared by and have the signature and seal of a professional engineer who shall certify that the Feasibility Study was prepared in accordance with this Order.

B. Respondents shall perform and prepare the Feasibility Study in accordance with the Department-approved RI/FS Work Plan and in a manner consistent with CERCLA, the NCP, and the guidance documents identified in Subparagraph II.B.2.

C. After the Department's approval of the Feasibility Study, Respondents shall cooperate and assist the Department in soliciting public comment on the RI/FS and on the proposed remedial action plan, in accordance with CERCLA, the NCP, the guidance documents identified in

Subparagraph II.B.2, and with any Department policy and guidance documents in effect at the time the public comment period is initiated. After the close of the public comment period, the Department shall select a final remedial alternative for the site in a Record of Decision ("ROD"). The ROD shall be incorporated into and become an enforceable part of this Order.

V. Interim Remedial Measures

A. 1. Respondents may propose one or more IRMs for the Site.

2. In proposing each IRM, Respondents shall submit to the Department a work plan that includes a chronological description of the anticipated IRM activities together with a schedule for performance of those activities (an "IRM Work Plan" for that Site).

3. Upon the Department's determination that the proposal is an appropriate IRM and upon the Department's approval of such work plan, the IRM Work Plan shall be incorporated into and become an enforceable part of this Order; and Respondent shall submit to the Department for its review and (as appropriate) approval, in accordance with the schedule contained in the Department-approved IRM Work Plan, detailed documents and specifications prepared, signed, and sealed by a professional engineer to implement the Department-approved IRM. Such documents shall include a health and safety plan, contingency plan, and (if the Department requires such) a citizen participation plan that incorporates appropriate activities outlined in the Department's publication, "New York State Inactive Hazardous Waste Citizen Participation Plan," dated August 30, 1988, and any subsequent revisions thereto, and 6 NYCRR Part 375. Respondents shall then carry out such IRM in accordance with the requirements of the approved IRM Work Plan, detailed documents and specifications, and this Order. Respondents shall notify the Department of any significant difficulties that may be encountered in implementing the Department-approved work plan, detailed documents, or specifications and shall not modify any obligation unless first approved by the Department.

4. During implementation of all construction activities identified in the Department-approved IRM Work Plan, Respondents shall have on-Site a full-time representative who is qualified to supervise the work done.

5. Within the schedule contained in the Department-approved IRM Work Plan, Respondents shall submit to the Department a final engineering report prepared by a professional engineer that includes a certification by that individual that all activities that comprised the Department-approved IRM were completed in accordance with the Department-approved IRM Work Plan and this Order.

a. If the performance of the Department-approved IRM encompassed construction activities, the final engineering report also shall include a detailed post-remedial operation and maintenance plan ("IRM O&M Plan"); "as-built" drawings and a final engineering report (each including all changes made to the Remedial Design during construction); and a certification by a professional engineer that the IRM was implemented and all construction activities

were completed in accordance with the Department-approved detailed documents and specifications for the IRM and all such activities were personally witnessed by him or her or by a person under his or her direct supervision. The IRM O&M Plan, "as built" drawings, final engineering report, and certification must be prepared, signed, and sealed by a professional engineer.

b. Upon the Department's approval of the IRM O&M Plan, Respondents shall implement the IRM O&M Plan in accordance with the requirements of the Department-approved IRM O&M Plan.

6. After receipt of the final engineering report and certification, the Department shall notify Respondents in writing whether the Department is satisfied that the IRM was completed in compliance with the Department-approved IRM Work Plan and design.

VI. Progress Reports

Respondent shall submit to the parties identified in Subparagraph XIV.B in the numbers specified therein copies of written monthly progress reports that:

A. describe the actions which have been taken toward achieving compliance with this Order during the previous month;

B. include all results of sampling and tests and all other data received or generated by Respondent or Respondent's contractors or agents in the previous month, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent;

C. identify all work plans, reports, and other deliverables required by this Order that were completed and submitted during the previous month;

D. describe all actions, including, but not limited to, data collection and implementation of work plans, that are scheduled for the next month and provide other information relating to the progress at the Site;

E. include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of Respondent's obligations under the Order, and efforts made to mitigate those delays or anticipated delays;

F. include any modifications to any work plans that Respondent has proposed to the Department or that the Department has approved; and

G. describe all activities undertaken in support of the Citizen Participation Plan during the previous month and those to be undertaken in the next month. Respondent shall submit these progress reports to the Department by the tenth day of every month following the effective date of

this Order.

Respondent also shall allow the Department to attend, and shall provide the Department at least seven days advance notice of, any of the following: prebid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.

VII. Review of Submittals

A. 1. The Department shall review each of the submittals Respondents make pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. The Department shall notify Respondents in writing of its approval or disapproval of the submittal, except for the submittals discussed in Subparagraph II.B.1c. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. a. If the Department disapproves a submittal, it shall so notify Respondents in writing and shall specify the reasons for its disapproval. Within __ days after receiving written notice that Respondents' submittal has been disapproved, Respondents shall make a revised submittal to the Department that addresses and resolves all of the Department's stated reasons for disapproving the first submittal.

b. After receipt of the revised submittal, the Department shall notify Respondents in writing of its approval or disapproval. If the Department disapproves the revised submittal, Respondents shall be in violation of this Order and the Department may take any action or pursue whatever rights it has pursuant to any provision of statutory or common law. If the Department approves the revised submittal, it shall be incorporated into and become an enforceable part of this Order.

B. Respondents shall modify and/or amplify and expand a submittal upon the Department's direction to do so if the Department determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts, that further work is necessary.

VIII. Penalties

A. 1. Respondents' failure to comply with any term of this Order constitutes a violation of this Order and the ECL.

2. Respondents shall be liable for payment to the Department of the sums set forth below as stipulated penalties for each day or part thereof that Respondents are in violation of the terms of this Order. All penalties begin to accrue on the first day Respondents are in violation of the terms of this Order and continue to accrue through the final day of correction of any violation.

Such sums shall be due and payable within 15 days after receipt of notification from the Department assessing the penalties. If such payment is not received within 15 days after Respondents receive such notification from the Department, interest shall be payable at the annual rate of nine per centrum on the overdue amount from the day on which it was due through, and including, date of payment. Penalties shall be paid by certified check or money order, made payable to "New York State Department of Environmental Conservation" and shall be delivered personally or by certified mail, return receipt requested, to the Director, Division of Environmental Enforcement, N.Y.S.D.E.C., 50 Wolf Road, Albany, New York 12233-5500. Payment of the penalties shall not in any way alter Respondents' obligation to complete performance under the terms of this Order. Stipulated penalties shall be due and payable under Subparagraph X.A.2 pursuant to the following schedule:

Period of Non-Compliance	Penalty Per Day
First through 15th day	$ 5,000
16th through 30th day	$ 10,000
31st day and thereafter	$ 15,000

B. Respondents shall not suffer any penalty under this Order or be subject to any proceeding or action if they cannot comply with any requirement hereof because of war, riot, or an unforeseeable disaster arising exclusively from natural causes which the exercise of ordinary human prudence could not have prevented. Respondents shall, within five days of when they obtain knowledge of any such condition, notify the Department in writing. Respondente will include in such notice the measures taken and to be taken by Respondents to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Failure to give such notice within such five-day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondents will have the burden of proving that an event is a defense to compliance with this Order pursuant to Subparagraph VIII.B.

IX. Entry upon Site

Respondents hereby consent to the entry upon the Site or areas in the vicinity of the Site which may be under the control of Respondents by any duly designated employee, consultant, contractor, or agent of the Department or any State agency for purposes of inspection, sampling, and testing and to ensure Respondents' compliance with this Order. During Remedial Construction, Respondents will provide the Department with suitable office space at the Site, including access to a telephone, and will permit the Department full access to all records relating to matters addressed by this Order and job meetings.

X. Payment of State Costs

Within 30 days after receipt of an itemized invoice from the Department, Respondents shall pay to the Department a sum of money which shall represent reimbursement for the State's expenses including, but not limited to, direct labor, fringe benefits, indirect costs, travel, analytical costs, and contractor costs incurred by the State of New York for work related to the Site to the effective date

of this Order, as well as for reviewing and revising submittals made pursuant to this Order, overseeing activities conducted pursuant to this Order, collecting and analyzing samples, and administrative costs associated with this Order. Such payment shall be made by certified check payable to the Department of Environmental Conservation and shall be sent to:

Bureau of Program Management
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010.

Personal service costs shall be documented by reports of Direct Personal Service, which shall identify the employee name, title, biweekly salary, and time spent (in hours) on the project during the billing period, as identified by an assigned time and activity code. Approved agency fringe benefit and indirect cost rates shall be applied. Non-personal service costs shall be summarized by category of expense (e.g., supplies, materials, travel, contractual) and shall be documented by expenditure reports.

XI. Department Reservation of Rights

A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's civil, criminal, or administrative rights or authorities.

B. Nothing contained in this Order shall be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

XII. Indemnification

Respondents shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondents and/or any of Respondents' directors, officers, employees, servants, agents, successors, and assigns.

XIII. Public Notice

A. Within 30 days after the effective date of this Order, Respondents shall file a Declaration of Covenants and Restrictions with the Clerk of the County wherein the Site is located to give all parties who may acquire any interest in the Site notice of this Order.

B. If Respondents propose to convey the whole or any part of Respondents' ownership interest in the Site, Respondents shall, not fewer than 60 days before the date of conveyance, notify

the Department in writing of the identity of the transferee and of the nature and proposed date of the conveyance and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order.

XIV. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

1. Communication from Respondents shall be sent to:

Jeanna E. Hussey, Esq.
Division of Environmental Enforcement
Eastern Field Unit
New York State Department of Environmental Conservation
200 White Plains Road, 5th Floor
Tarrytown, NY 10591-5805

with copies to:

1. Chittitabu Vasudevan, P.E.
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

2. G. Anders Carlson, Ph.D
Director, Bureau of Environmental Exposure Investigation
New York State Department of Health
2 University Place
Albany, New York 12203

3. Ray Cowen, Director
Region I
New York State Department of Environmental Conservation
N. Loop Rd., Bldg #40
SUNY Campus
Stony Brook, NY 11790-2356

2. Communication to be made from the Department to Respondents shall be sent

to:

_____

_____

B. Copies of work plans and reports shall be submitted as follows:

1. Four copies (one unbound) to

Jeffrey Trad
Division of Environmental Remediation

2. Two copies to

G. Anders Carlson, Ph.D.
Director, Bureau of Environmental Exposure Investigation

3. One copy to Ray Cowen, Regional Director

4. One copy to Jeanna E. Hussey, Esq.
Division of Environmental Enforcement

C. 1. Within 30 days of the Department's approval of any report submitted pursuant to this Order, Respondents shall submit to Director, Division of Environmental Remediation, a computer readable magnetic media copy of the approved report in American Standard Code for Information Interchange (ASCII) format.

2. Within 30 days after the Department's approval of the RI/FS, Respondents will submit one microfilm copy of the RI/FS to Director, Division of Environmental Remediation.

D. The Department and Respondent reserve the right to designate additional or different addressees for communication or written notice to the other.

XV. Miscellaneous

A. 1. All activities and submittals required by this Order shall address both on-Site and off-Site contamination resulting from the disposal of hazardous wastes at the Site.

2. All activities Respondents are required to undertake under this Order are ordinary and necessary expenses for the continued operation of Respondent.

B. Respondents shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and third party data validators acceptable to the Department to

perform the technical, engineering, and analytical obligations required by this Order. The experience, capabilities, and qualifications of the firms or individuals selected by Respondents shall be submitted to the Department within 15 days after the effective date of this Order. The Department's approval of these firms or individuals shall be obtained before the start of any activities for which Respondents and such firms or individuals will be responsible. The responsibility for the performance of the professionals retained by Respondents shall rest solely with Respondents.

C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondents, and the Department also shall have the right to take its own samples. Respondents will make available to the Department the results of all sampling and/or tests or other data generated by Respondents with respect to implementation of this Order and will submit these results in the progress reports required by this Order.

D. Respondents shall notify the Department at least 10 working days in advance of any field activities to be conducted pursuant to this Order.

E. Respondents will obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform Respondents' obligations under this Order.

F. Respondents and Respondents' officers, directors, agents, servants, employees, successors, and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondents including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondents' responsibilities under this Order. Respondents' officers, directors, employees, servants, and agents shall be obliged to comply with the relevant provisions of this Order in the performance of their designated duties on behalf of Respondents.

G. Respondents shall provide a copy of this Order to each contractor hired to perform work required by this Order and to each person representing Respondents with respect to the Site and shall condition all contracts entered into in order to carry out the obligations identified in this Order upon performance in conformity with the terms of this Order. Respondents or Respondents' contractors shall provide written notice of this Order to all subcontractors hired to perform any portion of the work required by this Order. Respondents shall nonetheless be responsible for ensuring that Respondents' contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

H. All references to "professional engineer" in this Order are to an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law. If such individual is a member of a firm, that firm must be authorized to offer professional engineering services in the State of New York in accordance with Article 145 of the New York State Education Law.

I. All references to "days" in this Order are to calendar days unless otherwise specified.

J. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

K. 1. .... No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondents of Respondents' obligation to obtain such formal approvals as may be required by this Order.

2. If Respondents desire that any provision of this Order be changed, Respondents shall make timely written application, signed by Respondents, to the Commissioner setting forth reasonable grounds for the relief sought. Copies of such written application shall be delivered or mailed to Jeanna E. Hussey and to Jeffrey Trad.

L. The effective date of this Order is the date the Commissioner or his designee signs it.

DATED: , New York
, 1997

JOHN P. CAHILL, ACTING COMMISSIONER
New York State Department
of Environmental Conservation

By:

_____
Michael J. O'Toole, Jr.

CONSENT BY RESPONDENTS

Respondents hereby consent to the issuing and entering of this Order, waives Respondents' right to a hearing herein as provided by law, and agree to be bound by this Order.

By:_____
(TYPE NAME OF SIGNER)

Title:_____

Date:_____

STATE OF NEW YORK)
) s.s.:
COUNTY OF)

On this _____ day of _____, 19___, before me personally came _____, to me known, who being duly sworn, did depose and say that he resides in _____;
that he is the _____ of _____,
the corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation and that he signed his name thereto by like order.

_____
Notary Public

SF

New York State Department of Environmental Conservation
Division of Environmental Enforcement
State Superfund and Voluntary Cleanup Practice Group
Eastern Field Unit
200 White Plains Road, 5th Floor
Tarrytown, New York 10591-5805
Telephone: (914) 332-1835
Fax (914)332-5116 (not for service of process)

John P. Cahill
Acting Commissioner

May 29, 1997

NOTICE LETTER
URGENT LEGAL MATTER - PROMPT REPLY NECESSARY
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

One Stop Auto & Truck Center
299 Main Street,
Westbury, NY 11590

Re: 299 Main Street, Site # 01-30-043S

Dear Sir/Madam :

New York State, through the efforts of the Department of Environmental Conservation (the "Department"), has documented a release and/or threatened release of "hazardous substances" as defined by the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC 9601 et seq. ("CERCLA") and the presence of "hazardous wastes" as defined in Environmental Conservation Law (ECL) 27-1301.1 at property located at 299 Main Street, in the western portion of the New Cassel Industrial Area, Westbury, NY 11590. This site is listed in the New York State Registry of Inactive Hazardous Waste Sites as Site No. 01-30-043S. It is a Class "2" site. In response to these releases and the threat of future such releases, the Department has spent public funds and anticipates spending additional public funds. These actions have been and will be taken by the Department pursuant to ECL Article 27, Title 13 and State Finance Law §97-b.

Under ECL Article 27, Title 13 and CERCLA, responsible parties are liable for monies expended by the State in taking response actions at and around sites where hazardous substances have been released, including investigative, planning, removal, and remedial actions. You have been determined to be a responsible party based on your prior and/or current ownership of the property.

The process of remediating this site will consist of two phases. In the first phase, a remedial investigation will be conducted to determine the nature and extent of the problem presented by the releases or threatened releases. This will include sampling, monitoring and gathering information to determine the necessity for and proposed extent of remedial actions. Using this data, a Feasibility Study will be performed which will define the objectives of the response action, develop and screen remedial action alternatives, and analyze selected alternatives in detail. The second step of the remediation process involves the design and implementation of the final remedial alternative selected for the site.

The purpose of this Notice Letter is to inform you of your potential liability as a responsible party, and to determine whether you are willing to conduct or finance the Remedial Investigation and Feasibility Study for this site. Any agreement by you to finance or undertake such activities must be

memorialized in an administrative consent order. You must indicate within twenty-one (21) days whether you are willing to enter negotiations with the Department for this purpose.

If within twenty-one (21) days you do not notify the Department that you are willing to enter into negotiations, the Department, at its sole discretion, may perform the necessary work at the site using the Hazardous Waste Remedial Fund. If the Fund is used to investigate or to remediate the site, the Department is required to seek recovery from you as a responsible party for any expenses it incurs in conducting such activities, in which event this letter also serves as a demand for payment of all monies the Department may expend for the investigation and remediation of this site, plus any and all interest recoverable under 42 USC 9607 and any other provision of law. In accordance with 42 USC 9607(a), interest on such amount shall accrue as of the date of this letter.

It is imperative that negotiations concerning the site begin as early as possible. Your decision whether to negotiate should be provided to me no later than twenty-one (21) days from receipt of this letter. In order to coordinate correspondence with the Department and facilitate possible negotiations, we suggest that you designate a member of your organization or an attorney to represent your interests to the Department. I enclose a copy of a draft Consent Order for your review, and I request that if you wish to negotiate with the Department in this matter, you provide me with comments on this draft Consent Order within twenty-one days of your receipt of this letter.

If you decide to negotiate a Consent Order, please note that such negotiations must be completed and I must have in hand a Consent Order executed by you no later than August 29, 1997. If I do not have a signed Consent Order in hand by that date, all further negotiations will terminate, and the Department will undertake the investigation directly and may pursue you in the future to reimburse its expenditures.

Information obtained by the Department indicates that the following companies are also potentially liable for the investigation and remediation of the site:

Island Transportation Corp.
Sam-Ton Salvage

The Department also demands a response to the following questions within twenty-one (21) days of your receipt of this letter pursuant to its authority under ECL 27-1307 and 27-1309:

1. A detailed description of your ownership interest or your relationship to an owner currently or in the past at the site including type of interest, dates the interest was or is held, location on the property of the ownership interest.

2. To the best of your knowledge, a detailed description of products manufactured or service provided at the facility; for each product listed or service provided, provide a description of the type of process or operation used.

3. For each process or operation identified pursuant to Item 2, an identification of all waste resulting from that process or operation; an identification of those wastes resulting from that process which, if generated today may be deemed hazardous wastes pursuant to 6 NYCRR, Part 371 and the hazardous waste constituents which are or may be present in the waste and the periods of time such wastes were disposed of at the above-referenced site.

4. For each waste identified pursuant to Item 3, a description of the typical physical characteristics of such waste, time periods in which it was

generated, the annual quantities generated of such waste, and the manner of disposal for all wastes.

5. The name and last known address of each individual or firm which disposed of the waste at the site and the location, time period, frequency, type, quantity and method of such disposal.

6. The names, positions, and addresses of present and former employees who had knowledge of past waste disposal practices at the site, their time of employment.

7. An identification of the methods employed, the names of personnel and the source, nature and availability of records, files, or other references utilized in the compilation of information to respond to this inquiry.

If you have any questions or wish to discuss any matters addressed in this letter, please contact me as soon as possible. My telephone number is (914) 332-1835, ext. 320.

Sincerely,

Jeanna E. Hussey
Senior Attorney
Division of Environmental
Enforcement

cc: Vasudevan/Trad

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Development and Implementation of a Remedial Investigation/Feasibility Study for an Inactive Hazardous Waste Disposal Site, Under Article 27, Title 13, and Article 71, Title 27 of the Environmental Conservation Law of the State of New York by One Stop Auto & Truck Center Respondent.	ORDER ON CONSENT INDEX # Site Code # 01-30-043S.

WHEREAS,

1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites." This Order is issued pursuant to the Department's authority under, inter alia, ECL Article 27, Title 13 and ECL 3-0301.

2. One Stop Auto & Truck Center ("Respondent"), is the current owner of the site located at 299 Main Street in the western portion of the New Cassel Industrial Area, Westbury, NY 11590, (hereinafter referred to as "the Site"). Documentary evidence indicates that past site operations have led to groundwater contamination beneath and downgradient of the site with TCE and related compounds. The contaminated groundwater is located within an EPA- designated sole source aquifer. Two public water supply wells are located approximately 2,700 ft downgradient of the site. A site map is attached as an appendix to this Order as Exhibit A.

3. The Site is an inactive hazardous waste disposal site, as that term is defined at ECL 27-1301.2, and presents a significant threat to the public health or environment. The Site has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 01-30-043S. The Department has classified the Site as a Classification "2" pursuant to ECL 27-1305.4.b.

4. A. Pursuant to ECL 27-1313.3.a, whenever the Commissioner of Environmental Conservation (the "Commissioner") "finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department,

at such site, and (ii) to implement such program within reasonable time limits specified in the order."

B. Any person under order pursuant to ECL 27-1313.3.a has a duty imposed by ECL Article 27, Title 13 to carry out the remedial program committed to under order. ECL 71-2705 provides that any person who fails to perform any duty imposed by ECL Article 27, Title 13 shall be liable for civil, administrative and/or criminal sanctions.

C. The Department also has the power, inter alia, to provide for the prevention and abatement of all water, land, and air pollution. ECL 3-0301.1.i.

5. The Department and Respondent agree that the goals of this Order are for Respondent to (i) develop and implement a Remedial Investigation/Feasibility Study ("RI/FS") for the Site; and (ii) reimburse the State's administrative costs.

6. Respondent, having waived Respondent's right to a hearing herein as provided by law, and having consented to the issuance and entry of this Order, agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Initial Submittal

Within 30 days after the effective date of this Order, Respondent shall submit to the Department all data within Respondent's possession or control regarding environmental conditions on-Site and off-Site, and other information described below, unless the Department informs Respondent that such data have previously been provided to the Department. The data and other information shall include:

A. A brief history and description of the Site, including the types, quantities, physical state, location, and dates of disposal of hazardous waste including methods of disposal and spillage of such wastes;

B. A concise summary of information held by Respondent and Respondent's attorneys and consultants with respect to all persons responsible for such disposal of hazardous wastes, including but not limited to names, addresses, dates of disposal and any proof linking each such person responsible with hazardous wastes identified pursuant to Subparagraph I.A; and

C. A comprehensive list and copies of all existing relevant reports with titles, authors, and subject matter, as well as a description of the results of all previous investigations of the Site and areas in the vicinity of the Site, including copies of all available topographic and property surveys, engineering studies and aerial photographs.

II. RI/FS Work Plan Contents and Submittals

A. Within 30 days after the effective date of this Order, Respondent shall submit to the Department a detailed work plan describing the methods and procedures to be implemented in performing an RI/FS for the Site ("RI/FS Work Plan").

B. (1) The RI/FS Work Plan shall include, but not be limited to, the following:

a. A chronological description of the anticipated RI/FS activities together with a schedule for the performance of these activities.

b. A Sampling and Analysis Plan that shall include:

(i) A quality assurance project plan that describes the quality assurance and quality control protocols necessary to achieve the initial data quality objectives. This plan shall designate a data validation expert and must describe such individual's qualifications and experience.

(ii) A field sampling plan that defines sampling and data gathering methods in a manner consistent with the "Field Methods Compendium," OSWER Directive 9285.2-11 (draft June 1993), as supplemented by the Department.

c. A health and safety plan to protect persons at and in the vicinity of the Site during the performance of the RI/FS which shall be prepared in accordance with 29 CFR 1910 and all other applicable standards by a certified health and safety professional. Respondent shall add supplemental items to this plan necessary to ensure the health and safety of all persons at or in the vicinity of the Site during the performance of any work pursuant to this Order.

d. A citizen participation plan that is, at a minimum, consistent with the Department's publication, "New York State Inactive Hazardous Waste Site Citizen Participation Plan," dated August 30, 1988, and any subsequent revisions thereto, and 6 NYCRR Part 375.

(2) The RI/FS Work Plan shall incorporate all elements of a RI/FS as set forth in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") [42 USC 9601 et seq.], as amended, the National Contingency Plan ("NCP") of March 8, 1990 [40 CFR Part 300], the USEPA guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," dated October 1988, and any subsequent revisions to that guidance document in effect at the time the RI/FS Work Plan is submitted, and appropriate USEPA and Department technical and administrative guidance documents.

III. Performance and Reporting of Remedial Investigation

A. Respondent shall commence the Remedial Investigation in accordance with the schedule contained in the Department-approved RI/FS Work Plan.

B. Respondent shall perform the Remedial Investigation in accordance with the Department-approved RI/FS Work Plan.

C. During the performance of the Remedial Investigation, Respondent shall have on-Site a full-time representative who is qualified to supervise the work done.

D. Within the time frame set forth in the Department-approved RI/FS Work Plan, Respondent shall prepare a Remedial Investigation Report that shall:

(1) include all data generated and all other information obtained during the Remedial Investigation:

(2) provide all of the assessments and evaluations set forth in CERCLA, the NCP, and the guidance documents identified in Subparagraph II.B.2;

(3) identify any additional data that must be collected; and

(4) include a certification by the individual or firm with primary responsibility for the day to day performance of the Remedial Investigation that all activities that comprised the Remedial Investigation were performed in full accordance with the Department-approved RI/FS Work Plan.

IV. Feasibility Study

A. In accordance with the schedule contained in the Department-approved RI/FS Work Plan, Respondent shall submit a complete Feasibility Study evaluating on-Site and off-Site remedial actions to eliminate, to the maximum extent practicable, all health and environmental hazards and potential hazards at the Site. The Feasibility Study shall be prepared by and have the signature and seal of a professional engineer who shall certify that the Feasibility Study was prepared in accordance with this Order.

B. Respondent shall perform and prepare the Feasibility Study in accordance with the Department-approved RI/FS Work Plan and in a manner consistent with CERCLA, the NCP, and the guidance documents identified in Subparagraph II.B.2.

C. After the Department's approval of the Feasibility Study, Respondent shall cooperate and assist the Department in soliciting public comment on the RI/FS and on the proposed remedial

action plan, in accordance with CERCLA, the NCP, the guidance documents identified in Subparagraph II.B.2, and with any Department policy and guidance documents in effect at the time the public comment period is initiated. After the close of the public comment period, the Department shall select a final remedial alternative for the site in a Record of Decision ("ROD"). The ROD shall be incorporated into and become an enforceable part of this Order.

V. Interim Remedial Measures

A. 1. Respondent may propose one or more IRMs for the Site.

2. In proposing each IRM, Respondent shall submit to the Department a work plan that includes a chronological description of the anticipated IRM activities together with a schedule for performance of those activities (an "IRM Work Plan" for that Site).

3. Upon the Department's determination that the proposal is an appropriate IRM and upon the Department's approval of such work plan, the IRM Work Plan shall be incorporated into and become an enforceable part of this Order; and Respondent shall submit to the Department for its review and (as appropriate) approval, in accordance with the schedule contained in the Department-approved IRM Work Plan, detailed documents and specifications prepared, signed, and sealed by a professional engineer to implement the Department-approved IRM. Such documents shall include a health and safety plan, contingency plan, and (if the Department requires such) a citizen participation plan that incorporates appropriate activities outlined in the Department's publication, "New York State Inactive Hazardous Waste Citizen Participation Plan," dated August 30, 1988, and any subsequent revisions thereto, and 6 NYCRR Part 375. Respondent shall then carry out such IRM in accordance with the requirements of the approved IRM Work Plan, detailed documents and specifications, and this Order. Respondent shall notify the Department of any significant difficulties that may be encountered in implementing the Department-approved work plan, detailed documents, or specifications and shall not modify any obligation unless first approved by the Department.

4. During implementation of all construction activities identified in the Department-approved IRM Work Plan, Respondent shall have on-Site a full-time representative who is qualified to supervise the work done.

5. Within the schedule contained in the Department-approved IRM Work Plan, Respondent shall submit to the Department a final engineering report prepared by a professional engineer that includes a certification by that individual that all activities that comprised the Department-approved IRM were completed in accordance with the Department-approved IRM Work Plan and this Order.

a. If the performance of the Department-approved IRM encompassed construction activities, the final engineering report also shall include a detailed post-remedial operation and maintenance plan ("IRM O&M Plan"); "as-built" drawings and a final engineering report (each including all changes made to the Remedial Design during construction); and a

certification by a professional engineer that the IRM was implemented and all construction activities were completed in accordance with the Department-approved detailed documents and specifications for the IRM and all such activities were personally witnessed by him or her or by a person under his or her direct supervision. The IRM O&M Plan, "as built" drawings, final engineering report, and certification must be prepared, signed, and sealed by a professional engineer.

b. Upon the Department's approval of the IRM O&M Plan, Respondent shall implement the IRM O&M Plan in accordance with the requirements of the Department-approved IRM O&M Plan.

6. After receipt of the final engineering report and certification, the Department shall notify Respondent in writing whether the Department is satisfied that the IRM was completed in compliance with the Department-approved IRM Work Plan and design.

VI. Progress Reports

Respondent shall submit to the parties identified in Subparagraph XIV.B in the numbers specified therein copies of written monthly progress reports that:

A. describe the actions which have been taken toward achieving compliance with this Order during the previous month;

B. include all results of sampling and tests and all other data received or generated by Respondent or Respondent's contractors or agents in the previous month, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent;

C. identify all work plans, reports, and other deliverables required by this Order that were completed and submitted during the previous month;

D. describe all actions, including, but not limited to, data collection and implementation of work plans, that are scheduled for the next month and provide other information relating to the progress at the Site;

E. include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of Respondent's obligations under the Order, and efforts made to mitigate those delays or anticipated delays;

F. include any modifications to any work plans that Respondent has proposed to the Department or that the Department has approved; and

G. describe all activities undertaken in support of the Citizen Participation Plan during the previous month and those to be undertaken in the next month. Respondent shall submit these

progress reports to the Department by the tenth day of every month following the effective date of this Order.

Respondent also shall allow the Department to attend, and shall provide the Department at least seven days advance notice of, any of the following: prebid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.

VII. Review of Submittals

A. 1. The Department shall review each of the submittals Respondent makes pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. The Department shall notify Respondent in writing of its approval or disapproval of the submittal, except for the submittals discussed in Subparagraph II.B.1c. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. a. If the Department disapproves a submittal, it shall so notify Respondent in writing and shall specify the reasons for its disapproval. Within __ days after receiving written notice that Respondent's submittal has been disapproved, Respondent shall make a revised submittal to the Department that addresses and resolves all of the Department's stated reasons for disapproving the first submittal.

b. After receipt of the revised submittal, the Department shall notify Respondent in writing of its approval or disapproval. If the Department disapproves the revised submittal, Respondent shall be in violation of this Order and the Department may take any action or pursue whatever rights it has pursuant to any provision of statutory or common law. If the Department approves the revised submittal, it shall be incorporated into and become an enforceable part of this Order.

B. Respondent shall modify and/or amplify and expand a submittal upon the Department's direction to do so if the Department determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts, that further work is necessary.

VIII. Penalties

A. 1. Respondent's failure to comply with any term of this Order constitutes a violation of this Order and the ECL.

2. Respondent shall be liable for payment to the Department of the sums set forth below as stipulated penalties for each day or part thereof that Respondent is in violation of the terms of this Order. All penalties begin to accrue on the first day Respondent is in violation of the terms

of this Order and continue to accrue through the final day of correction of any violation. Such sums shall be due and payable within 15 days after receipt of notification from the Department assessing the penalties. If such payment is not received within 15 days after Respondent receives such notification from the Department, interest shall be payable at the annual rate of nine per centrum on the overdue amount from the day on which it was due through, and including, date of payment. Penalties shall be paid by certified check or money order, made payable to "New York State Department of Environmental Conservation" and shall be delivered personally or by certified mail, return receipt requested, to the Director, Division of Environmental Enforcement, N.Y.S.D.E.C., 50 Wolf Road, Albany, New York 12233-5500. Payment of the penalties shall not in any way alter Respondent's obligation to complete performance under the terms of this Order. Stipulated penalties shall be due and payable under Subparagraph X.A.2 pursuant to the following schedule:

Period of Non-Compliance	Penalty Per Day
First through 15th day	$ 5,000
16th through 30th day	$ 10,000
31st day and thereafter	$ 15,000

B. Respondent shall not suffer any penalty under this Order or be subject to any proceeding or action if it cannot comply with any requirement hereof because of war, riot, or an unforeseeable disaster arising exclusively from natural causes which the exercise of ordinary human prudence could not have prevented. Respondent shall, within five days of when it obtains knowledge of any such condition, notify the Department in writing. Respondent shall include in such notice the measures taken and to be taken by Respondent to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Failure to give such notice within such five-day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall have the burden of proving that an event is a defense to compliance with this Order pursuant to Subparagraph VIII.B.

IX. Entry upon Site

Respondent hereby consents to the entry upon the Site or areas in the vicinity of the Site which may be under the control of Respondent by any duly designated employee, consultant, contractor, or agent of the Department or any State agency for purposes of inspection, sampling, and testing and to ensure Respondent's compliance with this Order. During Remedial Construction, Respondent shall provide the Department with suitable office space at the Site, including access to a telephone, and shall permit the Department full access to all records relating to matters addressed by this Order and job meetings.

X. Payment of State Costs

Within 30 days after receipt of an itemized invoice from the Department, Respondent shall pay to the Department a sum of money which shall represent reimbursement for the State's expenses including, but not limited to, direct labor, fringe benefits, indirect costs, travel, analytical costs, and

contractor costs incurred by the State of New York for work related to the Site to the effective date of this Order, as well as for reviewing and revising submittals made pursuant to this Order, overseeing activities conducted pursuant to this Order, collecting and analyzing samples, and administrative costs associated with this Order. Such payment shall be made by certified check payable to the Department of Environmental Conservation and shall be sent to:

Bureau of Program Management
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010.

Personal service costs shall be documented by reports of Direct Personal Service, which shall identify the employee name, title, biweekly salary, and time spent (in hours) on the project during the billing period, as identified by an assigned time and activity code. Approved agency fringe benefit and indirect cost rates shall be applied. Non-personal service costs shall be summarized by category of expense (e.g., supplies, materials, travel, contractual) and shall be documented by expenditure reports.

XI. Department Reservation of Rights

A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's civil, criminal, or administrative rights or authorities.

B. Nothing contained in this Order shall be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

XII. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors, and assigns.

XIII. Public Notice

A. Within 30 days after the effective date of this Order, Respondent shall file a Declaration of Covenants and Restrictions with the Clerk of the County wherein the Site is located to give all parties who may acquire any interest in the Site notice of this Order.

B. If Respondent proposes to convey the whole or any part of Respondent's ownership

interest in the Site, Respondent shall, not fewer than 60 days before the date of conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed date of the conveyance and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order.

XIV. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

1. Communication from Respondent shall be sent to:

Jeanna E. Hussey, Esq.
Division of Environmental Enforcement
Eastern Field Unit
New York State Department of Environmental Conservation
200 White Plains Road, 5th Floor
Tarrytown, NY 10591-5805

with copies to:

1. Chittitabu Vasudevan, P.E.
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

2. G. Anders Carlson, Ph.D
Director, Bureau of Environmental Exposure Investigation
New York State Department of Health
2 University Place
Albany, New York 12203

3. Ray Cowen, Director
Region I
New York State Department of Environmental Conservation
N. Loop Rd., Bldg #40
SUNY Campus
Stony Brook, NY 11790-2356

2. Communication to be made from the Department to Respondent shall be sent to:

_____

_____

B. Copies of work plans and reports shall be submitted as follows:

1. Four copies (one unbound) to

Jeffrey Trad
Division of Environmental Remediation

2. Two copies to

G. Anders Carlson, Ph.D.
Director, Bureau of Environmental Exposure Investigation

3. One copy to Ray Cowen, Regional Director

4. One copy to Jeanna E. Hussey, Esq.
Division of Environmental Enforcement

C. 1. Within 30 days of the Department's approval of any report submitted pursuant to this Order, Respondent shall submit to Director, Division of Environmental Remediation, a computer readable magnetic media copy of the approved report in American Standard Code for Information Interchange (ASCII) format.

2. Within 30 days after the Department's approval of the RI/FS, Respondent shall submit one microfilm copy of the RI/FS to Director, Division of Environmental Remediation.

D. The Department and Respondent reserve the right to designate additional or different addressees for communication or written notice to the other.

XV. Miscellaneous

A. 1. All activities and submittals required by this Order shall address both on-Site and off-Site contamination resulting from the disposal of hazardous wastes at the Site.

2. All activities Respondent is required to undertake under this Order are ordinary and necessary expenses for the continued operation of Respondent.

B. Respondent shall retain professional consultants, contractors, laboratories, quality

assurance/quality control personnel, and third party data validators acceptable to the Department to perform the technical, engineering, and analytical obligations required by this Order. The experience, capabilities, and qualifications of the firms or individuals selected by Respondent shall be submitted to the Department within 15 days after the effective date of this Order. The Department's approval of these firms or individuals shall be obtained before the start of any activities for which Respondent and such firms or individuals will be responsible. The responsibility for the performance of the professionals retained by Respondent shall rest solely with Respondent.

C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondent, and the Department also shall have the right to take its own samples. Respondent shall make available to the Department the results of all sampling and/or tests or other data generated by Respondent with respect to implementation of this Order and shall submit these results in the progress reports required by this Order.

D. Respondent shall notify the Department at least 10 working days in advance of any field activities to be conducted pursuant to this Order.

E. Respondent shall obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform Respondent's obligations under this Order.

F. Respondent and Respondent's officers, directors, agents, servants, employees, successors, and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondent's responsibilities under this Order. Respondent's officers, directors, employees, servants, and agents shall be obliged to comply with the relevant provisions of this Order in the performance of their designated duties on behalf of Respondent.

G. Respondent shall provide a copy of this Order to each contractor hired to perform work required by this Order and to each person representing Respondent with respect to the Site and shall condition all contracts entered into in order to carry out the obligations identified in this Order upon performance in conformity with the terms of this Order. Respondent or Respondent's contractors shall provide written notice of this Order to all subcontractors hired to perform any portion of the work required by this Order. Respondent shall nonetheless be responsible for ensuring that Respondent's contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

H. All references to "professional engineer" in this Order are to an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law. If such individual is a member of a firm, that firm must be authorized to offer professional engineering services in the State of New York in accordance with Article 145 of the New York State Education Law.

I. All references to "days" in this Order are to calendar days unless otherwise specified.

J. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

K. 1. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order.

2. If Respondent desires that any provision of this Order be changed, Respondent shall make timely written application, signed by Respondent, to the Commissioner setting forth reasonable grounds for the relief sought. Copies of such written application shall be delivered or mailed to Jeanna E. Hussey and to Jeffrey Trad.

L. The effective date of this Order is the date the Commissioner or his designee signs it.

DATED: , New York
, 1997

JOHN P. CAHILL, ACTING COMMISSIONER
New York State Department
of Environmental Conservation

By:

_____
Michael J. O'Toole, Jr.

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

By:_____
(TYPE NAME OF SIGNER)

Title:_____

Date:_____

STATE OF NEW YORK)
) s.s.:
COUNTY OF)

On this _____ day of _____, 19___, before me personally came _____, to me known, who being duly sworn, did depose and say that he resides in _____;
that he is the _____ of _____,
the corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation and that he signed his name thereto by like order.

_____
Notary Public

New Cassel

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7010

John P. Cahill
Acting Commissioner

VIA FAX

June 5, 1997

RECEIVED
JUN - 9 1997
DIV. ENV. ENF.
FIELD UNIT

Mr. Phil Rivera
One Stop Auto and Truck Center
520 Main Street
Westbury, NY 11590

Dear Mr. Rivera:

Re: 299 Main Street Site
Site ID No. 1-30-043S

As you requested yesterday, I am forwarding a copy of the final Registry Report for the 299 Main Street Site to you for your information.

As we discussed, the information (receipts, manifests, invoices, and other pertinent records) you possess would be very helpful in the investigation at this site. These should be provided to the Department pursuant to the Notice Letter sent to you by Ms Hussey dated May 29, 1997.

If you have any concerns or questions regarding this matter, please contact me at (518) 457-3395 or Ms. Hussey at (914) 322-1835, ext. 320.

Sincerely,

Jeffrey E. Trad

Jeffrey E. Trad, P.E.
Project Manager
Remedial Section A
Bureau of Eastern Remedial Action
Division of Environmental Remediation

cc: J. Hussey, DEE, Tarrytown

DIVISION OF HAZARDOUS WASTE REMEDIATION

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
299 Main Street Site	130043S	North Hempstead/ New Cassel	Nassau

5. REGION	6. CLASSIFICATION
1	CURRENT P PROPOSED 2

7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)

a. Quadrangle Hicksville

b. Site Latitude 40° 45' 21" Site Longitude 73° 34' 00"

c. Tax Map Numbers Section 11, Block 144, Lots 37 to 44

d. Site Street Address: 299 Main St., Westbury, NY 11590

8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

This site is located in the western portion of the New Cassel Industrial Area. It is currently occupied by One Stop Auto and Truck Center and was developed some time between 1950 and 1962. The buildings consist of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formerly used as a junk yard and a transportation company. Island Transport Corporation used large quantities of BTEX- related compounds and approximately 275 gal of TCE between July and December 1978 to clean trucks.

a. Area 0.5 acres b. EPA ID Number _____

c. Completed ( )Phase I ( )Phase II (X) PSA ( )RI/FS ( )PA/SI ( )Other :

9. HAZARDOUS WASTE DISPOSED (Include EPA Hazardous Waste Numbers)

Island Transportation Corp. used TCE to wash asphalt residues from its trucks prior to 1980. Approximately 275 gallons were used during a period from July to December 1978. The TCE was reclaimed on-site and reused. An NCDOH inspection in April 1978 listed a storage of 2841.5 lbs of TCE and oil saturation at the storage area.

10. ANALYTICAL DATA AVAILABLE

a. ( )Air (X)Groundwater ( )Surface Water ( )Sediment (X)Soil ( )Waste ( )Leachate ( )EPTox ( )TCLP

b. Contravention of Standards or Guidance Values- Groundwater

Contaminant Group	GW-Upgradient Level(ppb)	GW-On site Level(ppb)	GW-Downgradient Level(ppb)	GW Standard (ppb)	Soil Sample -(SGP-22) On-Site (ppb)
PCE	< 100	12	680	5	1730
TCE	ND	2	20-490	5	92

11. CONCLUSION

The results of the geoprobe investigation show that this property is contributing to groundwater contamination. The PCE contamination concentrations are significantly higher than the upgradient concentrations. The number of contaminants downgradient are also more numerous. Upgradient of the site the only contaminant noted in the groundwater is PCE while downgradient TCE, DCE, and VC are found along with the PCE. The source of these contaminants is likely located on this property. The PCE contamination at depth is most likely from an upgradient souce. The contaminated groundwater is located within a USEPA designated sole source aquifer.

12. SITE DATA

a. Nearest Surface Water: Distance: 6 mi. Direction: NW Classification: SB (Hempstead Bay)

b. Nearest Groundwater: Depth: 60 ft. Flow Direction: SW (X)Sole Source ( )Primary ( )Principal

c. Nearest Water Supply: Distance: 2,100 ft. Direction: South Active (X)Yes ( )No

d. Nearest Building: Distance: on-site Direction: on-site Use: manufacturing

e. In State Economic Development Zone?	( )Y	(X)N	i. Controlled Site Access?	( )Y	(X)N
f. Crops or livestock on site?	( )Y	(X)N	j. Exposed hazardous waste?	( )Y	(X)N
g. Documented fish or wildlife mortality?	( )Y	(X)N	k. HRS Score: N/A		
h. Impact on special status fish or wildlife resource?	( )Y	(X)N	l. For Class 2: Priority Category		

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
One Stop Auto & Truck Center	299 Main Street, Westbury, NY 11590	516-338-4000

16. PREPARER	17. APPROVED
A. Joseph White 2/20/97	5/5/97
Signature Date	Signature Date
A. Joseph White, EE-2, Eastern Investigation Section	Earl H. Barcomb, Director, BHSC, DER
Name, Title, Organization	Name, Title, Organization

Division of Hazardous Waste Remediation
Inactive Hazardous Waste Disposal Report

PROPOSED

Site Name: 299 MAIN ST. SITE
Class Code: 2 Region: 1 County: NASSAU Site Code: 01-30-043 S
Address: 299 MAIN ST. City: WESTBURY EPA Id:
Latitude: 40° 45' 33.7" N Longitude: 73° 33' 36.1" W Zip: 11590
Site Type: FLAT, INDUSTRIAL AREA Estimated Size: 0.5 Acres

Site Owner / Operator Information:
Current Owner(s) Name: ONE STOP AUTO + TRUCK CENTER
Current Owner(s) Address: 299 MAIN ST, WESTBURY NY 11590
Owner(s) during disposal: ISLAND TRANSPORTATION CORP., SAM-TON SALVAGE
Operator(s) during disposal: " " " "
Stated Operator(s) Address: 299 MAIN ST., WESTBURY N.Y. 11590
Hazardous Waste Disposal Period: From 1963 To 1993

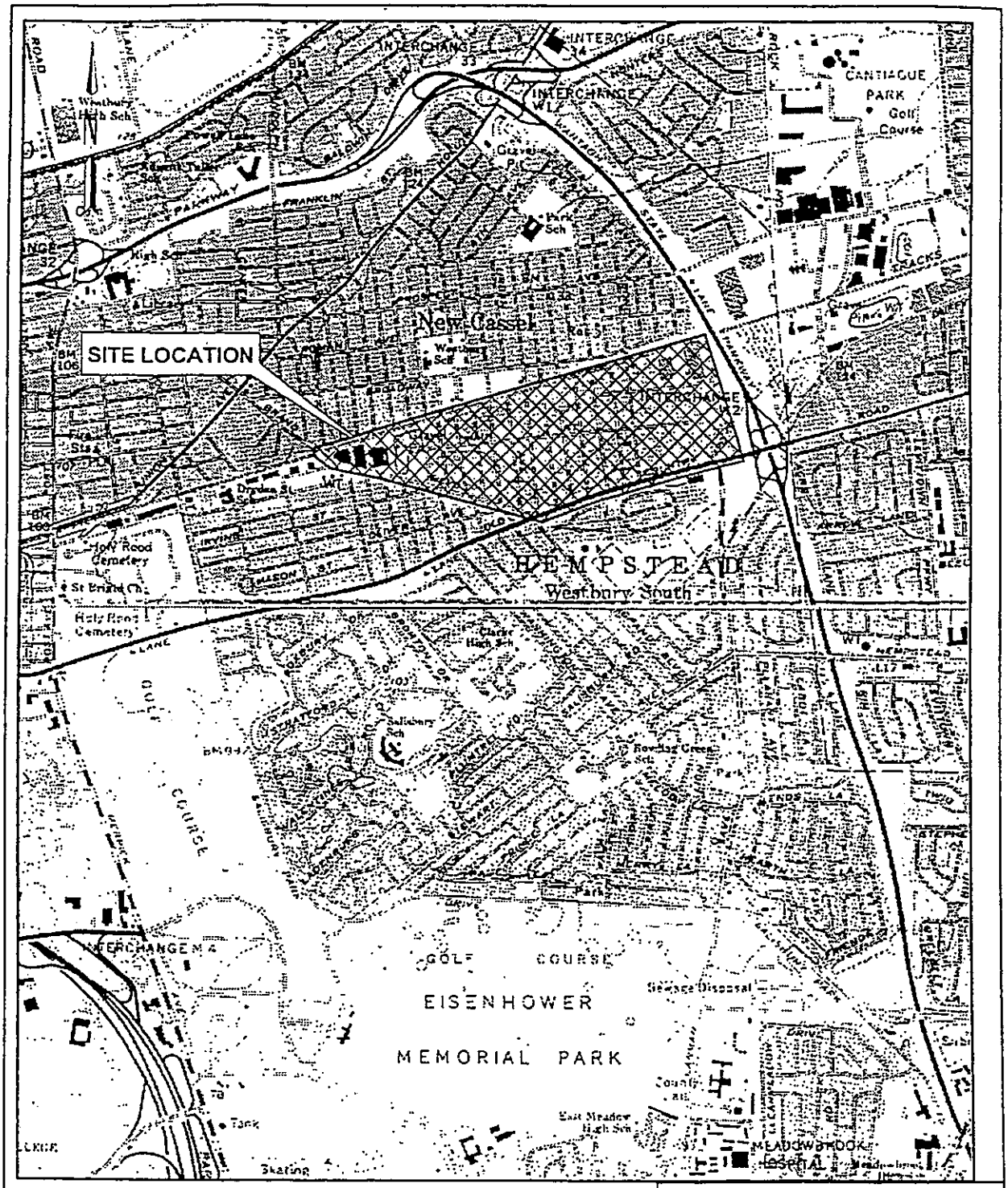
Site Description: This site was developed some time between 1950 and 1962 and consists of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formerly used as a junkyard and a transportation company. Island Transportation Company (ITC) used TCE to wash asphalt residues from its trucks prior to 1980. A NCDOH inspection in 1978 listed a storage of 2841 lbs of TCE and oil saturation at the storage area. The NCDOH, in 1979, discovered ITC was discharging wastewater from its truck cleaning operations into the street. A sample showed that Benzene, Xylene, Toluene and Aliphatic Hydrocarbons were present in this discharge. Sam-Ton Towing and Salvage was cited by USEPA in August of 1990 for illegally injecting fluids into the ground via Class V wells at this property. On Nov. 2, 1993 a fire occurred at Sam-Ton and at least seven drums of unknown contents spilled during the fire.

Confirmed Hazardous Waste Disposal: TCE (EPA ID. F001) Quantity: UNKNOWN

Analytical Data Available for: GROUNDWATER, SOILS
Applicable Standards Exceeded in: GROUNDWATER
Geotechnical Information:
Soil/Rock Type: FINE TO MED. GRAINED SAND + GRAVEL Depth to Groundwater: 50-52 ft
Legal Action: Type: Status:
Remedial Action: Nature of action:
Assessment of Environmental Problems:

Assessment of Health Problems:

Past site operations have contaminated groundwater beneath and downgradient of the site with TCE and related compounds. The contaminated groundwater is located within an EPA-designated sole source aquifer. Two public water supply wells are located approximately 2,700 ft. downgradient of the site.



0 2000 ft

SCALE
1 in. = 2000 ft

Map source:
USGS 7.5-minute quadrangle series,
Freeport, NY, 1969, photorevised 1979,
Hicksville, NY, 1967, photorevised 1979.

Figure 1-1

Site Location

NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043 J, N-Q, and 130043

LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Pearl River, New York

NEW YORK STATE DEPARTM[illegible] OF ENVIRONMENTAL CONSERVATION [illegible]
INACTIVE HAZARDOUS WASTE DISPOSAL SITE PRIORITY RANKING WORKSHEET

NEW CASSEL INDUSTRIAL AREA

SITE I.D. 01-30-043 S SITE NAME 299 MAIN ST.

Priority I - Sites for which remediation should supersede all other Class 2 sites. Priority I can be assigned if any one of the following questions can be answered affirmatively.

a) Has a public or private water supply which is currently in use been contaminated or threatened?..... [X]
b) Has human exposure to contaminants (or the potential for exposure) been identified which represents a significant health risk as determined by DOH?..... [ ]
c) Has bioaccumulation of site contaminants in flora or fauna resulted in a health advisory?..... [ ]
d) Are site contaminants present at levels that are acutely toxic to fish or wildlife or that have caused documented fish or wildlife mortality?..... [ ]
e) Is there a potentially responsible party or volunteer ready, willing and able to proceed with remediation?..... [ ]

[X] (1) [If 1 or more boxes are checked, check this box]

• Priority II - Important Sites. Priority II will be assigned if any of the following questions can be answered affirmatively.

a) Has a Class A or AA surface water body or a primary or principal aquifer been contaminated or threatened without contaminating or threatening an existing water supply?..... [ ]
b) Has bioaccumulation of site contaminants in flora or fauna resulted in actionable levels (but not a health advisory)?.... [ ]
c) Are contaminants at levels chronically toxic to fish/wildlife?..... [ ]
d) Have endangered, threatened or rare species, significant habitats, designated coastal zone or regulated wetlands been impacted by releases from the site?..... [ ]

[ ] (2) [If 1 or more boxes are checked, check this box]

• Priority III - will be assigned unless one or more of the site prioritization criteria, specified above, apply to a site. After remedial needs for Priority I and II sites have been accommodated, remediation of sites under this category can be considered. If priority III, check box 3. [ ] (3)

Enter the number of the priority box checked 1, 2, or 3 here..... [1] (4)
This is the site's priority rank.

FACTORS

IJC Factor - If the site has been identified by the International Joint Commission (IJC) as a component in a remedial action plan, subtract (1) from the value in box 4 and enter the result in box 5..... [ ] (5)

EDZ Factor - If the site is within a New York State designated Economic Development Zone (EDZ) should this fact cause the site priority to be raised?.. Yes [ ] No [ ]

Community Support Factor - If the site has been targeted for local government-supported development, should this fact cause the site priority to be raised?..... Yes [ ] No [ ]

If either "yes" box is checked, subtract 1 from the value in box 4 and enter the result into box 6. If "no" is checked, the value in box 6 equals box 4 (or box 5 if applicable). If both IJC and EDZ/Community Support factors apply, only 1 (not 2) will be subtracted form the value in box 4. The resultant value in box 6 will never be less than 1..... [ ] (6)

IRM NOTE: Should this site be considered a candidate for an Interim Remedial asure (IRM) as defined by 6NYCRR Part 375-1.3n?..... Yes [ ] No [ ]

If "yes", please explain why: _____

Preparer A. Joseph White Date 2/20/97

Appendix 2-1

CLASSIFICATION WORKSHEET

Site: NEW CASSEL IND. AREA 299 MAIN ST. County: NASSAU Region 1

1. Hazardous waste disposed? ☑ Y (to 2) ☐ N (Stop) ☐ U (Stop)

2. Consequential amount of hazardous waste? ☑ Y (to 3) ☐ N (Stop) ☐ U (Stop)

3. Part 375-1.4(a)(1) applies? ☐ N (to 4) ☐ U (to 4)

☐ Y (as checked below; Class 2; to 5)

☐ a. endangered or threatened species

☐ b. streams, wetlands or coastal zone

☐ c. bioaccumulation

☐ d. fish, shellfish, crustacea or wildlife

☐ e. fire, spill, explosion or toxic reaction

☑ f. proximity to people or water supplies

4. Part 375-1.4(a)(2) applies? ☐ N (Cl 3; Stop) ☐ U (Cl 2a; Stop)

☑ Y (Class 2; to 5) DOCUMENTED USE, DISPOSAL AND MEASURED CONCENTRATIONS IN GROUNDWATER AND SOILS AT THIS SITE.

5. Factor(s) considered in making this determination:

SUMMARY

Consequential Hazardous Waste ☑ Yes ☐ No ☐ Unknown

Significant Threat ☑ Yes ☐ No ☐ Unknown

Proposed Classification 2 Site Number

2/20/97
Date

A. Joseph White, EE2
Signature and Title

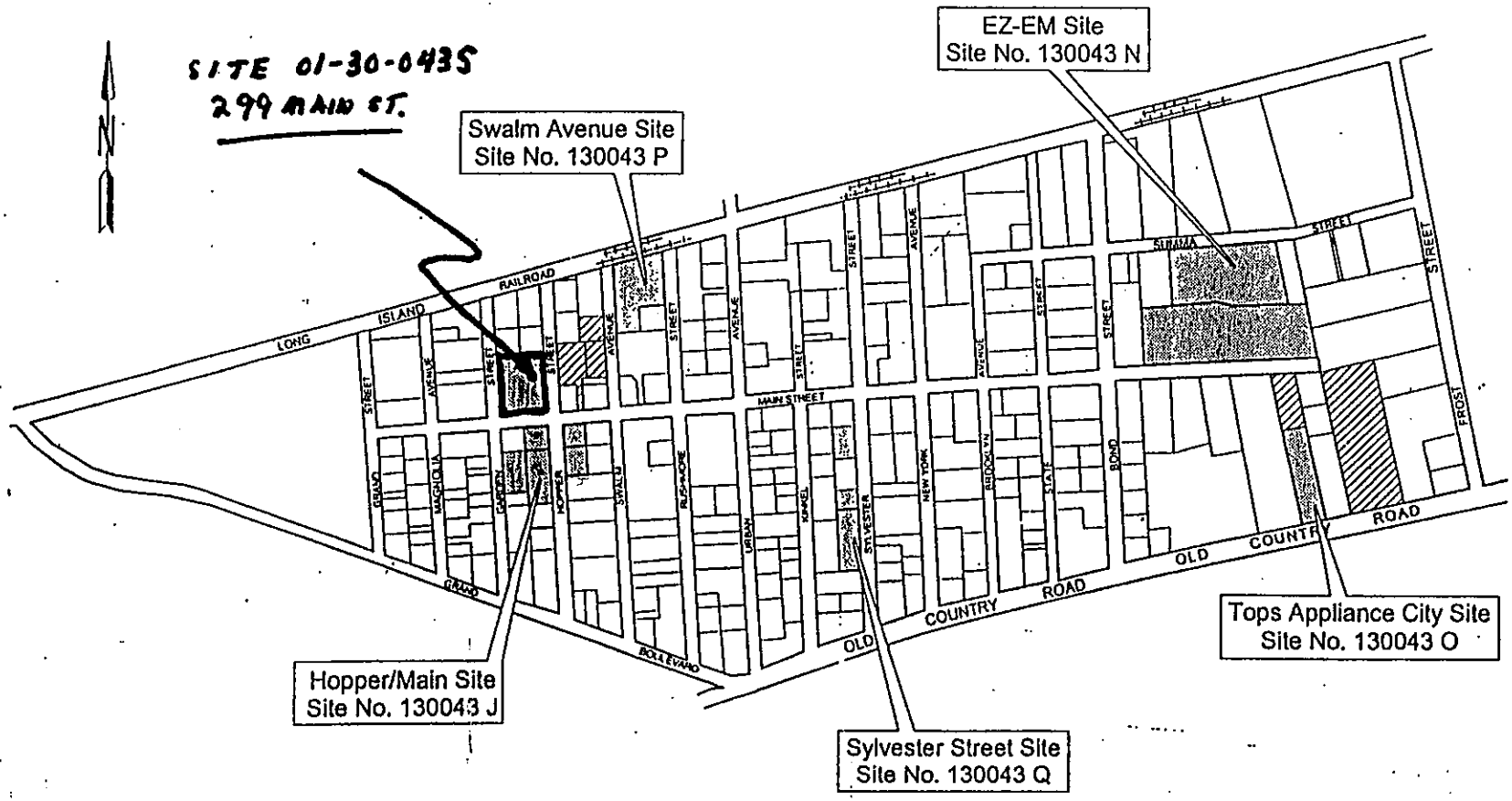
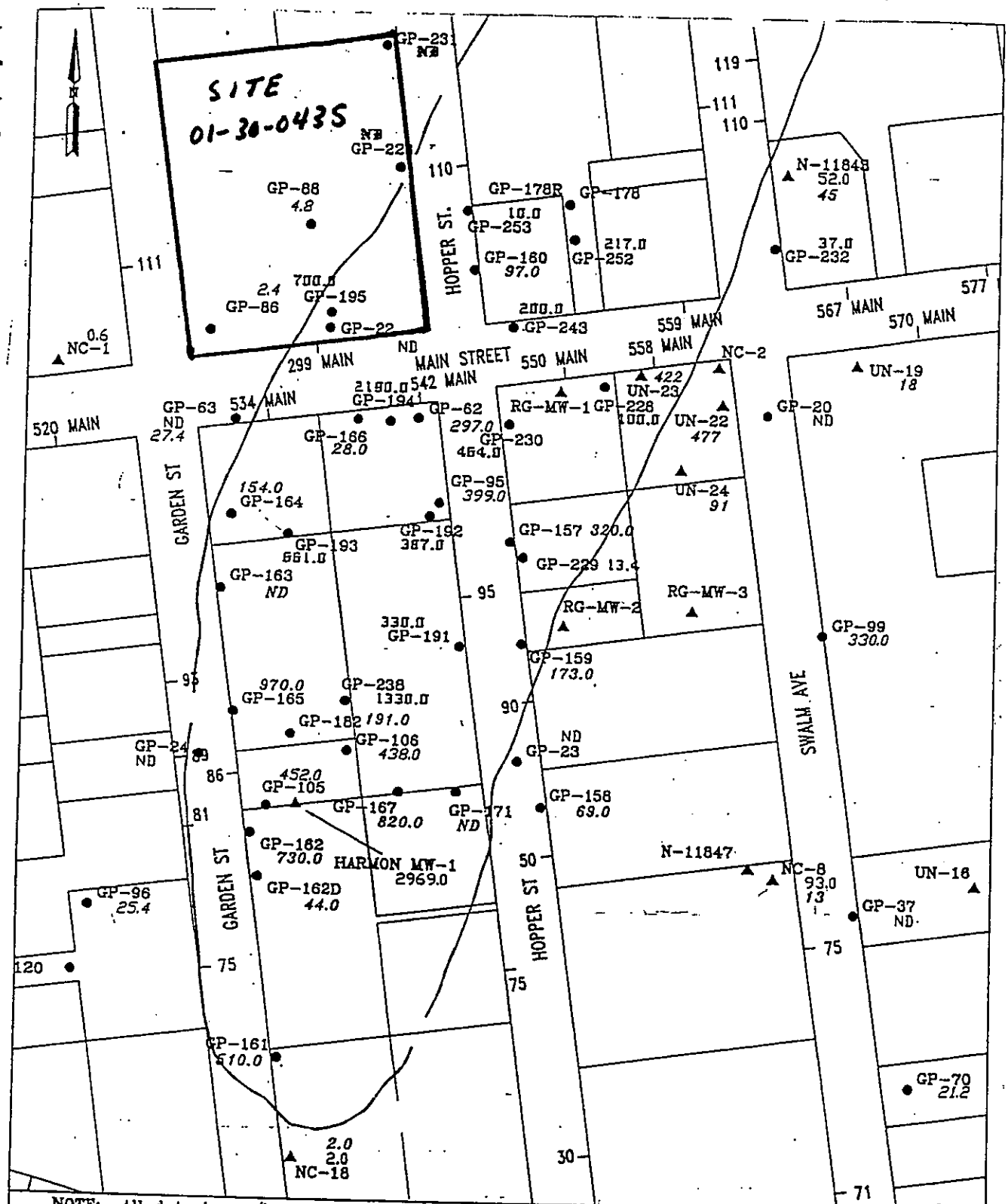


Figure 1-2

Site Plan

NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043 J, N-Q, and 130043

LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Pearl River, New York



NOTE: All data in ug/l.

Scale in Feet

140 0 140

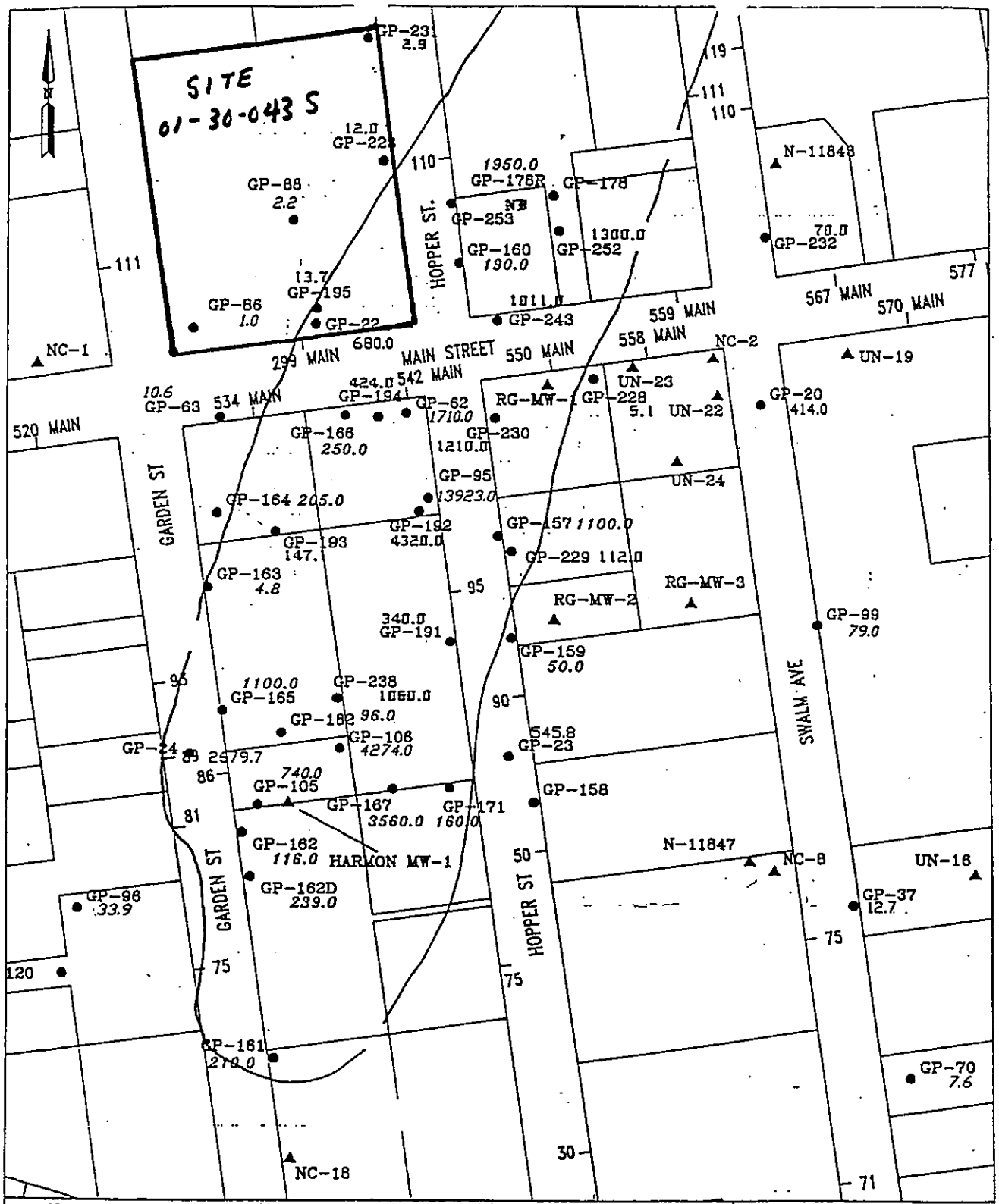
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.1
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST.
PCE IN GROUNDWATER
WATER TABLE TO 65 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

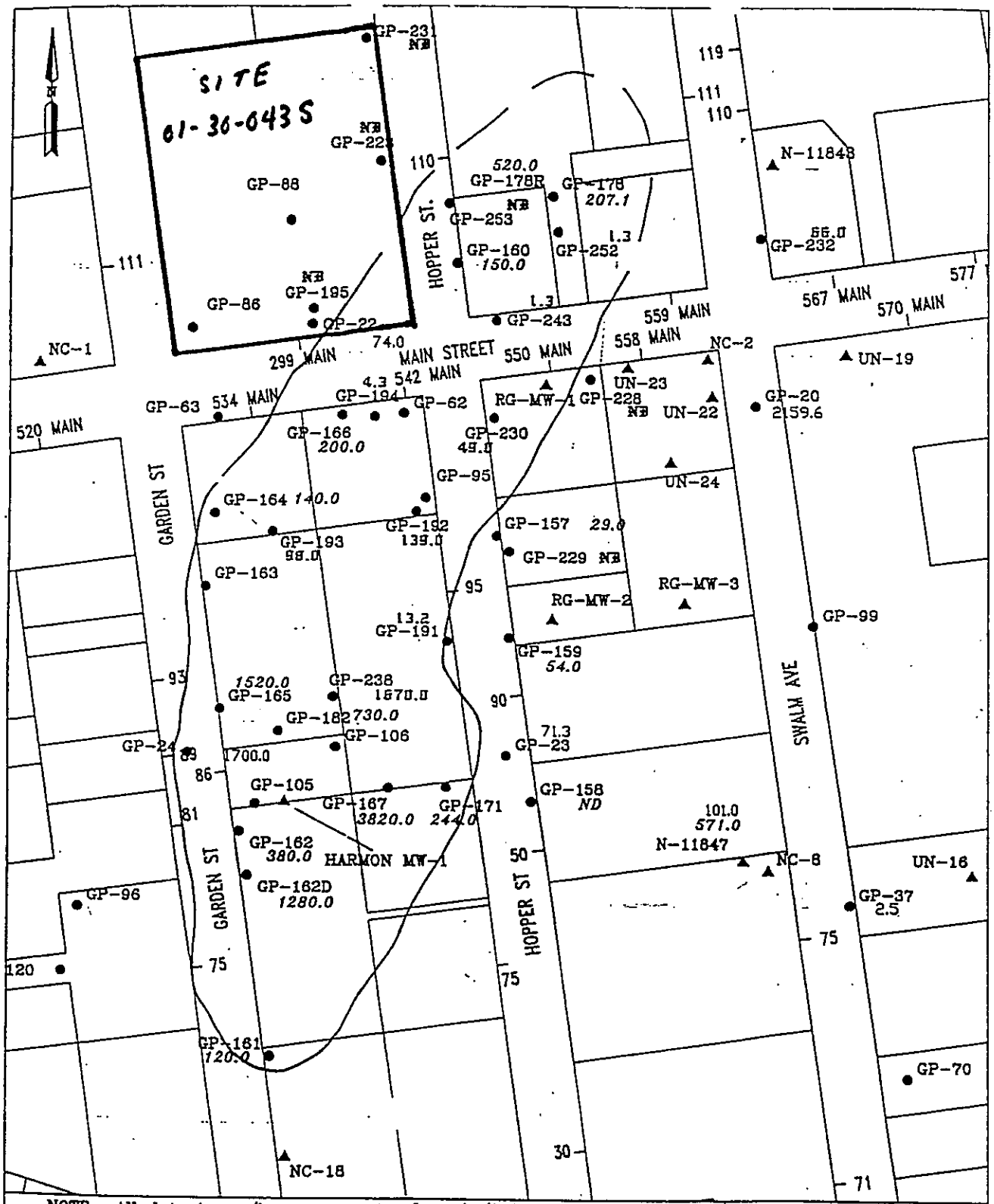
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.2
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
PCE IN GROUNDWATER
65 TO 85 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

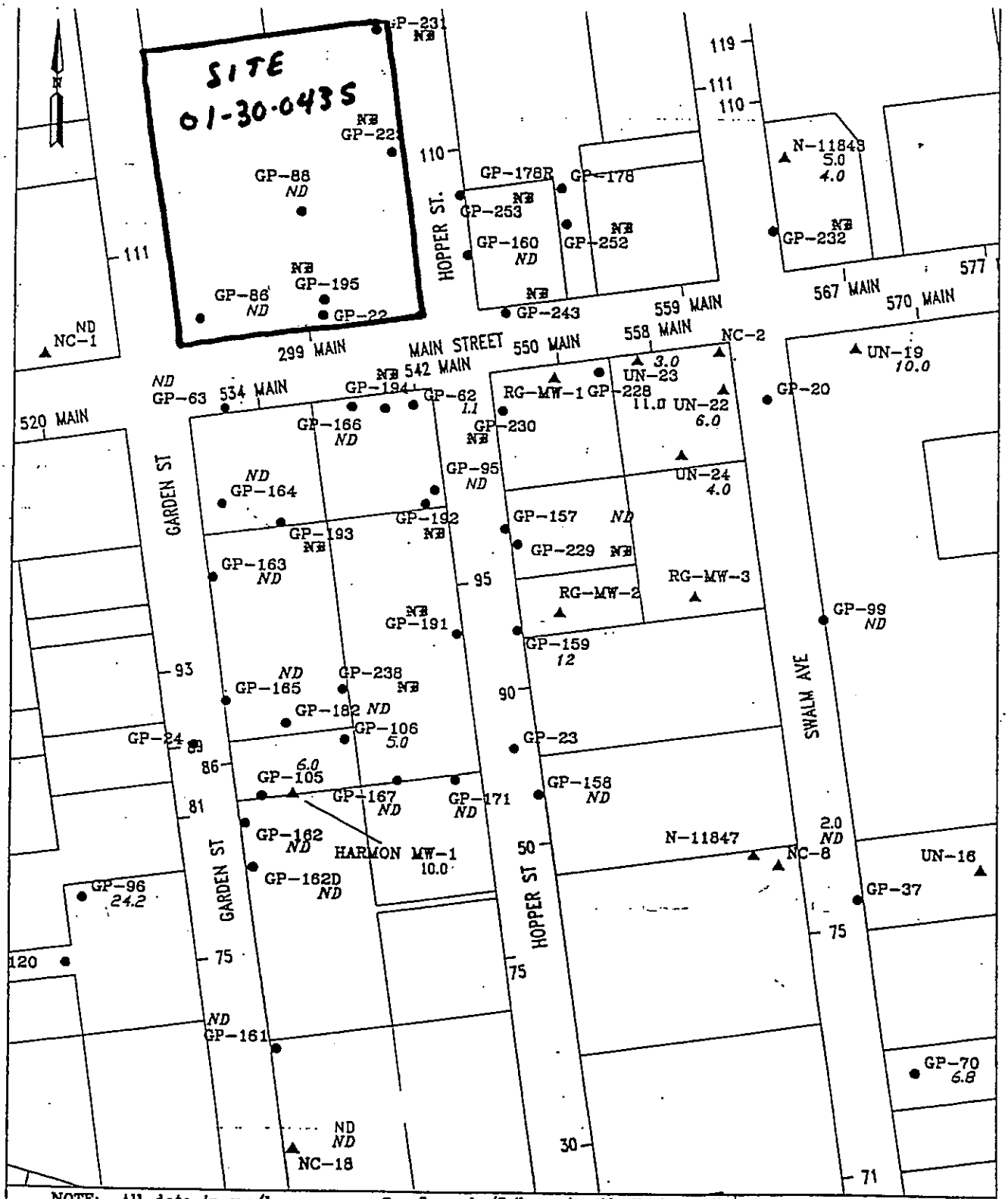
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.3
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
PCE IN GROUNDWATER
85 FT +



NOTE: All data in ug/l.

Scale in Feet

140 0 140

● - Geoprobe/Soil Sample Location

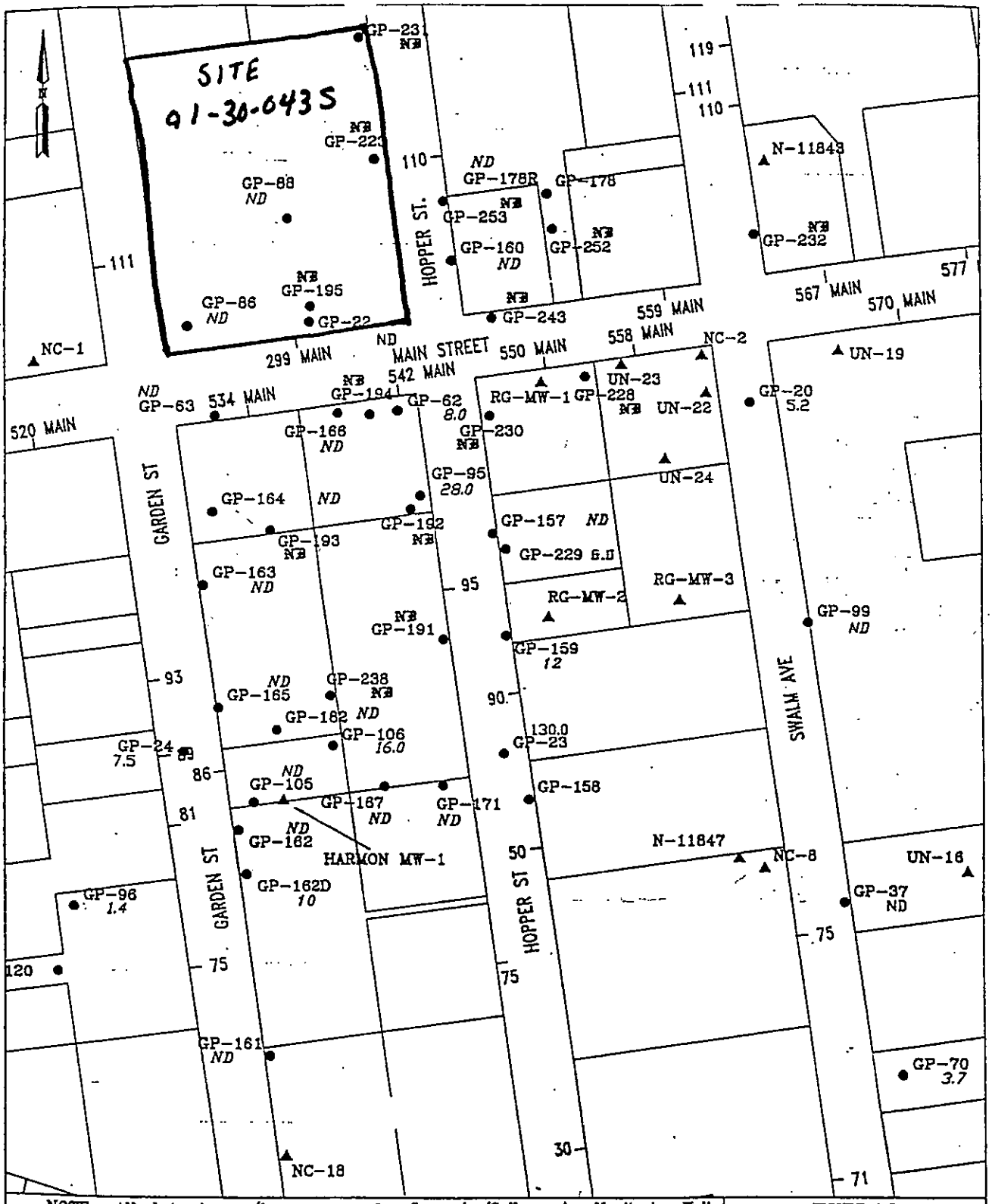
▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.4

HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 95 HOPPER ST
TCA IN GROUNDWATER
WATER TABLE TO 65 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

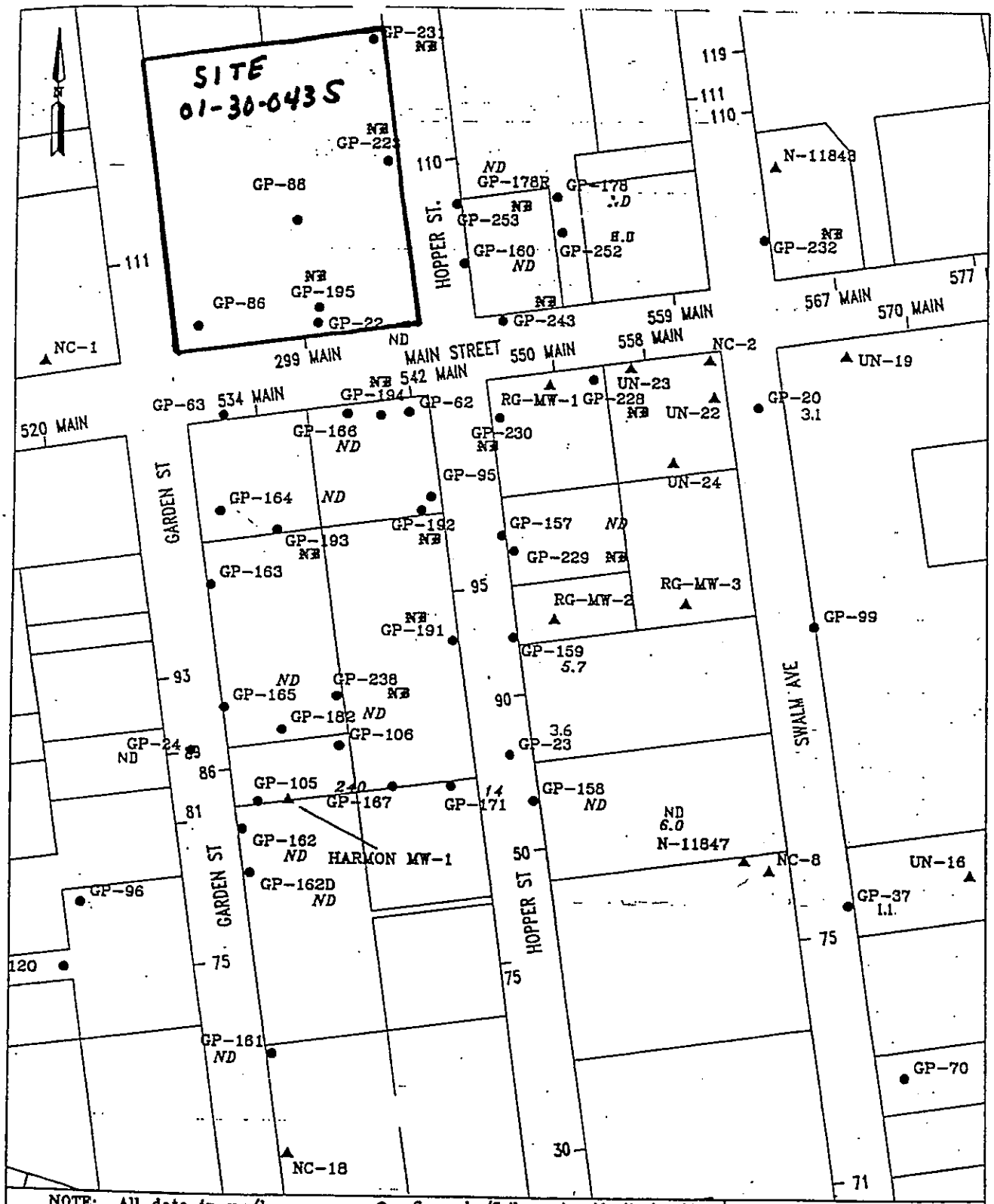
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.5
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
TCA IN GROUNDWATER
65 TO 85 FT



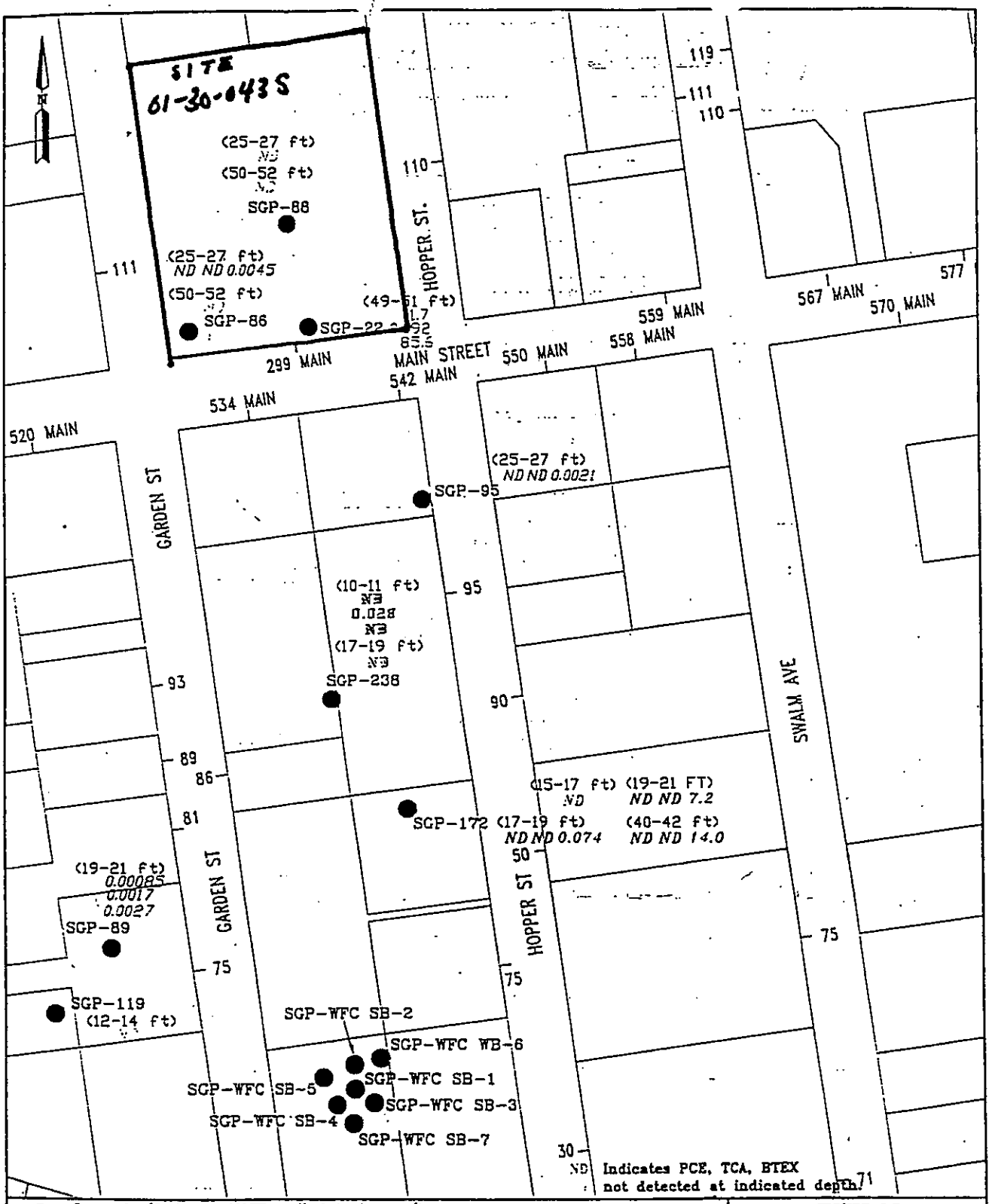
NOTE: All data in ug/l.
Scale in Feet
140 0 140

● - Geoprobe/Soil Sample Location
▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.6
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 95 HOPPER ST
TCA IN GROUNDWATER
65 FT +


SITE
61-30-043S
(25-27 ft)
(50-52 ft)
SGP-88
(25-27 ft)
ND ND 0.0045
(50-52 ft)
SGP-86
SGP-22
(49-51 ft)
HOPPER ST.
MAIN STREET
299 MAIN
542 MAIN
550 MAIN
558 MAIN
559 MAIN
567 MAIN
570 MAIN
577
520 MAIN
534 MAIN
GARDEN ST
(25-27 ft)
ND ND 0.0021
SGP-95
(10-11 ft)
0.028
(17-19 ft)
SGP-238
SGP-172
(15-17 ft) (19-21 FT)
ND ND ND 7.2
(17-19 ft) (40-42 ft)
ND ND 0.074 ND ND 14.0
(19-21 ft)
0.00085
0.0017
0.0027
SGP-89
SGP-119
(12-14 ft)
SGP-WFC SB-2
SGP-WFC WB-6
SGP-WFC SB-1
SGP-WFC SB-5
SGP-WFC SB-3
SGP-WFC SB-4
SGP-WFC SB-7
HOPPER ST
SWALM AVE
ND Indicates PCE, TCA, BTEX not detected at indicated depth.
● - Geoprobe/Soil Sample Location
NOTE: All data in mg/kg.
Scale in Feet
140 0 140
Lawler, Matusky & Skelly Engineers, LLP
PCE TCA BTEX
120 120 120 1993 Sample Data
120 120 120 1994 Sample Data
120 120 120 1995 Sample Data
120 120 120 1996 Sample Data
FIGURE 6.7
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
SUBSURFACE SOILS DATA

299 Main Street (Block 144, Lots 37 to 44)

299 Main Street, occupied by One Stop Auto and Truck Center, was developed some time between 1950 and 1962 and consists of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formerly used as a junkyard and a transportation company. Island Transport Corporation used large quantities of BTEX-related compounds and approximately 275 gal of TCE from July to December 1978 (LMS 1996) to wash trucks.

The probes completed during the site investigation indicated that in upgradient areas PCE-related contaminants were not detected above 100 ppb (GP-85). At a downgradient position, PCE-related contaminants were found at 680 ppb in the intermediate depth sample (GP-22). Soil samples collected at SGP-86 and SGP-88 did not show any target compounds. A soil sample collected at GP-22 contained both PCE- and TCA-related compounds in a 49-51 ft sample (Figure 6-7); however, it is not known whether the contamination is in the soil or the groundwater. PCE-related contaminants were found at 1.73 mg/kg and TCA-related contaminants at 0.092 mg/kg. In addition, total BTEX-related contaminants were found at 85.63 mg/kg in this soil sample. BTEX compounds ranging from 0.002 to 0.212 mg/kg were also found in the groundwater at the property.

Although this site has a documented use of target compounds (TCE), an on-site source, and an environmental impact was not fully documented during the previous phase of the PSA. To document an environmental impact three additional upgradient and two additional downgradient probes were completed (Figure 6-1, Figure 6-2, Figure 6-3, Figure 6-4, Figure 6-5, and Figure 6-6). The results of these probes clearly indicate that this property is contributing to the groundwater contamination in the Garden/Hopper Street area. The three upgradient probes (GP-231, 223, and 253) do not show any target compounds above 100 ppb. The downgradient points GP-193, GP-194, and GP-195 clearly show elevated PCE-related contaminant concentrations at the three depth ranges (Figure 6-1, Figure 6-2, and Figure 6-3). In GP-194 (water table to 65 ft) the PCE-related contaminants total 2190 ppb (1700 ppb cis-1,2-DCE and 490 ppb TCE) (Figure 6-1). It was also noted that the individual contaminants change and become more numerous just downgradient of this property. Upgradient of the site the only contaminant noted in the groundwater is PCE, while downgradient TCE, DCE, and VC are found along with the PCE (Figure 6-6a). In GP-195 the total PCE-related contaminants are 700 ppb at the shallow depth; of this 700 ppb total, 250 ppb is cis-1,2-DCE and 450 VC (Figure 6-6a). The source of these different contaminants is likely located on this property or the property just to the east, while the PCE-related contaminants at depth are from an upgradient source. Based on a documented history of chemical usage, a documented on-site source, and a demonstrated environmental impact to groundwater, this property should be included on the registry.

New York State Department of Environmental Conservation
Division of Environmental Enforcement
State Superfund and Voluntary Cleanup Practice Group
Eastern Field Unit
200 White Plains Road, 5th Floor
Tarrytown, New York 10591-5805
Telephone: (914) 332-1835
Fax (914)332-5116 (not for service of process)

John P. Cahill
Acting
Commissioner

June 11, 1997

NOTICE LETTER
URGENT LEGAL MATTER - PROMPT REPLY NECESSARY
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Block & Kops
66 Commack Rd.
Commack, NY 11724

Re: Sam-Ton Towing & Salvage Inc., 299 Main Street, Site, 01-30-043S

Dear Sir/Madam :

New York State, through the efforts of the Department of Environmental Conservation (the "Department"), has documented a release and/or threatened release of "hazardous substances" as defined by the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC 9601 et seq. ("CERCLA") and the presence of "hazardous wastes" as defined in Environmental Conservation Law (ECL) 27-1301.1 at property located at 299 Main Street, in the western portion of the New Cassel Industrial Area, Westbury, NY 11590. This site is listed in the New York State Registry of Inactive Hazardous Waste Sites as Site No. 01-30-043S. It is a Class "2" site. In response to these releases and the threat of future such releases, the Department has spent public funds and anticipates spending additional public funds. These actions have been and will be taken by the Department pursuant to ECL Article 27, Title 13 and State Finance Law §97-b.

Under ECL Article 27, Title 13 and CERCLA, responsible parties are liable for monies expended by the State in taking response actions at and around sites where hazardous substances have been released, including investigative, planning, removal, and remedial actions. You have been determined to be a responsible party based on your ownership of the site during the disposal of the hazardous waste.

The process of remediating this site will consist of two phases. In the first phase, a remedial investigation will be conducted to determine the nature and extent of the problem presented by the releases or threatened releases. This will include sampling, monitoring and gathering information to determine the necessity for and proposed extent of remedial actions. Using this data, a Feasibility Study will be performed which will define the objectives of the response action, develop and screen remedial action alternatives, and analyze selected alternatives in detail. The second step of the remediation process involves the design and implementation of the final remedial alternative selected for the site.

The purpose of this Notice Letter is to inform you of your potential liability as a responsible

party, and to determine whether you are willing to conduct or finance the Remedial Investigation and Feasibility Study for this site. Any agreement by you to finance or undertake such activities must be memorialized in an administrative consent order. You must indicate within twenty-one (21) days whether you are willing to enter negotiations with the Department for this purpose.

If within twenty-one (21) days you do not notify the Department that you are willing to enter into negotiations, the Department, at its sole discretion, may perform the necessary work at the site using the Hazardous Waste Remedial Fund. If the Fund is used to investigate or to remediate the site, the Department is required to seek recovery from you as a responsible party for any expenses it incurs in conducting such activities, in which event this letter also serves as a demand for payment of all monies the Department may expend for the investigation and remediation of this site, plus any and all interest recoverable under 42 USC 9607 and any other provision of law. In accordance with 42 USC 9607(a), interest on such amount shall accrue as of the date of this letter.

It is imperative that negotiations concerning the site begin as early as possible. Your decision whether to negotiate should be provided to me no later than twenty-one (21) days from receipt of this letter. In order to coordinate correspondence with the Department and facilitate possible negotiations, we suggest that you designate a member of your organization or an attorney to represent your interests to the Department. I enclose a copy of a draft Consent Order for your review, and I request that if you wish to negotiate with the Department in this matter, you provide me with comments on this draft Consent Order within twenty-one days of your receipt of this letter.

If you decide to negotiate a Consent Order, please note that such negotiations must be completed and I must have in hand a Consent Order executed by you no later than August 29, 1997. If I do not have a signed Consent Order in hand by that date, all further negotiations will terminate, and the Department will undertake the investigation directly and may pursue you in the future to reimburse its expenditures.

Information obtained by the Department indicates that the following companies are also potentially liable for the investigation and remediation of the site:

One Stop Auto & Truck Center
Island Transportation Corp.

The Department also demands a response to the following questions within twenty-one (21) days of your receipt of this letter pursuant to its authority under ECL 27-1307 and 27-1309:

1. A detailed description of your ownership interest or your relationship to an owner currently or in the past at the site including type of interest, dates the interest was or is held, location on the property of the ownership interest.

2. To the best of your knowledge, a detailed description of products manufactured or service provided at the facility; for each product listed or service provided, provide a description of the type of process or operation used.

3. For each process or operation identified pursuant to Item 2, an identification of all waste resulting from that process or operation; an identification of those wastes resulting from that process which, if generated today may be deemed hazardous wastes pursuant to 6 NYCRR, Part 371 and the hazardous waste constituents which are or may be present in the waste and the periods of time such wastes were disposed of at the above-referenced site.

4. For each waste identified pursuant to Item 3, a description of the typical physical characteristics of such waste, time periods in which it was generated, the annual quantities generated of such waste, and the manner of disposal for all wastes.

5. The name and last known address of each individual or firm which disposed of the waste at the site and the location, time period, frequency, type, quantity and method of such disposal.

6. The names, positions, and addresses of present and former employees who had knowledge of past waste disposal practices at the site, their time of employment.

7. An identification of the methods employed, the names of personnel and the source, nature and availability of records, files, or other references utilized in the compilation of information to respond to this inquiry.

If you have any questions or wish to discuss any matters addressed in this letter, please contact me as soon as possible. My telephone number is (914) 332-1835, ext. 320.

Sincerely,

Jeanna E. Hussey
Senior Attorney
Division of Environmental
Enforcement

cc: Vasudevan/Trad

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the
Development and Implementation
of a Remedial Investigation/Feasibility
Study for an Inactive Hazardous Waste
Disposal Site, Under Article 27, Title 13,
and Article 71, Title 27 of the
Environmental Conservation Law
of the State of New York by

Block & Kops and Sam-Ton Towing & Salvage Inc.
Respondents.

ORDER
ON
CONSENT
INDEX #

Site Code #
01-30-043S

WHEREAS,

1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites." This Order is issued pursuant to the Department's authority under, inter alia, ECL Article 27, Title 13 and ECL 3-0301.

2. Block & Kops and Sam-Ton Towing & Salvage Inc. ("Respondents"), are the prior operators of the site located at 299 Main Street in the western portion of the New Cassel Industrial Area, Westbury, NY 11590, (hereinafter referred to as "the Site"). Documentary evidence indicates that past site operations have led to groundwater contamination beneath and downgradient of the site with TCE and related compounds. The contaminated groundwater is located within an EPA- designated sole source aquifer. Two public water supply wells are located approximately 2,700 ft downgradient of the site. A site map is attached as an appendix to this Order as Exhibit A.

3. The Site is an inactive hazardous waste disposal site, as that term is defined at ECL 27-1301.2, and presents a significant threat to the public health or environment. The Site has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 01-30-043S. The Department has classified the Site as a Classification "2" pursuant to ECL 27-1305.4.b.

4. A. Pursuant to ECL 27-1313.3.a, whenever the Commissioner of Environmental Conservation (the "Commissioner") "finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department,

at such site, and (ii) to implement such program within reasonable time limits specified in the order."

B. Any person under order pursuant to ECL 27-1313.3.a has a duty imposed by ECL Article 27, Title 13 to carry out the remedial program committed to under order. ECL 71-2705 provides that any person who fails to perform any duty imposed by ECL Article 27, Title 13 shall be liable for civil, administrative and/or criminal sanctions.

C. The Department also has the power, inter alia, to provide for the prevention and abatement of all water, land, and air pollution. ECL 3-0301.1.i.

5. The Department and Respondents agree that the goals of this Order are for Respondents to (i) develop and implement a Remedial Investigation/Feasibility Study ("RI/FS") for the Site; and (ii) reimburse the State's administrative costs.

6. Respondents, having waived Respondents' right to a hearing herein as provided by law, and having consented to the issuance and entry of this Order, agree to be bound by its terms. Respondents consent to and agree not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agree not to contest the validity of this Order or its terms.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Initial Submittal

Within 30 days after the effective date of this Order, Respondents shall submit to the Department all data within Respondents' possession or control regarding environmental conditions on-Site and off-Site, and other information described below, unless the Department informs Respondents that such data have previously been provided to the Department. The data and other information shall include:

A. A brief history and description of the Site, including the types, quantities, physical state, location, and dates of disposal of hazardous waste including methods of disposal and spillage of such wastes;

B. A concise summary of information held by Respondents and Respondents' attorneys and consultants with respect to all persons responsible for such disposal of hazardous wastes, including but not limited to names, addresses, dates of disposal and any proof linking each such person responsible with hazardous wastes identified pursuant to Subparagraph I.A; and

C. A comprehensive list and copies of all existing relevant reports with titles, authors, and subject matter, as well as a description of the results of all previous investigations of the Site and areas in the vicinity of the Site, including copies of all available topographic and property surveys, engineering studies and aerial photographs.

II. RI/FS Work Plan Contents and Submittals

A. Within 30 days after the effective date of this Order, Respondents shall submit to the Department a detailed work plan describing the methods and procedures to be implemented in performing an RI/FS for the Site ("RI/FS Work Plan").

B. (1) The RI/FS Work Plan shall include, but not be limited to, the following:

a. A chronological description of the anticipated RI/FS activities together with a schedule for the performance of these activities.

b. A Sampling and Analysis Plan that shall include:

(i) A quality assurance project plan that describes the quality assurance and quality control protocols necessary to achieve the initial data quality objectives. This plan shall designate a data validation expert and must describe such individual's qualifications and experience.

(ii) A field sampling plan that defines sampling and data gathering methods in a manner consistent with the "Field Methods Compendium," OSWER Directive 9285.2-11 (draft June 1993), as supplemented by the Department.

c. A health and safety plan to protect persons at and in the vicinity of the Site during the performance of the RI/FS which shall be prepared in accordance with 29 CFR 1910 and all other applicable standards by a certified health and safety professional. Respondents shall add supplemental items to this plan necessary to ensure the health and safety of all persons at or in the vicinity of the Site during the performance of any work pursuant to this Order.

d. A citizen participation plan that is, at a minimum, consistent with the Department's publication, "New York State Inactive Hazardous Waste Site Citizen Participation Plan," dated August 30, 1988, and any subsequent revisions thereto, and 6 NYCRR Part 375.

(2) The RI/FS Work Plan shall incorporate all elements of a RI/FS as set forth in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") [42 USC 9601 et seq.], as amended, the National Contingency Plan ("NCP") of March 8, 1990 [40 CFR Part 300], the USEPA guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," dated October 1988, and any subsequent revisions to that guidance document in effect at the time the RI/FS Work Plan is submitted, and appropriate USEPA and Department technical and administrative guidance documents.

III. Performance and Reporting of Remedial Investigation

A. Respondents shall commence the Remedial Investigation in accordance with the schedule contained in the Department-approved RI/FS Work Plan.

B. Respondents shall perform the Remedial Investigation in accordance with the Department-approved RI/FS Work Plan.

C. During the performance of the Remedial Investigation, Respondents shall have on-Site a full-time representative who is qualified to supervise the work done.

D. Within the time frame set forth in the Department-approved RI/FS Work Plan, Respondents shall prepare a Remedial Investigation Report that shall:

(1) include all data generated and all other information obtained during the Remedial Investigation:

(2) provide all of the assessments and evaluations set forth in CERCLA, the NCP, and the guidance documents identified in Subparagraph II.B.2;

(3) identify any additional data that must be collected; and

(4) include a certification by the individual or firm with primary responsibility for the day to day performance of the Remedial Investigation that all activities that comprised the Remedial Investigation were performed in full accordance with the Department-approved RI/FS Work Plan.

IV. Feasibility Study

A. In accordance with the schedule contained in the Department-approved RI/FS Work Plan, Respondents shall submit a complete Feasibility Study evaluating on-Site and off-Site remedial actions to eliminate, to the maximum extent practicable, all health and environmental hazards and potential hazards at the Site. The Feasibility Study shall be prepared by and have the signature and seal of a professional engineer who shall certify that the Feasibility Study was prepared in accordance with this Order.

B. Respondents shall perform and prepare the Feasibility Study in accordance with the Department-approved RI/FS Work Plan and in a manner consistent with CERCLA, the NCP, and the guidance documents identified in Subparagraph II.B.2.

C. After the Department's approval of the Feasibility Study, Respondents shall cooperate and assist the Department in soliciting public comment on the RI/FS and on the proposed remedial action plan, in accordance with CERCLA, the NCP, the guidance documents identified in

Subparagraph II.B.2, and with any Department policy and guidance documents in effect at the time the public comment period is initiated. After the close of the public comment period, the Department shall select a final remedial alternative for the site in a Record of Decision ("ROD"). The ROD shall be incorporated into and become an enforceable part of this Order.

V. Interim Remedial Measures

A. 1. Respondents may propose one or more IRMs for the Site.

2. In proposing each IRM, Respondents shall submit to the Department a work plan that includes a chronological description of the anticipated IRM activities together with a schedule for performance of those activities (an "IRM Work Plan" for that Site).

3. Upon the Department's determination that the proposal is an appropriate IRM and upon the Department's approval of such work plan, the IRM Work Plan shall be incorporated into and become an enforceable part of this Order; and Respondent shall submit to the Department for its review and (as appropriate) approval, in accordance with the schedule contained in the Department-approved IRM Work Plan, detailed documents and specifications prepared, signed, and sealed by a professional engineer to implement the Department-approved IRM. Such documents shall include a health and safety plan, contingency plan, and (if the Department requires such) a citizen participation plan that incorporates appropriate activities outlined in the Department's publication, "New York State Inactive Hazardous Waste Citizen Participation Plan," dated August 30, 1988, and any subsequent revisions thereto, and 6 NYCRR Part 375. Respondents shall then carry out such IRM in accordance with the requirements of the approved IRM Work Plan, detailed documents and specifications, and this Order. Respondents shall notify the Department of any significant difficulties that may be encountered in implementing the Department-approved work plan, detailed documents, or specifications and shall not modify any obligation unless first approved by the Department.

4. During implementation of all construction activities identified in the Department-approved IRM Work Plan, Respondents shall have on-Site a full-time representative who is qualified to supervise the work done.

5. Within the schedule contained in the Department-approved IRM Work Plan, Respondents shall submit to the Department a final engineering report prepared by a professional engineer that includes a certification by that individual that all activities that comprised the Department-approved IRM were completed in accordance with the Department-approved IRM Work Plan and this Order.

a. If the performance of the Department-approved IRM encompassed construction activities, the final engineering report also shall include a detailed post-remedial operation and maintenance plan ("IRM O&M Plan"); "as-built" drawings and a final engineering report (each including all changes made to the Remedial Design during construction); and a certification by a professional engineer that the IRM was implemented and all construction activities

were completed in accordance with the Department-approved detailed documents and specifications for the IRM and all such activities were personally witnessed by him or her or by a person under his or her direct supervision. The IRM O&M Plan, "as built" drawings, final engineering report, and certification must be prepared, signed, and sealed by a professional engineer.

b. Upon the Department's approval of the IRM O&M Plan, Respondents shall implement the IRM O&M Plan in accordance with the requirements of the Department-approved IRM O&M Plan.

6. After receipt of the final engineering report and certification, the Department shall notify Respondents in writing whether the Department is satisfied that the IRM was completed in compliance with the Department-approved IRM Work Plan and design.

VI. Progress Reports

Respondent shall submit to the parties identified in Subparagraph XIV.B in the numbers specified therein copies of written monthly progress reports that:

A. describe the actions which have been taken toward achieving compliance with this Order during the previous month;

B. include all results of sampling and tests and all other data received or generated by Respondent or Respondent's contractors or agents in the previous month, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent;

C. identify all work plans, reports, and other deliverables required by this Order that were completed and submitted during the previous month;

D. describe all actions, including, but not limited to, data collection and implementation of work plans, that are scheduled for the next month and provide other information relating to the progress at the Site;

E. include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of Respondent's obligations under the Order, and efforts made to mitigate those delays or anticipated delays;

F. include any modifications to any work plans that Respondent has proposed to the Department or that the Department has approved; and

G. describe all activities undertaken in support of the Citizen Participation Plan during the previous month and those to be undertaken in the next month. Respondent shall submit these progress reports to the Department by the tenth day of every month following the effective date of

this Order.

Respondent also shall allow the Department to attend, and shall provide the Department at least seven days advance notice of, any of the following: prebid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.

VII. Review of Submittals

A. 1. The Department shall review each of the submittals Respondents make pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. The Department shall notify Respondents in writing of its approval or disapproval of the submittal, except for the submittals discussed in Subparagraph II.B.1c. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. a. If the Department disapproves a submittal, it shall so notify Respondents in writing and shall specify the reasons for its disapproval. Within __ days after receiving written notice that Respondents' submittal has been disapproved, Respondents shall make a revised submittal to the Department that addresses and resolves all of the Department's stated reasons for disapproving the first submittal.

b. After receipt of the revised submittal, the Department shall notify Respondents in writing of its approval or disapproval. If the Department disapproves the revised submittal, Respondents shall be in violation of this Order and the Department may take any action or pursue whatever rights it has pursuant to any provision of statutory or common law. If the Department approves the revised submittal, it shall be incorporated into and become an enforceable part of this Order.

B. Respondents shall modify and/or amplify and expand a submittal upon the Department's direction to do so if the Department determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts, that further work is necessary.

VIII. Penalties

A. 1. Respondents' failure to comply with any term of this Order constitutes a violation of this Order and the ECL.

2. Respondents shall be liable for payment to the Department of the sums set forth below as stipulated penalties for each day or part thereof that Respondents are in violation of the terms of this Order. All penalties begin to accrue on the first day Respondents are in violation of the terms of this Order and continue to accrue through the final day of correction of any violation.

Such sums shall be due and payable within 15 days after receipt of notification from the Department assessing the penalties. If such payment is not received within 15 days after Respondents receive such notification from the Department, interest shall be payable at the annual rate of nine per centrum on the overdue amount from the day on which it was due through, and including, date of payment. Penalties shall be paid by certified check or money order, made payable to "New York State Department of Environmental Conservation" and shall be delivered personally or by certified mail, return receipt requested, to the Director, Division of Environmental Enforcement, N.Y.S.D.E.C., 50 Wolf Road, Albany, New York 12233-5500. Payment of the penalties shall not in any way alter Respondents' obligation to complete performance under the terms of this Order. Stipulated penalties shall be due and payable under Subparagraph X.A.2 pursuant to the following schedule:

Period of Non-Compliance	Penalty Per Day
First through 15th day	$ 5,000
16th through 30th day	$ 10,000
31st day and thereafter	$ 15,000

B. Respondents shall not suffer any penalty under this Order or be subject to any proceeding or action if they cannot comply with any requirement hereof because of war, riot, or an unforeseeable disaster arising exclusively from natural causes which the exercise of ordinary human prudence could not have prevented. Respondents shall, within five days of when they obtain knowledge of any such condition, notify the Department in writing. Respondente will include in such notice the measures taken and to be taken by Respondents to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Failure to give such notice within such five-day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondents will have the burden of proving that an event is a defense to compliance with this Order pursuant to Subparagraph VIII.B.

IX. Entry upon Site

Respondents hereby consent to the entry upon the Site or areas in the vicinity of the Site which may be under the control of Respondents by any duly designated employee, consultant, contractor, or agent of the Department or any State agency for purposes of inspection, sampling, and testing and to ensure Respondents' compliance with this Order. During Remedial Construction, Respondents will provide the Department with suitable office space at the Site, including access to a telephone, and will permit the Department full access to all records relating to matters addressed by this Order and job meetings.

X. Payment of State Costs

Within 30 days after receipt of an itemized invoice from the Department, Respondents shall pay to the Department a sum of money which shall represent reimbursement for the State's expenses including, but not limited to, direct labor, fringe benefits, indirect costs, travel, analytical costs, and contractor costs incurred by the State of New York for work related to the Site to the effective date

of this Order, as well as for reviewing and revising submittals made pursuant to this Order, overseeing activities conducted pursuant to this Order, collecting and analyzing samples, and administrative costs associated with this Order. Such payment shall be made by certified check payable to the Department of Environmental Conservation and shall be sent to:

Bureau of Program Management
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010.

Personal service costs shall be documented by reports of Direct Personal Service, which shall identify the employee name, title, biweekly salary, and time spent (in hours) on the project during the billing period, as identified by an assigned time and activity code. Approved agency fringe benefit and indirect cost rates shall be applied. Non-personal service costs shall be summarized by category of expense (e.g., supplies, materials, travel, contractual) and shall be documented by expenditure reports.

XI. Department Reservation of Rights

A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's civil, criminal, or administrative rights or authorities.

B. Nothing contained in this Order shall be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

XII. Indemnification

Respondents shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondents and/or any of Respondents' directors, officers, employees, servants, agents, successors, and assigns.

XIII. Public Notice

A. Within 30 days after the effective date of this Order, Respondents shall file a Declaration of Covenants and Restrictions with the Clerk of the County wherein the Site is located to give all parties who may acquire any interest in the Site notice of this Order.

B. If Respondents propose to convey the whole or any part of Respondents' ownership interest in the Site, Respondents shall, not fewer than 60 days before the date of conveyance, notify

the Department in writing of the identity of the transferee and of the nature and proposed date of the conveyance and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order.

XIV. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

1. Communication from Respondents shall be sent to:

Jeanna E. Hussey, Esq.
Division of Environmental Enforcement
Eastern Field Unit
New York State Department of Environmental Conservation
200 White Plains Road, 5th Floor
Tarrytown, NY 10591-5805

with copies to:

1. Chittitabu Vasudevan, P.E.
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

2. G. Anders Carlson, Ph.D
Director, Bureau of Environmental Exposure Investigation
New York State Department of Health
2 University Place
Albany, New York 12203

3. Ray Cowen, Director
Region I
New York State Department of Environmental Conservation
N. Loop Rd., Bldg #40
SUNY Campus
Stony Brook, NY 11790-2356

2. Communication to be made from the Department to Respondents shall be sent

to: _____

_____

B. Copies of work plans and reports shall be submitted as follows:

1. Four copies (one unbound) to

Jeffrey Trad
Division of Environmental Remediation

2. Two copies to

G. Anders Carlson, Ph.D.
Director, Bureau of Environmental Exposure Investigation

3. One copy to Ray Cowen, Regional Director

4. One copy to Jeanna E. Hussey, Esq.
Division of Environmental Enforcement

C. 1. Within 30 days of the Department's approval of any report submitted pursuant to this Order, Respondents shall submit to Director, Division of Environmental Remediation, a computer readable magnetic media copy of the approved report in American Standard Code for Information Interchange (ASCII) format.

2. Within 30 days after the Department's approval of the RI/FS, Respondents will submit one microfilm copy of the RI/FS to Director, Division of Environmental Remediation.

D. The Department and Respondent reserve the right to designate additional or different addressees for communication or written notice to the other.

XV. Miscellaneous

A. 1. All activities and submittals required by this Order shall address both on-Site and off-Site contamination resulting from the disposal of hazardous wastes at the Site.

2. All activities Respondents are required to undertake under this Order are ordinary and necessary expenses for the continued operation of Respondent.

B. Respondents shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and third party data validators acceptable to the Department to

perform the technical, engineering, and analytical obligations required by this Order. The experience, capabilities, and qualifications of the firms or individuals selected by Respondents shall be submitted to the Department within 15 days after the effective date of this Order. The Department's approval of these firms or individuals shall be obtained before the start of any activities for which Respondents and such firms or individuals will be responsible. The responsibility for the performance of the professionals retained by Respondents shall rest solely with Respondents.

C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondents, and the Department also shall have the right to take its own samples. Respondents will make available to the Department the results of all sampling and/or tests or other data generated by Respondents with respect to implementation of this Order and will submit these results in the progress reports required by this Order.

D. Respondents shall notify the Department at least 10 working days in advance of any field activities to be conducted pursuant to this Order.

E. Respondents will obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform Respondents' obligations under this Order.

F. Respondents and Respondents' officers, directors, agents, servants, employees, successors, and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondents including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondents' responsibilities under this Order. Respondents' officers, directors, employees, servants, and agents shall be obliged to comply with the relevant provisions of this Order in the performance of their designated duties on behalf of Respondents.

G. Respondents shall provide a copy of this Order to each contractor hired to perform work required by this Order and to each person representing Respondents with respect to the Site and shall condition all contracts entered into in order to carry out the obligations identified in this Order upon performance in conformity with the terms of this Order. Respondents or Respondents' contractors shall provide written notice of this Order to all subcontractors hired to perform any portion of the work required by this Order. Respondents shall nonetheless be responsible for ensuring that Respondents' contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

H. All references to "professional engineer" in this Order are to an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law. If such individual is a member of a firm, that firm must be authorized to offer professional engineering services in the State of New York in accordance with Article 145 of the New York State Education Law.

I. All references to "days" in this Order are to calendar days unless otherwise specified.

J. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

K. 1. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondents of Respondents' obligation to obtain such formal approvals as may be required by this Order.

2. If Respondents desire that any provision of this Order be changed, Respondents shall make timely written application, signed by Respondents, to the Commissioner setting forth reasonable grounds for the relief sought. Copies of such written application shall be delivered or mailed to Jeanna E. Hussey and to Jeffrey Trad.

L. The effective date of this Order is the date the Commissioner or his designee signs it.

DATED: , New York
, 1997

JOHN P. CAHILL, ACTING COMMISSIONER
New York State Department
of Environmental Conservation

By:

_____
Michael J. O'Toole, Jr.

CONSENT BY RESPONDENTS

Respondents hereby consent to the issuing and entering of this Order, waives Respondents' right to a hearing herein as provided by law, and agree to be bound by this Order.

By:_____
(TYPE NAME OF SIGNER)

Title:_____

Date:_____

STATE OF NEW YORK)
) s.s.:
COUNTY OF)

On this _____ day of _____, 19___, before me personally came _____, to me known, who being duly sworn, did depose and say that he resides in _____;
that he is the _____ of _____,
the corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation and that he signed his name thereto by like order.

_____
Notary Public

New Cassel
New Cassel / 299 Main Street

STATE OF NEW YORK
DEPARTMENT OF STATE
ALBANY, NY 12231-0001

RECEIVED
JUN 10 1997
ENV. ENF.
FIELD UNIT

ALEXANDER F. TREADWELL
SECRETARY OF STATE

NYS DEPT OF ENVIRONMENTAL CONSERVATION
DIV OF ENFORCEMENT
200 WHITE PLAINSRD 5TH FL
TARRYTOWN NY 10591-5805

JUNE 03, 1997

Dear Sir/Madam,

The following represents the most complete and current information available in response to your recent inquiry.

A Certificate of Incorporation of SAM-TON TOWING & SALVAGE INC. was filed on 12/04/1974. Its principal location is NASSAU county.

Status: Inactive DISSOLVED BY PROC 06/26/1996

Biennial Statement: Not required

Service of Process Address:
BLOCK & KOPS
66 COMMACK RD.
COMMACK, NY 11724

Registered Agent (optional in NY):
NO ADDRESS STATED

Chairman of the Board: None listed

Principal Business Location: None listed

Current Stock Information:

Stock Type	Num.Shares	Value/Share
Non Par Value	200	.00000

There is no requirement that the names and addresses of officers or directors, other than the chairman of the board, be filed with this or any other state agency.

Sincerely,

DIVISION OF CORPORATIONS 199706040402 64

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—new Cavil SF

New York State Department of Environmental Conservation
Division of Environmental Enforcement
State Superfund and Voluntary Cleanup Practice Group
Eastern Field Unit
200 White Plains Road, 5th Floor
Tarrytown, New York 10591-5805
Telephone: (914) 332-1835
Fax (914)332-5116 (not for service of process)

John P. Cahill
Acting
Commissioner

June 16, 1997

Peter Fioretti, Jr.
299 Edison Avenue
West Babylon, NY 11704

Re: Island Transportation Corp., 299 Main Street, Site # 01-30-043S

Dear Mr. Fioretti :

Enclosed find the information requested in your phone call dated June 13, 1997. Accordingly, your Freedom of Information Request is deemed satisfied. Please submit a check payable to the Department for $2.75. There is a .25 cents per page charge for photocopying costs.

Please note that some materials have been withheld pursuant to Public Officers Law Section 87 (2) (g). If you wish to appeal the denial of material, you may do so as provided for by 6 NYCRR 616.8 within 30 days. The appeal should be addressed to:

Frank Bifera, General Counsel
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, New York 12233

If you have any questions, please contact me as soon as possible. My telephone number is (914) 332-1835, ext. 320.

Very truly yours,

Jeanna E. Hussey

Jeanna E. Hussey
Senior Attorney
Division of Environmental
Enforcement

DIVISION OF HAZARDOUS WASTE REMEDIATION

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
299 Main Street Site	130043S	North Hempstead/ New Cassel	Nassau

5. REGION	6. CLASSIFICATION
1	CURRENT P PROPOSED 2

7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)

a. Quadrangle Hicksville

b. Site Latitude 40° 45' 21" Site Longitude 73° 34' 00"

c. Tax Map Numbers Section 11, Block 144, Lots 37 to 44

d. Site Street Address: 299 Main St., Westbury, NY 11590

8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

This site is located in the western portion of the New Cassel Industrial Area. It is currently occupied by One Stop Auto and Truck Center and was developed some time between 1950 and 1962. The buildings consist of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formerly used as a junk yard and a transportation company. Island Transport Corporation used large quantities of BTEX- related compounds and approximately 275 gal of TCE between July and December 1978 to clean trucks.

a. Area 0.5 acres b. EPA ID Number _____

c. Completed ( )Phase I ( )Phase II (X) PSA ( )RI/FS ( )PA/SI ( )Other

9. HAZARDOUS WASTE DISPOSED (Include EPA Hazardous Waste Numbers)

Island Transportation Corp. used TCE to wash asphalt residues from its trucks prior to 1980. Approximately 275 gallons were used during a period from July to December 1978. The TCE was reclaimed on-site and reused. An NCDOH inspection in April 1978 listed a storage of 2841.5 lbs of TCE and oil saturation at the storage area.

10. ANALYTICAL DATA AVAILABLE

a. ( )Air (X)Groundwater ( )Surface Water ( )Sediment (X)Soil ( )Waste ( )Leachate ( )EPTox ( )TCLP

b. Contravention of Standards or Guidance Values- Groundwater

Contaminant Group	GW-Upgradient Level(ppb)	GW-On site Level(ppb)	GW-Downgradient Level(ppb)	GW Standard (ppb)	Soil Sample -(SGP-22) On-Site (ppb)
PCE	< 100	12	680	5	1730
TCE	ND	2	20-490	5	92

11. CONCLUSION

The results of the geoprobe investigation show that this property is contributing to groundwater contamination. The PCE contamination concentrations are significantly higher than the upgradient concentrations. The number of contaminants downgradient are also more numerous. Upgradient of the site the only contaminant noted in the groundwater is PCE while downgradient TCE, DCE, and VC are found along with the PCE. The source of these contaminants is likely located on this property. The PCE contamination at depth is most likely from an upgradient souce. The contaminated groundwater is located within a USEPA designated sole source aquifer.

12. SITE DATA

a. Nearest Surface Water: Distance: 6 mi. Direction: NW Classification: SB (Hempstead Bay)

b. Nearest Groundwater: Depth: 60 ft. Flow Direction: SW (X)Sole Source ( )Primary ( )Principal

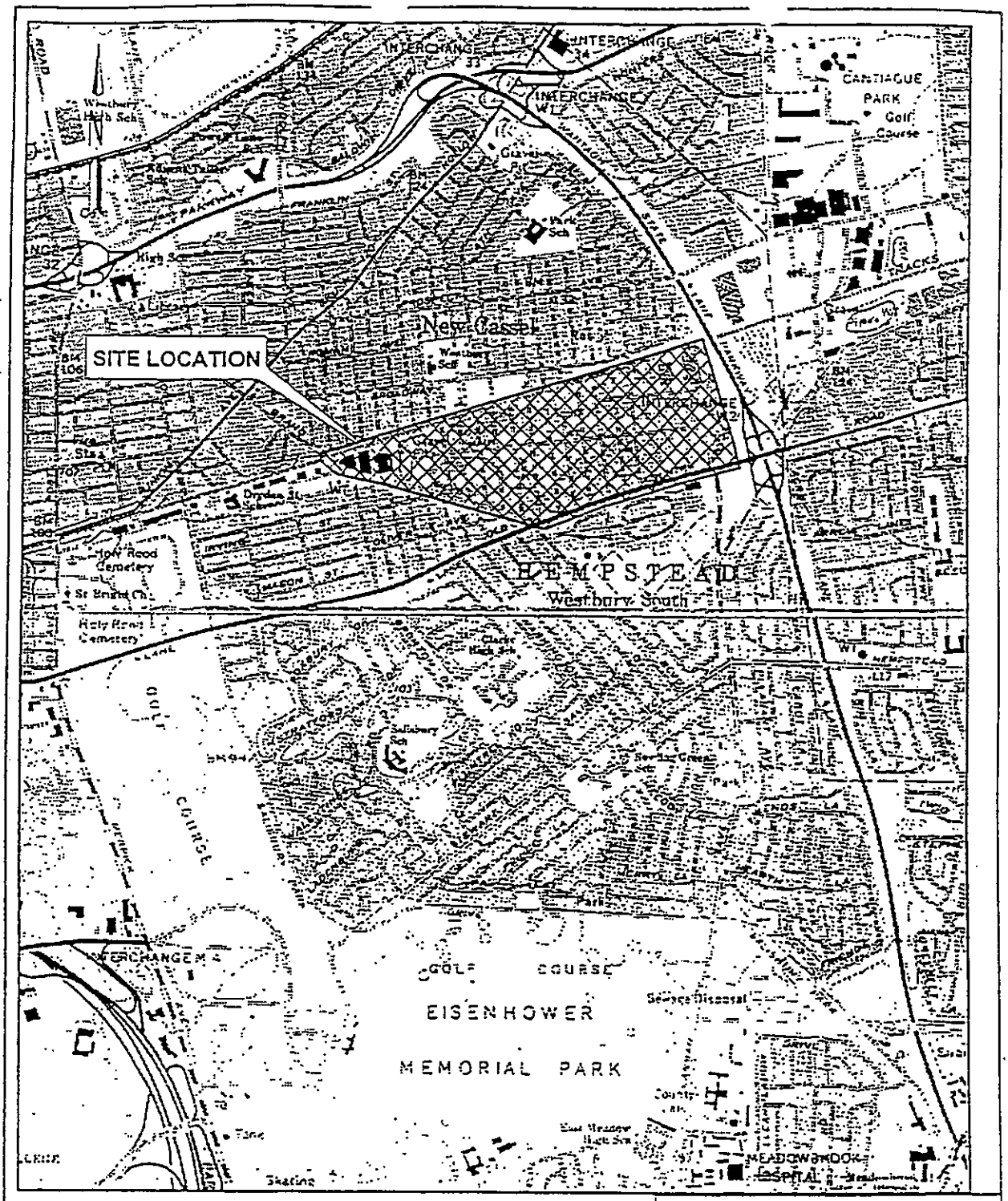
c. Nearest Water Supply: Distance: 2,100 ft. Direction: South Active (X)Yes ( )No

d. Nearest Building: Distance: on-site Direction: on-site Use: manufacturing

e. In State Economic Development Zone?	( )Y	(X)N	i. Controlled Site Access?	( )Y	(X)N
f. Crops or livestock on site?	( )Y	(X)N	j. Exposed hazardous waste?	( )Y	(X)N
g. Documented fish or wildlife mortality?	( )Y	(X)N	k. HRS Score: N/A		
h. Impact on special status fish or wildlife resource?	( )Y	(X)N	l. For Class 2: Priority Category		

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
One Stop Auto & Truck Center	299 Main Street, Westbury, NY 11590	516-338-4000

16. PREPARER	17. APPROVED
Signature Date 2/20/97	Signature Date 5/6/97
A. Joseph White, EE-2, Eastern Investigation Section	Earl H. Barcomb, Director, BHSC, DER
Name, Title, Organization	Name, Title, Organization



0 2000 ft

SCALE
1 in. = 2000 ft

Map source:
USGS 7.5-minute quadrangle series, Freeport, NY, 1969, photorevised 1979, Hicksville, NY, 1967, photorevised 1979.

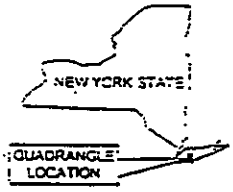


Figure 1-1

Site Location

NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043 J, N-Q, and 130043

LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Pearl River, New York

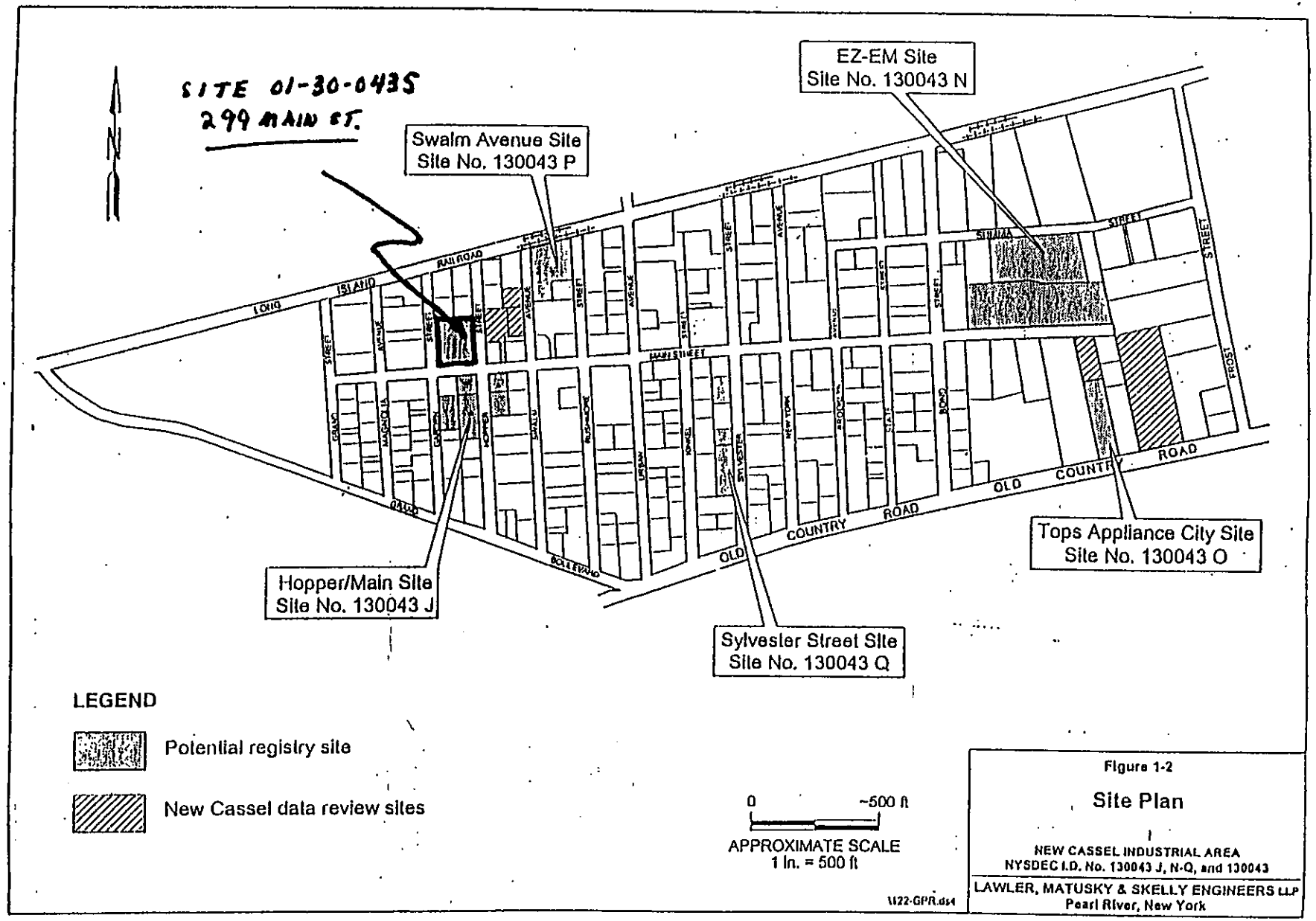
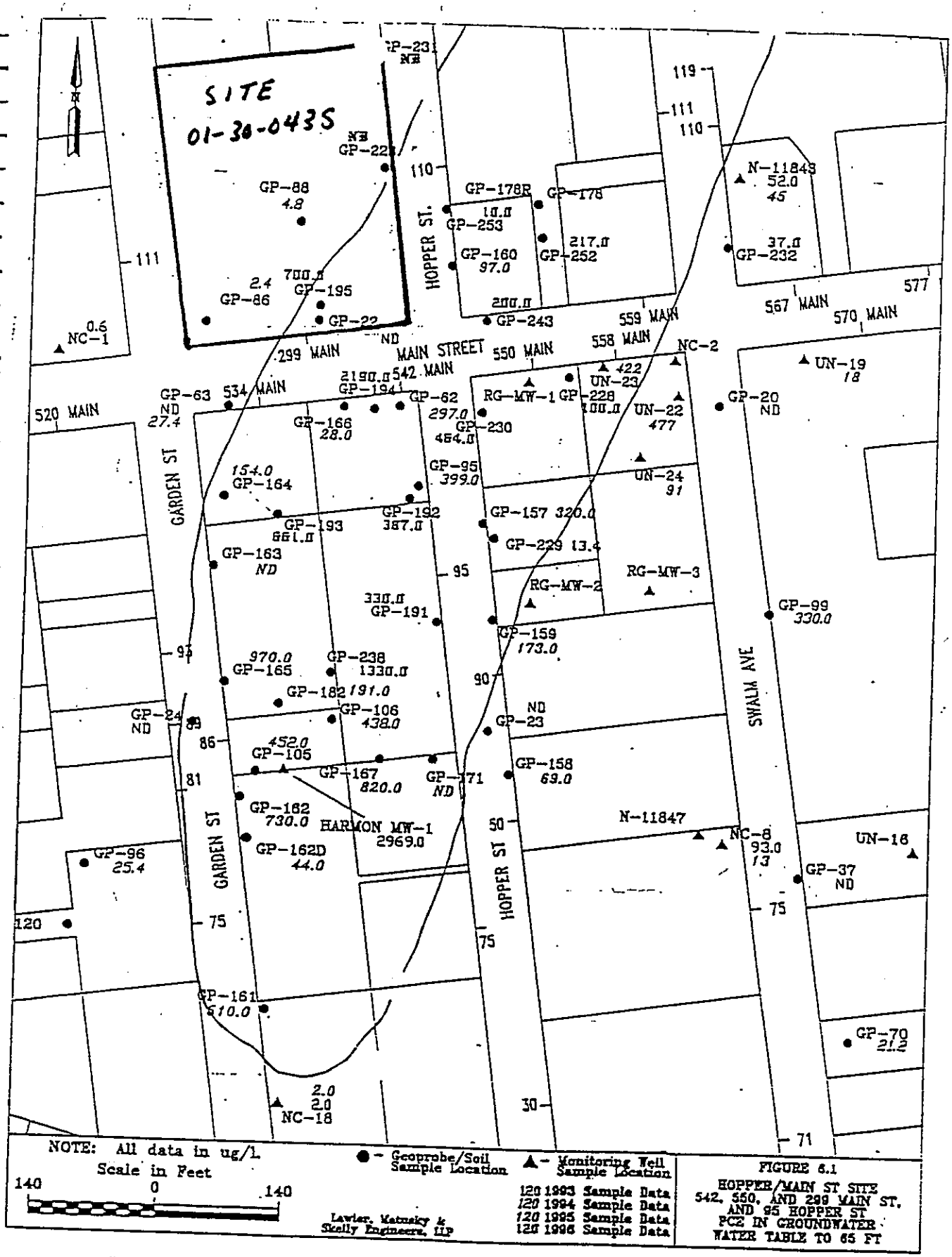


Figure 1-2

Site Plan

NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043 J, N-Q, and 130043

LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Pearl River, New York



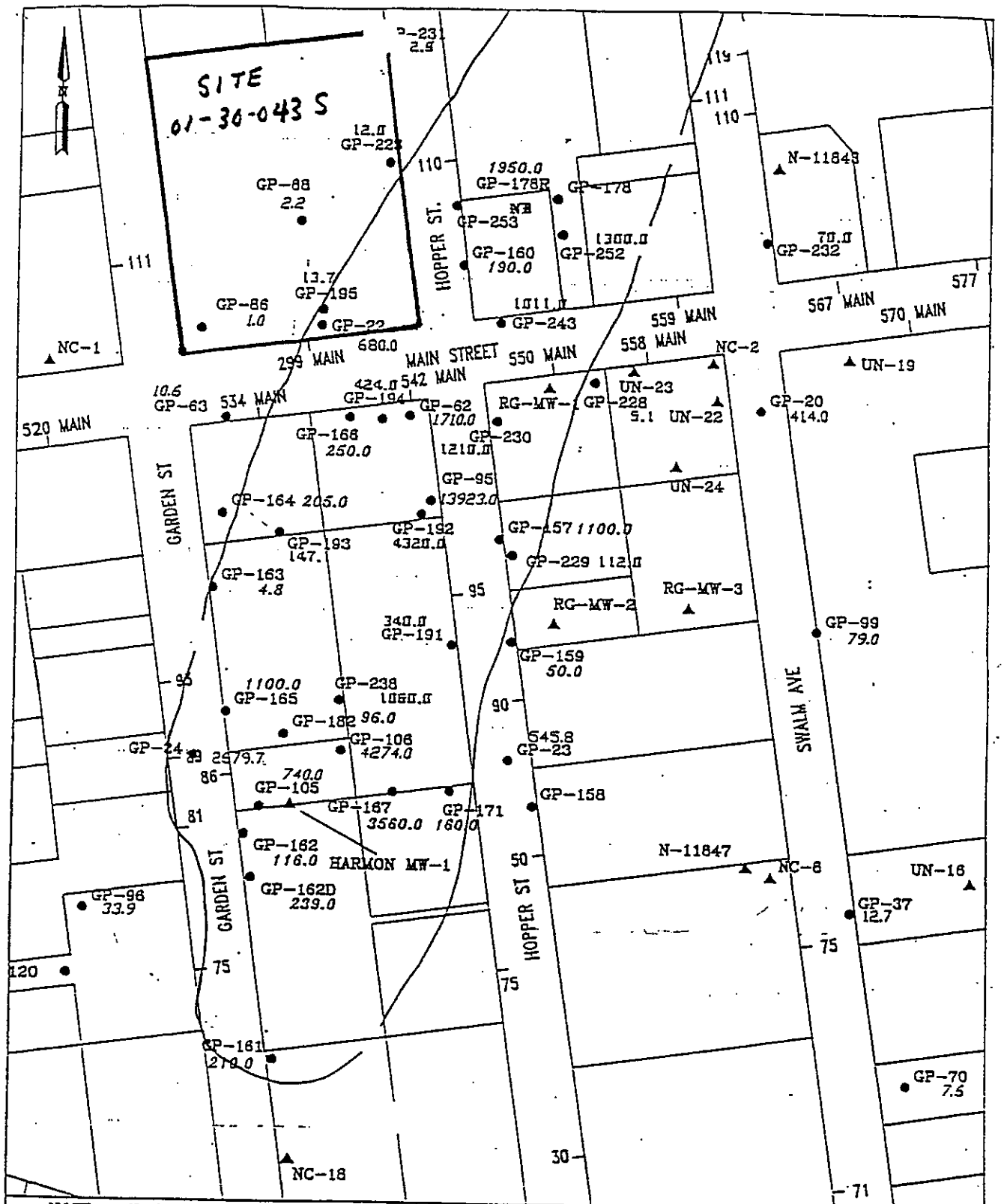
NOTE: All data in ug/l.
Scale in Feet
140 0 140

● - Geoprobe/Soil Sample Location
▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.1
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 95 HOPPER ST
PCE IN GROUNDWATER
WATER TABLE TO 65 FT



NOTE: All data in ug/L.

Scale in Feet

140 0 140

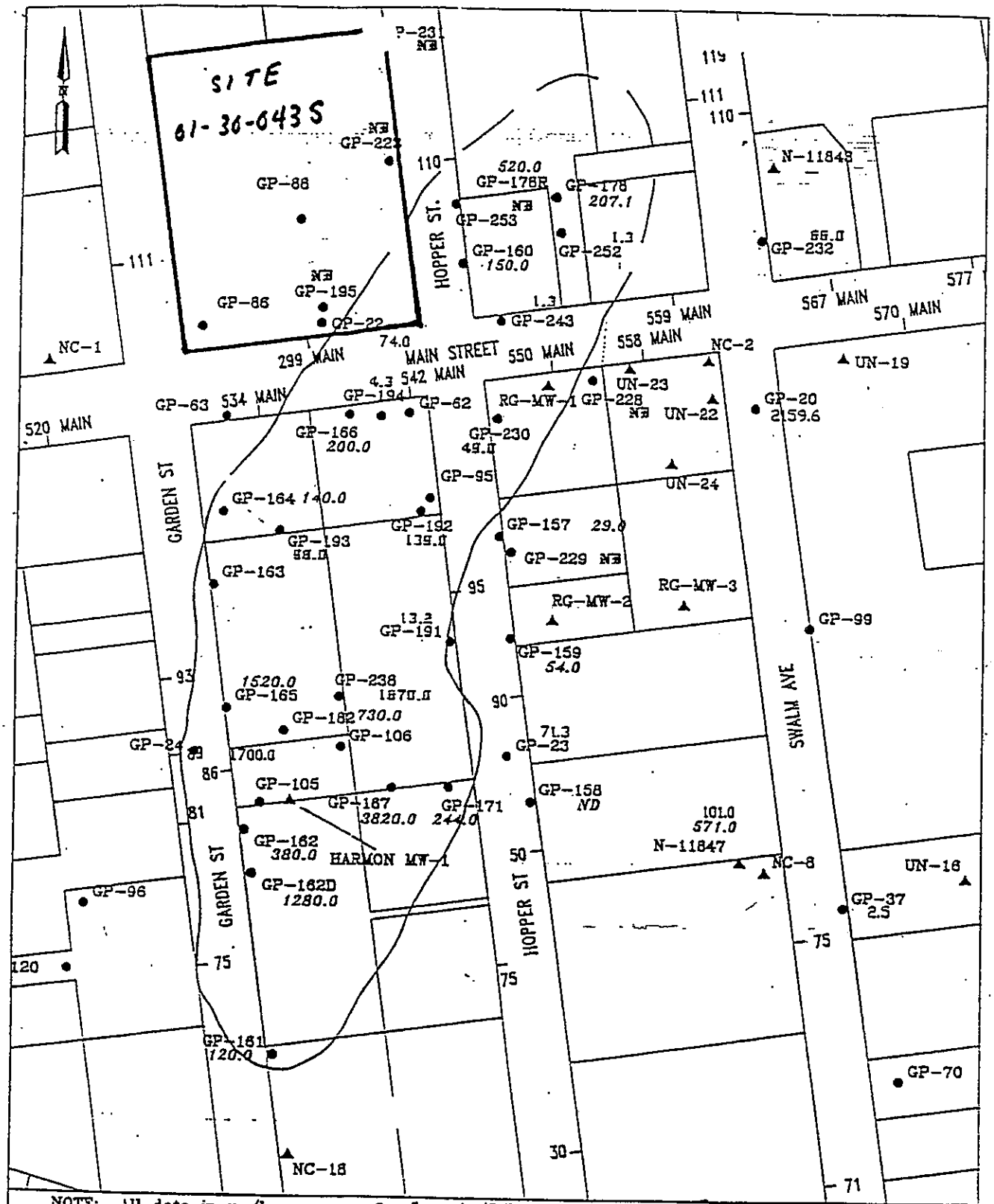
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.2
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
PCE IN GROUNDWATER
65 TO 85 FT



NOTE: All data in ug/L

Scale in Feet

140 0 140

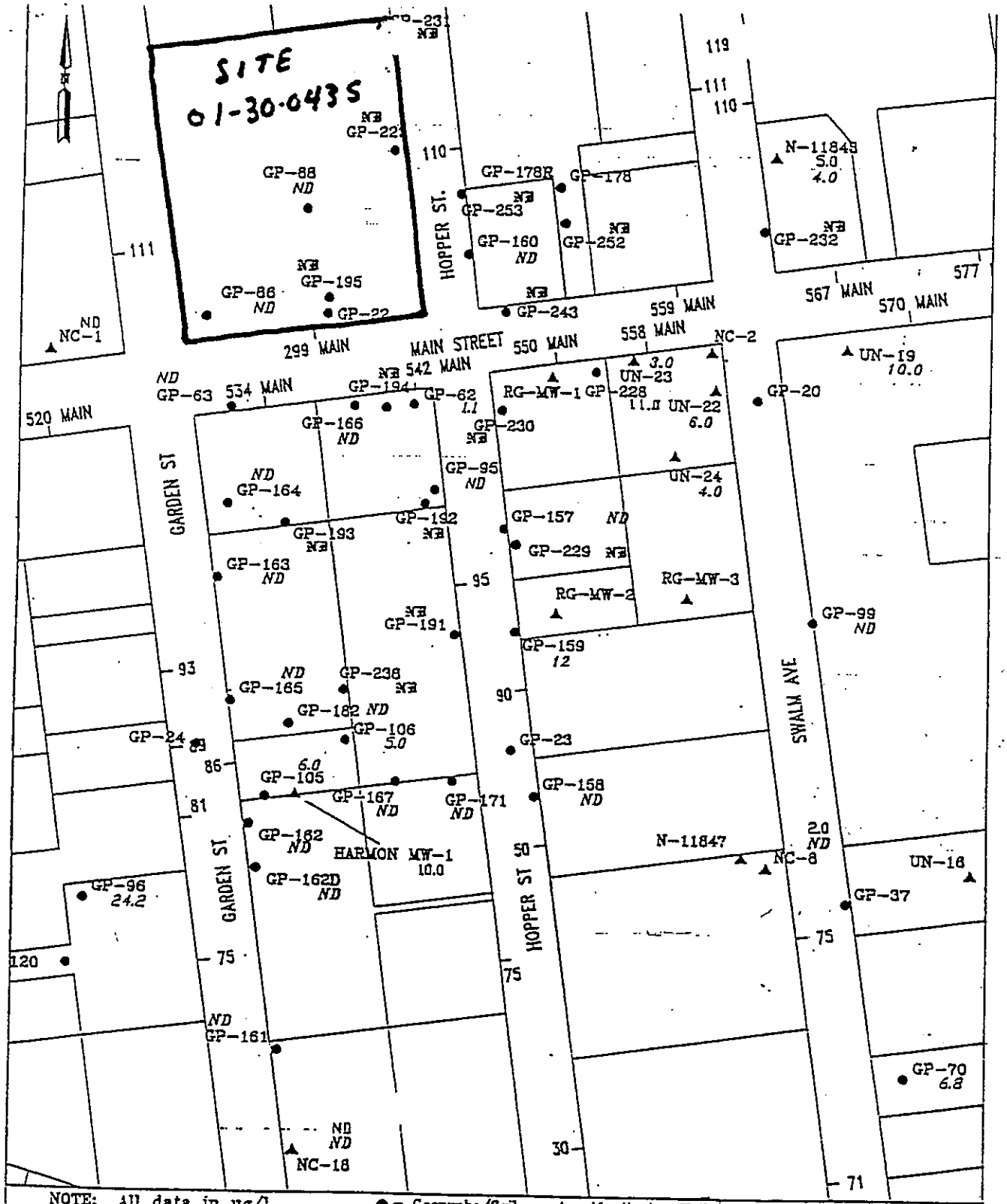
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.3
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 95 HOPPER ST
PCE IN GROUNDWATER
85 FT +



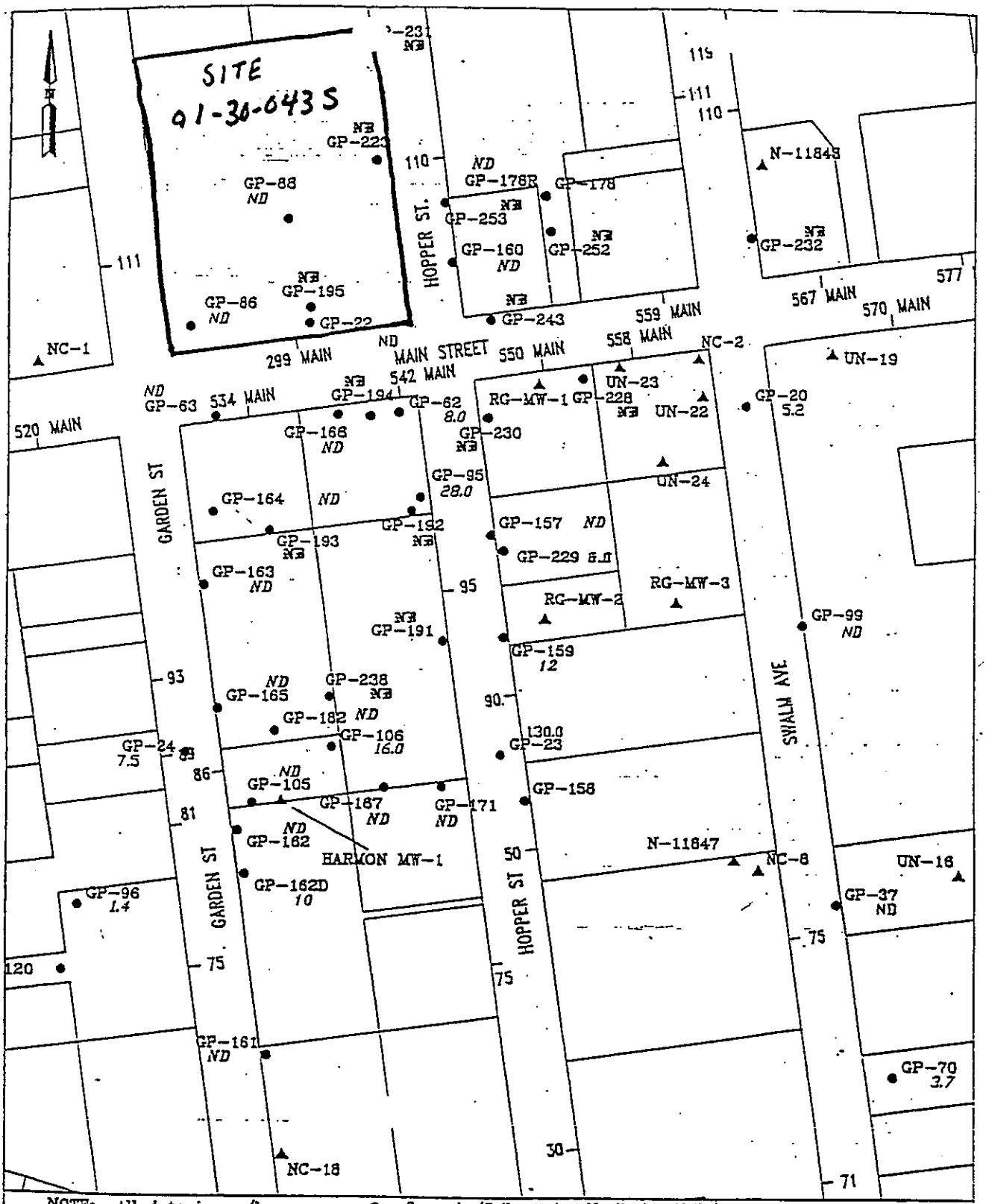
NOTE: All data in ug/l.
Scale in Feet
140 0 140

● - Geoprobe/Soil Sample Location
▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.4
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
TCA IN GROUNDWATER
WATER TABLE TO 65 FT



NOTE: All data in ug/L

Scale in Feet

140 0 140

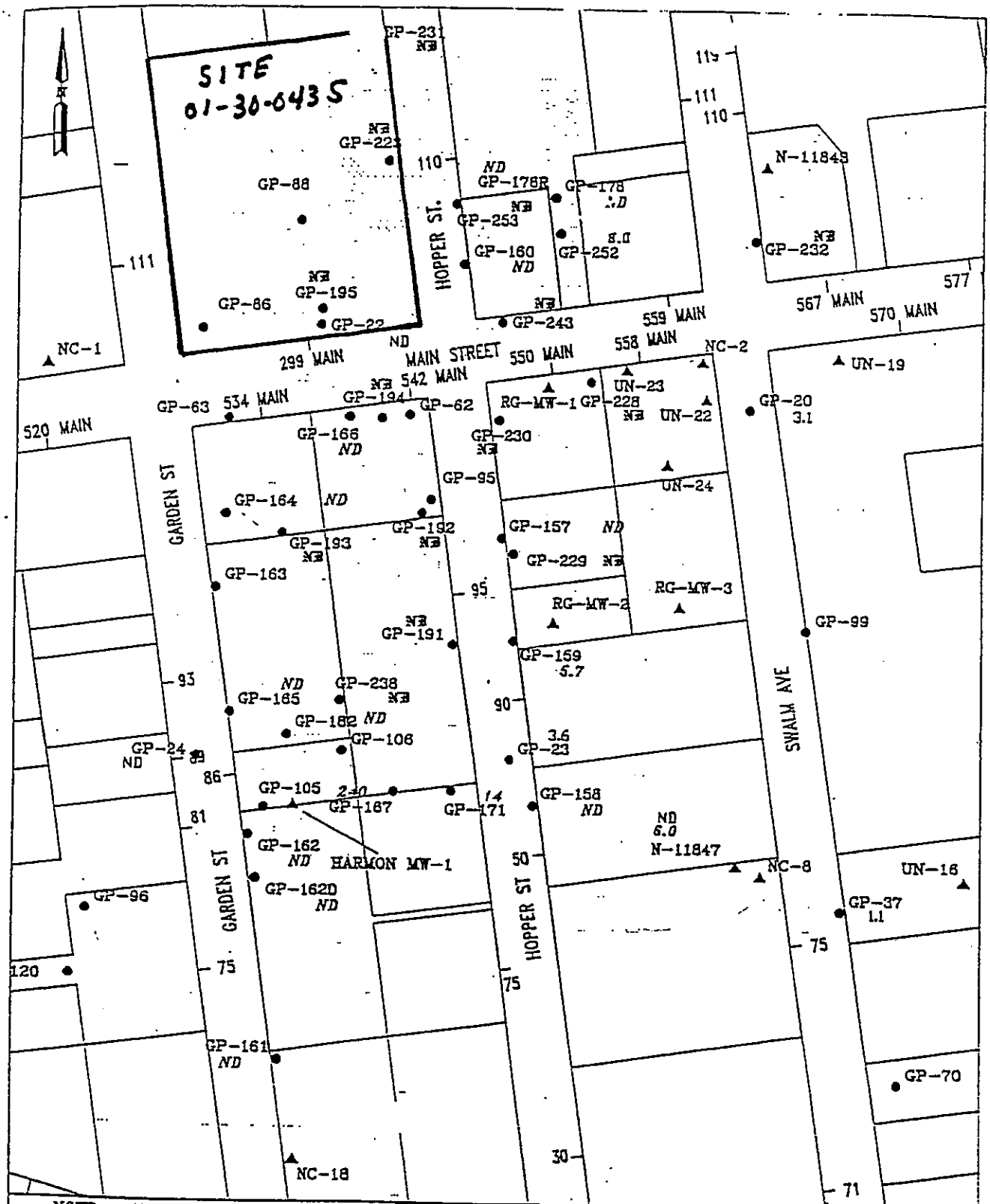
● – Geoprobe/Soil Sample Location

▲ – Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.5
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 95 HOPPER ST
TCA IN GROUNDWATER
65 TO 85 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.6
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 95 HOPPER ST
TCA IN GROUNDWATER
85 FT +

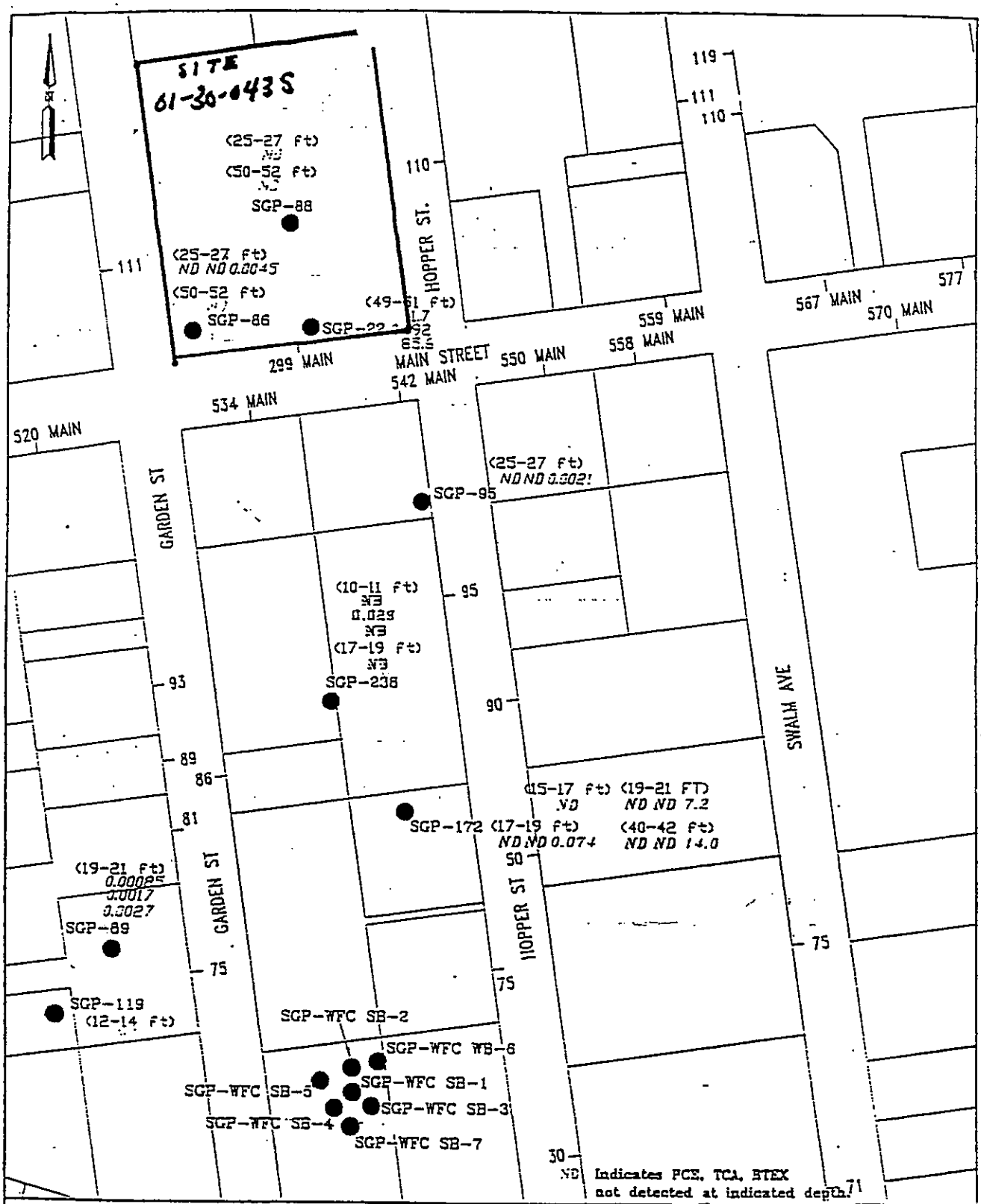


FIGURE 6.7

HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 95 HOPPER ST
SUBSURFACE SOILS DATA

299 Main Street (Block 144, Lots 37 to 44)

299 Main Street, occupied by One Stop Auto and Truck Center, was developed some time between 1950 and 1962 and consists of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formerly used as a junkyard and a transportation company. Island Transport Corporation used large quantities of BTEX-related compounds and approximately 275 gal of TCE from July to December 1978 (LMS 1996) to wash trucks.

The probes completed during the site investigation indicated that in upgradient areas PCE-related contaminants were not detected above 100 ppb (GP-85). At a downgradient position, PCE-related contaminants were found at 680 ppb in the intermediate depth sample (GP-22). Soil samples collected at SGP-86 and SGP-88 did not show any target compounds. A soil sample collected at GP-22 contained both PCE- and TCA-related compounds in a 49-51 ft sample (Figure 6-7); however, it is not known whether the contamination is in the soil or the groundwater. PCE-related contaminants were found at 1.73 mg/kg and TCA-related contaminants at 0.092 mg/kg. In addition, total BTEX-related contaminants were found at 85.63 mg/kg in this soil sample. BTEX compounds ranging from 0.002 to 0.212 mg/kg were also found in the groundwater at the property.

Although this site has a documented use of target compounds (TCE), an on-site source, and an environmental impact was not fully documented during the previous phase of the PSA. To document an environmental impact three additional upgradient and two additional downgradient probes were completed (Figure 6-1, Figure 6-2, Figure 6-3, Figure 6-4, Figure 6-5, and Figure 6-6). The results of these probes clearly indicate that this property is contributing to the groundwater contamination in the Garden/Hopper Street area. The three upgradient probes (GP-231, 223, and 253) do not show any target compounds above 100 ppb. The downgradient points GP-193, GP-194, and GP-195 clearly show elevated PCE-related contaminant concentrations at the three depth ranges (Figure 6-1, Figure 6-2, and Figure 6-3). In GP-194 (water table to 65 ft) the PCE-related contaminants total 2190 ppb (1700 ppb cis-1,2-DCE and 490 ppb TCE) (Figure 6-1). It was also noted that the individual contaminants change and become more numerous just downgradient of this property. Upgradient of the site the only contaminant noted in the groundwater is PCE, while downgradient TCE, DCE, and VC are found along with the PCE (Figure 6-6a). In GP-195 the total PCE-related contaminants are 700 ppb at the shallow depth; of this 700 ppb total, 250 ppb is cis-1,2-DCE and 450 VC (Figure 6-6a). The source of these different contaminants is likely located on this property or the property just to the east, while the PCE-related contaminants at depth are from an upgradient source. Based on a documented history of chemical usage, a documented on-site source, and a demonstrated environmental impact to groundwater, this property should be included on the registry.

New York State Department of Environmental Conservation
Division of Environmental Enforcement
Eastern Field Unit
200 White Plains Road, 5th Floor
Tarrytown, New York 10591-5805
Telephone: (914) 332-1835
Fax (914)332-5116 (not for service of process)

John P. Cahill
Commissioner

NOTICE LETTER
URGENT LEGAL MATTER - PROMPT REPLY NECESSARY
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 10, 1998

Sam-Ton Salvage
c/o Scibelli Bros. Inc.
603 Main Street
Westbury, New York 11590

Re: **299 Main Street Site**
Site #1-30-043S
Scibelli Brothers, Inc.
Sam-Ton Salvage
Frank Scibelli
Sam Scibelli

Dear Sir/Madam:

New York State, through the efforts of the Department of Environmental Conservation (the "Department"), has documented a release and/or threatened release of "hazardous substances" as defined by the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC 9601 et seq. ("CERCLA") and the presence of "hazardous wastes" as defined in Environmental Conservation Law (ECL) 27-1301.1 at property known as 299 Main Street, Westbury, New York. This site is listed in the New York State Registry of Inactive Hazardous Waste Sites as Site No. 1-30-043. It is a Class "2" site. In response to these releases and the threat of future such releases, the Department has spent public funds and anticipates spending additional public funds. These actions have been and will be taken by the Department pursuant to ECL Article 27, Title 13 and State Finance Law §97-b.

Under ECL Article 27, Title 13 and CERCLA, responsible parties are liable for monies expended by the State in taking response actions at and around sites where hazardous substances have been released, including investigative, planning, removal, and remedial actions. You have been determined to be a responsible party as a former operator doing business as Sam-Ton Salvage at the Site.

The process of remediating this site will consist of two phases. In the first phase, a remedial investigation will be conducted to determine the nature and extent of the problem presented by the releases or threatened releases. This will include sampling, monitoring and gathering information to determine the necessity for and proposed extent of remedial actions. Using this data, a Feasibility Study will be performed which will define the objectives of the response action, develop and screen remedial action alternatives, and analyze selected alternatives

in detail. The second step of the remediation process involves the design and implementation of the final remedial alternative selected for the site.

The purpose of this Notice Letter is to inform you of your potential liability as a responsible party, and to determine whether you are willing to conduct or finance the Remedial Investigation and Feasibility Study for this site. Any agreement by you to finance or undertake such activities must be memorialized in an administrative consent order. You must indicate within twenty-one (21) days whether you are willing to enter negotiations with the Department for this purpose.

If within twenty-one (21) days you do not notify the Department that you are willing to enter into negotiations, the Department, at its sole discretion, may perform the necessary work at the site using the Hazardous Waste Remedial Fund. If the Fund is used to investigate or to remediate the site, the Department is required to seek recovery from you as a responsible partt for any expenses it incurs in conducting such activities, in which event this letter also serves as a demand for payment of all monies the Department may expend for the investigation and remediation of this site, plus any and all interest recoverable under 42 USC 9607 and any other provision of law. In accordance with 42 USC 9607(a), interest on such amount shall accrue as of the date of this letter.

It is imperative that negotiations concerning the site begin as early as possible. Your decision whether to negotiate should be provided to me no later than twenty-one (21) days from receipt of this letter. I enclose a copy of a draft Consent Order for your review, and I request that if you wish to negotiate with the Department in this matter, you provide me with comments on this draft Consent Order within twenty-one days of your receipt of this letter.

If you decide to negotiate a Consent Order, please note that such negotiations must be completed and I must have in hand a Consent Order executed by them no later than August 1, 1998. If I do not have a signed Consent Order in hand by that date, all further negotiations will terminate, and the Department will undertake the investigation directly and may pursue your clients in the future to reimburse its expenditures.

The Department also demands a response to the following questions within twenty-one (21) days of your receipt of this letter pursuant to its authority under ECL 27-1307 and 27-1309:

1. A detailed description of your ownership interest or your relationship to an owner currently or in the past at the site including type of interest, dates the interest was or is held, location on the property of the ownership interest.

2. To the best of your knowledge, a detailed description of products manufactured or service provided at the facility; for each product listed or service provided, provide a description of the type of process or operation used.

3. For each process or operation identified pursuant to Item 2, an identification of all waste resulting from that process or operation; an identification of those wastes resulting from that process which, if generated today may be deemed hazardous wastes pursuant to 6 NYCRR, Part 371 and the hazardous waste constituents which are or may be present in the waste and the periods of time such wastes were disposed of at the above-referenced site.

4. For each waste identified pursuant to Item 3, a description of the typical physical characteristics of such waste, time periods in which it was generated, the annual quantities generated of such waste, and the manner of disposal for all wastes.

5. The name and last known address of each individual or firm which disposed of the waste at the site and the location, time period, frequency, type, quantity and method of such disposal.

6. The names, positions, and addresses of present and former employees who had knowledge of past waste disposal practices at the site, their time of employment.

7. An identification of the methods employed, the names of personnel and the source, nature and availability of records, files, or other references utilized in the compilation of information to respond to this inquiry.

If you have any questions or wish to discuss any matters addressed in this letter, please contact me as soon as possible. My telephone number is 914-332-1835, ext.320.

Sincerely,

Jeanna E. Hussey

Jeanna E. Hussey
Senior Attorney
Division of Environmental
Enforcement

cc: A. Ruepp

New York State Department of Environmental Conservation
Division of Environmental Enforcement
Eastern Field Unit
200 White Plains Road, 5th Floor
Tarrytown, New York 10591-5805
Telephone: (914) 332-1835
Fax (914)332-5116 (not for service of process)

John P. Cahill
Commissioner

NOTICE LETTER
URGENT LEGAL MATTER - PROMPT REPLY NECESSARY
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 10, 1998

Frank Scibelli
c/o Scibelli Bros. Inc.
603 Main Street
Westbury, New York 11590

Re: **299 Main Street Site**
Site #1-30-043S
Scibelli Brothers, Inc.
Sam-Ton Salvage
Frank Scibelli
Sam Scibelli

Dear Sir/Madam:

New York State, through the efforts of the Department of Environmental Conservation (the "Department"), has documented a release and/or threatened release of "hazardous substances" as defined by the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC 9601 et seq. ("CERCLA") and the presence of "hazardous wastes" as defined in Environmental Conservation Law (ECL) 27-1301.1 at property known as 299 Main Street, Westbury, New York. This site is listed in the New York State Registry of Inactive Hazardous Waste Sites as Site No. 1-30-043. It is a Class "2" site. In response to these releases and the threat of future such releases, the Department has spent public funds and anticipates spending additional public funds. These actions have been and will be taken by the Department pursuant to ECL Article 27, Title 13 and State Finance Law §97-b.

Under ECL Article 27, Title 13 and CERCLA, responsible parties are liable for monies expended by the State in taking response actions at and around sites where hazardous substances have been released, including investigative, planning, removal, and remedial actions. You have been determined to be a responsible party as an officer/director in charge of the day-to-day operations and environmental practices of a former operator of the Site.

The process of remediating this site will consist of two phases. In the first phase, a remedial investigation will be conducted to determine the nature and extent of the problem presented by the releases or threatened releases. This will include sampling, monitoring and gathering information to determine the necessity for and proposed extent of remedial actions. Using this data, a Feasibility Study will be performed which will define the objectives of the response action, develop and screen remedial action alternatives, and analyze selected alternatives

in detail. The second step of the remediation process involves the design and implementation of the final remedial alternative selected for the site.

The purpose of this Notice Letter is to inform you of your potential liability as a responsible party, and to determine whether you are willing to conduct or finance the Remedial Investigation and Feasibility Study for this site. Any agreement by you to finance or undertake such activities must be memorialized in an administrative consent order. You must indicate within twenty-one (21) days whether you are willing to enter negotiations with the Department for this purpose.

If within twenty-one (21) days you do not notify the Department that you are willing to enter into negotiations, the Department, at its sole discretion, may perform the necessary work at the site using the Hazardous Waste Remedial Fund. If the Fund is used to investigate or to remediate the site, the Department is required to seek recovery from you as a responsible partt for any expenses it incurs in conducting such activities, in which event this letter also serves as a demand for payment of all monies the Department may expend for the investigation and remediation of this site, plus any and all interest recoverable under 42 USC 9607 and any other provision of law. In accordance with 42 USC 9607(a), interest on such amount shall accrue as of the date of this letter.

It is imperative that negotiations concerning the site begin as early as possible. Your decision whether to negotiate should be provided to me no later than twenty-one (21) days from receipt of this letter. I enclose a copy of a draft Consent Order for your review, and I request that if you wish to negotiate with the Department in this matter, you provide me with comments on this draft Consent Order within twenty-one days of your receipt of this letter.

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The Department also demands a response to the following questions within twenty-one (21) days of your receipt of this letter pursuant to its authority under ECL 27-1307 and 27-1309:

1. A detailed description of your ownership interest or your relationship to an owner currently or in the past at the site including type of interest, dates the interest was or is held, location on the property of the ownership interest.

2. To the best of your knowledge, a detailed description of products manufactured or service provided at the facility; for each product listed or service provided, provide a description of the type of process or operation used.

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6. The names, positions, and addresses of present and former employees who had knowledge of past waste disposal practices at the site, their time of employment.

7. An identification of the methods employed, the names of personnel and the source, nature and availability of records, files, or other references utilized in the compilation of information to respond to this inquiry.

If you have any questions or wish to discuss any matters addressed in this letter, please contact me as soon as possible. My telephone number is 914-332-1835, ext.320.

Sincerely,

Jeanna E. Hussey

Jeanna E. Hussey
Senior Attorney
Division of Environmental
Enforcement

cc: A. Ruepp

New York State Department of Environmental Conservation
Division of Environmental Enforcement
Eastern Field Unit
200 White Plains Road, 5th Floor
Tarrytown, New York 10591-5805
Telephone: (914) 332-1835
Fax (914)332-5116 (not for service of process)

John P. Cahill
Commissioner

NOTICE LETTER
URGENT LEGAL MATTER - PROMPT REPLY NECESSARY
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 10, 1998

Scibelli Brothers, Inc.
603 Main Street
Westbury, New York 11590

Re: **299 Main Street Site**
Site #1-30-043S
Scibelli Brothers, Inc.
Sam-Ton Salvage
Frank Scibelli
Sam Scibelli

Dear Sir/Madam:

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The process of remediating this site will consist of two phases. In the first phase, a remedial investigation will be conducted to determine the nature and extent of the problem presented by the releases or threatened releases. This will include sampling, monitoring and gathering information to determine the necessity for and proposed extent of remedial actions. Using this data, a Feasibility Study will be performed which will define the objectives of the response action, develop and screen remedial action alternatives, and analyze selected alternatives in detail. The second step of the remediation process involves the design and implementation of the final remedial alternative selected for the site.

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Sincerely,

Jeanna E. Hussey

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Senior Attorney
Division of Environmental
Enforcement

cc: A. Ruepp

New York State Department of Environmental Conservation
Division of Environmental Enforcement
Eastern Field Unit
200 White Plains Road, 5th Floor
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John P. Cahill
Commissioner

NOTICE LETTER
URGENT LEGAL MATTER - PROMPT REPLY NECESSARY
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 9, 1998

Paula Scappatura
1015 Old Country Road
Westbury, New York 11590

Re: 299 Main Street Site
Site #1-30-043S

Dear Ms. Scappatura:

New York State, through the efforts of the Department of Environmental Conservation (the "Department"), has documented a release and/or threatened release of "hazardous substances" as defined by the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC 9601 et seq. ("CERCLA") and the presence of "hazardous wastes" as defined in Environmental Conservation Law (ECL) 27-1301.1 at property known as 299 Main Street, Westbury, New York. This site is listed in the New York State Registry of Inactive Hazardous Waste Sites as Site No. 1-30-043. It is a Class "2" site. In response to these releases and the threat of future such releases, the Department has spent public funds and anticipates spending additional public funds. These actions have been and will be taken by the Department pursuant to ECL Article 27, Title 13 and State Finance Law §97-b.

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The process of remediating this site will consist of two phases. In the first phase, a remedial investigation will be conducted to determine the nature and extent of the problem presented by the releases or threatened releases. This will include sampling, monitoring and gathering information to determine the necessity for and proposed extent of remedial actions. Using this data, a Feasibility Study will be performed which will define the objectives of the response action, develop and screen remedial action alternatives, and analyze selected alternatives in detail. The second step of the remediation process involves the design and implementation of the final remedial alternative selected for the site.

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If you have any questions or wish to discuss any matters addressed in this letter, please contact me as soon as possible. My telephone number is 914-332-1835, ext.320.

Sincerely,

Jeanna E. Hussey

Jeanna E. Hussey
Senior Attorney
Division of Environmental
Enforcement

cc: A. Ruepp

Acappatora OU-3

Received at: 3:26PM, 1/20/2004

JAN-20-2004 15:37 NYSDEC DEE EFU 914 332 5116 P.02/03

New York State Department of Environmental Conservation
Division of Environmental Enforcement
Eastern Field Unit
200 White Plains Road, 5th Floor, Tarrytown, New York 10591-5805
Phone: (914) 332-1835 ext. 316 • **FAX:** (914) 332-5116
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

January 20, 2004
via facsimile and regular mail

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
EAB Plaza
Uniondale, New York 11556-0120

Re: New Cassel Industrial Area, Off-Site groundwater ("OU-3")
Site #'s 1-30-043A, 1-30-043B, 1-30-043C, 1-30-043D, 1-30-043E, 1-30-043H, 1-30-043I, 1-30-043K, 1-30-043L, 1-30-043M, 1-30-043P, 1-30-043S, 1-30-043U, 1-30-043V

Dear Charlotte:

As you know, New York State, through the efforts of the New York State Department of Environmental Conservation ("Department"), documented a release of "hazardous substances" as defined by the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC 9601 et seq. ("CERCLA") and the presence of "hazardous wastes" as defined in Environmental Conservation Law ("ECL") § 27-1301.1 at the property known as the 299 Main Street Site located at 299 Main Street, New Cassel Industrial Area ("NCIA"), Town of North Hempstead, Nassau County, New York (the "Site"). The Site is listed in the *New York State Registry of Inactive Hazardous Waste Sites* (the "Registry") as Site No. 1-30-043S with a classification 2. The Site is located in the western part of the NCIA and is considered to be a contributor to the western groundwater plume. Please note that as a consequence of the recently passed Superfund/Brownfield legislation, ECL § 27-1301.1 was amended to expand the definition of "hazardous waste" to include hazardous substances.

During the period May 1995 through September 1999, seventeen sites in the NCIA were listed in the Registry with a classification 2. Subsequently, three of the Sites were investigated and delisted, with fourteen Class 2 Sites remaining on the Registry (the "fourteen Sites"). The Department adopted a three pronged strategy in remediating the fourteen sites. The first action identified the source areas of contamination at each site which have been remediated, the second action investigated groundwater contamination at and beneath each site, and the third action is addressing the groundwater contamination migrating from the fourteen sites. NCIA off-site groundwater- Operable Unit 03 ("OU-3")consists of off-site groundwater contamination that has migrated from the fourteen sites and includes the area south of Old Country Road and Grand Boulevard. Accordingly, in response to the releases at the fourteen sites, the Department has spent public funds for a remedial investigation of the contaminant plume originating from the fourteen sites and a comprehensive feasibility study, and anticipates the need to spend public funds to design and implement the remedy selected in the Department's October 2003 Record of Decision (the "ROD") for OU-3 of the fourteen Sites. These response actions have been, and will be taken by the Department pursuant to ECL Article 27, Title 13 and State Finance Law §97-b.

Accordingly, the purpose of this letter is to inform your client, 2632 Realty Development Corp. of its potential liability as a responsible party, and to request that it implement the selected remedy for OU-3 associated with the western plume. Under ECL Article 27, Title 13 and CERCLA, responsible parties are liable for monies expended by the State in taking response actions at sites where hazardous substances have been released, including investigative, planning, removal, and remedial work. Any agreement by your client to finance or undertake such activities must be memorialized in an administrative Consent Order.

You must respond in writing within ten (10) days as to whether your client is willing to enter negotiations with the Department for this purpose. If within ten (10) days you do not contact the Department, the Department will consider this as a negative response and may perform the necessary work for OU-3 using the Hazardous Waste Remedial Fund. If the Fund is used, the Department is required to seek recovery from you for any expenses it incurs in conducting such activities. This letter also serves as a demand for payment of all monies the Department has expended for the remedial activities associated with OU-3, plus any and all interest recoverable under 42 USC 9607 and any other provision of law.

If your client decides to execute a Consent Order with the Department, please note that all negotiations must be completed by February 27, 2004. If I do not have a signed Consent Order by that date, all negotiations will terminate, and the Department will undertake the remediation directly, seeking cost recovery at a later date.

If you have any questions or wish to discuss any matters addressed in this letter, please feel free to contact me at (914) 332-1835 ext. 320 or write to the above address. Thank you for your attention to this matter.

Very truly yours,

Alali M. Tamuno
Senior Attorney

cc: via e-mail w/o encl.
G. Bobersky
J. Jones
J. Hussey, Esq. (New York State Department of Law, Environmental Protection Bureau)
C. Vasudevan

New York State Department of Environmental Conservation
Division of Environmental Enforcement
State Superfund and Voluntary Cleanup Practice Group
Eastern Field Unit
200 White Plains Road, 5th Floor
Tarrytown, New York 10591-5805
Telephone: (914) 332-1835
Fax (914)332-5116 (not for service of process)

RECEIVED
MAY 1999

John P. Cahill
Commissioner

Airborne Express

May 27, 1999

Charlotte Biblow, Esq.
Rivkin, Radler & Kremer
EAB Plaza Uniondale, NY 2556
Uniondale, NY 11532

Re: 299 Main Street
Site # 130043S

Dear Ms. Biblow:

Enclosed is a fully executed Order on Consent providing for a Focussed Remedial Investigation/Focussed Feasibility Study at the above referenced site. The Order was signed for the Department by Michael J. O'Toole, Jr. on May 21, 1999.

Pursuant to ¶L, the effective date of this Order is the date on which it was signed by the Commissioner or his designee. Thus, May 21, 1999 should be used to calculate the timing of all submissions and activities pursuant to this Order unless otherwise specifically stated.

Thank you for your courtesy and cooperation in this project. The Department anticipates working harmoniously with your client in the above investigation.

Sincerely,

Jeanna E. Hussey

Jeanna E. Hussey
Senior Attorney

cc: C. Vasudevan

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the
Development and Implementation
of a Focussed Remedial Investigation/Focussed Feasibility
Study for an Inactive Hazardous Waste
Disposal Site, Under Article 27, Title 13,
and Article 71, Title 27 of the
Environmental Conservation Law
of the State of New York by
by

2632 Realty Development Corp.
Respondent.

ORDER
ON
CONSENT

INDEX # W1-0843-98-06

Site Code #1-30-043S

WHEREAS,

1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites." This Order is issued pursuant to the Department's authority under, inter alia, ECL Article 27, Title 13 and ECL 3-0301.

2. 2632 Realty Development Corp. ("Respondent"), is the current owner of the site located at 299 Main Street in the western portion of the New Cassel Industrial Area, Westbury, NY 11590, (hereinafter referred to as "the Site"). Groundwater beneath and down gradient of the site is contaminated with TCE and related compounds. The contaminated groundwater is located within an EPA-designated sole source aquifer. Two public water supply wells are located approximately 2,700 ft. down gradient of the site. A site map is attached as an appendix to this Order as Exhibit A.

3. The Department has determined that the Site is an inactive hazardous waste disposal site, as that term is defined at ECL 27-1301.2. The Site has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 01-30-043S. The Department has classified the Site as a Classification "2" pursuant to ECL 27-1305.4.b.

4. A. Pursuant to ECL 27-1313.3.a, whenever the Commissioner of Environmental Conservation (the "Commissioner") "finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department, at such site, and (ii) to implement such program within reasonable time limits specified in the order."

B. Any person under order pursuant to ECL 27-1313.3.a has a duty imposed by

ECL Article 27, Title 13 to carry out the remedial program committed to under order. ECL 71-2705 provides that any person who fails to perform any duty imposed by ECL Article 27, Title 13 shall be liable for civil, administrative and/or criminal sanctions.

C. The Department also has the power, inter alia, to provide for the prevention and abatement of all water, land, and air pollution. ECL 3-0301.1.i.

5. The Department and Respondent agree that the goals of this Order are for Respondents to (i) develop and implement a Focussed Remedial Investigation/Focussed Feasibility Study ("FRI/FFS") for the Site; and (ii) reimburse the State's administrative costs with reservation of the State's rights as to all administrative costs not provided for in this consent order.

6. Respondent, having waived Respondent's right to a hearing herein as provided by law, and having consented to the issuance and entry of this Order, agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms.

7. Notwithstanding Respondent's agreement to carry out the terms of this Order, Respondent does not admit or acknowledge any liability, fault or wrongdoing or violation of law, regulation, permit of any kind whatsoever in any way related to the Site.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Initial Submittal

Within 30 days after the effective date of this Order, Respondent shall submit to the Department all data within Respondent's possession or control regarding environmental conditions on-Site, and other information described below, unless the Department informs Respondent that such data have previously been provided to the Department. The data and other information shall include:

A. A brief history and description of the Site, including the types, quantities, physical state, location, and dates of disposal of hazardous waste including methods of disposal and spillage of such wastes;

B. (1) A concise summary of information held by Respondent and Respondent's attorneys and consultants with respect to all persons responsible for such disposal of hazardous wastes, including but not limited to names, addresses, dates of disposal and any proof linking each such person responsible with hazardous wastes identified pursuant to Subparagraph I.A; and

(2) Respondent with respect to any documents for which a privilege may

be claimed, will disclose such data or documents but need not disclose (a) the privileged mental impressions, conclusions, opinions or legal theories that are Respondent attorney's or consultant's work product or (b) Respondent's privileged communications to Respondent's attorney seeking legal counsel, and Respondent's attorney's communications with Respondent; and

C. A comprehensive list and copies of all existing relevant reports with titles, authors, and subject matter, as well as a description of the results of all previous investigations of the Site and areas in the vicinity of the Site, including copies of all available topographic and property surveys, engineering studies and aerial photographs.

II. Performance and Reporting of Remedial Investigation

A. Within 30 days after the effective date of this Order, Respondent shall commence the Remedial Investigation in accordance with the schedule contained in the Department-approved FRI/FFS Work Plan attached to this Order as Exhibit B and made a part of this Order.

B. Respondent shall perform the Focussed Remedial Investigation in accordance with the Department-approved FRI/FFS Work Plan.

C. During the performance of the Focussed Remedial Investigation, Respondent shall have on-Site a full-time representative who is qualified to supervise the work done.

D. Within the time frame set forth in the Department-approved FRI/FFS Work Plan, Respondent shall prepare a Focussed Remedial Investigation Report that shall:

(1) include all data generated and all other information obtained during the Focussed Remedial Investigation:

(2) provide all of the assessments and evaluations set forth in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") [42 USC 9601 et seq.], as amended, the National Contingency Plan ("NCP") of March 8, 1990 [40 CFR Part 300], the USEPA guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," dated October 1988, and any subsequent revisions to that guidance document in effect at the time the FRI/FFS Work Plan is submitted, and appropriate USEPA and Department technical and administrative guidance documents as applicable to the approved FRI/FFS work plan.

(3) identify any additional data that must be collected; and

(4) include a certification by the individual or firm with primary responsibility for the day to day performance of the Focussed Remedial Investigation that all activities that comprised the Focussed Remedial Investigation were performed in full accordance with the Department-approved FRI/FFS Work Plan.

III. Focussed Feasibility Study

A. In accordance with the schedule contained in the Department-approved FRI/FFS Work Plan, Respondents shall submit a Focussed Feasibility Study evaluating on-Site remedial actions to eliminate, to the maximum extent practicable, all health and environmental hazards and potential hazards on-Site. The Focussed Feasibility Study shall be prepared by and have the signature and seal of a professional engineer who shall certify that the Focussed Feasibility Study was prepared in accordance with this Order.

B. Respondent shall perform and prepare the Focussed Feasibility Study in accordance with the Department-approved FRI/FFS Work Plan and in a manner consistent with CERCLA, the NCP, and the guidance documents identified in Subparagraph II.D.2.

C. After the Department's approval of the Focussed Feasibility Study, Respondent shall cooperate and assist the Department in soliciting public comment on the FRI/FFS and on the proposed remedial action plan, in accordance with CERCLA, the NCP, the guidance documents identified in Subparagraph II.D.2, and with any Department policy and guidance documents in effect at the time the public comment period is initiated.

IV. Interim Remedial Measures

A. 1. Respondent may propose one or more IRMs for the Site.

2. In proposing each IRM, Respondent shall submit to the Department a work plan that includes a chronological description of the anticipated IRM activities together with a schedule for performance of those activities (an "IRM Work Plan" for that Site).

3. Upon the Department's determination that the proposal is an appropriate IRM and upon the Department's approval of such work plan, the IRM Work Plan shall be incorporated into and become an enforceable part of this Order; and Respondent shall submit to the Department for its review and (as appropriate) approval, in accordance with the schedule contained in the Department-approved IRM Work Plan, detailed documents and specifications prepared, signed, and sealed by a professional engineer to implement the Department-approved IRM. Such documents shall include a health and safety plan and contingency plan. Respondent shall then carry out such IRM in accordance with the requirements of the approved IRM Work Plan, detailed documents and specifications, and this Order. Respondent shall notify the Department of any significant difficulties that may be encountered in implementing the Department-approved work plan, detailed documents, or specifications and shall not modify any obligation unless first approved by the Department.

4. During implementation of all construction activities identified in the Department-approved IRM Work Plan, Respondent shall have on-Site a full-time representative who is qualified to supervise the work done.

5. Within the schedule contained in the Department-approved IRM Work Plan, Respondent shall submit to the Department a final engineering report prepared by a professional engineer that includes a certification by that individual that all activities that comprised the Department-approved IRM were completed in accordance with the Department-approved IRM Work Plan and this Order.

a. If the performance of the Department-approved IRM encompassed construction activities, the final engineering report also shall include a detailed post-remedial operation and maintenance plan ("IRM O&M Plan"); "as-built" drawings and a final engineering report (each including all changes made to the Remedial Design during construction); and a certification by a professional engineer that the IRM was implemented and all construction activities were completed in accordance with the Department-approved detailed documents and specifications for the IRM and all such activities were personally witnessed by him or her or by a person under his or her direct supervision. The IRM O&M Plan, "as built" drawings, final engineering report, and certification must be prepared, signed, and sealed by a professional engineer.

b. Upon the Department's approval of the IRM O&M Plan, Respondent shall implement the IRM O&M Plan in accordance with the requirements of the Department-approved IRM O&M Plan.

6. After receipt of the final engineering report and certification, the Department shall notify Respondent in writing whether the Department is satisfied that the IRM was completed in compliance with the Department-approved IRM Work Plan and design.

V. Progress Reports

Respondent shall submit to the parties identified in Subparagraph XIII.B in the numbers specified therein copies of written monthly progress reports that:

A. describe the actions which have been taken toward achieving compliance with this Order during the previous month;

B. include all results of sampling and tests and all other data received or generated by Respondent or Respondent's contractors or agents in the previous month, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent;

C. identify all work plans, reports, and other deliverables required by this Order that were completed and submitted during the previous month;

D. describe all actions, including, but not limited to, data collection and implementation of work plans, that are scheduled for the next month and provide other information relating to the progress at the Site;

E. include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of Respondent's obligations under the Order, and efforts made to mitigate those delays or anticipated delays; and

F. include any modifications to any work plans that Respondent has proposed to the Department or that the Department has approved.

Respondent also shall allow the Department to attend, and shall provide the Department at least seven days advance notice of, any of the following: prebid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.

VI. Review of Submittals

A. 1. The Department shall review each of the submittals Respondent makes pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. The Department shall notify Respondent in writing of its approval or disapproval of the submittal. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. a. If the Department disapproves a submittal, it shall so notify Respondent in writing and shall specify the reasons for its disapproval. Within 30 days after receiving written notice that Respondent's submittal has been disapproved, Respondent shall make a revised submittal to the Department that addresses and resolves all of the Department's stated reasons for disapproving the first submittal.

b. After receipt of the revised submittal, the Department shall notify Respondent in writing of its approval or disapproval. If the Department disapproves the revised submittal, the parties shall take all reasonable efforts to resolve their differences regarding the revised submittal. If the parties are unable to resolve their differences Respondent shall be in violation of this Order and the Department may take any action or pursue whatever rights they have pursuant to any provision of statutory or common law. If the Department approves the revised submittal, it shall be incorporated into and become an enforceable part of this Order.

B. Respondent shall modify and/or amplify and expand a submittal upon the Department's direction to do so if the Department determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts, that further work is necessary.

VII. Penalties

A. 1. Respondent's failure to comply with any term of this Order constitutes a violation of this Order and the ECL.

2. Respondent shall be liable for payment to the Department of the sums set forth below as stipulated penalties for each day or part thereof that Respondent is in violation of the terms of this Order. All penalties begin to accrue on the first day Respondent is in violation of the terms of this Order and continue to accrue through the final day of correction of any violation. Such sums shall be due and payable within 15 days after receipt of notification from the Department assessing the penalties. If such payment is not received within 15 days after Respondent receives such notification from the Department, interest shall be payable at the annual rate of nine per centum on the overdue amount from the day on which it was due through, and including, date of payment. Penalties shall be paid by certified check or money order, made payable to "New York State Department of Environmental Conservation" and shall be delivered personally or by certified mail, return receipt requested, to the Director, Division of Environmental Enforcement, N.Y.S.D.E.C., 50 Wolf Road, Albany, New York 12233-5500. Payment of the penalties shall not in any way alter Respondent's obligation to complete performance under the terms of this Order. Stipulated penalties shall be due and payable under this Subparagraph pursuant to the following schedule:

Period of Non-Compliance	Penalty Per Day
First through 15th day	$ 5,000
16th through 30th day	$ 10,000
31st day and thereafter	$ 15,000

B. Respondent shall not suffer any penalty under this Order or be subject to any proceeding or action if it cannot comply with any requirement hereof because of war, riot, or an unforeseeable disaster arising exclusively from natural causes which the exercise of ordinary human prudence could not have prevented. Respondent shall, within five days of when it obtains knowledge of any such condition, notify the Department in writing. Respondent shall include in such notice the measures taken and to be taken by Respondent to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Failure to give such notice within such five-day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall have the burden of proving that an event is a defense to compliance with this Order pursuant to this Subparagraph.

VIII. Entry upon Site

Respondent hereby consents to the entry upon the Site or areas in the vicinity of the Site which may be under the control of Respondent by any duly designated employee. consultant, contractor, or agent of the Department or any State agency for purposes of inspection, sampling, and testing and to ensure Respondent's compliance with this Order.

During Remedial Construction, Respondent shall provide the Department with suitable office space at the Site, including access to a telephone, and shall permit the Department full access to all records relating to matters addressed by this Order and job meetings.

IX. Payment of State Costs

Within 30 days after receipt of an itemized invoice from the Department, Respondent shall pay to the Department a sum of money which shall represent reimbursement for the State's expenses including, but not limited to, direct labor, fringe benefits, indirect costs, travel, analytical costs, and contractor costs incurred by the State of New York for work related to the Site from the effective date of this Order, as well as for reviewing and revising submittals made pursuant to this Order, overseeing activities conducted pursuant to this Order, collecting and analyzing samples, and administrative costs associated with this Order. Respondent's obligation to reimburse the state for expenses incurred in any one year under this Paragraph commencing from the effective date of the Order, shall not exceed $30,000; however, the Department may aggregate billings for more than one year. Respondent shall make quarterly installment payments of no less than $4,000.00 each, with the first installment due and owing on the first day of the month next following the month in which the Department sends its first invoice to Respondent; and Respondent shall continue making such quarterly installment payments of no less than $4,000.00 each until Respondent pays off in full all invoices sent to it under the provisions of this Paragraph. Such payment shall be made by certified check payable to the Department of Environmental Conservation and shall be sent to:

Bureau of Program Management
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010.

Personal service costs shall be documented by reports of Direct Personal Service, which shall identify the employee name, title, biweekly salary, and time spent (in hours) on the project during the billing period, as identified by an assigned time and activity code. Approved agency fringe benefit and indirect cost rates shall be applied. Non-personal service costs shall be summarized by category of expense (e.g., supplies, materials, travel, contractual) and shall be documented by expenditure reports.

X. Department Reservation of Rights

A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's civil, criminal, or administrative rights (including, but not limited to, nor exemplified by, the right to recover natural resource damages) or authorities.

B. Nothing contained in this Order shall be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

C. Nothing in this Order shall be construed as barring diminishing, adjudicating, or in any way affecting any of the Department's rights including, but not limited to nor exemplified by the Department's right to address groundwater plumes migrating off site resulting from Respondent's disposal of hazardous wastes at the Site, if any.

D. Nothing in this Order shall be construed as barring diminishing, adjudicating, or in any way affecting any of the Department's rights including, but not limited to nor exemplified by the Department's right to bring any action or proceeding to recover expenses incurred prior to the effective date of this Order by the State that are related to the disposal of hazardous wastes at the Site and are appropriate and reasonable and not inconsistent with the NCP.

E. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Respondent's rights as against third parties.

XI. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, and their representatives, consultants and employees harmless for all claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors, and assigns.

However, Respondent shall not be required to indemnify the Department, the State of New York, and their representatives, consultants and employees regarding any liability arising as a result of the gross negligence or reckless, wanton or intentional misconduct by the Department, the State of New York, and their representatives and employees during the course of any activities conducted pursuant to this Order.

XII. Public Notice

A. Within 30 days after the effective date of this Order, Respondent shall file a Notice with the Clerk of the County wherein the Site is located to give all parties who may acquire any interest in the Site notice of this Order and shall within 45 days thereafter proide to the Department a copy of such Notice as filed showing the liber and page number at which the Notice was filed and the date of the filing.

B. If Respondent proposes to convey the whole or any part of Respondent's ownership interest in the Site, Respondent shall, not fewer than 60 days before the date of conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed date of the conveyance and shall notify the transferee in writing, with a

copy to the Department, of the applicability of this Order.

XIII. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

1. Communication from Respondent shall be sent to:

Jeanna E. Hussey, Esq.
Division of Environmental Enforcement
Eastern Field Unit
New York State Department of Environmental Conservation
200 White Plains Road, 5th Floor
Tarrytown, NY 10591-5805

with copies to:

Chittibabu Vasudevan, P.E., Ph.D.
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

Anna C. Ruepp
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

G. Anders Carlson, Ph.D.
Director, Bureau of Environmental Exposure Investigation
New York State Department of Health
2 University Place
Albany, New York 12203

Ray Cowen, Director
Region 1
New York State Department of Environmental Conservation
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

2. Communication to be made from the Department to Respondent shall be sent to:

Paula Scappatura, President
2632 Realty Development Corp.
1025 Old Country Road
Westbury, N.Y. 11590

Charlotte Biblow, Esq.
Rivkin, Radler & Kremer
EAB Plaza Uniondale, NY 11556
Uniondale, NY 11532

Richard Parrish, P.G., C.E.I
Impact Environmental, Inc.
46 East North Port Road
Kings Park, NY 11754

B. Copies of work plans and reports shall be submitted as follows:

Four copies (one unbound) to:
Anna C. Ruepp
Division of Environmental Remediation

Two copies to:
G. Anders Carlson, Ph. D.
Director, Bureau of Environmental Exposure Investigation

One copy to:
Ray Cowen, Director
Region 1

and

Jeanna E. Hussey, Esq.
Division of Environmental Enforcement

C. 1. Within 30 days of the Department's approval of any report submitted pursuant to this Order, Respondent shall submit to Director, Division of Environmental Remediation, a computer readable magnetic media copy of the approved report in American Standard Code for Information Interchange (ASCII) format.

2. Within 30 days after the Department's approval of the FRI/FFS. Respondent shall submit one microfilm copy of the FRI/FFS to Director, Division of Environmental Remediation.

D. The Department and Respondent reserve the right to designate additional or different addressees for communication or written notice to the other.

XIV. Miscellaneous

A. 1. All activities and submittals required by this Order shall address on-Site contamination resulting from the disposal of hazardous wastes at the Site, if any.

2. All activities Respondent is required to undertake under this Order are ordinary and necessary expenses for the continued operation of Respondent.

B. Respondent shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and third party data validators acceptable to the Department to perform the technical, engineering, and analytical obligations required by this Order. The experience, capabilities, and qualifications of the firms or individuals selected by Respondent shall be submitted to the Department within 15 days after the effective date of this Order. The Department's approval of these firms or individuals shall be obtained before the start of any activities for which Respondent and such firms or individuals will be responsible. The responsibility for the performance of the professionals retained by Respondent shall rest solely with Respondent.

C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondent, and the Department also shall have the right to take its own samples. Respondent shall make available to the Department the results of all sampling and/or tests or other data generated by Respondent with respect to implementation of this Order and shall submit these results in the progress reports required by this Order.

D. Respondent shall notify the Department at least 10 working days in advance of any field activities to be conducted pursuant to this Order.

E. Respondent shall obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform Respondent's obligations under this Order.

F. Respondent and Respondent's officers, directors, agents, servants, employees, successors, and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondent's responsibilities under this Order. Respondent's officers, directors, employees, servants, and agents shall be obliged to comply with the relevant provisions of this Order in the performance of their designated duties on behalf of Respondent.

G. Respondent shall provide a copy of this Order to each contractor hired to perform work required by this Order and to each person representing Respondent with respect to the Site and shall condition all contracts entered into in order to carry out the obligations identified in this Order upon performance in conformity with the terms of this Order. Respondent or Respondent's contractors shall provide written notice of this Order to

all subcontractors hired to perform any portion of the work required by this Order. Respondent shall nonetheless be responsible for ensuring that Respondent's contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

H. All references to "professional engineer" in this Order are to an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law. If such individual is a member of a firm, that firm must be authorized to offer professional engineering services in the State of New York in accordance with Article 145 of the New York State Education Law.

I. All references to "days" in this Order are to calendar days unless otherwise specified.

J. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

K. 1. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order.

2. If Respondent desires that any provision of this Order be changed, Respondent shall make timely written application, signed by Respondent, to the Commissioner setting forth reasonable grounds for the relief sought. Copies of such written application shall be delivered or mailed to Jeanna E. Hussey and to Anna Ruepp.

L. The effective date of this Order is the date the Commissioner or his designee signs it.

DATED: 5/21/99

JOHN P. CAHILL, COMMISSIONER
New York State Department
of Environmental Conservation

By:

Michael J. O'Toole, Jr.

CONSENT BY RESPONDENT
2362 Realty Development Corp.

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

By: Paula Scappatura

Title: Pres

Date: 4/30/99

STATE OF NEW YORK)
) s.s.:
COUNTY OF)

On this 30 day of April, 1999, before me personally came PAULA SCAPPATURA, to me known, who being duly sworn, did depose and say that she resides at 1025 Old Country Rd, Suite 100M Westbury NY; that she is the President of 2632 Realty Development Corp., the corporation described in and which executed the foregoing instrument; and that she signed her name hereto by the order of the Board of Directors of said corporation.

[illegible] SCHUTZER
[illegible] State of New York
No. 02SC[illegible]
Qualified in Nassau County
Commission Expires January 27, 2018

[signature]
Notary Public

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Development and Implementation of a Focussed Remedial Investigation/Focussed Feasibility Study for an Inactive Hazardous Waste Disposal Site, Under Article 27, Title 13, and Article 71, Title 27 of the Environmental Conservation Law of the State of New York by 2632 Realty Development Corp. Respondent.	ORDER ON CONSENT INDEX # W1-0843-98-06 Site Code #1-30-043S

Nassau County Clerk
RECORDS OFFICE
RECORDING PAGE

Type of Instrument: Deed Misc w/Fee

Control No: 199907080836

2632 REALTY DEVELOPMENT CORP

L CONSERVATION
NYS DEPARTMENT OF ENVIRONMENTA

Recorded: 7/08/1999
At: 10:00:01 AM
In Liber: 11075
Of: Deed Book
From Page: 0400
Through Page: 0403

Refers to Liber: 00000
Of:
Page: 0000

Location:	Section:	Block:	Lot:	Unit:
N. Hempstead (2822)	00000011	00144-00	00035	

EXAMINED AND CHARGED AS FOLLOWS:

Consider Amt $ .00

Received The Following Fees For Above Instrument

			Exempt				Exempt
Recording	$	27.00	NO	State Fee	$	4.75	NO
St.Fee/Cty	$	.25	NO				

Fees Paid: $ 32.00

THIS PAGE IS A PART OF THE INSTRUMENT

KAL001

Karen V. Murphy
County Clerk, Nassau County

199907080836

NO. W1-0843-98-06
2632 REALTY DEVELOPMENT CORP.
NOTICE OF ORDER ON CONSENT

Section **11**
Block **144**
Lots **35 to 46**
Known as 299 Main Street, Westbury, NY 11590

RECORD AND RETURN TO:

Charlotte Biblow, Esq.
RIVKIN, RADLER & KREMER
EAB Plaza
Uniondale, NY 11556

NOTICE OF ORDER ON CONSENT

Notice made this 30th day of June, 1999, by 2632 Realty Development Corp., a corporation having its principal offices at 1025 Old Country Road, Westbury, Nassau County, New York, a parcel, designated on Nassau County Tax Map as Section 11, Block 144, Lots 35 to 46; (known as 299 Main Street, Westbury, NY 11590); and

WHEREAS, 2632 Realty Development Corp. has entered into an Order On Consent with the New York State Department of Environmental Conservation, which Order On Consent is entitled:

> In the matter of the Development and Implementation of a Focussed Remedial Investigation/Focussed Feasibility Study for an Inactive Hazardous Waste Disposal Site, under Article 27, Title 13, and Article 71, Title 27 of the Environmental Conservation Law of the State of New York by 2632 Realty Development Corp., Respondent
>
> Index No. W1-0843-98-06
>
> Site Code No. 1-30-043S

A copy of said Order On Consent is on file with the New York State Department of Environmental Conservation; and

WHEREAS, such Order On Consent provides for the investigation of the parcel, for the presence of certain specified chemicals;

NOW, THEREFORE, 2632 Realty Development Corp. states as follows:

1. That this document provides notice of the Order On Consent referenced above to all parties who may acquire any interest in the parcel.

2632 REALTY DEVELOPMENT CORP.

By: Paula Scappatura
Paula Scappatura
Title: President

STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)

On this 30th day of June, 1999, before me personally came Paula Scappatura, to me known, who being duly sworn, did depose and say that she resides in Nassau County; that she is the President of 2632 Realty Development Corp., the corporation described in and which executed the foregoing instrument; that she knew the seal of said corporation; that the seal affixed to said instrument was so affixed by the order of the Board of Directors of said corporation and that she signed her name thereto by like order.

NOTARY PUBLIC

MICHAEL JAY SCHLUSSEL
NOTARY PUBLIC, State of New York
No. 02SC4946308
Qualified in Nassau County
Commission Expires January 27, 2001

LEGIBILITY POOR
FOR MICROFILM

F:\DOCSOPEN\BIBLOW\#1354393 v1 - SCAPPATURA NOT OF ORDER

From the Desk of

Karen V. Murphy

Nassau County Clerk

Greetings:

This recorded document has been electronically imaged and is available for viewing in this office on the numerous public inquiry computers. This represents a significant change from the past. From the County's inception in 1899 and throughout the County's early years, copies of instruments were made by typing an exact duplicate of the recorded instrument and binding the copy in a large book, known as a liber. Over the years, microfilm has been used to copy all recorded instruments that were then printed out on paper and bound into libers for public use. During 1967 through 1987, microfiche was the media of choice and all documents recorded against a particular section, block and lot could be found on the same fiche. After 1987, the county reverted to microfilm and paper copies that were bound in plastic libers and stored in numerical order on an ever increasing number of book shelves. Now you can search for information and read the documents without leaving the computer. That saves time, money and space!

While we continue to microfilm the documents for archival purposes, we are simultaneously scanning the document to allow the image to be viewed at multiple locations at the same time on computer screens. The microfilm also serves as a backup to the computer imaging system and can be used for disaster recovery purposes.

Most of the land records from 1994 to the present have been imaged. We are now scanning UCC's, Business Name Certificates and various court documents. The staff and I are working diligently and continuously to improve efficiency, the accuracy of our records and the quality of service provided and to expand the computerization of the office. The new technology is fully integrated into the existing computerized indexing system, thereby capitalizing on the County's prior investment and the familiarity and knowledge of the staff and public with the existing system.

It has been a pleasure to share this exciting news with you. Although the County Clerk is not required to return recorded documents we are happy to provide this service. Due to new postal regulations, however, we would appreciate your cooperation in typing the "Record and Return to" information so that we can take advantage of postal discounts and keep operating expenses down.

Please put your recorded instrument in a safe place. Should you misplace this document however, a certified copy may be obtained from this office and can be used instead of the original.

Sincerely,

Karen V. Murphy

Karen V. Murphy

S+R issued 4/14/78

0140155

INDUSTRIAL CHEMICAL SURVEY
BUREAU OF WATER POLLUTION CONTROL

#00058

Nassau County Department of Health
240 Old Country Road, Mineola, N.Y. 11501 Tel. 535-2404

Part I

Company Name: Island Transportation Corp.		SIC (if known) Code: 4210	
Company Mailing Address: 299 Jericho St, Westbury			Zip: 11590
Plant Name (if different): —	Contact Name: Timothy Cropper		Tel. 334-5400
Plant Address: —	Village: Westbury	Water Distr.	Code / Zip
Principal Business of Plant: trucking		No. Employees at this Facility: 375	

Part II

COMPLETE LIST OF CHEMICALS USED (See attached)

PART III - DISCHARGE INFORMATION

WATER

1. Does your plant discharge liquid wastes to a municipally owned sanitary sewer system? ☐ Yes ☑ No
   If yes, name of system: cesspool
2. Is your facility permitted to discharge liquid wastes under a State (SPDES) or Federal (NPDES) permit? ☐ Yes ☑ No
   If yes, enter Permit No.
3. Do you discharge liquid industrial wastes in any other manner? ☑ Yes ☐ No
   If yes, explain: detergent wash from trucks into 5-9000 gal cesspools
4. If any of the above are yes:
   a. Do you discharge process or chemical wastes, i.e., water used in manufacturing, including direct contact cooling water and scrubber water? ☐ Yes ☐ No
   b. Do you discharge non-contact cooling water? ☐ Yes ☐ No
   c. Do you discharge sanitary wastes? ☐ Yes ☐ No

AIR

1. Does your facility have sources of possible emissions to the atmosphere? ☐ Yes ☑ No
2. Enter location and facility code as shown on your Air Pollution Control Application for Permits & Certification (if applicable)
3. Heating System: ☐ None ☐ Boiler ☑ Space Heater | Type of Fuel: ☐ Electric ☐ Gas ☑ Oil #2 | Incinerator: ☐ Yes ☑

SOLID & CONCENTRATED LIQUID WASTES

1. List name and address of firm (incl. yourself) removing wastes other than office and cafeteria refuse (industrial scavenger)

Name	Name
Address	Address

2. List location(s) of landfills owned and used by your Facility

	Active	Inactive
a.		
b.		

PEST

Does this facility manufacture, produce, formulate or repackage pesticides? ☐ Yes ☑ No

Signature (owner, partner, or officer): [signature] Date: 9-15-77

Name (printed or typed): Tim Cropper Title: Vice-Pres.

Inspector's Name: DB RZ Date of Inspection: 9/15/77

2632 RDC-00227

USTRIAL C MICAL SURVEY-BUREAU OF WATER POLLUTION
County partment of Health

Name of Company: Island Transportation | Code | Water Dist: Westbury | Code

PART II - CHEMICALS USED (include gases and oils)

INSTRUCTIONS: Complete all information for those chemicals your facility has used, stored, distributed, or otherwise disposed of since January 1, 1977. Do not include chemicals used only in analytical laboratory work.

Name of Chemical/Trade Name, Supplier and Address	Code	Avg Annual Usage	Gal	Lbs	Use of Chemical	Final Disposition of Chemical
Trichlorethylene (drawn from 275 gal holding tank)		80	✓		Vapor degreaser cleaning inside of tankers	- evaporation + recirculation of cleaning fluids within tank truck
Methanol		5-600	✓		fuel system additive for trucks + tractors added to Service Stations tanks	- evaporative loss [ea truck uses 6oz/wk]
Safety-Kleen (Emmerich Mint 99.9%)		1400	✓		parts cleaner	picked up + delivered by Safety Kleen (some evaporation)

RECOMMENDED ACTION

OR
FFICE
SE
NLY

2 ☐ Immediate Abatement
3 ☐ Sample
4 ☒ SPDES Application
5 ☐ Refer To: _____
6 ☐ Re-inspection
7 ☐ No Action
9 ☐ Other (specify)

FIB 2 '77

2632 RDC-00228

NASSAU COUNTY HEALTH DEPARTMENT
PERMIT COMPLIANCE INSPECTION REPORT

Name, Address and Phone of Permittee
Island Transport.
299 M. Street
Westbury, N. 11590

Permit #NY0140155 Effective Date 4/14/78 Expiration Date 4/13/78

Company Representative & Title Bill Ryan — Super. - [illegible]

Permit Verification	Yes	No	N.A.
Name and location correct	/		
Changes:			
Purchase records in order			/
Removal of waste material records in order			/
Name & Number of scavenger & waste pick-up			/
Changes in scavenger pick-up			/
Final destination of waste known			/
Destination All Pet [illegible]			/
Re: 2841.5 lbs Trichlor. March, 28, 1978			
Chemical Storage Area			
Waste contained in sealable leakproof containers.....		/	
Containers labeled		/	
Storage area relatively secure			/
Spill prevention appears adequate.....	/		
Cleanup apparatus or material on premises.....	/		
Records of spill occurrences.....		/	
Date of last spill		/	
Reported to this department		/	
Comments: Storage area for oils and such fairly situated. This was in [illegible] [illegible] expect a little [illegible].			
Operation			
Changes in operation or chemical usage since last inspection		/	
Comments:			
Sludges & solids adequately disposed of in production in area	/		
Production area kept relatively free of chemical spillage into floor drain			

Compliance Schedule Special Requirements	Yes	No	N.A.
Permittee under complicance schedule.....			
Status of compliance.....			
All records and reports required by this department sent by prescribed date.....			

Prescribed date Jan 31/1973

Date sent N/A

Comments:

Gave them a few days to [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] east side of [illegible]

Signature Inspector [illegible] Date 12/10/73

Signature Company Agent [illegible] Date 17/10/73

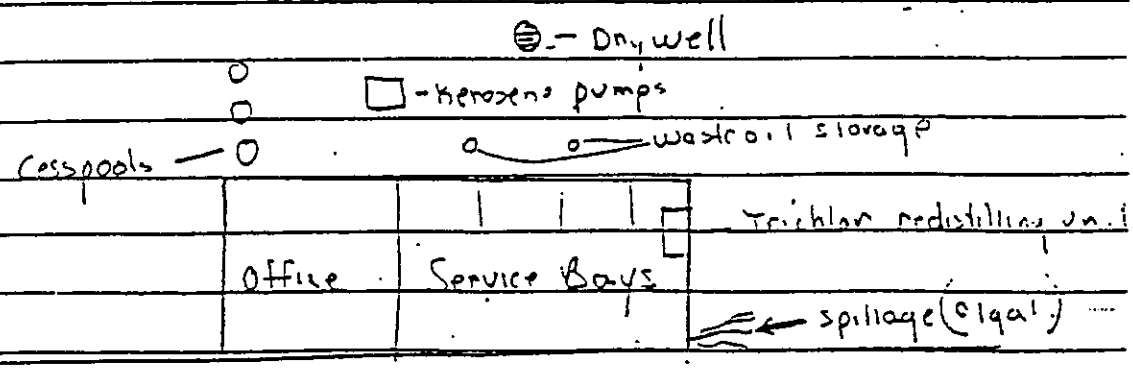
ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent: Island Trans
Address: Main St. Westbury

Inspector: Gene M.

DATE	COMMENTS
1/11/79	Arrived at Island Transport at approx. 3:00. Spoke to Tim Cropper, Maintenance Head. Inspected oil storage, and trichlor redistillation unit. Both [illegible] can be expected in this operation, however, some chemical is leaking out of corner of shop at S.E. corner. Informed him to clean up area. We proceeded to the west area of maintance lot. Mr Cropper pointed out 3 cesspools in sequence. See diagram. He also pointed out a drywell in the middle of the lot. This was under a tanker filled with gasoline. It was also frozen over with [illegible] water. Sample not accessible. Informed Mr Cropper [illegible] at some future date.

Gene Marleas



Main St

MASSACHUSETTS DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES & RESEARCH
ENVIRONMENTAL HEALTH LABORATORIES

RESULTS OF EXAMINATION

REPORTING LAB: TRACE ORGANICS

LAB ACCESS NO.: 900891

SOURCE: ISLAND TRANSPORTATION

MATRIX: WATER

DATE SAMPLED: 8/31/79

DATE RECEIVED: 8/31/79

DATE COMPLETED: 8/31/79

PARAMETER	ppb(ug/l.)
BENZENE	359
TOLUENE	766
XYLENE	2603
* ALIPHATIC HYDROCARBON	1571

ADDITIONAL HIGHER MOLECULAR WEIGHT HYDROCARBONS PRESENT

AUG 23 1979

* C4 - C10 based on n-hexane

INVESTIGATIONAL
Information Sheet
Nassau County Health Department

334-540

Owner or Agent: Island Transportation Corp.
Address: 299 Main Street Westbury

Inspector: [illegible]

COMMENTS (Maintenance & Equipment)

DATE

30 August 1979 Field Contact - Timothy E. Cropper V.P.
Results of sample taken on 8/21/79 - discussed with Tim Cropper.
Further advised Mr. Tim Cropper that results of another certified sample would have to be submitted to NCHD by Island Transportation Corp. to ascertain whether conditions have improved.

Herbert Welch NCHD.
Sanitarian II

13 Sept 1979 Field Contact - Wm. Ryan (Plant Maintenance Foreman).
Spoke with Bill Ryan regarding waste water discharge into street (via pipe) from truck wash area. Will discuss problem further with Tim E. Cropper V.P. (Maintenance & Equipment).
Further advised Mr. Ryan regarding the DuBois Chemical product "SPRA-JEL" - being just as deleterious to ground water integrity as 1,1,1 Trichloro.

Herbert Welch NCHD
Sanitarian II

5. SLUDGE DISPOSAL If sludge is created as a result of processing or treatment, what is ultimate disposal point?

6. DISCHARGE DATA (Continued) (See Instructions) ATTACH SKETCH SHOWING OUTFALL LOCATIONS

OUTFALL NO.	☐ Proposed ☐ Replacement ☒ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)
One		Biodegradeable Detergent	None

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
10 Gal/Day	10 Gal/Day	☐ Continuous ☒ Intermittent ☐ Batch	☐ Yes ☒ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Twelve Months per year	Five Days per week	Seven Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☒ Yes ☐ No	Unknown	– Ft.	Unknown	Unknown

OUTFALL NO.	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

OUTFALL NO.	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

OUTFALL NO.	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

7. COMMENTS:

8. I hereby affirm under penalty of perjury that information provided on this form and any attached supplemental forms is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

APPLICANT'S SIGNATURE (See Instructions)	Date	Printed Name	Title
X [signature]	1/25/[illegible]	[illegible]	Vice Pres. Maintenance

SEMI-ANNUAL WASTE REPORT

Company: Island Transportation Corp. Date: January 15, 1979

Permit#: NY - #0140155 Reporting Period: Previous 6 months

Item	Reporting Requirement	
1. Waste generating chemicals and/or solvents purchased during reporting period.	Name	Quantity
Solvents	Safety Kleen Corp. P.O. Box 768 Mineola, N.Y. 11501	10 gal./week approximately
Tricholoroethylene	Pride Solvents & Chemical Co., Inc. 86 Lamar Street West Babylon, N.Y. 11704	275 gal. approximately

2. Waste Removal

Attach copies of manifests or receipts from registered industrial waste scavenger. Must include nature, name and amount of waste, date removed, registration number, and name of scavenger.

General Waste Oil Co., Inc.
Huntington. New York 11746

3. Final Disposal Site for Waste (obtain information from scavenger)

New Jersey Waste Oil Refinery

4. Occurrence of Accidental Spills (include date, nature, and approximate amount spilled)

None

Signed Timothy E. Grogan

Title Vice-President Maintenance

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Land Resources Management

Nassau County Department of Health

Name	Permit Number
Island Transportation corp	0140155
Address	**Report Period**
299 Main Street, Westbury, N.Y. 11590	June 80-Dec.80

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp.	10 Gal/Wk.
		P.O. Box 768 Mineola, N.Y. 11501	Approximately

RECEIVED
JAN 23 1981
NCDH
BLRM

continued on reverse

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Wastewater Management

Nassau County Department of Health

Name	Permit Number
Island Transportation Corp.	014C155
Address	Report Period
299 Main St., Westbury, NY 11590	Jan-June 198C

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp	10 Gal./Wk.
		P.O. Box 768 Mineola, NY 11501	Approximately

RECEIVED
JUL 16 1980
NCDH
BWWC

continued on reverse

ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent : Island Transportation

Address: 599 Main St Westbury

Inspector

DATE	COMMENTS
10/11/80	Visited Island Transportation + spoke to [illegible] I explained the 360 program with him + discussed the applications to be returned to this office
	[illegible]

EH 109a 1/68

PERMIT COMPLIANCE INSPECTION REPORT

Bureau of Land Resources Management

Nassau County Department of Health

Facility Name: ISLAND TRANSPORTATION CORP

Address: 299 MAIN ST WESTBURY

Company Representative: TIMOTHY CROPPER

Title:

Phone:

Changes in Name, Address, Rep.

Permit No. 30-11-86

☒ New ☐ Renewal

Effective Date of Permit: 1/2/81

Expiration Date of Permit: 1/20/82

Item	Yes	No	N/A
1. Waste Storage and Handling			
A. Adequate Spill Control?			
B. No obvious infraction of Fire Code?			
C. Proper waste containers?			
D. Proper Storage of incompatible wastes?			
E. Waste containers properly labeled?			
F. Proper drum stack size and aisles?			
G. Containers off ground and not leaking?			
H. Waste stored in secure area?			
2. Registered Industrial Waste Scavenger?			
Name			
DEC #			
☐ Different scavenger since last report			
3. Records			
A, B, C Proper waste inventory records?			

Item	Yes	No	N/A
3. Records (Cont'd.)			
D. Record of spills & notification of N.C.H.D.?			
E. Record of special sampling results?			
4. Records kept a minimum of 3 years?			
5. Reports submitted on time?			✓
6. Waste storage in conformance with permit?			
Quantities O.K.? Drums			
1(500GAL) underground Tanks			
Maximum storage time O.K.?			
7. Sampling in conformance with permit?			
8. Is compliance schedule met as required by permit?			
9. Overall Inspection Rating			
☐ Satisfactory			
☐ Non-Compliance ☐ Major ☒ Minor			

Date	Item	Comments
		WASTE REPORT DUE FOR 1ST HALF OF 1981
		VISITED ISLAND TRANSPORTATION + FOUND THE FACILITY TO BE CLOSED
		THE ENTIRE STORAGE YARD HAS BEEN CLEANED & ALL TRUCKS ARE GONE THERE
		IT APPEARS THAT THIS FACILITY IS OUT OF BUSINESS.

Signature of Inspector: [signature] Date 11/20/81

Signature of Company Representative: Date

2632 RDC-00239

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N. Y. 11501

FRANCIS T. PURCELL
County Executive

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PAGAR, P.E., M.C.E.
Deputy Commissioner
for Environmental Health

October 31, 1980

Mr. Morris Bruckman, P.E.
New York State Department of
Environmental Conservation
SUNY-Bldg. 40
Stony Brook, New York 11790

Re: Island Transportation
Part 360 Application & Permit

Dear Mr. Bruckman:

Please find enclosed an application for a Part 360 permit to replace the SPDES hold and haul permit for the above facility. We have reviewed the application and found it to be complete.

Consequently, a draft permit has been drawn up and enclosed. This permit requires a facility number, your signature and an issuance date.

If you have any questions, please contact me at 535-2404.

Very truly yours,

L. Sama
Public Health Engineer
Bureau of Land Resources Mgmt.

LS:ceg
Encl.

[illegible]-2 (8/77) NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FACILITY NO. [illegible]

PERMIT

EXPIRATION DATE [illegible]

Under the Environmental Conservation Law, Article 27, Title 7, Part 360

☐ CONSTRUCTION ☐ INITIAL ISSUE ☐ REISSUANCE
☐ OPERATION ☐ RENEWAL ☐ MODIFICATION

PERMIT ISSUED TO	ADDRESS OF PERMITTEE	TELEPHONE NO.
[illegible]land Transportation Corp.	299 Main St., Westbury, NY 11590	516-334-5400

LOCATION OF PROJECT Town	County	Environmental Conservation Regional Office
[illegible]	[illegible]	[illegible] Stony Brook, NY 11790

DESCRIPTION OF PROJECT	ON-SITE SUPERVISOR
[illegible]	[illegible]

GENERAL CONDITIONS

1. The permittee shall file in the office of the Environmental Conservation Region specified above, a notice on intention to commence work at least 48 hours in advance of the time of commencement and shall also notify said office promptly in writing of the completion of the work.
2. The permitted work shall be subject to inspection by an authorized representative of the Department of Environmental Conservation who may order the work suspended if the public interest so requires.
3. As a condition of the issuance of this permit, the applicant has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.
4. All work carried out under this permit shall conform to the approved plans and specifications. Any amendments must be approved by the Department of Environmental Conservation prior to their implementation.
5. The permittee is responsible for obtaining any other permits, approvals, easements and rights-of-way which may be required for this project.
6. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with Part 360 and the special conditions. Any variances granted by the Department of Environmental Conservation to Part 360 must be in writing and attached hereto.

SPECIAL CONDITIONS

ISSUE DATE	ISSUING OFFICER	SIGNATURE
	[illegible]	X [illegible]

Permit Conditions for Operation of a Waste Generating Facility

1. The following minimum standards will apply for storing and handling wastes:

   a. There should be adequate spill control in the storage area; i.e. an impervious storage pad or floor, bermed to facilitate containment of spills. Stormwater shall be directed to prevent entry into the pad.

   b. Building and fire codes should be met where required.

   c. Wastes should be stored in leakproof containers which are compatible with the waste materials. The containers should not be corroded or leaking and should be tightly closed.

   d. Wastes which deleteriously react with each other must not be stored directly adjacent or mixed together.

   e. Waste containers should be labeled, numbered and distinctly coded and identified as to contents in accordance with Department of Transportation Regulations 49CFR, Part 172.

   f. Waste drums should not be stacked more than two high and aisles should be provided so that all drums are accessible and clearly visible for inspection.

   g. Waste drums should be stored off the ground a minimum of 2 inches to facilitate detection of bottom leaks.

   h. Wastes should be stored in a secured area.

2. Removal of wastes should be only by registered industrial scavenger.

30 H 50

3. Records should be kept on premises and made available to personnel from the Department of Environmental Conservation or its agents upon request. The following should be included:

   a. Quantity and type waste generated.

   b. Waste container inventory and identification including starting date of collection.

   c. Waste removals by scavenger including container I.D. numbers and scavenger I.D. numbers and final disposal site.

   d. Spills - Notification of DEC (751-7900) and/or Health Department (535-2404) should be made immediately.

   e. Sampling results

4. All records shall be kept a minimum of three years.

5. A report shall be filed on an approved form by the fifteenth day of the following months each year:

   February and August

   Reports shall be filed with the Nassau County Department of Health.

6. Limits on maximum storage time and quantities of wastes stored on the site shall be _____.

   Less than 90 days for one 500 gal. underground tank.

7. Samples shall be collected and analyzed as follows:

   N.A.

30 H 56

8. Compliance Schedule

The waste storage area is to be modified to conform with Item 1a of permit conditions within 12 weeks of the effective date of the permit. All other conditions to be complied with no later than four weeks after EDP.

NOTICE OF PERMIT

for:

- [ ] CONSTRUCTION
- [ ] INITIAL ISSUE
- [ ] REISSUANCE
- [x] OPERATION
- [ ] RENEWAL
- [ ] MODIFICATION

has been issued to: ISLAND TRANSPORTATION CORP.

address: 299 MAIN STREET, WESTBURY, NEW YORK 11590

for a project described as: HOLD TO HAUL HAZARDOUS WASTE

under the Environmental Conservation Law,
Article 27, Title 5, Part 360 (Solid Waste Management Facilities)

NOTE:
- This Notice of Permit must be posted on the project site in such a manner that it is protected from weather and is in a location readily visible to the public.
- A copy of the Permit with the general and special conditions noted thereon will be shown to anyone upon request.

Issuing Officer: MORRIS BRUCKMAN, P.E.

BLDG. #40, SUNY, STONY BROOK, NEW YORK 117[illegible]
Address

30-H-56	1/21/81	1/20/82
Permit No.	Issue Date	Expiration Date

New York State
Department of Environmental Conservation

47-12-2 (8/77)

2632 RDC-00245

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR APPROVAL [illegible] OPERATE A SOLID WASTE MANAGEMENT FACILITY

FOR STATE USE ONLY

PROJECT NO.	DATE RECEIVED
[illegible]	[illegible]

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

1. OWNER'S NAME: PETER [illegible]	2. ADDRESS (Street, City, State, Zip Code): [illegible]	[illegible]
4. OPERATOR'S NAME: SAME	5. ADDRESS (Street, City, State, Zip Code): [illegible]	[illegible]
7. ENGINEER'S NAME: NONE	8. ADDRESS (Street, City, State, Zip Code): [illegible]	9. Telephone No. [illegible]
10. ON-SITE SUPERVISOR: [illegible] CROPPER	11. ADDRESS (Street, City, State, Zip Code): 116 RUDER AVE. DIX HILLS NY 11746	12. Telephone No.: 516.643.4577

13. HAS THE INDIVIDUAL NAMED IN ITEM 10 ATTENDED A DEPARTMENT SPONSORED OR APPROVED TRAINING COURSE? ☐ Yes Date Course Title Location ☒ No

14. PROJECT/FACILITY NAME	15. COUNTY IN WHICH FACILITY IS LOCATED	16. ENVIRONMENTAL CONSERVATION REGION
ISLAND TRANSPORTATION CORP.	NASSAU	NO MAP

17. TYPE OF PROJECT FACILITIES: ☐ Composting ☐ Transfer ☐ Shredding ☐ Baling ☐ Sanitary Landfill ☐ Incineration ☐ Pyrolysis ☐ Resource Recovery-Energy ☐ Resource Recovery-Materials ☒ Other TRUCKING COMPANY

18. HAS THIS DEPARTMENT EVER APPROVED PLANS AND SPECIFICATIONS AND/OR ENGINEERING REPORTS FOR THIS FACILITY? ☐ Yes Date ☒ No

19. LIST WASTES NOT ACCEPTED

NONE

20. BRIEFLY DESCRIBE OPERATION

PETROLEUM PRODUCT TRANSPORTER WITH REPAIR FACILITY FOR OWN TRACTOR TRAILERS

21. IF FACILITY IS A SANITARY LANDFILL, PROVIDE THE FOLLOWING INFORMATION:
a. Total useable area: (Acres) Initially _____ Currently _____
b. Distance to nearest offsite, downgradient water supply well _____
c. No. of groundwater monitoring wells Upgradient _____ Downgradient _____

22. INDICATE WHICH ATTACHMENTS, IF ANY, ARE INCLUDED WITH THIS APPLICATION: [illegible]
☐ Form 47-19-2 or SW-7 ☐ Operations Plan & Report ☐ USGS Topographic Map ☐ Record Forms ☐ Other [illegible]
☐ Construction Certificate ☐ Boring Logs ☐ Water Sample Analysis ☐ None

23. CERTIFICATION:
I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

10/21/80 [illegible]
Date Signature and Title

FIELD COPY

2632 RDC-00246

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501

RALPH G. CASO
County Executive
JOHN J. DOWLING, M.D., M.P.H.
Commissioner
FRANCIS Y. PADAR, P.E.
Asst. Deputy Commissioner
Div. of Environmental Health

November 15, 1977

New York State Department of
Environmental Conservation
Pollutant Discharge Elimination
System Section
50 Wolf Road
Albany, New York 12233

Attention: Mr. George Hansen

Gentlemen:

In accordance with the UPA effective November 1, 1977, we have sent SPDES applications to five industrial firms, list attached.

Also sent and attached here were:

1. the cover letter used
2. the list of fees taken from UPA
3. the Project Permit Requirement Questionaire.

A copy of the organic chemical survey for each company is also enclosed for your refrence in evaluating the applications when returned to you.

Very truly yours,

L. Sama
SPDES Coordinator
Bureau of Water Pollution Control

LS/lhg
enc.

Facility ID No. : NY 0140155

Effective Date : June 12/78

Expiration Date : June 11/81

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
PERMIT FOR THE STORAGE AND REMOVAL OF
POTENTIALLY HAZARDOUS WASTES
(NO DISCHARGE PERMITTED)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisions or the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972, (33 U.S.C. Sec. 1251 et. seq.).

is authorized to store wastes for removal by authorized industrial scavenger from the facility described below:

in accordance with the monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to store and have wastes removed shall expire on midnight of the expiration date shown above and the permitee shall not discharge wastes after the expiration date unless this permit has been renewed, or written authorization is given by the Department. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the Department no later than 180 days prior to the expiration date.

By Authority of R.D.Cusumano,P.E. - Director, Wastewater Management
Designated Representative of Commissioner of the
Department of Environmental Conservation

June 5, 1978
Date

R D Cusumano
Signature

DRAFT

Facility ID No. : NY 0140155

Effective Date : April 14, 1978

Expiration Date : April 13, 1981

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
PERMIT FOR THE STORAGE AND REMOVAL OF
POTENTIALLY HAZARDOUS WASTES
(NO DISCHARGE PERMITTED)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisio of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972, (33 U.S.C. Sec. 1251 et. seq.).

Island Transportation

is authorized to store wastes for removal by authorized industrial scavenger from the facility described below:

299 Main Street
Westbury, N. Y. 11590

in accordance with the monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to store and have wastes removed shall expire on midnight of the expiration date shown above and the permitee shall not discharge wastes after the expiration date unless this permit has been renewed, or written authorization is given by the Department. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the Department no later than 180 days prior to the expiration date.

By Authority of R.D.Cusumano,P.E. - Director, Wastewater Management
Designated Representative of Commissioner of the
Department of Environmental Conservation

April 14, 1978
Date

R D Cusumano
Signature

DRAFT

Facility ID No. NY 0140155

During the period beginning EDP and lasting until EDP + 3 years the wastes from the permitted facility shall be controlled and monitored by the permittee as specified below:

All industrial wastes shall be collected in sealable leakproof holding tanks or drums. The storage vessels shall be suitable for and utilized and maintained in a manner to minimize corrosion and other damage and to prevent discharges onto the ground or discharged into the groundwater or surface waters of the State. Wastes shall be removed by a licensed industrial waste scavenger only. It shall be the responsibility of the permit holder to determine whether the scavenger employed is licensed by the State. The following records and manifests shall be maintained on the premises of this facility:

1. Amount of waste producing chemicals or solvents purchased during the reporting period.
2. Nature, name and amount of waste removed.
3. Date and method of removal. Copy of receipts or manifests.
4. Registration number and name of scavenger.
5. Final disposal site for waste.
6. Occurance of accidental spills.

Copies of records are required to be submitted to:

Bureau of Wastewater Management
Nassau County Health Department
240 Old Country Road
Mineola, New York 11501

Such records should be submitted by the last day of January and July of each year, covering collection for July to December and January to June respectively, if wastes total more than 100 gallons/year. Where wastes are less than 100 gallons/year only one submission need be made and that on the last day of January covering the previous calender year's collection.

Compliance Schedule

The permit holder shall have until May 14, 1978 to make any necessary preparations for meeting the permit requirements, as described on page 3, (if required).

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR APPROVAL TO OPERATE A SOLID WASTE MANAGEMENT FACILITY

PROJECT NO.	DATE RECEIVED
DEPARTMENT ACTION ☐ Approved ☐ Disapproved	DATE

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

1. OWNER'S NAME PETER FIORETTI	2. ADDRESS (Street, City, State, Zip Code) 299 MAIN ST. WESTBURY N.Y. 11590	3. Telephone No. 516-334-5400
4. OPERATOR'S NAME SAME	5. ADDRESS (Street, City, State, Zip Code)	6. Telephone No.
7. ENGINEER'S NAME NONE	8. ADDRESS (Street, City, State, Zip Code)	9. Telephone No.
10. ON-SITE SUPERVISOR TIMOTHY CROPPER	11. ADDRESS (Street, City, State, Zip Code) 116 RYDER AVE. DIX HILLS NY. 11746	12. Telephone No. 516-643-4572

13. HAS THE INDIVIDUAL NAMED IN ITEM 10 ATTENDED A DEPARTMENT SPONSORED OR APPROVED TRAINING COURSE? ☐ Yes Date Course Title Location ☒ No

14. PROJECT/FACILITY NAME ISLAND TRANSPORTATION CORP.	15. COUNTY IN WHICH FACILITY IS LOCATED NASSAU	16. ENVIRONMENTAL CONSERVATION REGION NO MAP

17. TYPE OF PROJECT FACILITIES: ☐ Composting ☐ Transfer ☐ Shredding ☐ Baling ☐ Sanitary Landfill ☐ Incineration ☐ Pyrolysis ☐ Resource Recovery-Energy ☐ Resource Recovery-Materials ☒ Other TRUCKING COMPANY

18. HAS THIS DEPARTMENT EVER APPROVED PLANS AND SPECIFICATIONS AND/OR ENGINEERING REPORTS FOR THIS FACILITY? ☐ Yes Date ☒ No

19. LIST WASTES NOT ACCEPTED NONE

20. BRIEFLY DESCRIBE OPERATION

PETROLEUM PRODUCT TRANSPORTER WITH REPAIR FACILITY FOR OWN TRACTOR, TRAILERS

21. IF FACILITY IS A SANITARY LANDFILL, PROVIDE THE FOLLOWING INFORMATION:

a. Total useable area: (Acres) Initially _____ Currently _____

b. Distance to nearest offsite, downgradient, water supply well _____ Feet

c. No. of groundwater monitoring wells Upgradient _____ Downgradient _____

22. INDICATE WHICH ATTACHMENTS, IF ANY, ARE INCLUDED WITH THIS APPLICATION:

☐ Form 47-19-2 or SW-7 ☐ Operations Plan & Report ☐ USGS Topographic Map ☐ Record Forms ☐ Other MATERIAL FLOW SKETCH PLAT SKETCH
☐ Construction Certificate ☐ Boring Logs ☐ Water Sample Analysis ☐ None

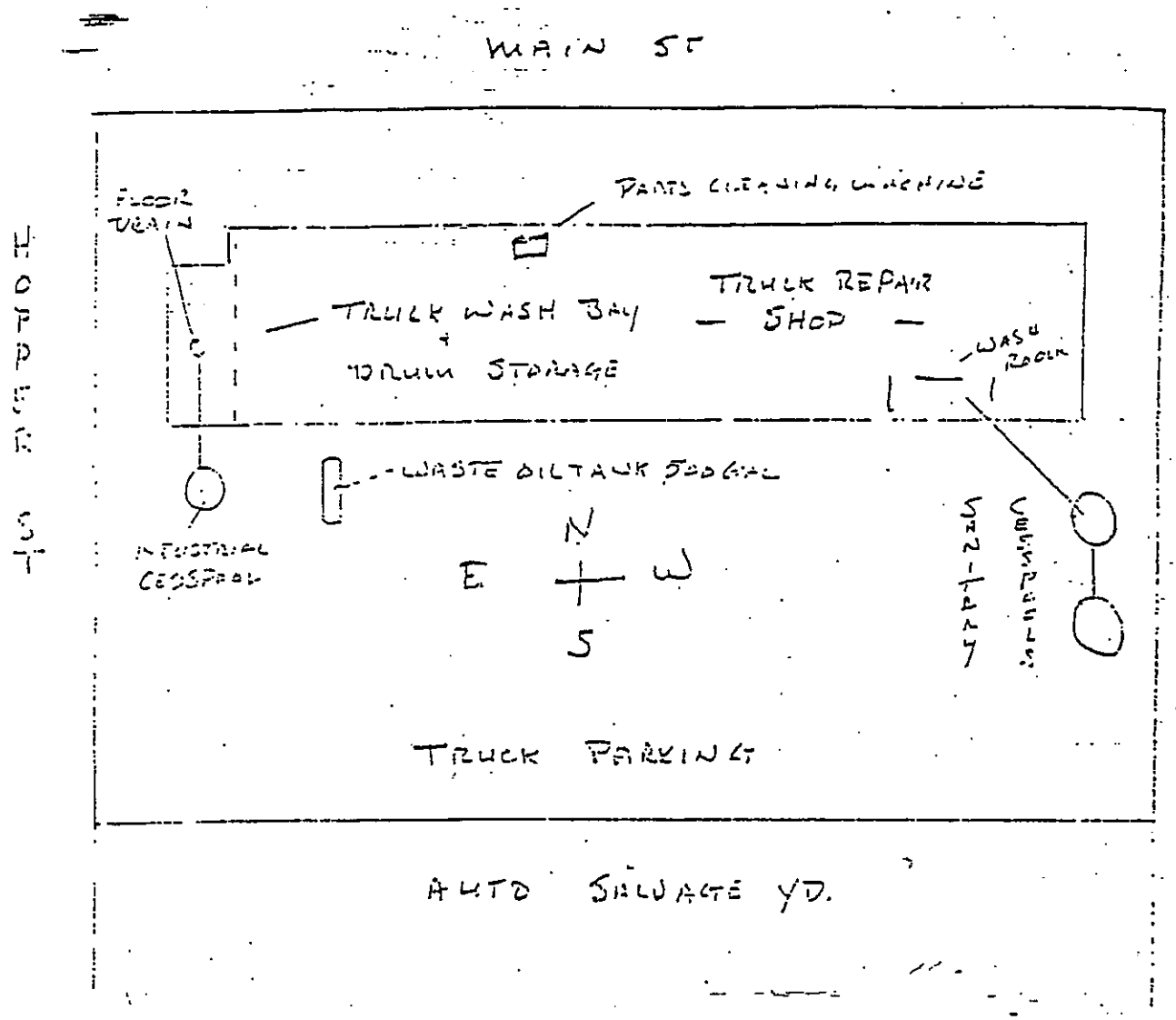
23. CERTIFICATION:

I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

10/21/80 Timothy Cropper V.P. Maint.

2632 RDC-00251

MATERIAL FLOW SKETCH
ISLAND TRANSPORTATION CORP.



MATERIAL FLOW DESCRIPTION

1. TRUCKS WASHED WITH DETERGENT IN EAST BAY - DRAINAGE INTO UNDERGROUND POOL.

2. SAFETY-CLEAN CORP. REMOVES LIQUID + SOLID WASTE @ 1 GAL PER WEEK RATE (APPROX)

3. ENGINE WASTE OIL REMOVED BY GENERAL WASTE MAT. CO.

MASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N. Y., 11501

FRANCIS T. PURCELL
County Executive

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PAGAR, P.E., M.C.E.
Director of Environmental Health

1/22/80.

Island Transportation
2900 Main St.
Westbury, N.Y. 11590
Att: Mr. T. Cropper

Gentlemen:

As stated in the permit (NY# 0140155) issued to you for the storage and the removal of industrial chemical and/or solvent wastes, you are required to report periodically on the nature of these activities.

Please complete the attached report for the period July-Dec. 1979, and return it to this office within 30 days.

If you have any questions, please feel free to call me at 535-2404

Very truly yours,

Larry Sama
Public Health Engineer
Bureau of Wastewater Management

Encl.

EH 100 1/80

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Wastewater Management

Nassau County Department of Health

Name	Permit Number
Island Transportation Corp.	011.0155
Address	Report Period
299 Main St. Westbury, N.Y. 11590	7/9/79 - 1/28/

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp.	10 Gal./Wk.
		P.O. Box 768 Mineola, N.Y, 11501	Approximately

RECEIVED
JAN 30 1980
NCDH
BWWC

SEMI-ANNUAL WASTE REPORT

Company: Island Transportation Corp.

Date: July 9, 1979

Permit#: NY #0140155

Reporting Period: Previous 6 months

Item	Reporting Requirement: Name	Quantity
1. Waste generating chemicals and/or solvents purchased during reporting period.		
Solvents	Safety Kleen Corp. P.O. Box 768 Mineola, N.Y. 11501	10 gal./week approximately
Trichloroethylene	Discontinued use	

2. Waste Removal

Attach copies of manifests or receipts from registered industrial waste scavenger. Must include nature, name and amount of waste, date removed, registration number, and name of scavenger.

General Waste Oil Co., Inc.
Huntington, New York 11746

3. Final Disposal Site for Waste (obtain information from scavenger)

New Jersey Waste Oil Refinery

4. Occurrence of Accidental Spills (include date, nature, and approximate amount spilled)

None

Signed Timothy E. Groppe

Title Vice-President, Maintenance

THOMAS S. GULOTTA
COUNTY EXECUTIVE
JOSEPH G. BOSLET, JR.
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
899 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553

August 1989
Insp. No. GS-96-111

ISLAND TRANSPORTATION OR CURRENT RESIDENT
299 MAIN ST
NEW CASSEL, NEW YORK 11590

TO WHOM IT MAY CONCERN:

Article III of the Nassau County Fire Prevention Ordinance, Section 3.6.3.1.2 requires that all existing underground steel storage tanks be replaced in accordance with the following schedule:

All steel tanks placed into service after February 23, 1961 and before February 23, 1976 shall be replaced, removed or permenantly abandoned by February 23, 1990.

The following is a list of tanks at your location which our records indicate require replacement, abandonment or removal:

SIZE	CONTENTS	INSTALLATION DATE
10K	DIESEL	2/15/72
4K	DIESEL	1/1/63
4K	DIESEL	1/1/63
4K	GASOLINE	5/1/66

If you have any questions please feel free to call this office at (516) 566-5832.

Very truly yours,

David M. Barlow
Supervising Fire Inspector
Industrial Division

1679C

FHIGS96 00111 PERMIT NO. 02795

STATE OF NEW YORK
COUNTY OF NASSAU
OFFICE OF FIRE MARSHAL

TR FLAMMABLE/COMBUSTIBLE LIQUID STORAGE TANK REGISTRATION

LOCATION: ISLAND TRANSPORTATION CORP. 299 MAIN ST. NEW CASSEL, NY 11590

ISSUED TO: NAME ISLAND TRANSPORTATION CORP.
ADDRESS 299 MAIN ST
NEW CASSEL, NY 11590

DATE ISSUED: 08/31/86
EXPIRE DATE: 09/30/91

TANK	SIZE	PRODUCT	DATE INSTALLED	DATE TESTED	CONSTRUCTION
HB01	10K	3 01993 0	02/15/72	09/11/80	STL
HB02	4K	3 01993 01	01/01/63	09/11/80	STL
HB03	4K	3 01993 01	01/01/63	09/11/80	STL
HB04	4K	3 01203 00	05/01/66	09/11/80	STL

****

ASSISTANT FIRE MARSHAL

THOMAS S. GULOTTA
COUNTY EXECUTIVE
JOSEPH G. BOHLEY, JR.
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
888 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553

TO: NASSAU COUNTY FIRE MARSHAL

FM KEY # GS-96-111

FROM: ~~A. VOLINO & SONS, INC.~~
~~P.O. BOX 128~~
~~CARLE PLACE, N.Y. 11514~~

CONCERNING TANKS AT:
SAM TOW SALVAGE CO.
199 MAIN ST. WESTBURY N.Y.

The following flammable /combustible liquid storage tanks at the above location have been:

T - Placed temporarily out-of-service (if permitted), or

(P) - Permanently abandoned in place; or

R - Removed from the premises:

(indicate one of the above letters under "STATUS" for each tank.)

	TANK TYPE*	TANK SIZE	CONSTRUCTION	STATUS	DATE WHEN DONE
1	U/G	10,000	STEEL	P	7-18-90 ✓
1	U/G	4000	"	P	7-19-90 ✓
1	U/G	4000	"	P	7-20-90 ✓
1	U/G	4000	"	P	7-23-90 ✓

* NOTE: If the tank type is unknown, indicate either A/G (aboveground) or U/G (underground). If more than 8 tanks, use an additional sheet.

==========

All work as indicated above has been done in accordance with the applicable Sections of Article III of the Nassau County Fire Prevention Ordinance.

A. Volino & Sons Inc
Name

Pat Volino
Signature

County of NASSAU
State of New York
Sworn to before me this
24th day of July 1990

Joseph Siniscalchi
Notary Signature

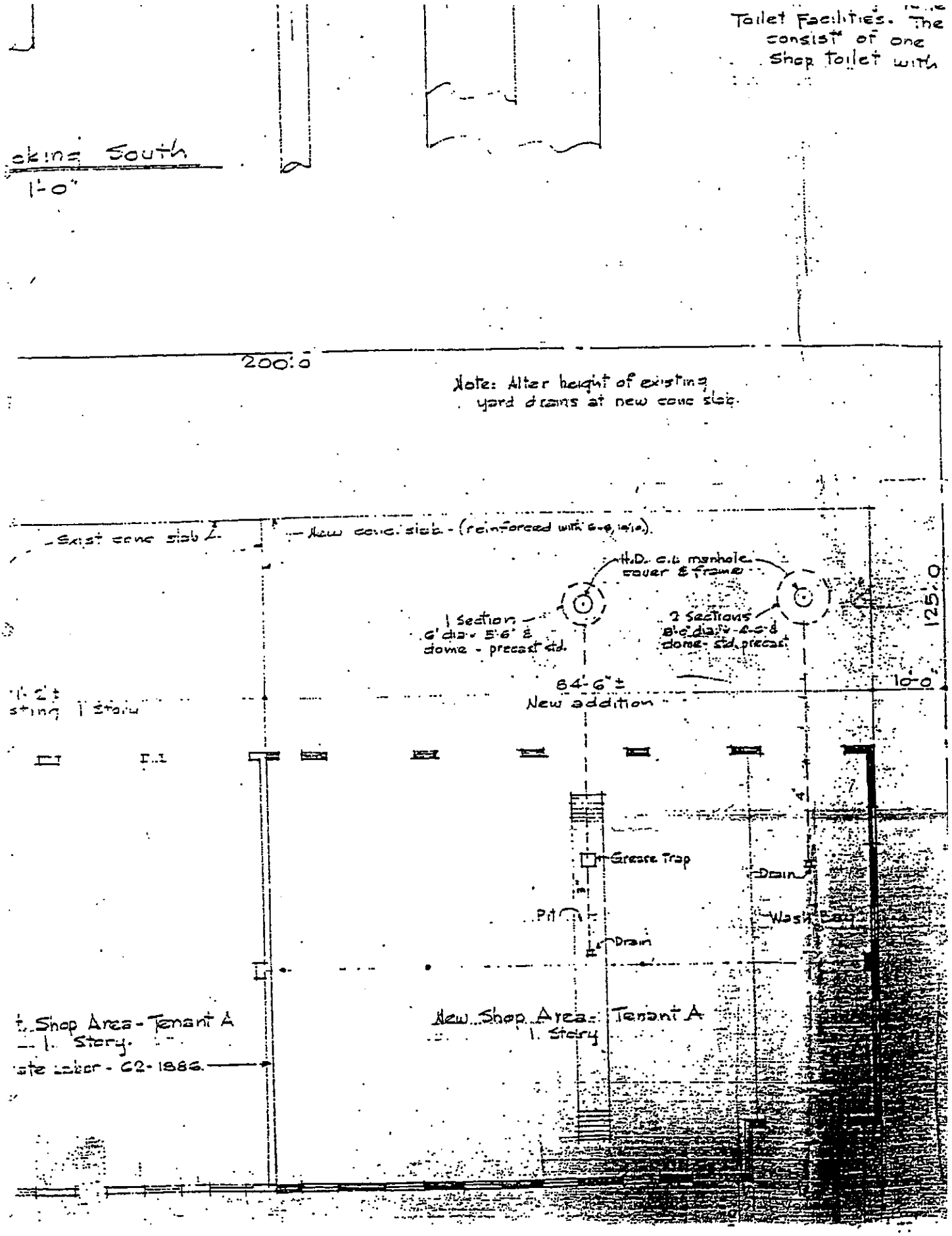
JOSEPH SINISCALCHI
NOTARY PUBLIC, State of New York
No. 30-3687900
Qualified in Nassau County
Commission Expires March 30, 1991

Notary Stamp

JOSEPH SINISCALCHI
NOTARY PUBLIC, State of New York
No. 30-3687900
Qualified in Nassau County
Commission Expires March 30, 1991

0841C / 110788

INVESTIGATION - 566-5979 • SCHOOL - 566-5824 • INDUSTRIAL - 566-5815 • INSTITUTIONAL - 566-5819 • GENERAL INSPECTION - 566-5928


Toilet Facilities. The consist of one Shop Toilet with
cking South
1'-0"
200'-0
Note: Alter height of existing yard drains at new conc slab.
Exist conc slab
New conc. slab - (reinforced with 6-6, 10/10).
H.D. c.i. manhole cover & frame
1 Section 6' dia - 5'-6" & dome - precast std.
2 Sections 8'-0" dia - 4'-6" & dome - std. precast
125'-0
84'-6" ±
New addition
10'-0"
1'-2" ±
sting 1 Story
Grease Trap
Drain
Pit
Drain
Wash Bay
t. Shop Area - Tenant A
1. Story.
ate Labor - 62-1886.
New Shop Area - Tenant A
1. Story

NASSAU COUNTY HEALTH DEPARTMENT
PERMIT COMPLIANCE INSPECTION REPORT

Name, Address and Phone of Permittee
Island Transport.
299 M. Street
Westbury, N. 11590

Permit #NY0140155 Effective Date 4/14/78 Expiration Date 4/13/78

Company Representative & Title Bill Regan — Super. - [illegible]

Permit Verification	Yes	No	N.A.
Name and location correct	/		
Changes:			
Purchase records in order			/
Removal of waste material records in order			/
Name & Number of scavenger & waste pick-up			/
Changes in scavenger pick-up			/
Final destination of waste known			/
Destination All Pet [illegible]			/
Re: 2841.5 lbs Trichlor. March, 28, 1978			
Chemical Storage Area			
Waste contained in sealable leakproof containers.....		/	
Containers labeled		/	
Storage area relatively secure			/
Spill prevention appears adequate.....	/		
Cleanup apparatus or material on premises.....	/		
Records of spill occurrences.....		/	
Date of last spill		/	
Reported to this department		/	
Comments: Storage area for oils and such fairly saturated. This was in [illegible] Must expect a little [illegible].			
Operation			
Changes in operation or chemical usage since last inspection		/	
Comments:			
Sludges & solids adequately disposed of in production in area	/		
Production area kept relatively free of chemical spillage into floor drain	/		

Compliance Schedule   Special Requirements

	Yes	No	N.A.
Permittee under complicance schedule	/		
Status of compliance			
All records and reports required by this department sent by prescribed date			

Prescribed date Jan 21, 1973

Date sent N/A

Comments:

Gave them a few days to [illegible] [illegible] [illegible] [illegible] [illegible]. Oil [illegible] [illegible] [illegible] [illegible] east side of [illegible].

Signature Inspector [illegible]   Date 12/18/73

Signature Company Agent [illegible]   Date 12/18/73

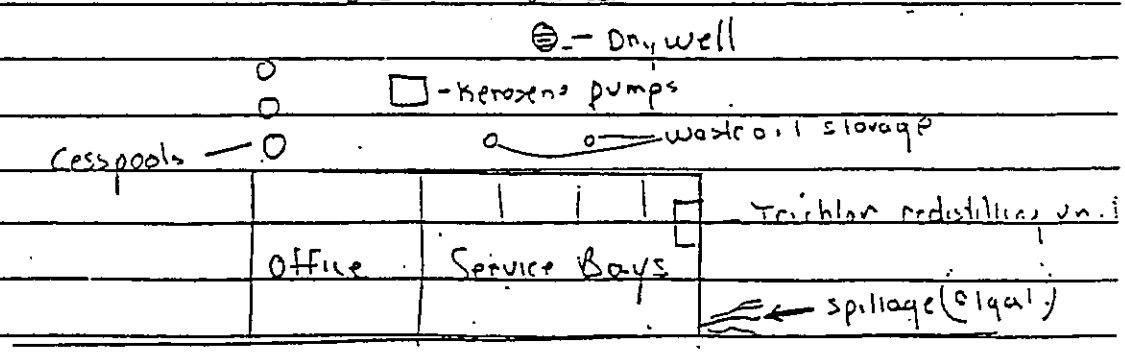
ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent: Island Trans
Address: Main St. Westbury

Inspector: Gene M.

DATE	COMMENTS
1/11/79	Arrived at Island Transport at approx. 3:00. Spoke to Tim Cropper, Maintenance Head. Inspected oil storage, and trichlor redistillation unit. Both [illegible] can be expected in this operation, however, some chemical is leaking out of corner of [illegible] at S.E. corner. Informed him to clean up area. We proceeded to the west area of maintance lot. Mr Cropper pointed out 3 cesspools in sequence. See diagram. He also pointed out a drywell in the middle of the lot. This was under a tanker filled with gasoline. It was also frozen over with [illegible] water. Sample not [illegible]. Informed Mr Cropper [illegible] [illegible] [illegible] [illegible]

Gene Marlens



Main St

NASSAU COUNTY DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES & RESEARCH
ENVIRONMENTAL HEALTH LABORATORIES

RESULTS OF EXAMINATION

REPORTING LAB: TRACE ORGANICS

LAB ACCESS NO.: 900891

SOURCE: ISLAND TRANSPORTATION

MATRIX: WATER

DATE SAMPLED: 8-21-79

DATE RECEIVED: 8/21/79

DATE COMPLETED: 8-21-79

PARAMETER	ppb(ug/l.)
BENZENE	359
TOLUENE	766
XYLENE	~~2000~~
* ALIPHATIC HYDROCARBON	1571

ADDITIONAL HIGHER MOLECULAR WEIGHT HYDROCARBONS PRESENT

AUG 23 1979

* C4 - C10 based on n-hexane

ENVIRONMENTAL
E. LTH
Continuation Sheet
Nassau County Health Department

334-540

Owner or Agent: Island Transportation Corp.
Address: 299 Main Street Westbury

Inspector: HW

DATE | COMMENTS (Maintenance & Equipment)

30 August 1979 Field Contact - Timothy E. Cropper V.P.
Results of sample taken on 8/21/79 - discussed with Tim Cropper.
Further advised Mr. Tim Cropper that results of another certified sample would have to be submitted to NCHD by Island Transportation Corp. to ascertain whether conditions have improved.

Herbert Welch NCHD.
Sanitarian II

13 Sept 1979 Field Contact - Wm. Ryan (Plant Maintenance Foreman).
Spoke with Bill Ryan regarding waste water discharge into street (via pipe) from truck wash area. Will discuss problem further with Tim E. Cropper V.P. (Maintenance & Equipment).
Further advised Mr. Ryan regarding the DuBois Chemical product "SPRA-JEL" - being just as deleterious to ground water integrity as 1,1,1 Trichloro.

Herbert Welch NCHD
Sanitarian II

5. SLUDGE DISPOSAL If sludge is created as a result of processing or treatment, what is ultimate disposal point?

6. DISCHARGE DATA (Continued) (See Instructions) ATTACH SKETCH SHOWING OUTFALL LOCATIONS

OUTFALL NO.	☐ Proposed ☐ Replacement ☒ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)
One		Biodegradeable Detergent	None

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
10 Gal/Day	10 Gal/Day	☐ Continuous ☒ Intermittent ☐ Batch	☐ Yes ☒ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Twelve Months per year	Five Days per week	Seven Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☒ Yes ☐ No	Unknown	– Ft.	Unknown	Unknown

OUTFALL NO.	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

OUTFALL NO.	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

OUTFALL NO.	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

7. COMMENTS:

8. I hereby affirm under penalty of perjury that information provided on this form and any attached supplemental forms is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

APPLICANT'S SIGNATURE (See Instructions)	Date	Printed Name	Title
X [illegible]	1/27/[illegible]	[illegible] E. Cooper	Vice Pres. Maintenance

SEMI-ANNUAL WASTE REPORT

Company: Island Transportation Corp. Date: January 15, 1979

Permit#: NY - #0140155 Reporting Period: Previous 6 months

Item	Reporting Requirement	
1. Waste generating chemicals and/or solvents purchased during reporting period.	Name	Quantity
Solvents	Safety Kleen Corp. P.O. Box 768 Mineola, N.Y. 11501	10 gal./week approximately
Tricholoroethylene	Pride Solvents & Chemical Co., Inc. 86 Lamar Street West Babylon, N.Y. 11704	275 gal. approximately

2. Waste Removal

Attach copies of manifests or receipts from registered industrial waste scavenger. Must include nature, name and amount of waste, date removed, registration number, and name of scavenger.

General Waste Oil Co., Inc.
Huntington. New York 11746

3. Final Disposal Site for Waste (obtain information from scavenger)

New Jersey Waste Oil Refinery

4. Occurrence of Accidental Spills (include date, nature, and approximate amount spilled)

None

Signed Timothy E. Crowe

Title Vice-President Maintenance

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Land Resources Management

Nassau County Department of Health

Name	Permit Number
Island Transportation corp.	0140155
Address	**Report Period**
299 Main Street, Westbury, N.Y. 11590	June 80-Dec.80

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp.	10 Gal/Wk.
		P.O. Box 768 Mineola, N.Y. 11501	Approximately

RECEIVED
JAN 23 1981
NCDH
BLRM

continued on reverse

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Wastewater Management

Nassau County Department of Health

Name	Permit Number
Island Transportation Corp.	01A0155
Address	Report Period
299 Main St., Westbury, NY 11590	Jan-June 198[illegible]

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp	10 Gal./Wk.
		P.O. Box 768 Mineola, NY 11501	Approximately

RECEIVED
JUL 16 1980
NCDH
BWWC

continued on reverse

ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent : Island Transportation

Address: 599 Main St Westbury

Inspector

DATE	COMMENTS
11/11/80	Visited Island Transportation + spoke to Mr. [illegible] I explained the 360 program with him + discussed the applications to be returned to this office
	[illegible]

EH 109a 1/58

PERMIT COMPLIANCE INSPECTION REPORT
Bureau of Land Resources Management
Nassau County Department of Health

Facility Name: ISLAND TRANSPORTATION CORP
Address: 299 MAIN ST WESTBURY
Company Representative: TIMOTHY CROPPER
Title:
Phone:
Changes in Name, Address, Rep.

Permit No. 30-11-86
☒ New ☐ Renewal
Effective Date of Permit: 1/2/81
Expiration Date of Permit: 1/20/82

Item	Yes	No	N/A
1. Waste Storage and Handling			
A. Adequate Spill Control?			
B. No obvious infraction of Fire Code?			
C. Proper waste containers?			
D. Proper Storage of incompatible wastes?			
E. Waste containers properly labeled?			
F. Proper drum stack size and aisles?			
G. Containers off ground and not leaking?			
H. Waste stored in secure area?			
2. Registered Industrial Waste Scavenger?			
Name			
DEC #			
☐ Different scavenger since last report			
3. Records			
A, B, C Proper waste inventory records?			

Item	Yes	No	N/A
3. Records (Cont'd.)			
D. Record of spills & notification of N.C.H.D.?			✓
E. Record of special sampling results?			✓
4. Records kept a minimum of 3 years?			
5. Reports submitted on time?		✓	
6. Waste storage in comformance with permit?			
Quantities O.K.? Drums			✓
1 (500 GAL) underground Tanks			
Maximum storage time O.K.?			
7. Sampling in conformance with permit?			
8. Is compliance schedule met as required by permit?			
9. Overall Inspection Rating ☐ Satisfactory ☐ Non-Compliance ☐ Major ☒ Minor			

Date	Item	Comments
		WASTE REPORT DUE FOR 1ST HALF OF 1981
		VISITED ISLAND TRANSPORTATION + FOUND THE FACILITY TO BE CLOSED
		THE ENTIRE STORAGE YARD HAS BEEN CLEANED & ALL TRUCKS ARE GONE, THEREF
		IT APPEARS THAT THIS FACILITY IS OUT OF BUSINESS.

Signature of Inspector: [signature] Date 11/20/81
Signature of Company Representative: Date

FH 702 9/80

2632 RDC-00270

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N. Y., 11501

FRANCIS T. PURCELL
County Executive

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PAGAR, P.E., M.C.E.
Deputy Commissioner
for Environmental Health

October 31, 1980

Mr. Morris Bruckman, P.E.
New York State Department of
Environmental Conservation
SUNY-Bldg. 40
Stony Brook, New York 11790

Re: Island Transportation
Part 360 Application & Permit

Dear Mr. Bruckman:

Please find enclosed an application for a Part 360 permit to replace the SPDES hold and haul permit for the above facility. We have reviewed the application and found it to be complete.

Consequently, a draft permit has been drawn up and enclosed. This permit requires a facility number, your signature and an issuance date.

If you have any questions, please contact me at 535-2404.

Very truly yours,

L. Sama
Public Health Engineer
Bureau of Land Resources Mgmt.

LS:ceg
Encl.

-20-2 (8/77) NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PERMIT

Under the Environmental Conservation Law, Article 27, Title 7, Part 360

FACILITY NO. [illegible]

EXPIRATION DATE [illegible]

☐ CONSTRUCTION ☐ INITIAL ISSUE ☐ REISSUANCE
☐ OPERATION ☐ RENEWAL ☐ MODIFICATION

PERMIT ISSUED TO	ADDRESS OF PERMITTEE	TELEPHONE NO.
[illegible]land Transportation Corp.	299 Main St., Westbury, NY 11590	516-334-5400

LOCATION OF PROJECT Town	County	Environmental Conservation Regional Office
[illegible]	[illegible]	[illegible] Stony Brook, NY 11790

DESCRIPTION OF PROJECT	ON-SITE SUPERVISOR

GENERAL CONDITIONS

1. The permittee shall file in the office of the Environmental Conservation Region specified above, a notice on intention to commence work at least 48 hours in advance of the time of commencement and shall also notify said office promptly in writing of the completion of the work.
2. The permitted work shall be subject to inspection by an authorized representative of the Department of Environmental Conservation who may order the work suspended if the public interest so requires.
3. As a condition of the issuance of this permit, the applicant has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.
4. All work carried out under this permit shall conform to the approved plans and specifications. Any amendments must be approved by the Department of Environmental Conservation prior to their implementation.
5. The permittee is responsible for obtaining any other permits, approvals, easements and rights-of-way which may be required for this project.
6. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with Part 360 and the special conditions. Any variances granted by the Department of Environmental Conservation to Part 360 must be in writing and attached hereto.

SPECIAL CONDITIONS

ISSUE DATE	ISSUING OFFICER	SIGNATURE
	[illegible]	X [illegible]

Facility # 30 H 56

Permit Conditions for Operation
of a Waste Generating Facility

1. The following minimum standards will apply for storing and handling wastes:

   a. There should be adequate spill control in the storage area; i.e. an impervious storage pad or floor, bermed to facilitate containment of spills. Stormwater shall be directed to prevent entry into the pad.

   b. Building and fire codes should be met where required.

   c. Wastes should be stored in leakproof containers which are compatible with the waste materials. The containers should not be corroded or leaking and should be tightly closed.

   d. Wastes which deleteriously react with each other must not be stored directly adjacent or mixed together.

   e. Waste containers should be labeled, numbered and distinctly coded and identified as to contents in accordance with Department of Transportation Regulations 49CFR, Part 172.

   f. Waste drums should not be stacked more than two high and aisles should be provided so that all drums are accessible and clearly visible for inspection.

   g. Waste drums should be stored off the ground a minimum of 2 inches to facilitate detection of bottom leaks.

   h. Wastes should be stored in a secured area.

2. Removal of wastes should be only by registered industrial scavenger.

30 11 50

3. Records should be kept on premises and made available to Personnel from the Department of Environmental Conservation or its agents upon request. The following should be included:

   a. Quantity and type waste generated.

   b. Waste container inventory and identification including starting date of collection.

   c. Waste removals by scavenger including container I.D. numbers and scavenger I.D. numbers and final disposal site.

   d. Spills - Notification of DEC (751-7900) and/or Health Department (535-2404) should be made immediately.

   e. Sampling results

4. All records shall be kept a minimum of three years.

5. A report shall be filed on an approved form by the fifteenth day of the following months each year:

   February and August

   Reports shall be filed with the Nassau County Department of Health.

6. Limits on maximum storage time and quantities of wastes stored on the site shall be _____.

   Less than 90 days for one 500 gal. underground tank.

7. Samples shall be collected and analyzed as follows:

   N.A.

30 H 56

8. Compliance Schedule

The waste storage area is to be modified to conform with Item 1a of permit conditions within 12 weeks of the effective date of the permit. All other conditions to be complied with no later than four weeks after EDP.

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501

RALPH G. CASO
County Executive
JOHN J. DOWLING, M.D., M.P.H.
Commissioner
FRANCIS Y. PADAR, P.E.
Asst. Deputy Commissioner
Div. of Environmental Health

November 15, 1977

New York State Department of
Environmental Conservation
Pollutant Discharge Elimination
System Section
50 Wolf Road
Albany, New York 12233

Attention: Mr. George Hansen

Gentlemen:

In accordance with the UPA effective November 1, 1977, we have sent SPDES applications to five industrial firms, list attached.

Also sent and attached here were:

1. the cover letter used
2. the list of fees taken from UPA
3. the Project Permit Requirement Questionaire.

A copy of the organic chemical survey for each company is also enclosed for your refrence in evaluating the applications when returned to you.

Very truly yours,

L. Sama
SPDES Coordinator
Bureau of Water Pollution Control

LS/lhg
enc.

Facility ID No. : NY 0140155

Effective Date : June 12/78

Expiration Date : June 11/81

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
PERMIT FOR THE STORAGE AND REMOVAL OF
POTENTIALLY HAZARDOUS WASTES
(NO DISCHARGE PERMITTED)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972, (33 U.S.C. Sec. 1251 et. seq.).

is authorized to store wastes for removal by authorized industrial scavenger from the facility described below:

in accordance with the monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to store and have wastes removed shall expire on midnight of the expiration date shown above and the permitee shall not discharge wastes after the expiration date unless this permit has been renewed, or written authorization is given by the Department. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the Department no later than 180 days prior to the expiration date.

By Authority of R.D.Cusumano,P.E. - Director, Wastewater Management
Designated Representative of Commissioner of the
Department of Environmental Conservation

June 5, 1978
Date

R D Cusumano
Signature

DRAFT

Facility ID No. : NY 0140155

Effective Date : April 14, 1978

Expiration Date : April 13, 1981

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
PERMIT FOR THE STORAGE AND REMOVAL OF
POTENTIALLY HAZARDOUS WASTES
(NO DISCHARGE PERMITTED)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisio of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972, (33 U.S.C. Sec. 1251 et. seq.).

Island Transportation

is authorized to store wastes for removal by authorized industrial scavenger from the facility described below:

299 Main Street
Westbury, N. Y. 11590

in accordance with the monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to store and have wastes removed shall expire on midnight of the expiration date shown above and the permitee shall not discharge wastes after the expiration date unless this permit has been renewed, or written authorization is given by the Department. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the Department no later than 180 days prior to the expiration date.

By Authority of R.D.Cusumano,P.E. - Director, Wastewater Management
Designated Representative of Commissioner of the
Department of Environmental Conservation

April 14, 1978
Date

R D Cusumano
Signature

DRAFT

Facility ID No. NY 0140155

During the period beginning EDP and lasting until EDP + 3 years the wastes from the permitted facility shall be controlled and monitored by the permittee as specified below:

All industrial wastes shall be collected in sealable leakproof holding tanks or drums. The storage vessels shall be suitable for and utilized and maintained in a manner to minimize corrosion and other damage and to prevent discharges onto the ground or discharged into the groundwater or surface waters of the State. Wastes shall be removed by a licensed industrial waste scavenger only. It shall be the responsibility of the permit holder to determine whether the scavenger employed is licensed by the State. The following records and manifests shall be maintained on the premises of this facility:

1. Amount of waste producing chemicals or solvents purchased during the reporting period.
2. Nature, name and amount of waste removed.
3. Date and method of removal. Copy of receipts or manifests.
4. Registration number and name of scavenger.
5. Final disposal site for waste.
6. Occurance of accidental spills.

Copies of records are required to be submitted to:

Bureau of Wastewater Management
Nassau County Health Department
240 Old Country Road
Mineola, New York 11501

Such records should be submitted by the last day of January and July of each year, covering collection for July to December and January to June respectively, if wastes total more than 100 gallons/year. Where wastes are less than 100 gallons/year only one submission need be made and that on the last day of January covering the previous calender year's collection.

Compliance Schedule

The permit holder shall have until May 14, 1978 to make any necessary preparations for meeting the permit requirements, as described on page 3, (if required).

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR APPROVAL TO OPERATE A SOLID WASTE MANAGEMENT FACILITY

PROJECT NO.	DATE RECEIVED
DEPARTMENT ACTION ☐ Approved ☐ Disapproved	DATE

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

1. OWNER'S NAME: PETER FIORETTI	2. ADDRESS (Street, City, State, Zip Code): 299 MAIN ST. WESTBURY N.Y. 11590	3. Telephone No.: 516-334-5400
4. OPERATOR'S NAME: SAME	5. ADDRESS (Street, City, State, Zip Code):	6. Telephone No.:
7. ENGINEER'S NAME: NONE	8. ADDRESS (Street, City, State, Zip Code):	9. Telephone No.:
10. ON-SITE SUPERVISOR: TIMOTHY CROPPER	11. ADDRESS (Street, City, State, Zip Code): 116 RYDER AVE. DIX HILLS NY. 11746	12. Telephone No.: 516-643-4572

13. HAS THE INDIVIDUAL NAMED IN ITEM 10 ATTENDED A DEPARTMENT SPONSORED OR APPROVED TRAINING COURSE?
☐ Yes Date Course Title Location ☒ No

14. PROJECT/FACILITY NAME: ISLAND TRANSPORTATION CORP.	15. COUNTY IN WHICH FACILITY IS LOCATED: NASSAU	16. ENVIRONMENTAL CONSERVATION REGION: NO MAP

17. TYPE OF PROJECT FACILITIES: ☐ Composting ☐ Transfer ☐ Shredding ☐ Baling ☐ Sanitary Landfill ☐ Incineration ☐ Pyrolysis ☐ Resource Recovery-Energy ☐ Resource Recovery-Materials ☒ Other TRUCKING COMPANY

18. HAS THIS DEPARTMENT EVER APPROVED PLANS AND SPECIFICATIONS AND/OR ENGINEERING REPORTS FOR THIS FACILITY? ☐ Yes Date ☒ No

19. LIST WASTES NOT ACCEPTED
NONE

20. BRIEFLY DESCRIBE OPERATION

PETROLEUM PRODUCT TRANSPORTER WITH REPAIR FACILITY FOR OWN TRACTOR, TRAILERS

21. IF FACILITY IS A SANITARY LANDFILL, PROVIDE THE FOLLOWING INFORMATION:
a. Total useable area: (Acres) Initially _____ Currently _____
b. Distance to nearest offsite, downgradient, water supply well _____ Feet
c. No. of groundwater monitoring wells Upgradient _____ Downgradient _____

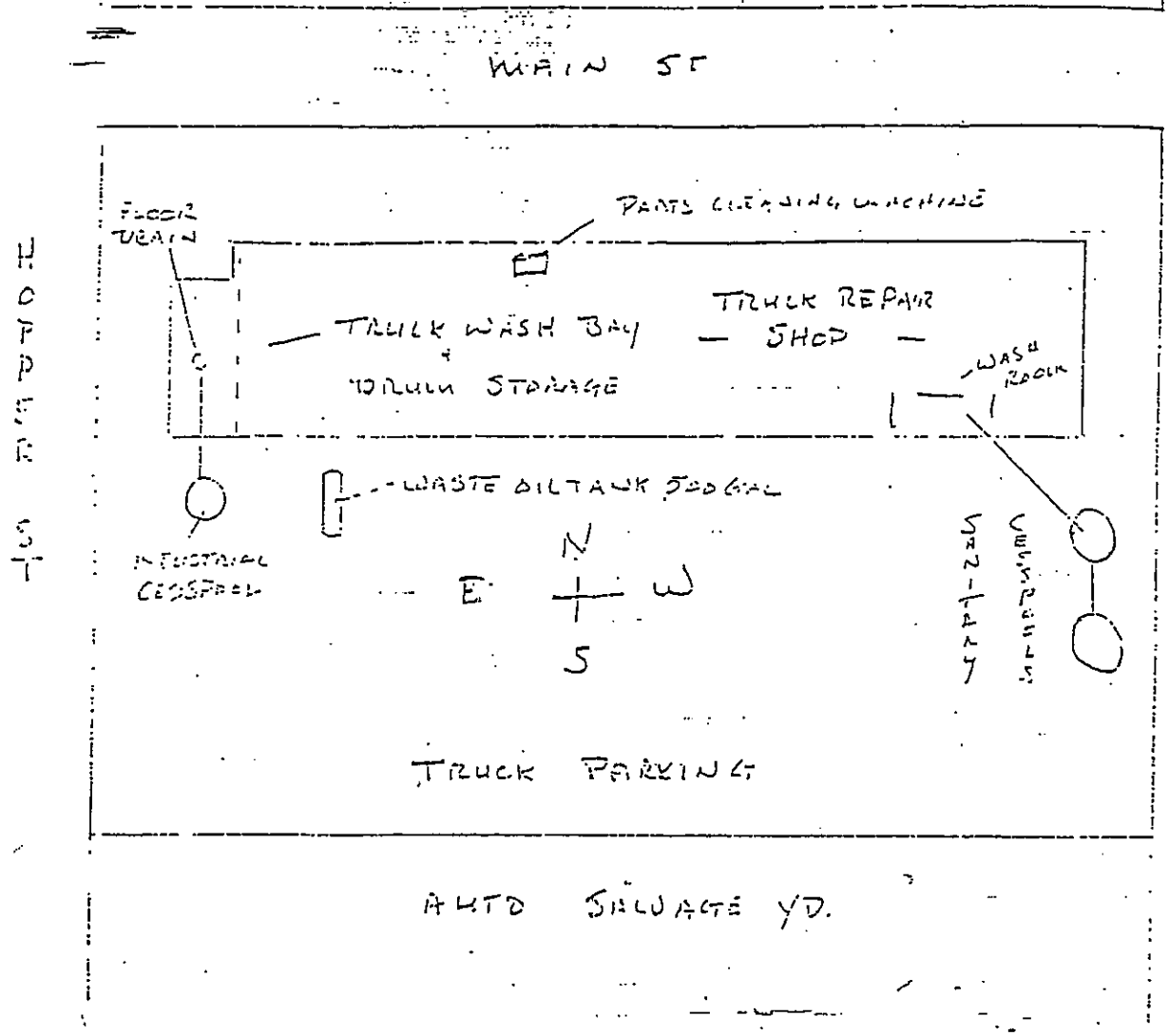
22. INDICATE WHICH ATTACHMENTS, IF ANY, ARE INCLUDED WITH THIS APPLICATION:
☐ Form 47-19-2 or SW-7 ☐ Operations Plan & Report ☐ USGS Topographic Map ☐ Record Forms MATERIAL FLOW SKETCH
☐ Construction Certificate ☐ Boring Logs ☐ Water Sample Analysis ☐ None ☐ Other PLAT SKETCH

23. CERTIFICATION:
I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

10/21/80 Timothy Cropper V.P. Maint.

2632 RDC-00280

MATERIAL FLOW SKETCH
ISLAND TRANSPORTATION CORP.



MATERIAL FLOW DESCRIPTION

1. TRUCKS WASHED WITH DETERGENT IN EAST BAY - DRAINAGE INTO UNDERGROUND POOL.

2. SAFETY-CLEAN CORP REMOVES LIQUID + SOLID WASTE @ 3 GAL PER WEEK RATE (APPROX)

3. ENGINE WASTE OIL REMOVED BY GENERAL WASTE OIL CO.

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N. Y., 11501

FRANCIS T. PURCELL
County Executive

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Director of Environmental Health

1/22/80.

Island Transportation
2900 Main St.
Westbury, N.Y. 11590
Att: Mr. T. Cropper

Gentlemen:

As stated in the permit (NY# 014 0155) issued to you for the storage and the removal of industrial chemical and/or solvent wastes, you are required to report periodically on the nature of these activities.

Please complete the attached report for the period July-Dec. 1979, and return it to this office within 30 days.

If you have any questions, please feel free to call me at 535-2404

Very truly yours,

Larry Sama
Public Health Engineer
Bureau of Wastewater Management

Encl.

EH 707 1/80

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Wastewater Management

Nassau County Department of Health

Name	Permit Number
Island Transportation Corp.	07.0155
Address: 299 Main St. Westbury, N.Y. 11590	Report Period: 7/9/79 - 1/28/

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp.	10 Gal./Wk.
		P.O. Box 768 Mineola, N.Y, 11501	Approximately

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JAN 30 1980
NCDH
BWWC

SEMI-ANNUAL WASTE REPORT

Company: Island Transportation Corp. Date: July 9, 1979

Permit#: NY #0140155 Reporting Period: Previous 6 months

Item	Reporting Requirement	
	Name	Quantity
1. Waste generating chemicals and/or solvents purchased during reporting period.		
Solvents	Safety Kleen Corp. P.O. Box 768 Mineola, N.Y. 11501	10 gal./week approximately
Trichloroethylene	Discontinued use	

2. Waste Removal

Attach copies of manifests or receipts from registered industrial waste scavenger. Must include nature, name and amount of waste, date removed, registration number, and name of scavenger.

General Waste Oil Co., Inc.
Huntington, New York 11746

3. Final Disposal Site for Waste (obtain information from scavenger)

New Jersey Waste Oil Refinery

4. Occurrence of Accidental Spills (include date, nature, and approximate amount spilled)

None

Signed Timothy E. Hogue

Title Vice-President, Maintenance

THOMAS S. GULOTTA
COUNTY EXECUTIVE
JOSEPH G. BOSLET, JR.
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
899 JERUSALEM AVENUE
P.O. BOX 125
UNIONDALE, NEW YORK 11553

August 1989
Insp. No. GS-96-111

ISLAND TRANSPORTATION OR CURRENT RESIDENT
299 MAIN ST
NEW CASSEL, NEW YORK 11590

TO WHOM IT MAY CONCERN:

Article III of the Nassau County Fire Prevention Ordinance, Section 3.6.3.1.2 requires that all existing underground steel storage tanks be replaced in accordance with the following schedule:

All steel tanks placed into service after February 23, 1961 and before February 23, 1976 shall be replaced, removed or permenantly abandoned by February 23, 1990.

The following is a list of tanks at your location which our records indicate require replacement, abandonment or removal:

SIZE	CONTENTS	INSTALLATION DATE
10K	DIESEL	2/15/72
4K	DIESEL	1/1/63
4K	DIESEL	1/1/63
4K	GASOLINE	5/1/66

If you have any questions please feel free to call this office at (516) 566-5832.

Very truly yours,

David M. Barlow
Supervising Fire Inspector
Industrial Division

1679C

FMIGS96 00111

PERMIT NO. 02795

STATE OF NEW YORK
COUNTY OF NASSAU
OFFICE OF FIRE MARSHAL

TR FLAMMABLE/COMBUSTIBLE LIQUID STORAGE TANK REGISTRATION

LOCATION: ISLAND TRANSPORTATION CORP. 299 MAIN ST NEW CASSEL, NY 11590

ISSUED TO: NAME ISLAND TRANSPORTATION CORP.
ADDRESS 299 MAIN ST
NEW CASSEL, NY 11590

DATE ISSUED: 08/31/86
EXPIRE DATE: 09/30/91

TANK	SIZE	PRODUCT	DATE INSTALLED	DATE TESTED	CONSTRUCTION
HB01	10K	3 01993 01	02/15/72	09/11/80	STL
HB02	4K	3 01993 01	01/01/63	09/11/80	STL
HB03	4K	3 01993 01	01/01/63	09/11/80	STL
HB04	4K	3 01203 00	05/01/66	09/11/80	STL

****

ASSISTANT FIRE MARSHAL

THOMAS E. GULOTTA
COUNTY EXECUTIVE
JOSEPH G. SCHLEY, JR.
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
888 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553

TO: NASSAU COUNTY FIRE MARSHAL

FM KEY # GS-96-111

FROM: ~~A. VOLINO & SONS, INC.~~
~~P.O. BOX 128~~
~~CARLE PLACE, N.Y. 11514~~

CONCERNING TANKS AT:
SAM TOU SALVAGE CO.
199 MAIN ST. WESTBURY N.Y.

The following flammable /combustible liquid storage tanks at the above location have been:

T - Placed temporarily out-of-service (if permitted); or

(P) - Permanently abandoned in place; or

R - Removed from the premises:

(Indicate one of the above letters under "STATUS" for each tank.)

	TANK TYPE*	TANK SIZE	CONSTRUCTION	STATUS	DATE WHEN DONE
1	U/G	10,000	STEEL	P	7-18-90 ✓
1	U/G	4000	"	P	7-19-90 ✓
1	U/G	4000	"	P	7-20-90 ✓
1	U/G	4000	"	P	7-23-90 ✓

* NOTE: If the tank type is unknown, indicate either A/G (aboveground) or U/G (underground). If more than 8 tanks, use an additional sheet.

==========

All work as indicated above has been done in accordance with the applicable Sections of Article III of the Nassau County Fire Prevention Ordinance.

A. VOLINO & SONS INC
Name

Pat Volino
Signature

County of NASSAU
State of New York
Sworn to before me this
24th day of July 1990

Joseph Siniscalchi
Notary Signature

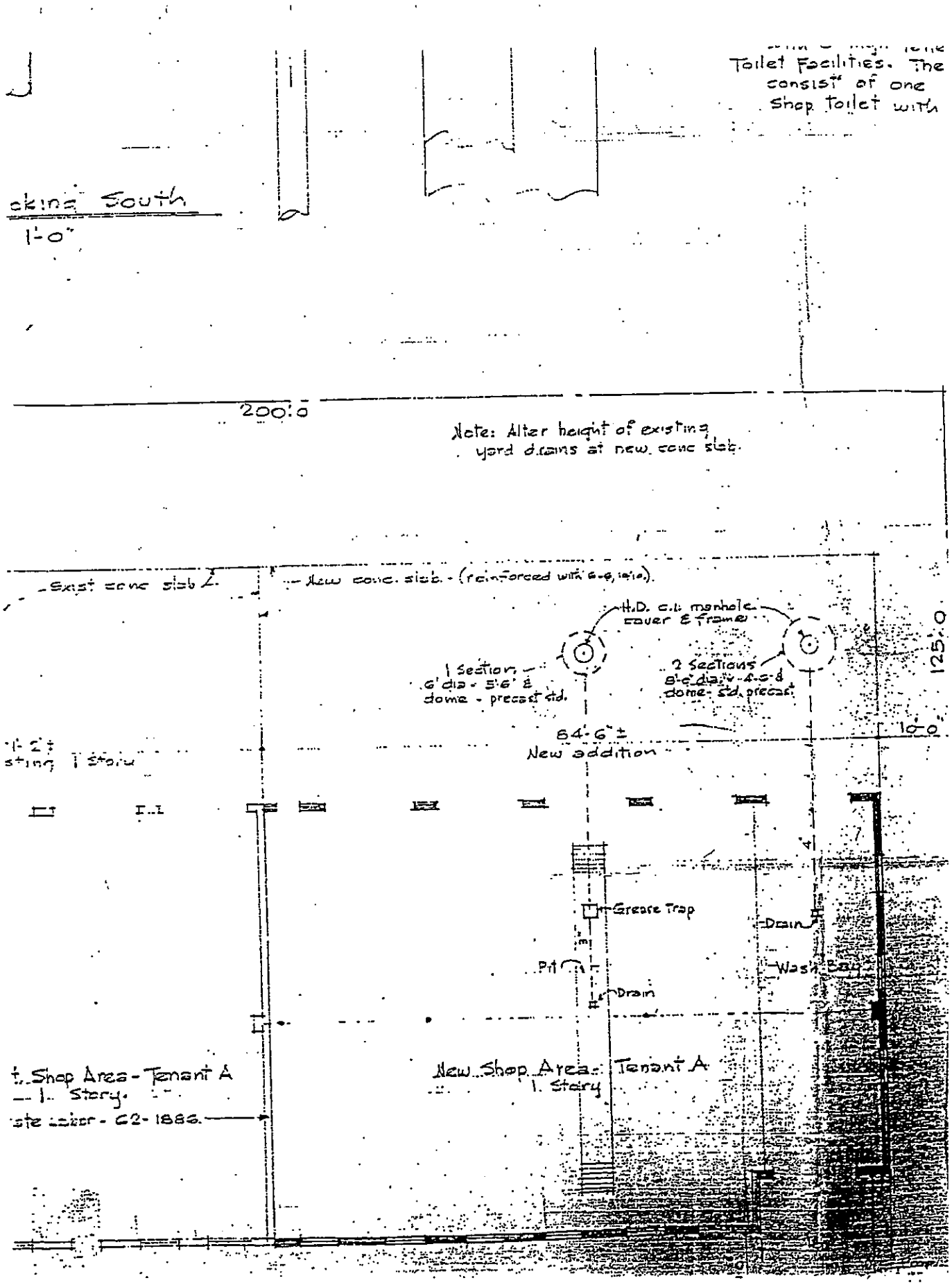
JOSEPH SINISCALCHI
NOTARY PUBLIC, State of New York
No. 30-3687900
Qualified in Nassau County
Commission Expires March 30, 1991

Notary Stamp

JOSEPH SINISCALCHI
NOTARY PUBLIC, State of New York
No. 30-3687900
Qualified in Nassau County
Commission Expires March 30, 1991

0841C / 110788

INVESTIGATION - 566-5979 & SCHOOL - 566-5824 & INDUSTRIAL - 566-5818 & INSTITUTIONAL - 566-5818 & GENERAL INSPECTION - 566-5828


Toilet Facilities. The consist of one Shop toilet with
cking South
1'-0"
200'-0
Note: Alter height of existing yard drains at new conc slab.
Exist conc slab
New conc. slab - (reinforced with 6-6, 10/10).
H.D. c.i. manhole cover & frame
1 Section 6' dia - 5'6" & dome - precast std.
2 Sections 8'-6" dia - 4'-6" & dome - std. precast
125'-0
84'-6" ±
New addition
10'-0
1 Story
Grease Trap
Drain
Pit
Wash Bay
Drain
t. Shop Area - Tenant A
1. Story.
ate Labor - 62-1886.
New Shop Area - Tenant A
1. Story

ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent : Quality Collision
Address: 299 Main Street Westbury

Ins

COMMENTS

DATE

10/20/98 I visited Quality Collision formerly Sam Tom Towing and Salvage. I spoke with the receptionist, the receptionist told me that repair work is done on premises. My view of the establishment was limited as the receptionist told me that she was not allowed to take me into the repair area. I will revisit at another time and try to make contact with the owner/operator.
J Minghinelli

11/30/98 I visited 299 Main St in Westbury I viewed the interior and I found no floor drains
J Minghinelli

EPA

ACKNOWLEDGEMENT OF NOTIFICATION
OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER ➤ NYD020576898

ISLAND TRANSPORTATION CORP
299 MAIN STREET
WESTBURY NY 11590

INSTALLATION ADDRESS ➤ 299 MAIN STREET
WESTBURY NY 11590

EPA Form 8700-12B (4-80)

11/07/80

Please print or type with ELITE type *(12 characters/inch)* in the unshaded areas only.

Form Approved OMB No. 158-S79016
GSA No. 0246-EPA-OT

EPA U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.: NYD020576898

I. NAME OF INSTALLATION: ISLAND TRANSPORTATION CORP

II. INSTALLATION MAILING ADDRESS: ~~[illegible]~~ 299 Main St Westbury N.Y. 11590

III. LOCATION OF INSTALLATION: ~~[illegible]~~ 299 Main St Westbury N.Y. 11590

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act)*.

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER	APPROVED	DATE RECEIVED (yr., mo., & day)
F NY 0 0 2 0 5 7 6 8 9 8 T/N C 3 1		8 0 0 7 3 0

I. NAME OF INSTALLATION

ISLAND TRANSPORTATION CORP

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 3 2 9 9 MAIN STREET

CITY OR TOWN	ST.	ZIP CODE
4 WESTBURY	NY	11590

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 5 ~~SAME~~ 299 MAIN STREET

CITY OR TOWN	ST.	ZIP CODE
6 ~~SAME~~ WESTBURY	NY	11590

IV. INSTALLATION CONTACT

NAME AND TITLE *(last, first, & job title)*	PHONE NO. *(area code & no.)*
2 SELDES HOWARD SAFETY DIRECTOR	516-334-5400

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: 8 PETER FIORETTI SR

B. TYPE OF OWNERSHIP *(enter the appropriate letter into box)*

F = FEDERAL
M = NON-FEDERAL

M

VI. TYPE OF HAZARDOUS WASTE ACTIVITY *(enter "X" in the appropriate box(es))*

- [ ] A. GENERATION
- [X] B. TRANSPORTATION *(complete Item VII)*
- [ ] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION *(transporters only – enter "X" in the appropriate box(es))*

- [ ] A. AIR
- [ ] B. RAIL
- [X] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER *(specify)*:

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION *(complete Item C)*

C. INSTALLATION'S EPA I.D. NO.:

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

EPA Form 8700-12 (6-80)

CONTINUE ON REVERSE

(SDS) RS
RS
JDP
DI
file

AUG 10 1990

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Frank Scibelli
President
Sam-Ton Towing and Salvage
299 Main Street
Westbury, New York 11590

Re: Class V UIC Permit Application/Closure Request
Sam-Ton Towing and Salvage
299 Main Street
Westbury, New York 11590

Dear Mr. Scibelli:

The U.S. Environmental Protection Agency (EPA) administers the Underground Injection Control (UIC) program as mandated by Part C of the Safe Drinking Water Act (SDWA), 42 United States Code (USC) §300f et seq., as amended. Section 1422 of the SDWA, 42 USC §300h-1, requires EPA to administer the UIC program in states that do not have approved state programs, as is the case in New York. The regulations associated with the program are contained in 40 Code of Federal Regulations (CFR) Parts 124, 144, 145, 146, and 147.

A recent inspection of the above-referenced facility, indicates that fluids are being injected into the ground by means of wells. Under 40 CFR §144.3, the wells, two type 5X28's (see Enclosure 1, Class V well types), are considered Class V wells and subject to the requirements of the UIC program. EPA records indicate that the injection activity is unauthorized.

40 CFR §144.12(a) states that no owner or operator shall conduct any injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or may otherwise adversely affect the health of persons. 40 CFR §144.12(d) states that when the director of the UIC program learns that a Class V well may cause a violation, he may take such actions as may be necessary to prevent the violation. This may include requiring the operator to obtain an individual UIC permit or closure of the well.

The hydrogeologic structure underlying the facility has high potential for allowing contamination of ground water. Consequently, the facility's Class V wells may cause a violation of primary drinking water regulations or otherwise adversely affect the health of persons. Therefore, it is necessary that action be taken to bring the wells into compliance with the SDWA. To achieve compliance, you must either obtain a permit to operate the wells or close the wells.

If you would like to continue using the wells, you must submit a permit application to EPA. The permit application must be in accordance with 40 CFR Part 144 Subpart D and the application must demonstrate that the conditions of 40 CFR §144.12(a) are satisfied. **If the application does not satisfy the requirements of 40 CFR §144.12(a) and 40 CFR Part 144 Subpart D, it will be denied and closure of the wells will be necessary.** Be advised that issuance of a federal UIC permit does not exempt the facility from State or local law and that, therefore, any injection activity may be prohibited at the State or local level, regardless of the fact that a federal UIC permit has been issued to you. Instructions for filing a federal UIC permit are enclosed.

Due to stringent injectate quality standards the cost of treatment would be substantial and it is EPA's experience that most Class V operators choose to close the wells rather than attempt to obtain a federally issued UIC permit. Therefore **EPA strongly recommends that you choose to close the wells.** Before you close the wells you must submit a closure plan to EPA and receive EPA's approval of that plan. Enclosed are instructions for UIC closure plans.

Failure to submit a closure plan or permit application <u>within 30 days of receipt of this letter</u> and continued unauthorized injection into the wells may result in an enforcement action pursuant to Section 1423 of the SDWA, 42 USC 300h-2, <u>et seq</u>. including, but not limited to, the imposition of a civil penalty of not more than $25,000 for each day of violation. In addition to, or in lieu of a civil penalty, willful violations may result in imprisonment for up to 3 years or a fine in accordance with Title 18 of the USC. As an alternative to civil enforcement, an Administrative Order may be issued which assesses a civil penalty of not more than $10,000 for each day of violation for any past or current violations, up to a maximum penalty of $125,000, or which requires compliance with such regulation or other requirement, or both.

If you have any questions concerning this matter, you may contact Dermott Courtney of my staff at (212) 264-6897. Please send all submissions to:

Frank C. Brock, Chief
Underground Injection Control Section
U.S. Environmental Protection Agency
26 Federal Plaza, Room 845
New York, NY 10278

Your cooperation in this matter is encouraged.

Sincerely yours,

Kevin Bricke
Acting Director
Water Management Division

Enclosures

cc: S. Silvers, Nassau County Department of Health

Pleas print or type with ITE type (12 cha ters/inch) in the (naded areas only.

SA No. 0246-EPA-

EPA U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.: NYD020576898

I. NAME OF INSTALLATION: ~~ISLAND TRANSPORTATION CORP~~

II. INSTALLATION MAILING ADDRESS: ~~[illegible]~~ 299 Main St Westbury N.Y. 11590

III. LOCATION OF INSTALLATION: ~~[illegible]~~ 299 Main St Westbury N.Y. 11590

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law (Section 3010 of the Resource Conservation and Recovery Act).

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER	APPROVED	DATE RECEIVED (yr., mo., & day)
F NY0020576898 31		800730

I. NAME OF INSTALLATION

ISLAND TRANSPORTATION CORP

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 3 299 MAIN STREET

CITY OR TOWN	ST.	ZIP CODE
4 WESTBURY	NY	11590

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 5 ~~SAME~~ 299 MAIN STREET

CITY OR TOWN	ST.	ZIP CODE
6 ~~SAME~~ WESTBURY	NY	11590

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title)	PHONE NO. (area code & no.)
2 SELDES HOWARD SAFETY DIRECTOR	516-334-5400

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: 8 PETER FIORETTI SR

DETACH

B. TYPE OF OWNERSHIP (enter the appropriate letter into box): F = FEDERAL; M = NON-FEDERAL — M

VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es))

- [ ] A. GENERATION
- [X] B. TRANSPORTATION (complete item VII)
- [ ] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION (transporters only – enter "X" in the appropriate box(es))

- [ ] A. AIR
- [ ] B. RAIL
- [X] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER (specify):

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION (complete item C)

C. INSTALLATION'S EPA I.D. NO.

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

EPA Form 8700-12 (6-80)

CONTINUE ON REVERSE

ISLAND TRANSPORTATION CORP.

Petroleum and Petroleum Products

299 EDISON AVENUE • WEST BABYLON, N. Y. 11704

MC ICC #116849
D.O.T.N.Y.MT-7249
P.U.C.-CONN. C-383

Office:	W. Babylon Term.:	Greenpoint Term.:	New Jersey Term.:	Conn. Term.:
(516) 694-4800	(516) 694-4497	(212) 383-3221	(201) 541-8091	(203) 239-4494

Special Letter

May 5, 1983

NYD020576898

Dr. Dick Baker,
Permits Administration Branch
U.S. Environmental Protection Agency
Region 11, 26 Federal Plaza
New York, New York 10278

Gentlemen:

Island Transportation Corp. wrote to the NYS-DEC on February 16, 1983, explaning that it appeared unnecessary to fill out the facility annual hazardous waste report, and that we had moved to a new location. Since that time, Jere Austin of the NYS-DEC, Stony Brook office, made an inspection of our operation on April 13, 1983 and recommended that I write to your office to explain that our hold to haul hazardous waste permit might be used sometime in the future and should not be cancelled.

Please advise me as to the status of our present permit, #30-H-56. Our E.P.A. I.D. Number is NY D020576H9A, and our previous permit to store and remove under N.Y.S. Pollutat Discharge Elimination System was #NY-0140155.

Very truly yours,
Island Transportation Corp.

Timothy E. Cropper

Timothy E. Cropper
Vice President

TC:imc
enc.

MAY 10 12 52 PM '83
ENVIRONMENTAL PROTECTION AGENCY
NEW YORK, N.Y. 10007
PERMITS ADMINISTRATION BRANCH

"IF IT FLOWS WE HAUL"

ISLAND TRANSPORTATION CORP.

Petroleum and Petroleum Products

299 MAIN STREET • WESTBURY, N.Y. 11590

MC ICC #118646
D.O.T.N.Y.MT-7348
P.U.C.-CONN. C-363

Office: (516) 334-5400 • Westbury Term. (516) 334-5440 • Greenpoint Term. (212) 383-3221 • New Jersey Term. (201) 541-8091 • Conn. Term. (203) 239-4494

NYD020576898

~~NYD05~~

Eliminate
ALREADY NOTIFIED

notified date
8 0 0 7 2 0

February 27, 1981

U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, NY 10278

Re: NYT000029553

MAR 4 1 [illegible] AM '81
ENVIRONMENTAL PROTECTION AGENCY
NEW YORK, N.Y. 10007

Att: Mr. Julio Morales-Sanchez, Director
Enforcement Division

Gentlemen:

Please be aware that Island Transportation Corp. has filed with the E.P.A. as required by law and has already been issued E.P.A. Identification No. NYD020576898 for Hazardous Waste Activity, a copy of which is attached.

Perhaps there is an error in that your letter was addressed to me personally rather than to Island Transportation Corp.

Please contact me if further clarification of this matter is necessary.

Yours truly,

Peter Fioretti, Jr.
Vice-President

PF:ms

DGA

NOTICE**NOTICE**NOTICE

TO ENSURE ACCURATE PROCESSING, YOUR RESPONSE TO THIS LETTER MUST INCLUDE THE TWELVE DIGIT NUMBER PRINTED ON THE MAILING LABEL OF THIS LETTER.

NYT000029553

FIORETTI PETER

299 MAIN STREET
WESTBURY NY 11590

MAR 4 11 30 AM '81
ENVIRONMENTAL PROTECTION AGENCY
NEW YORK, N.Y. 10007

Dear Sir:

The United States Environmental Protection Agency (EPA) regulates the handling of hazardous wastes under the Resource Conservation and Recovery Act (RCRA) 42 U.S.C. §6901 et seq. Under Section 3010 of RCRA, 42 U.S.C. §6930, parties handling certain quantities of hazardous wastes (these wastes are characterized and listed in regulations which were published in the Federal Register of May 19, 1980, 45 FR 33084 et seq. and July 16, 1980, 45 FR 47832 et seq.) are required to notify EPA of their activities. Facilities handling wastes defined by the May 19, 1980 regulations were required to notify by August 18, 1980. Facilities handling wastes defined by the July 16, 1980 regulations were required to notify by October 14, 1980. We have not yet received a notification from you or your company.

Section 3007 of RCRA, 42 U.S.C. §6927, allows EPA to request certain information of parties who handle hazardous wastes. Based upon information available to this Agency, we believe that you or your company handles such hazardous wastes. Therefore, in order to determine the extent of your hazardous waste activity, and to determine whether you should have notified EPA pursuant to §3010, we require that you answer the questions posed below. Your reply should be completed and signed by a responsible official of your firm and returned to us within 21 days of the date of this letter. If you have already notified EPA of your hazardous waste activity, please respond, indicating your prior notification and listing your EPA Identification Number, if available.

Please answer the following questions:

1) Do you handle any "hazardous wastes," as this term is defined in RCRA and the regulations promulgated under RCRA (regulations published in the Federal Register on May 19, 1980; July 16, 1980; October 30, 1980; November 12, 1980; November 17, 1980 and November 25, 1980)?

2) If you do handle such wastes, what is the greatest quantity of hazardous wastes that you handle in any one month?

3) If you do handle any hazardous wastes, please identify them by type, characteristics, components, or by the process that produces these wastes.

4) How do you handle these wastes (i.e. do you generate, transport, treat, store or dispose of them)?

LT-15-5(7/82)

RCRA INSPECTION FORM

Report Prepared for:

Generator ☑

Transporter ☑

HWM (TSD) facility ☐

Copy of report sent to the facility ☐

(4)

PERMITS ADMIN. BRANCH
REGION II
APR 29 2 56 PM '83
ENVIRONMENTAL PROTECTION AGENCY
NEW YORK, N.Y. 10007

Location Code:
47 2000

Facility Information

Name: Island Transportation Corp

Address: 299 Edison Ave
West Babylon NY 11704

EPA ID#: NYD 020 576 898

Date of Inspection: April 13, 1983

Participating Personnel

State or EPA Personnel: Jere Austin
NYS DEC

Facility Personnel: Timothy Cropper
VP - Maint. & Equip.

RECEIVED
APR 18 1983
BUREAU OF
HAZARDOUS WASTE OPERATIONS
DIVISION OF SOLID WASTE

Report Prepared by Name: J. Austin

Agency: NYS DEC

Telephone #: (516) 751 7900

Approved for the Director by: James H. Heil
Regional Solid Waste Engineer
Region I - NYSDEC

Summary of Findings

Facility Description and Operations

Facility is a trucking company. Maintenance shop generates waste lube oil approx. 400 to 500 gals/30 days. Waste oil is removed approx. 30 day intervals.

Two parts-cleaning machines are serviced by Safety-Klean Corp. which removes about 10 gal per machine every two weeks. Solvent is "Safety solvent #5".

Describe the activities that result in the generation of hazardous waste.

Two parts cleaning machines in maintenance shop using Safety-Kleen safety solvent #5. Spent solvent removed at two week intervals (approx 10 gal/machine)

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

Quantity and storage time qualifies Facility as an exempt generator

Environmental Protection Agency Internet

Internet

RCRA information is now available on the Internet. The address is http://www.epa.gov and if you have any questions, please contact the RCRA Hotline telephone number at 1-800-424-9346.

Another feature posted on the Internet by EPA HQ's is the Final National Biennial Reports with Data Files for all BRS reporting years, found at:

http://www.epa.gov/epaoswer/hazwaste/data. The Preliminary 1997 National Report is posted on the Internet and the address is:

http://www.epa.gov/epaoswer/hazwaste/data/pbr97/97pbr.htm. Also, available on the Internet is a public access on-line query engine for environmental databases found at:

http://www.rtk.net

In the near future, the public will have electronic access to RCRA facility-specific information which will also include some flat file reports. The RCRA reports will soon be available on the Freedom of Information Act (FOIA) Web Page. The FOIA Web Page will replace the Region 2 Bulletin Board System. The Bulletin Board System is out of date.

(SDS) RS
RS
JDR
DI
file

AUG 10 1990

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Frank Scibelli
President
Sam-Ton Towing and Salvage
299 Main Street
Westbury, New York 11590

Re: Class V UIC Permit Application/Closure Request
Sam-Ton Towing and Salvage
299 Main Street
Westbury, New York 11590

Dear Mr. Scibelli:

The U.S. Environmental Protection Agency (EPA) administers the Underground Injection Control (UIC) program as mandated by Part C of the Safe Drinking Water Act (SDWA), 42 United States Code (USC) §300f et seq., as amended. Section 1422 of the SDWA, 42 USC §300h-1, requires EPA to administer the UIC program in states that do not have approved state programs, as is the case in New York. The regulations associated with the program are contained in 40 Code of Federal Regulations (CFR) Parts 124, 144, 145, 146, and 147.

A recent inspection of the above-referenced facility, indicates that fluids are being injected into the ground by means of wells. Under 40 CFR §144.3, the wells, two type 5X28's (see Enclosure 1, Class V well types), are considered Class V wells and subject to the requirements of the UIC program. EPA records indicate that the injection activity is unauthorized.

40 CFR §144.12(a) states that no owner or operator shall conduct any injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or may otherwise adversely affect the health of persons. 40 CFR §144.12(d) states that when the director of the UIC program learns that a Class V well may cause a violation, he may take such actions as may be necessary to prevent the violation. This may include requiring the operator to obtain an individual UIC permit or closure of the well.

The hydrogeologic structure underlying the facility has high potential for allowing contamination of ground water. Consequently, the facility's Class V wells may cause a violation of primary drinking water regulations or otherwise adversely affect the health of persons. Therefore, it is necessary that action be taken to bring the wells into compliance with the SDWA. To achieve compliance, you must either obtain a permit to operate the wells or close the wells.

If you would like to continue using the wells, you must submit a permit application to EPA. The permit application must be in accordance with 40 CFR Part 144 Subpart D and the application must demonstrate that the conditions of 40 CFR §144.12(a) are satisfied. **If the application does not satisfy the requirements of 40 CFR §144.12(a) and 40 CFR Part 144 Subpart D, it will be denied and closure of the wells will be necessary.** Be advised that issuance of a federal UIC permit does not exempt the facility from State or local law and that, therefore, any injection activity may be prohibited at the State or local level, regardless of the fact that a federal UIC permit has been issued to you. Instructions for filing a federal UIC permit are enclosed.

Due to stringent injectate quality standards the cost of treatment would be substantial and it is EPA's experience that most Class V operators choose to close the wells rather than attempt to obtain a federally issued UIC permit. Therefore **EPA strongly recommends that you choose to close the wells.** Before you close the wells you must submit a closure plan to EPA and receive EPA's approval of that plan. Enclosed are instructions for UIC closure plans.

Failure to submit a closure plan or permit application <u>within 30 days of receipt of this letter</u> and continued unauthorized injection into the wells may result in an enforcement action pursuant to Section 1423 of the SDWA, 42 USC 300h-2, <u>et seq</u>. including, but not limited to, the imposition of a civil penalty of not more than $25,000 for each day of violation. In addition to, or in lieu of a civil penalty, willful violations may result in imprisonment for up to 3 years or a fine in accordance with Title 18 of the USC. As an alternative to civil enforcement, an Administrative Order may be issued which assesses a civil penalty of not more than $10,000 for each day of violation for any past or current violations, up to a maximum penalty of $125,000, or which requires compliance with such regulation or other requirement, or both.

If you have any questions concerning this matter, you may contact Dermott Courtney of my staff at (212) 264-6897. Please send all submissions to:

Frank C. Brock, Chief
Underground Injection Control Section
U.S. Environmental Protection Agency
26 Federal Plaza, Room 845
New York, NY 10278

Your cooperation in this matter is encouraged.

Sincerely yours,

Kevin Bricke
Acting Director
Water Management Division

Enclosures

cc: S. Silvers, Nassau County Department of Health

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

Barbara A. DeBuono, M.D., M.P.H.
Commissioner of Health

Dennis P. Whalen
Executive Deputy Commissioner

April 22, 1997

APR 30 1997

Mr. Earl Barcomb, P.E., Director
Bureau of Hazardous Site Control
Division of Environmental Remediation
NYS Dept. Of Environmental Conservation
50 Wolf Rd.
Albany, NY 12233

RE: Classification Package
New Cassel Industrial Area
(299 Main St.)
Site # 130043S
New Cassel, Nassau Co.

Dear Mr. Barcomb:

My staff have reviewed the Site Investigation Information Package which proposes placing the **299 Main St.** site on the NYS Registry of Inactive Hazardous Disposal Sites as a Class 2 . The March 1997 Multisite Preliminary Site Assessment identified contaminated groundwater on-site and downgradient with high levels of tetrachloroethene, trichloroethene, dichloroethene. These contaminants are contributing to a plume which is migrating in the direction of two public water supply wells. Based on the available site-related information, I concur with the proposal to list the site as a Class 2. The signed decision form is enclosed.

If you should have any questions concerning these issues, please contact Mr. Steve Bates, of my staff at (518) 458-6305.

Sincerely,

G. Anders Carlson, Ph.D.
Director
Bureau of Environmental Exposure
Investigation

cc: Dr. N. Kim
Mr. S. Bates/Mr. J. Olm/File
Mr. B. Smith - NCHD
Mr. S. Ervolina/Mr. C. Vasudevan - DEC
Mr. R. Marino - DEC
Mr. R. Becherer - DEC Region 1

listltr

New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
Bureau of Hazardous Site Control

ADDITIONS/CHANGES TO REGISTRY: SUMMARY OF APPROVALS

SITE NAME: NEW CASSEL INDUSTRIAL AREA 299 MAIN ST. SITE DEC I.D. NUMBER 01-30-043S

Current Classification P - (01-30-043 J)

Activity: [ ] Add as Class ___ [X] Reclassify to 2 [ ] Delist Category ___ [ ] Modify ___

Approvals:

Regional Hazardous Waste Engineer	Yes	[ ]	No	[ ]	_____
NYSDOH BEEI	Yes	[ ]	No	[ ]	_____
DEE	Yes	[ ]	No	[ ]	_____
_____ Remediation Action Bureau Director	Yes	[ ]	No	[ ]	_____
BHSC: a. Investigation Section	Yes	[ ]	No	[ ]	_____
b. O&M Section [Class 4]	Yes	[ ]	No	[ ]	_____
c. Site Control Section	_____			Date	_____
d. Director	_____			Date	_____

Completion Checklist		Completed By: Initials	Date
OWNER NOTIFICATION LETTER?	[ ]	_____	_____
ADJACENT PROPERTY OWNER NOTIFICATION LETTER?	[ ]	_____	_____
ENB/LEGAL NOTICE SENT? (For Deletion Only)	[ ]	_____	_____
COMMENTS SUMMARIZED/PLACE IN REPOSITORY	[ ]	_____	_____
FINAL NOTIFICATION SENT TO OWNER? (For Deletion Only)			

(For proposed Class 2a sites only) Planned investigative activities & dates: _____

_____

_____

DIVISION OF HAZARDOUS WASTE REMEDIATION

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
299 Main Street Site	130043S	North Hempstead/ New Cassel	Nassau

5. REGION	6. CLASSIFICATION
1	CURRENT P PROPOSED 2

7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)

a. Quadrangle Hicksville

b. Site Latitude 40° 45' 21" Site Longitude 73° 34' 00"

c. Tax Map Numbers Section 11, Block 144, Lots 37 to 44

d. Site Street Address: 299 Main St., Westbury, NY 11590

8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

This site is located in the western portion of the New Cassel Industrial Area. It is currently occupied by One Stop Auto and Truck Center and was developed some time between 1950 and 1962. The buildings consist of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formerly used as a junk yard and a transportation company. Island Transport Corporation used large quantities of BTEX- related compounds and approximately 275 gal of TCE between July and December 1978 to clean trucks.

a. Area 0.5 acres b. EPA ID Number _____

c. Completed ( )Phase I ( )Phase II (X) PSA ( )RI/FS ( )PA/SI ( )Other

9. HAZARDOUS WASTE DISPOSED (Include EPA Hazardous Waste Numbers)

Island Transportation Corp. used TCE to wash asphalt residues from its trucks prior to 1980. Approximately 275 gallons were used during a period from July to December 1978. The TCE was reclaimed on-site and reused. An NCDOH inspection in April 1978 listed a storage of 2841.5 lbs of TCE and oil saturation at the storage area.

10. ANALYTICAL DATA AVAILABLE

a. ( )Air (X)Groundwater ( )Surface Water ( )Sediment (X)Soil ( )Waste ( )Leachate ( )EPTox ( )TCLP

b. Contravention of Standards or Guidance Values- Groundwater

Contaminant Group	GW-Upgradient Level(ppb)	GW-On site Level(ppb)	GW-Downgradient Level(ppb)	GW Standard (ppb)	Soil Sample -(SGP-22) On-Site (ppb)
PCE	< 100	12	680	5	1730
TCE	ND	2	20-490	5	92

11. CONCLUSION

The results of the geoprobe investigation show that this property is contributing to groundwater contamination. The PCE contamination concentrations are significantly higher than the upgradient concentrations. The number of contaminants downgradient are also more numerous. Upgradient of the site the only contaminant noted in the groundwater is PCE while downgradient TCE, DCE, and VC are found along with the PCE. The source of these contaminants is likely located on this property. The PCE contamination at depth is most likely from an upgradient souce. The contaminated groundwater is located within a USEPA designated sole source aquifer.

12. SITE DATA

a. Nearest Surface Water: Distance: 6 mi. Direction: NW Classification: SB (Hempstead Bay)

b. Nearest Groundwater: Depth: 60 ft. Flow Direction: SW (X)Sole Source ( )Primary ( )Principal

c. Nearest Water Supply: Distance: 2,100 ft. Direction: South Active (X)Yes ( )No

d. Nearest Building: Distance: on-site Direction: on-site Use: manufacturing

e. In State Economic Development Zone?	( )Y	(X)N	i. Controlled Site Access?	( )Y	(X)N
f. Crops or livestock on site?	( )Y	(X)N	j. Exposed hazardous waste?	( )Y	(X)N
g. Documented fish or wildlife mortality?	( )Y	(X)N	k. HRS Score: N/A		
h. Impact on special status fish or wildlife resource?	( )Y	(X)N	l. For Class 2: Priority Category		

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
One Stop Auto & Truck Center	299 Main Street, Westbury, NY 11590	516-338-4000

16. PREPARER	17. APPROVED
[signature] 2/20/97	[signature] 2/25/97
Signature Date	Signature Date
A. Joseph White, EE-2, Eastern Investigation Section	John E. Swartwout Ch. Eastern Investig. Sec
Name, Title, Organization	Name, Title, Organization

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
299 Main Street Site	130043S	North Hempstead/ New Cassel	Nassau

5. REGION	6. CLASSIFICATION
1	CURRENT P PROPOSED 2

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a. Quadrangle Hicksville

b. Site Latitude 40° 45' 21" Site Longitude 73° 34' 00"

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a. Area 0.5 acres b. EPA ID Number _____

c. Completed ( )Phase I ( )Phase II (X) PSA ( )RI/FS ( )PA/SI ( )Other

9. HAZARDOUS WASTE DISPOSED (Include EPA Hazardous Waste Numbers)

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10. ANALYTICAL DATA AVAILABLE

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b. Contravention of Standards or Guidance Values- Groundwater

Contaminant Group	GW-Upgradient Level(ppb)	GW-On site Level(ppb)	GW-Downgradient Level(ppb)	GW Standard (ppb)	Soil Sample -(SGP-22) On-Site (ppb)
PCE	< 100	12	680	5	1730
TCE	ND	2	20-490	5	92

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b. Nearest Groundwater: Depth: 60 ft. Flow Direction: SW (X)Sole Source ( )Primary ( )Principal

c. Nearest Water Supply: Distance: 2,100 ft. Direction: South Active (X)Yes ( )No

d. Nearest Building: Distance: on-site Direction: on-site Use: manufacturing

e. In State Economic Development Zone?	( )Y	(X)N	i. Controlled Site Access?	( )Y	(X)N
f. Crops or livestock on site?	( )Y	(X)N	j. Exposed hazardous waste?	( )Y	(X)N
g. Documented fish or wildlife mortality?	( )Y	(X)N	k. HRS Score: N/A		
h. Impact on special status fish or wildlife resource?	( )Y	(X)N	l. For Class 2: Priority Category		

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
One Stop Auto & Truck Center	299 Main Street, Westbury, NY 11590	516-338-4000

16. PREPARER	17. APPROVED
Signature Date 2/20/97	Signature Date 4/21/97
A. Joseph White, EE-2, Eastern Investigation Section	Region 1 DEC
Name Title, Organization	Name, Title, Organization

2632 RDC-00309

Division of Hazardous Waste Remediation

Inactive Hazardous Waste Disposal Report PROPOSED

Site Name: 299 MAIN ST. SITE Site Code: 01-30-043 S
Class Code: 2 Region: 1 County: NASSAU EPA Id:
Address: 299 MAIN ST. City: WESTBURY Zip: 11590
Latitude: 40° 45' 33.7" N Longitude: 73° 33' 36.1" W
Site Type: FLAT, INDUSTRIAL AREA Estimated Size: 0.5 Acres

Site Owner / Operator Information:
Current Owner(s) Name: ONE STOP AUTO + TRUCK CENTER
Current Owner(s) Address: 299 MAIN ST, WESTBURY N.Y 11590
Owner(s) during disposal: ISLAND TRANSPORTATION CORP., SAM-TON SALVAGE
Operator(s) during disposal: " " " " " "
Stated Operator(s) Address: 299 MAIN ST., WESTBURY N.Y. 11590
Hazardous Waste Disposal Period: From 1963 To 1993

Site Description: This site was developed some time between 1950 and 1962 and consists of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formally used as a junkyard and a transportation company. Island Transportation Company (ITC) used TCE to wash asphalt residues from its trucks prior to 1980. A NCDOH inspection in 1978 listed a storage of 2841 lbs of TCE and oil saturation at the storage area. The NCDOH, in 1979, discovered ITC was discharging wastewater from its truck cleaning operations into the street. A sample showed that Benzene, Xylene, Toluene and Aliphatic Hydrocarbons were present in this discharge. Sam-Ton Towing and Salvage was cited by USEPA in August of 1990 for illegally injecting fluids into the ground via Class V wells at this property. On Nov. 2, 1993 a fire occured at Sam-Ton and at least seven drums of unknown contents spilled during the fire.

Confirmed Hazardous Waste Disposal:	Quantity:
TCE (EPA ID. F001)	UNKNOWN

Analytical Data Available for: GROUNDWATER, SOILS
Applicable Standards Exceeded in: GROUNDWATER

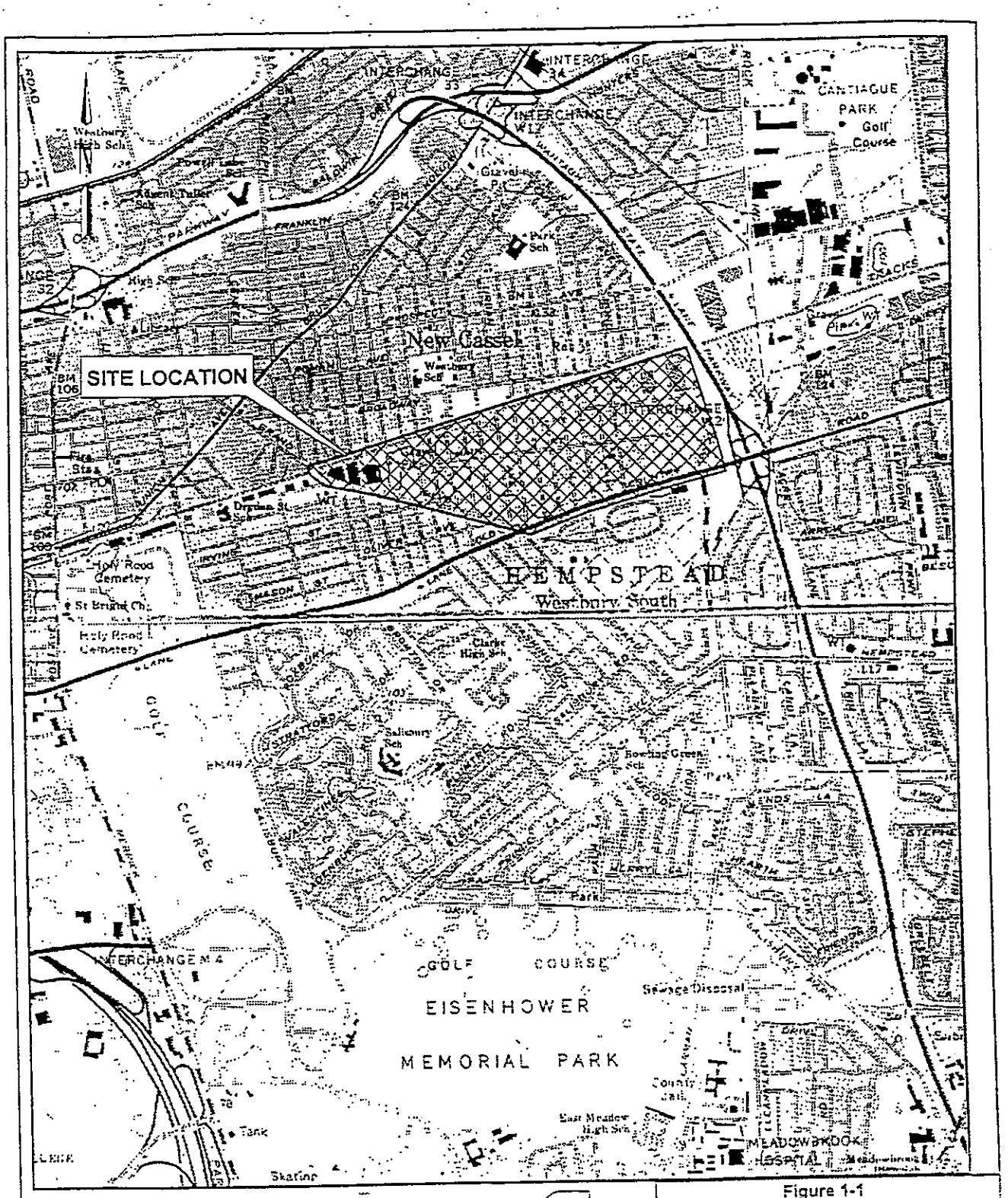
Geotechnical Information:
Soil/Rock Type: FINE TO MED. GRAINED SAND + GRAVEL
Depth to Groundwater: 50-52 ft

Legal Action: Type: Status:
Remedial Action: Nature of action:

Assessment of Environmental Problems:

Assessment of Health Problems:

Past site operations have contaminated groundwater beneath and downgradient of the site with TCE and related compounds. The contaminated groundwater is located within an EPA-designated sole source aquifer. Two public water supply wells are located approximately 1,700 ft downgradient of the site.



0 2000 ft

SCALE
1 in. = 2000 ft

Map source:
USGS 7.5-minute quadrangle series,
Freeport, NY, 1969, photorevised 1979,
Hicksville, NY, 1967, photorevised 1979.

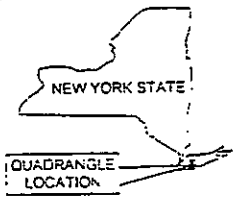


Figure 1-1

Site Location

NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043 J, N-Q, and 130045

LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Pearl River, New York

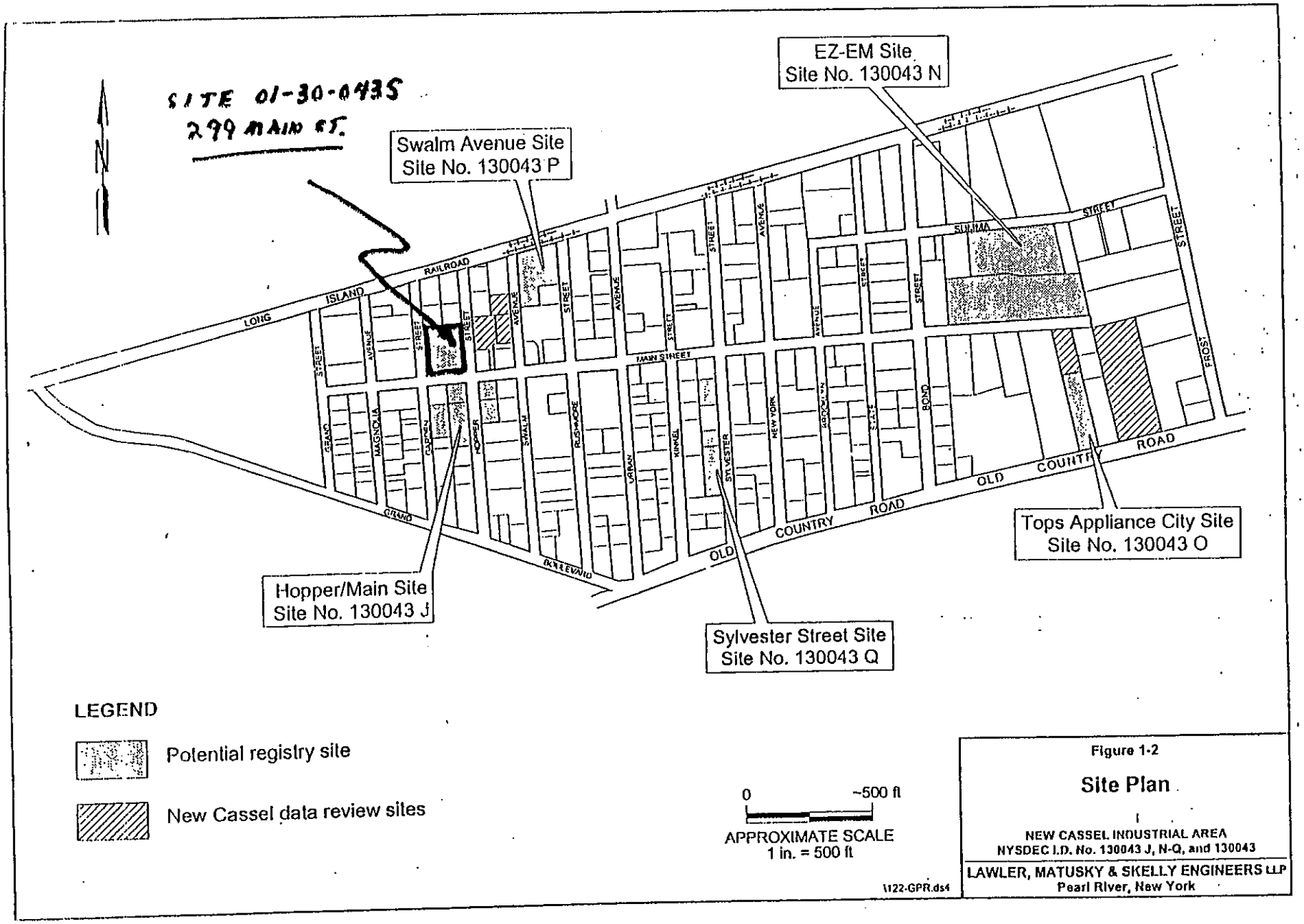


Figure 1-2

Site Plan

NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043 J, N-Q, and 130043

LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Pearl River, New York

APPENDIX 3 4/28/95

NEW YORK STATE DEPARTMENTS OF ENVIRONMENTAL CONSERVATION AND HEALTH
INACTIVE HAZARDOUS WASTE DISPOSAL SITE PRIORITY RANKING WORKSHEET

SITE I.D. 01-30-043 S SITE NAME 299 MAIN ST. NEW CASSEL INDUSTRIAL AREA

Priority I - Sites for which remediation should supersede all other Class 2 sites. Priority I can be assigned if any one of the following questions can be answered affirmatively.

a) Has a public or private water supply which is currently in use been contaminated or threatened?..... [X]
b) Has human exposure to contaminants (or the potential for exposure) been identified which represents a significant health risk as determined by DOH?..... [ ]
c) Has bioaccumulation of site contaminants in flora or fauna resulted in a health advisory?..... [ ]
d) Are site contaminants present at levels that are acutely toxic to fish or wildlife or that have caused documented fish or wildlife mortality?..... [ ]
e) Is there a potentially responsible party or volunteer ready, willing and able to proceed with remediation?..... [ ]

[If 1 or more boxes are checked, check this box] [X] (1)

- Priority II - Important Sites. Priority II will be assigned if any of the following questions can be answered affirmatively.

a) Has a Class A or AA surface water body or a primary or principal aquifer been contaminated or threatened without contaminating or threatening an existing water supply?..... [ ]
b) Has bioaccumulation of site contaminants in flora or fauna resulted in actionable levels (but not a health advisory)?.... [ ]
c) Are contaminants at levels chronically toxic to fish/wildlife?..... [ ]
d) Have endangered, threatened or rare species, significant habitats, designated coastal zone or regulated wetlands been impacted by releases from the site?..... [ ]

[If 1 or more boxes are checked, check this box] [ ] (2)

- Priority III - will be assigned unless one or more of the site prioritization criteria, specified above, apply to a site. After remedial needs for Priority I and II sites have been accommodated, remediation of sites under this category can be considered. If priority III, check box 3. [ ] (3)

Enter the number of the priority box checked 1, 2, or 3 here..... [1] (4)
This is the site's priority rank.

FACTORS

IJC Factor - If the site has been identified by the International Joint Commission (IJC) as a component in a remedial action plan, subtract (1) from the value in box 4 and enter the result in box 5..... [ ] (5)

EDZ Factor - If the site is within a New York State designated Economic Development Zone (EDZ) should this fact cause the site priority to be raised?.. Yes [ ] No [ ]

Community Support Factor - If the site has been targeted for local government-supported development, should this fact cause the site priority to be raised?..... Yes [ ] No [ ]

If either "yes" box is checked, subtract 1 from the value in box 4 and enter the result into box 6. If "no" is checked, the value in box 6 equals box 4 (or box 5 if applicable). If both IJC and EDZ/Community Support factors apply, only 1 (not 2) will be subtracted form the value in box 4. The resultant value in box 6 will never be less than 1..... [ ] (6)

IRM NOTE: Should this site be considered a candidate for an Interim Remedial Measure (IRM) as defined by 6NYCRR Part 375-1.3n?..... Yes [ ] No [ ]

If "yes", please explain why:

Preparer [signature] Date 2/20/97

Appendix 2-1

CLASSIFICATION WORKSHEET

Site: NEW CASSEL IND. AREA 299 MAIN ST. County: NASSAU Region 1

1. Hazardous waste disposed? [✓] Y (to 2) [ ] N (Stop) [ ] U (Stop)

2. Consequential amount of hazardous waste? [✓] Y (to 3) [ ] N (Stop) [ ] U (Stop)

3. Part 375-1.4(a)(1) applies? [ ] N (to 4) [ ] U (to 4)

[ ] Y (as checked below; Class 2; to 5)

[ ] a. endangered or threatened species

[ ] b. streams, wetlands or coastal zone

[ ] c. bioaccumulation

[ ] d. fish, shellfish, crustacea or wildlife

[ ] e. fire, spill, explosion or toxic reaction

[✓] f. proximity to people or water supplies

4. Part 375-1.4(a)(2) applies? [ ] N (Cl 3; Stop) [ ] U (Cl 2a; Stop)

[✓] Y (Class 2; to 5) DOCUMENTED USE, DISPOSAL AND MEASURED CONCENTRATIONS IN GROUNDWATER AND SOILS AT THIS SITE

5. Factor(s) considered in making this determination:

SUMMARY

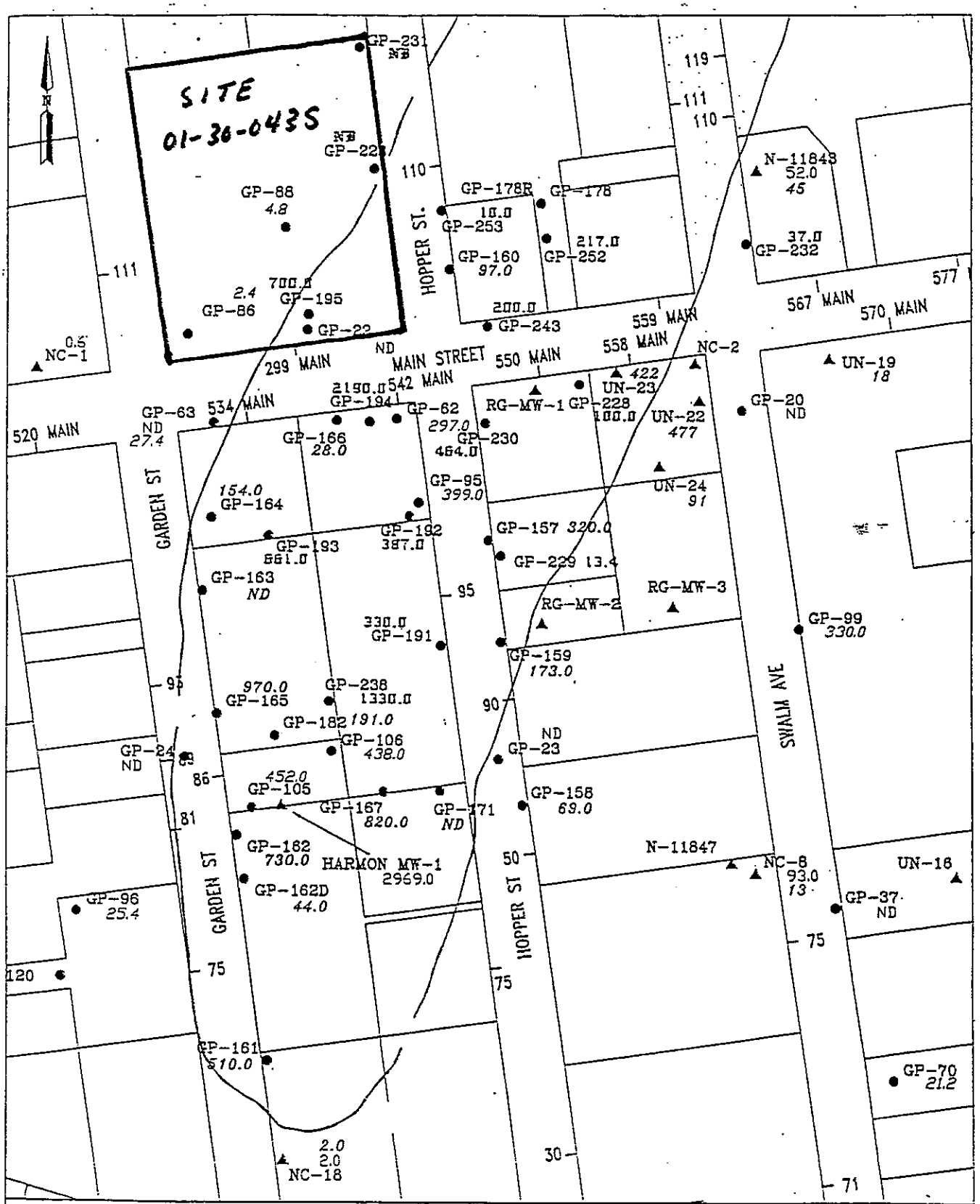
Consequential Hazardous Waste [✓] Yes [ ] No [ ] Unknown

Significant Threat [✓] Yes [ ] No [ ] Unknown

Proposed Classification 2 Site Number

2/20/97
Date

[signature], EE2
Signature and Title



NOTE: All data in ug/l.

Scale in Feet

140 0 140

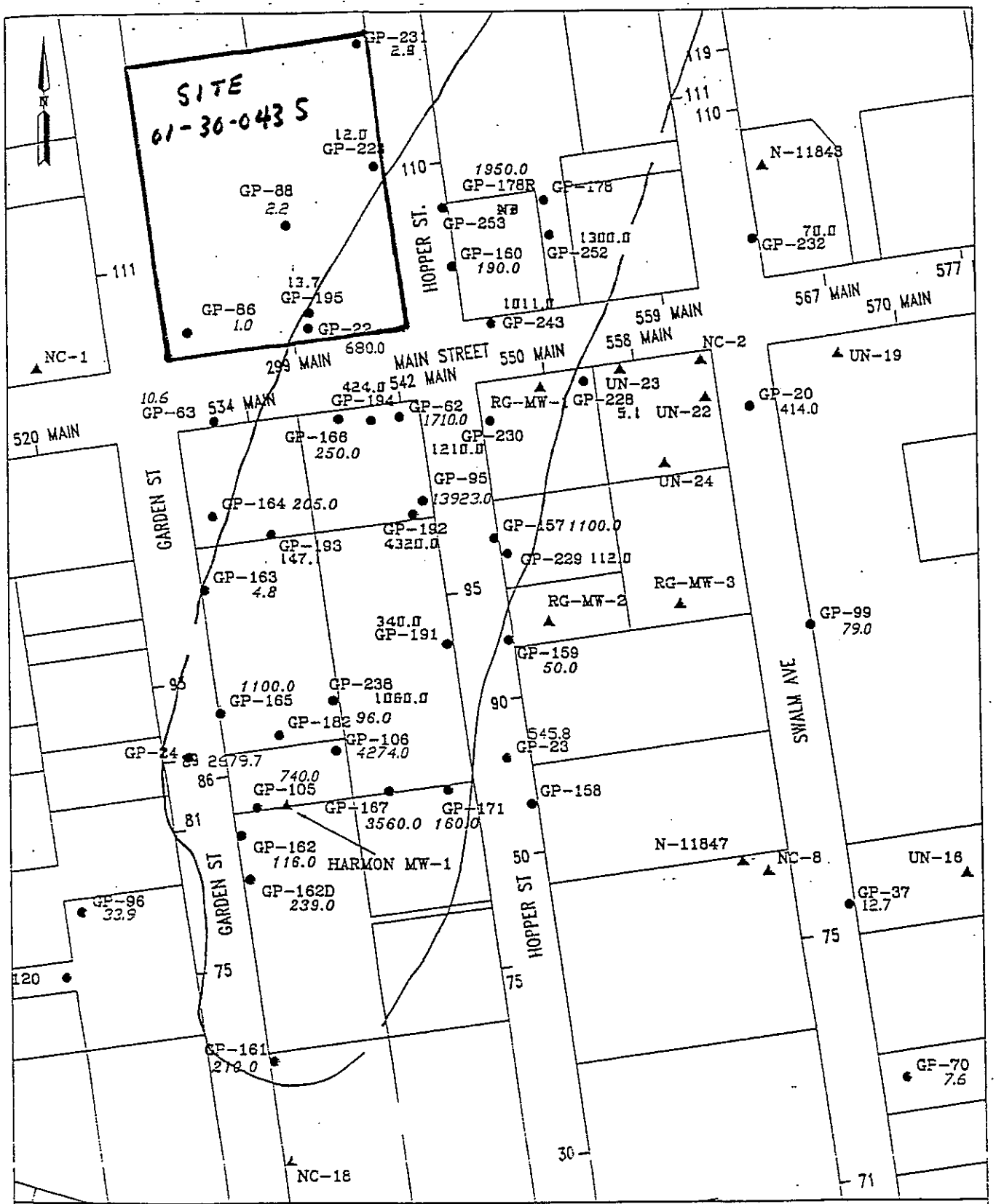
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Date
120 1994 Sample Date
120 1995 Sample Date
120 1996 Sample Date

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.1
HOPPER/MAIN ST SITE
542, 550, AND 298 MAIN ST, AND 95 HOPPER ST
PCE IN GROUNDWATER
WATER TABLE TO 65 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

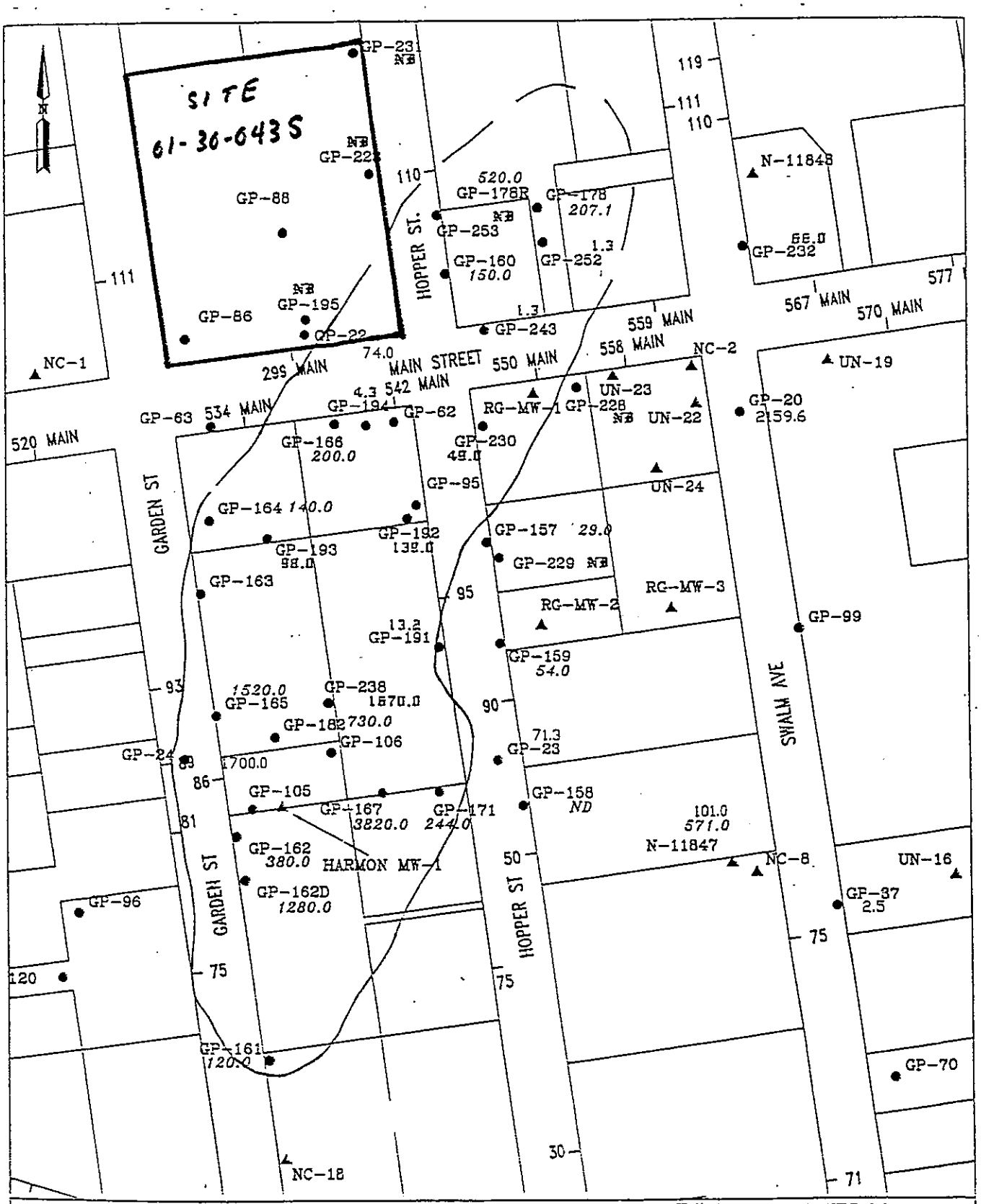
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
125 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.2
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
PCE IN GROUNDWATER
65 TO 85 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

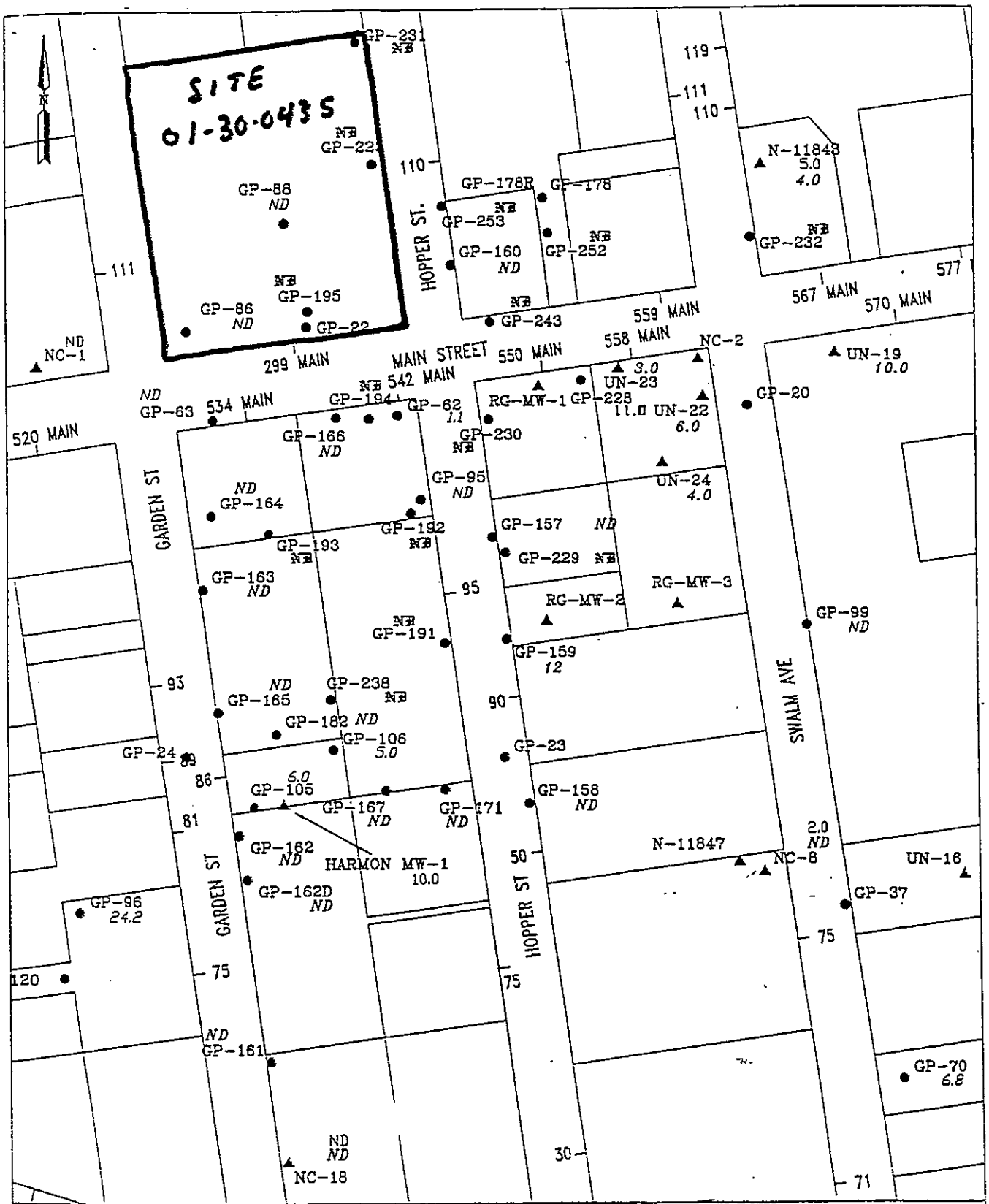
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
125 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.3
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 85 HOPPER ST
PCE IN GROUNDWATER
85 FT +



NOTE: All data in ug/l.

Scale in Feet

140 0 140

● - Geoprobe/Soil Sample Location

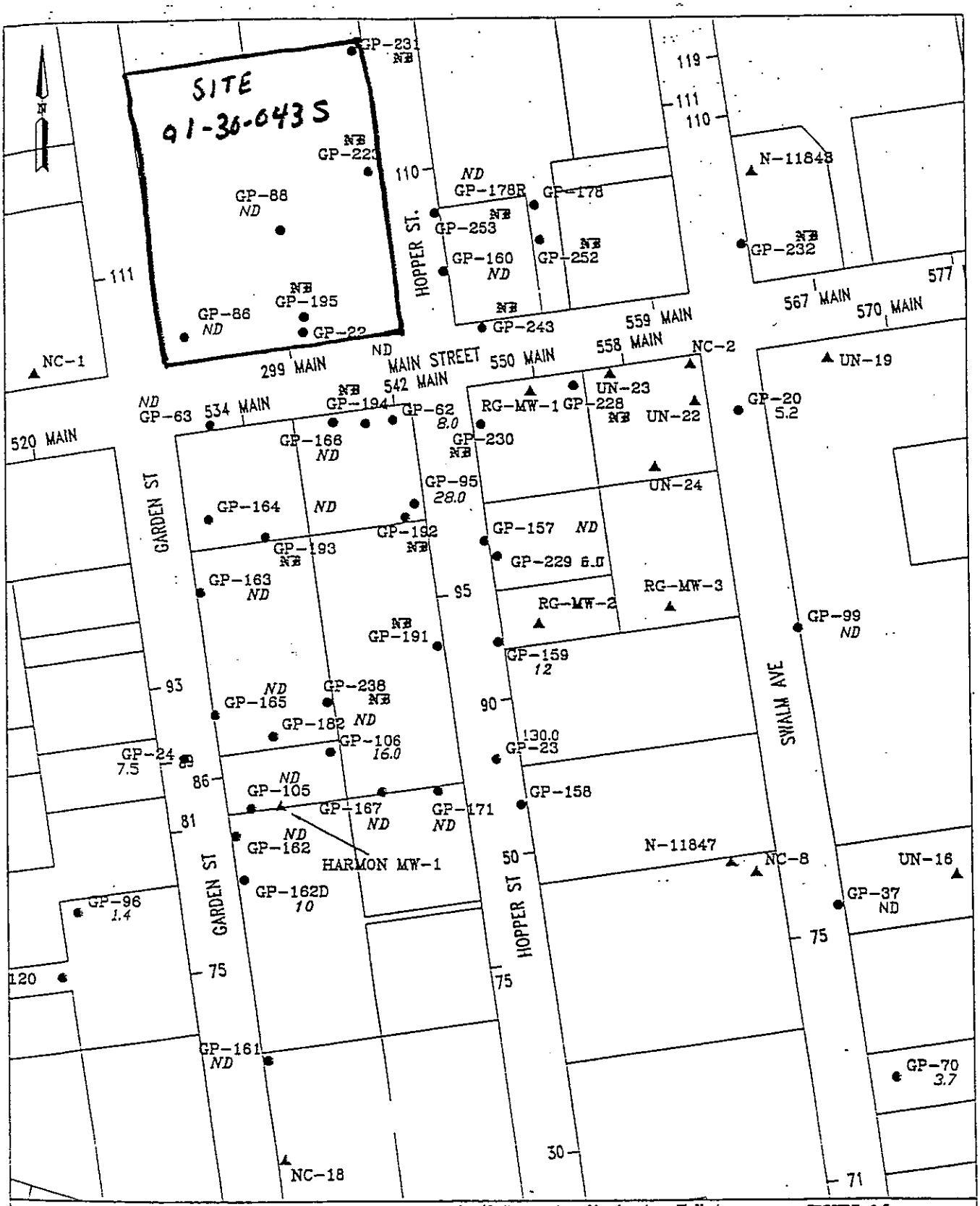
▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.4

HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 95 HOPPER ST
TCA IN GROUNDWATER
WATER TABLE TO 65 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

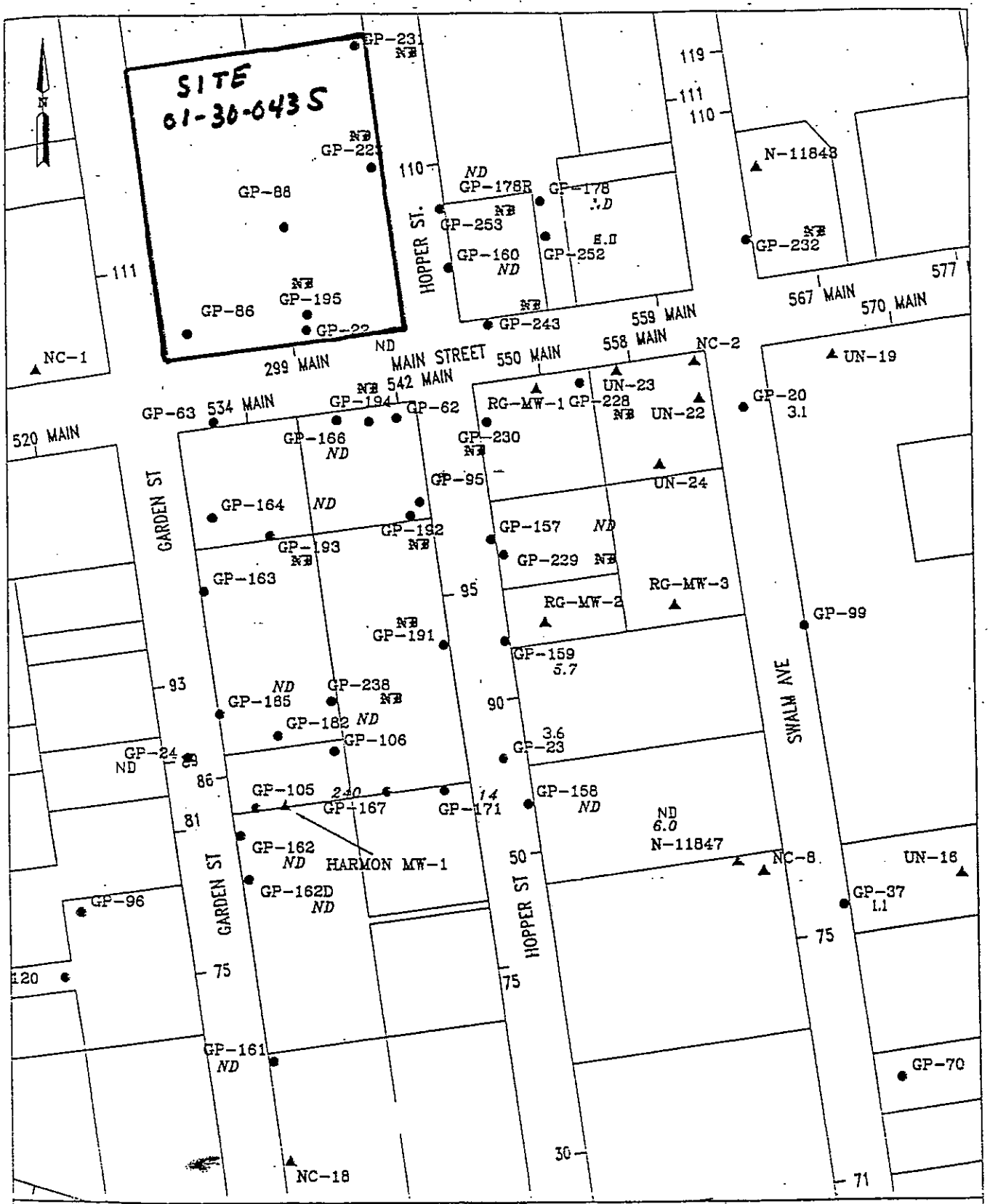
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.5
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
TCA IN GROUNDWATER
65 TO 85 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.6
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
TCA IN GROUNDWATER
85 FT +

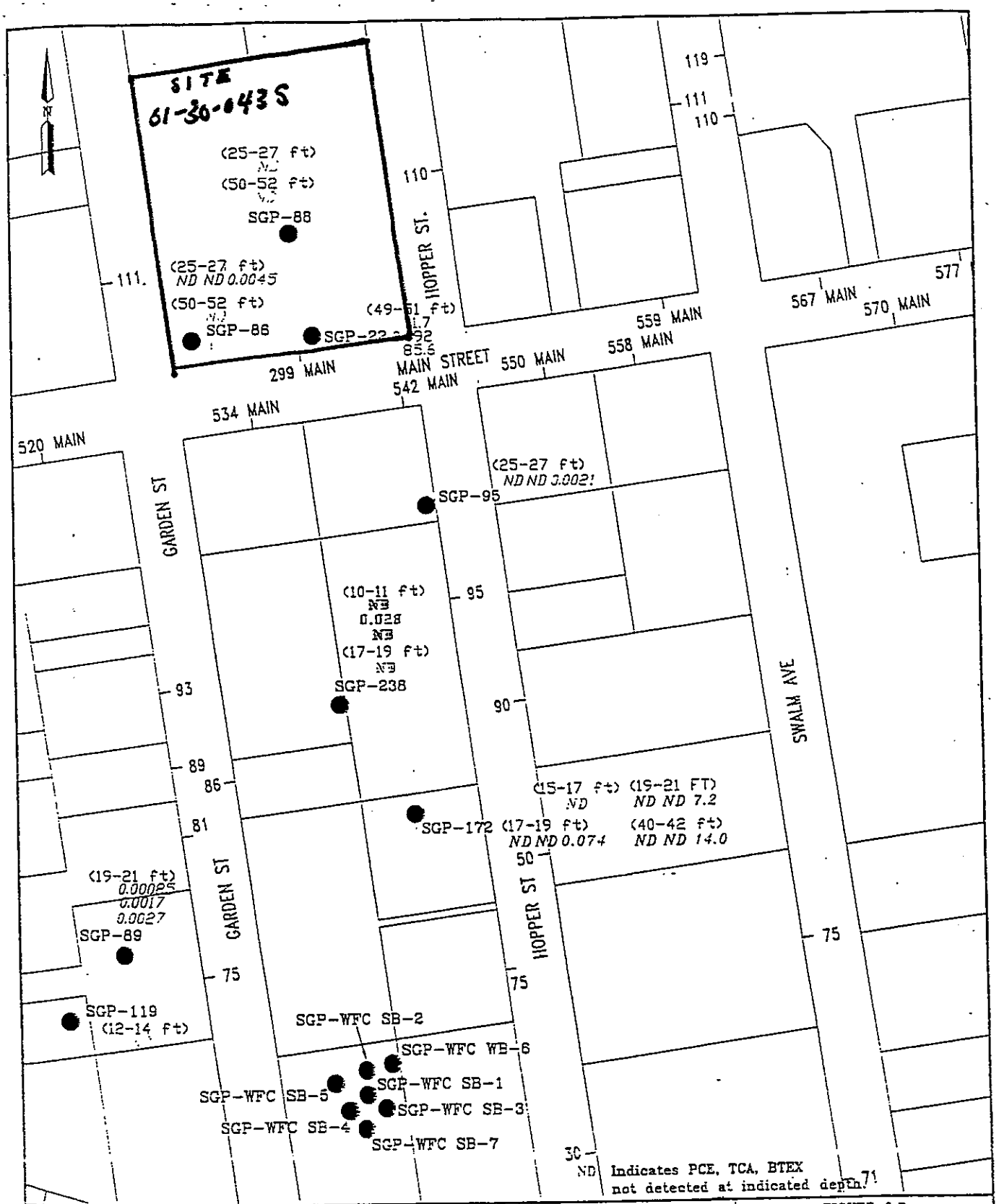


FIGURE 6.7

HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 95 HOPPER ST
SUBSURFACE SOILS DATA

299 Main Street (Block 144, Lots 37 to 44)

299 Main Street, occupied by One Stop Auto and Truck Center, was developed some time between 1950 and 1962 and consists of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formerly used as a junkyard and a transportation company. Island Transport Corporation used large quantities of BTEX-related compounds and approximately 275 gal of TCE from July to December 1978 (LMS 1996) to wash trucks.

The probes completed during the site investigation indicated that in upgradient areas PCE-related contaminants were not detected above 100 ppb (GP-85). At a downgradient position, PCE-related contaminants were found at 680 ppb in the intermediate depth sample (GP-22). Soil samples collected at SGP-86 and SGP-88 did not show any target compounds. A soil sample collected at GP-22 contained both PCE- and TCA-related compounds in a 49-51 ft sample (Figure 6-7); however, it is not known whether the contamination is in the soil or the groundwater. PCE-related contaminants were found at 1.73 mg/kg and TCA-related contaminants at 0.092 mg/kg. In addition, total BTEX-related contaminants were found at 85.63 mg/kg in this soil sample. BTEX compounds ranging from 0.002 to 0.212 mg/kg were also found in the groundwater at the property.

Although this site has a documented use of target compounds (TCE), an on-site source, and an environmental impact was not fully documented during the previous phase of the PSA. To document an environmental impact three additional upgradient and two additional downgradient probes were completed (Figure 6-1, Figure 6-2, Figure 6-3, Figure 6-4, Figure 6-5, and Figure 6-6). The results of these probes clearly indicate that this property is contributing to the groundwater contamination in the Garden/Hopper Street area. The three upgradient probes (GP-231, 223, and 253) do not show any target compounds above 100 ppb. The downgradient points GP-193, GP-194, and GP-195 clearly show elevated PCE-related contaminant concentrations at the three depth ranges (Figure 6-1, Figure 6-2, and Figure 6-3). In GP-194 (water table to 65 ft) the PCE-related contaminants total 2190 ppb (1700 ppb cis-1,2-DCE and 490 ppb TCE) (Figure 6-1). It was also noted that the individual contaminants change and become more numerous just downgradient of this property. Upgradient of the site the only contaminant noted in the groundwater is PCE, while downgradient TCE, DCE, and VC are found along with the PCE (Figure 6-6a). In GP-195 the total PCE-related contaminants are 700 ppb at the shallow depth; of this 700 ppb total, 250 ppb is cis-1,2-DCE and 450 VC (Figure 6-6a). The source of these different contaminants is likely located on this property or the property just to the east, while the PCE-related contaminants at depth are from an upgradient source. Based on a documented history of chemical usage, a documented on-site source, and a demonstrated environmental impact to groundwater, this property should be included on the registry.

NYSDEC SPILL REPORT FORM

DEC REGION# 1 (Stony Brook)
SPILL NAME: ON GROUND & HOLE IN FLOOR
CALLER'S NAME: ECO MAGGIO
CALLER'S AGENCY: NYSDEC - ECO
CALLER'S PHONE: (516) 444-0259 EXT.

SPILL NUMBER 9706902
DEC LEAD: N/A C-1
NOTIFIER'S NAME: ROBERT BYRNES
NOTIFIER'S AGENCY: USEPA
NOTIFIER'S PHONE: (212) 637-3034 EXT.

SPILL DATE: 02/12/96 TIME: 12:00
CALL RECEIVED DATE: 09/09/97 TIME: 15:30 RECEIVED BY CID #: 999

Material Spilled	Mat. Class	Am't Spilled	Units	Am't Recovered
1) WASTE OIL	Pet-Haz-Other-Unk.	Unknown	Gal Lbs	0
2) ANTIFREEZE	Pet-Haz-Other-Unk.	Unknown	Gal Lbs	0
3)	Pet-Haz-Other-Unk.		Gal - Lbs	
4)	Pet-Haz-Other-Unk.		Gal - Lbs	

SPILL LOCATION

PLACE: ON GROUND & HOLE IN FLOOR
STREET: 299 MAIN ST
T/C/V: WESTBURY CO: NASSAU
CONTACT: UNKNOWN
PHONE: (000) 000-0000 EXT.

POTENTIAL SPILLER

NAME: ONE-STOP AUTO & TRUCK CNT
STREET: 299 MAIN ST
CITY: WESTBURY
STATE: NY ZIP:
CONTACT: NONE
PHONE: EXT.

SPILL CAUSE

Human Error, Traffic Accident, Equipment Failure, Vandalism, Tank Test Failure*, Housekeeping, Deliberate, Abandoned Drums, Tank Failure, Tank Overfill, Other, Unknown

SPILL SOURCE

Gas Station, Passenger Vehicle, Comm. Vehicle, Tank Truck, Private Dwelling, Vessel, Railroad Car, Major Facility, Non-Maj Facility, Comm/Indust, Non-Comm/Instit, Unknown

RESOURCE AFFECTED

On Land, In Sewer, Groundwater, Surface Water**, Air

SPILL REPORTED BY

Responsible Party, Affected Persons, Police Department, Fire Department, Tank Tester, DEC, Citizen, Health Dept., Local Agency, Federal Gov't, Other

**WATERBODY:

CALLER REMARKS: ALLEGED INTENTIONAL DUMPING OF FLUIDS AND SLOPPY HOUSEKEEPING AT SHOP

*PBS Number	Tank Number	Tank Size	Test Method	Leak Rate

PAGED ON / / @ hrs.

PRIMARY CONTACT CALLED DATE: TIME: hrs. REACHED DATE: TIME: hrs.
SECONDARY CONT. CALLED DATE: TIME: hrs. FAXED BY CID#: 204

PIN #	T & A	Cost Center	ISR to Central Office
Cleanup Ceased	Meets Std's NO	Last Inspection	Penalty NO
RP-CUI	ENF-INIT	INVES-COM	CAP
UST Trust Eligible NO	Site: A B C D E	Resp. Party 1 2 3 4 5 6	Reg Close Date
		EDO	DATA INPUT [ ]

Created on 09/10/97 Last Updated on 09/10/97 Is Updated? YES
Date Printed: 09/10/97

SEP-10-97 WED 11:29 AM NYS SPILL HOTLINE FAX NO. 518 782 9128 P. 2

New York State Department of Environmental Conservation
Building 40 - SUNY, Stony Brook, New York 11790-2356

COVER SHEET

FAX

To: NCOH - Robin Putnam
Fax #: 516 - 571 - 1475

Date: 9/10/97
Page: 1 of 1

RE: One-Stop Auto & Truck Center 299 Main St. Westbury, N.Y.

COMMENTS: Please provide this office with any information concerning above ground or below ground storage tanks at this address. There could be fuel oil, waste oil, or other waste storage at this location.
Any questions please call me.

From: Walter Parish.
Division of Spills Management
Telephone: (516) 444-0320
FAX: (516) 444-0373

NYSDEC REGION 1
INITIAL SPILL REPORT

AH
LOGGED

SPILL DATE 11/2/93 TIME 11:00 hrs. SPILL NO. 93-09400

CENT OFF DATE 11/3/93 TIME 1307 hrs. ANS SVC DATE / /93 TIME ____ hrs.

REG OFF DATE 11/2/93 TIME 16:47 hrs. FIRST CALL REC'D.BY A. R. C

UST ELIGIBLE ? Y. N. CALL REC'D. BY : BC

LEGAL ACTION: Y. N. INITIAL CLASSIFICATION: B-1

PETROLEUM SPILLED

1-GASOLINE 5-DIESEL 8-NON PCB OIL
2-#2 FUEL 6-JET FUEL 9-PCB OIL
3-#4 FUEL 7-WASTE OIL 10-KEROSENE
4-#6 FUEL 11-UNKNOWN

MATERIAL CLASS

1-PETROLEUM 5-UNKNOWN
2-NON PETRO/NON HAZ
3-HAZARDOUS MATERIAL
4-RAW SEWAGE

OTHER MATERIAL SPILLED 7+ drums

QUANTITY SPILLED UNK GALS/LBS
TANK SIZE ____ GALS
FAILURE RATE ____ G.P.H
TEST METHOD ____

SPILL LOCATION

ADDRESS: SAm Ton Salvage
299 Main St
New Cassel/Westbury
(x Hopper or Swala (S. of RR tracks))

MUNICIPALITY: Westbury

28 -NASSAU 47 -SUFFOLK

SPILLER NAME: Same
STREET # :
CITY/ST/ZIP:
SPILLER'S PHONE:
CONTACT :

SPILL CAUSE

1-HUMAN ERROR 7-DELIBERATE
2-TRAFFIC ACCIDENT 8-ABAND. DRUMS
3-EQUIP.FAILURE 9-TANK FAILURE
4-VANDALISM 10-TANK OVERFILL
5-TK TEST FAIL. 11-OTHER
(BULK STOR.PRO.) 12-UNKNOWN
6-HOUSEKEEPING

SPILL SOURCE

1-COMM/INDUST. 7-COMM.VEHICLE
2-NON COMM/INST. 8-TANK TRUCK
3-MAJOR FACILITY 9-PVT.DWELLING
4-BULK FACILITY 10-VESSEL
5-GAS STATION 11-RAILROAD CAR
6-PASS.VEHICLE 12-UNKNOWN

RESOURCE AFFECTED

1-ON LAND 4-SURFACE WATER
2-IN DRAINAGE 5-AIR
3-GROUND WATER
WATER BODY ____
DRAIN BASIN/SUB BASIN: ____

NOTIFIER

1-RESP. PARTY 7-CITIZEN
2-AFFECT. PERS. 8-HEALTH DEPT.
3-POLICE DEPT. 9-LOCAL AGENCY
4-FIRE DEPT. 10-FED. GOVT.
5-TANK TESTER 11-OTHER
6-NYSDEC (SEE BELOW)

REMARKS : Former Junkyard had a fire, new location for Junkyard is 96 Urban Ave. Drums on site + near Road around site

ACTION/HISTORY :

CALLER'S NAME: ____
CALLER'S AGENCY: ____
CALLER'S PHONE: ____

NOTIFIER'S NAME: John Conover
NOTIFIER'S AGENCY: DEC
NOTIFIER'S PHONE: ____

ASSIGNED TO : KK

PIN # ____
T/A # ____
CC: ____
EPA ID# ____

CLOSED DATE :
FINAL CLASSIFICATION :

2632 RDC-00325

BY: JM DATE 11.4.93 LAWLER, MATUSKY & SKELLY ENGINEERS
ENVIRONMENTAL SCIENCE & ENGINEERING CONSULTANTS
ONE BLUE HILL PLAZA
POST OFFICE BOX 1509
PEARL RIVER, NEW YORK 10965

CHKD. BY ____ DATE ____ SHEET NO. ____ OF ____ JOB NO. 650-025

SUBJECT

299 MAIN - NEW CASSEL, WESTBURY

SOIL SAMPLE COLLECTED 11.2.93
FROM BORING IN FRONT OF BUILDING
(ON MAIN ST.)
FROM 49-51 FT BELOW GRADE

TOLUENE	7,000	PPB
CHLOROBENZENE	220	
ETHYLBENZENE	2,300	
M- & P-XYLENE	45,000	
O-XYLENE	32,000	

Water Sample 88'-90'
Toluene 38 ppb
M+P xylene 120 ppb
O xylene 58 ppb

Water table @ 55' below grade

Spill # 93-240

BY JM DATE 11.4.93

CHKD. BY ____ DATE ____

LAWLER, MATUSKY & SKELLY ENGINEERS

ENVIRONMENTAL SCIENCE & ENGINEERING CONSULTANTS

ONE BLUE HILL PLAZA
POST OFFICE BOX 1509
PEARL RIVER, NEW YORK 10965

SHEET NO. ____ OF ____

JOB NO. 650-025

SUBJECT ____

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Water Sample 88'-90'
Toluene 38 ppb
M+P xylene 120 ppb
O xylene 58 ppb

Water table @ 55' below grade

00-17-1 (5/76)
Formerly GA-4

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

TRANSMITTAL SLIP

TO: Mr. John Conover, Haz Waste Remed

FROM: Kevin Kispert, Spills

DATE: 11/8/93

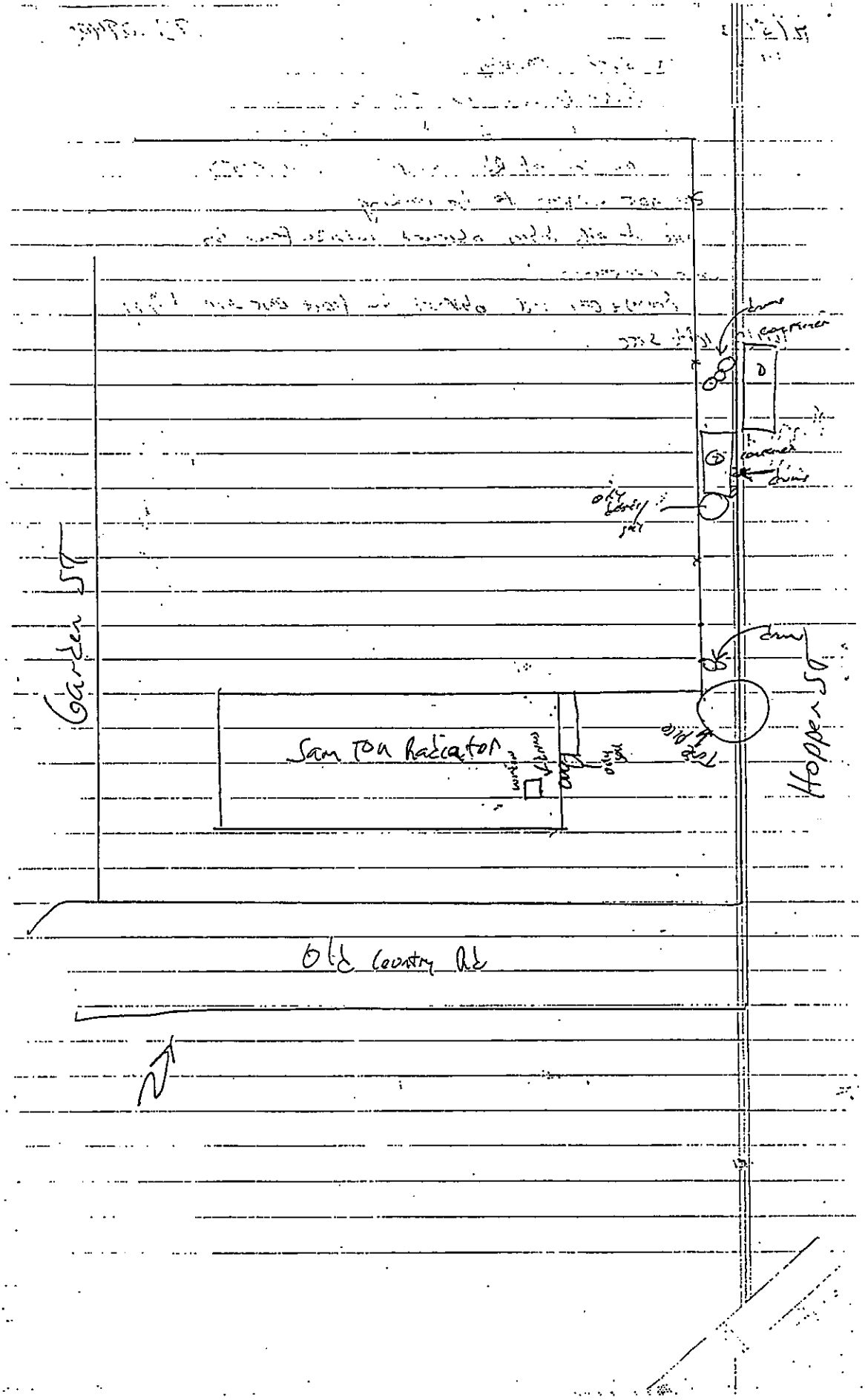
RE: Spill # 93-09400, Samton Salvage, Westbury, NY

— I checked out the above site, do you have any other info on this site?

FOR ACTION AS INDICATED:

- [ ] Please Handle
- [x] Prepare Reply
- [ ] Prepare Reply for _____ Signature
- [ ] Information
- [ ] Approval
- [ ] Prepare final/draft in _____ Copies
- [ ] Comments
- [ ] Signature
- [ ] File
- [ ] Return to me
- [ ] _____
- [ ] _____

As per J. Conover – Haz Waste Remediation
DEC hired contractor to use
Geo probe to investigate groundwater
problem in the area
– did not approach R.P.


Garden St
Hopper St
Old Country Rd
Sam Tom Radiator

11/5/93 93-09400

1420 on site, raining

Gate locked, no Trespassing sign

Several drums observed outside gate

on shoulder of Rd — on soil. some empty,

do not appear to be leaking

pile of oily debris observed outside fence by

one container

Drums + oily soil observed by front east side of Bldg

1440 left site

pt 371

11/9/93 re spill 93-09400

Kevin

This is a soil

+ groundwater

sample from

in front of Sam TON

299 Main John C

93-09400

11/5/93 1430 93-09400

11/5/93 1400 Samton 93-09400

11/5/93 1420 Samton 93-09400

11/5/93 1425 Samton 93-09400

Front east

11/5/93 1420 Samton 93-09400

Looking South East

11/5/93 1420 Samton 93-09400

NYSDEC SPILL REPORT FORM

DEC REGION# 1 (Stony Brook) SPILL NUMBER 9706902

SPILL NAME: ON GROUND & HOLE IN FLOOR DEC LEAD: NA C-1

CALLER'S NAME: ECO MAGGIO NOTIFIER'S NAME: ROBERT BYRNES

CALLER'S AGENCY: NYSDEC - ECO NOTIFIER'S AGENCY: USEPA

CALLER'S PHONE: (516) 444-0259 EXT. NOTIFIER'S PHONE: (212) 637-3034 EXT.

SPILL DATE: 02/12/96 TIME: 12:00

CALL RECEIVED DATE: 09/09/97 TIME: 15:30 RECEIVED BY CID #: 999

Material Spilled	Mat. Class	Am't Spilled	Units	Am't Recovered
1) WASTE OIL	(Pet)-Haz-Other-Unk.	Unknown	(Gal) Lbs	0
2) ANTIFREEZE	Pet-Haz-(Other)-Unk.	Unknown	(Gal) Lbs	0
3)	Pet-Haz-Other-Unk.		Gal - Lbs	
4)	Pet-Haz-Other-Unk.		Gal - Lbs	

SPILL LOCATION

PLACE: ON GROUND & HOLE IN FLOOR

STREET: 299 MAIN ST

T/C/V: WESTBURY CO: NASSAU

CONTACT: UNKNOWN

PHONE: (000) 000-0000 EXT.

POTENTIAL SPILLER

NAME: ONE-STOP AUTO & TRUCK CNT

STREET: 299 MAIN ST

CITY: WESTBURY

STATE: NY ZIP:

CONTACT: NONE

PHONE: EXT.

SPILL CAUSE

Human Error, Traffic Accident, Equipment Failure, Vandalism, Tank Test Failure*, (Housekeeping), Deliberate, Abandoned Drums, Tank Failure, Tank Overfill, Other, Unknown

SPILL SOURCE

Gas Station, Passenger Vehicle, Comm. Vehicle, Tank Truck, Private Dwelling, Vessel, Railroad Car, Major Facility, Non-Maj Facility, (Comm/Indust), Non-Comm/Instit, Unknown

RESOURCE AFFECTED

(On Land), In Sewer, Groundwater, Surface Water**, Air

**WATERBODY:

SPILL REPORTED BY

Responsible Party, Affected Persons, Police Department, Fire Department, Tank Tester, DEC, Citizen, Health Dept., Local Agency, (Federal Gov't), Other

CALLER REMARKS: ALLEGED INTENTIONAL DUMPING OF FLUIDS AND SLOPPY HOUSEKEEPING AT SHOP

*PBS Number	Tank Number	Tank Size	Test Method	Leak Rate

PAGED ON / / @ hrs.

PRIMARY CONTACT CALLED DATE: TIME: hrs. REACHED DATE: TIME: hrs.

SECONDARY CONT. CALLED DATE: TIME: hrs. FAXED BY CID#: 204

PIN #	T & A	Cost Center	ISR to Central Office
Cleanup Ceased	Meets St'ds NO	Last Inspection	Penalty NO
RP-CUI	ENF-INIT	INVES-COM	CAP
UST Trust Eligible NO	Site: A B C D E	Resp. Party 1 2 3 4 5 6	Reg Close Date

Created on 09/10/97 Last Updated on 09/10/97 Is Updated? YES EDO DATA INPUT [ ]

Date Printed: 09/10/97

SEP-10-97 WED 11:29 AM NYS SPILL HOTLINE FAX NO. 518 782 9128 P. 2

NYSDEC REGION 1
INITIAL SPILL REPORT

AH
LOGGED

SPILL DATE 11/2/93 TIME 11:00 hrs. SPILL NO. 93-09400

CENT OFF DATE 11/3/93 TIME 1307 hrs. ANS SVC DATE / /93 TIME ____ hrs.

REG OFF DATE 11/2/93 TIME 16:47 hrs. FIRST CALL REC'D.BY A, R, C

UST ELIGIBLE ? Y. N. CALL REC'D. BY : BC

LEGAL ACTION: Y. N. INITIAL CLASSIFICATION: B-1

PETROLEUM SPILLED

1-GASOLINE 5-DIESEL 8-NON PCB OIL
2-#2 FUEL 6-JET FUEL 9-PCB OIL
3-#4 FUEL 7-WASTE OIL 10-KEROSENE
4-#6 FUEL 11-UNKNOWN

MATERIAL CLASS

1-PETROLEUM 5-UNKNOWN
2-NON PETRO/NON HAZ
3-HAZARDOUS MATERIAL
4-RAW SEWAGE

OTHER MATERIAL SPILLED 7+ drums

QUANTITY SPILLED UNK GALS/LBS
TANK SIZE ____ GALS
FAILURE RATE ____ G.P.H
TEST METHOD ____

SPILL LOCATION

ADDRESS: Sam Ton Salvage
299 Main St
New Cassel/Westbury
(x Hopper or Swale (S. of RR tracks))

MUNICIPALITY: Westbury

28-NASSAU 47-SUFFOLK

SPILLER NAME: Same
STREET # :
CITY/ST/ZIP:
SPILLER'S PHONE:
CONTACT :

SPILL CAUSE

1-HUMAN ERROR 7-DELIBERATE
2-TRAFFIC ACCIDENT 8-ABAND. DRUMS
3-EQUIP.FAILURE 9-TANK FAILURE
4-VANDALISM 10-TANK OVERFILL
5-TK TEST FAIL. 11-OTHER
(BULK STOR.PRO.) 12-UNKNOWN
6-HOUSEKEEPING

SPILL SOURCE

1-COMM/INDUST. 7-COMM.VEHICLE
2-NON COMM/INST. 8-TANK TRUCK
3-MAJOR FACILITY 9-PVT.DWELLING
4-BULK FACILITY 10-VESSEL
5-GAS STATION 11-RAILROAD CAR
6-PASS.VEHICLE 12-UNKNOWN

RESOURCE AFFECTED

1-ON LAND 4-SURFACE WATER
2-IN DRAINAGE 5-AIR
3-GROUND WATER
WATER BODY ____
DRAIN BASIN/SUB BASIN: ____

NOTIFIER

1-RESP. PARTY 7-CITIZEN
2-AFFECT. PERS. 8-HEALTH DEPT.
3-POLICE DEPT. 9-LOCAL AGENCY
4-FIRE DEPT. 10-FED. GOVT.
5-TANK TESTER 11-OTHER
6-NYSDEC (SEE BELOW)

REMARKS : Former Junkyard had a fire, new location for Junkyard is 96 Urban Ave. Drums on site + near Road around site

ACTION/HISTORY :

CALLER'S NAME: ____
CALLER'S AGENCY: ____
CALLER'S PHONE: ____

NOTIFIER'S NAME: John Conover
NOTIFIER'S AGENCY: DEC
NOTIFIER'S PHONE: ____

ASSIGNED TO : KK

PIN # ____
T/A # ____
CC: ____
EPA ID# ____

CLOSED DATE :
FINAL CLASSIFICATION :

NYSDEC SPILL REPORT FORM

DEC REGION# 1 (Stony Brook) SPILL NUMBER 9706902

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3)	Pet-Haz-Other-Unk.		Gal - Lbs	
4)	Pet-Haz-Other-Unk.		Gal - Lbs	

SPILL LOCATION

PLACE: ON GROUND & HOLE IN FLOOR

STREET: 299 MAIN ST

T/C/V: WESTBURY CO: NASSAU

CONTACT: UNKNOWN

PHONE: (000) 000-0000 EXT.

POTENTIAL SPILLER

NAME: ONE-STOP AUTO & TRUCK CNT

STREET: 299 MAIN ST

CITY: WESTBURY

STATE: NY ZIP:

CONTACT: NONE

PHONE: EXT.

SPILL CAUSE

Human Error, Traffic Accident, Equipment Failure, Vandalism, Tank Test Failure*, (Housekeeping), Deliberate, Abandoned Drums, Tank Failure, Tank Overfill, Other, Unknown

SPILL SOURCE

Gas Station, Passenger Vehicle, Comm. Vehicle, Tank Truck, Private Dwelling, Vessel, Railroad Car, Major Facility, Non-Maj Facility, (Comm/Indust), Non-Comm/Instit, Unknown

RESOURCE AFFECTED

(On Land), In Sewer, Groundwater, Surface Water**, Air

**WATERBODY:

SPILL REPORTED BY

Responsible Party, Affected Persons, Police Department, Fire Department, Tank Tester, DEC, Citizen, Health Dept., Local Agency, (Federal Gov't), Other

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*PBS Number	Tank Number	Tank Size	Test Method	Leak Rate

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Cleanup Ceased	Meets Std's NO.	Last Inspection	Penalty NO
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UST Trust Eligible NO	Site: A B C D E	Resp. Party 1 2 3 4 5 6	Reg Close Date

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Data Printed: 09/10/97

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New York State Department of Environmental Conservation
Building 40 - SUNY, Stony Brook, New York 11790-2356

COVER SHEET

FAX

To: NCOH - Robin Putnam
Fax #: 516-571-1475

Date: 9/10/97
Page: 1 of 1

RE: One-Stop Auto & Truck Center 299 Main St. Westbury, N.Y.

COMMENTS: Please provide this office with any information concerning above ground or below ground storage tanks at this address. There could be fuel oil, waste oil, or other waste storage at this location.
Any questions please call me.

NYSDEC REGION 1
INITIAL SPILL REPORT

AH
LOGGED

SPILL DATE 11/2/93 TIME 11:00 hrs. SPILL NO. 93-09400

CENT OFF DATE 11/3/93 TIME 1307 hrs. ANS SVC DATE / /93 TIME ____ hrs.

REG OFF DATE 11/2/93 TIME 16:47 hrs. FIRST CALL REC'D.BY A. R. C

UST ELIGIBLE ? Y. N. CALL REC'D. BY : BC

LEGAL ACTION: Y. N. INITIAL CLASSIFICATION: B-1

PETROLEUM SPILLED

1-GASOLINE 5-DIESEL 8-NON PCB OIL
2-#2 FUEL 6-JET FUEL 9-PCB OIL
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OTHER MATERIAL SPILLED 7+ drums

QUANTITY SPILLED UNK GALS/LBS
TANK SIZE ____ GALS
FAILURE RATE ____ G.P.H
TEST METHOD ____

SPILL LOCATION

ADDRESS: SAM TON Salvage
299 Main St
New Cassel/Westbury

(x Hopper or Swala (S. of RR tracks))

MUNICIPALITY: Westbury

28 -NASSAU 47 -SUFFOLK

SPILLER NAME: Same

STREET # :

CITY/ST/ZIP:

SPILLER'S PHONE:

CONTACT :

SPILL CAUSE

1-HUMAN ERROR 7-DELIBERATE
2-TRAFFIC ACCIDENT 8-ABAND. DRUMS
3-EQUIP.FAILURE 9-TANK FAILURE
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SPILL SOURCE

1-COMM/INDUST. 7-COMM.VEHICLE
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4-BULK FACILITY 10-VESSEL
5-GAS STATION 11-RAILROAD CAR
6-PASS.VEHICLE 12-UNKNOWN

RESOURCE AFFECTED

1-ON LAND 4-SURFACE WATER
2-IN DRAINAGE 5-AIR
3-GROUND WATER
WATER BODY ____
DRAIN BASIN/SUB BASIN: ____

NOTIFIER

1-RESP. PARTY 7-CITIZEN
2-AFFECT. PERS. 8-HEALTH DEPT.
3-POLICE DEPT. 9-LOCAL AGENCY
4-FIRE DEPT. 10-FED. GOVT.
5-TANK TESTER 11-OTHER
6-NYSDEC (SEE BELOW)

REMARKS : Former Junkyard had a fire, New location for Junkyard is 96 Urban Ave. Drums on site + Near Road around site

ACTION/HISTORY :

CALLER'S NAME: ____

CALLER'S AGENCY: ____

CALLER'S PHONE: ____

NOTIFIER'S NAME: John Conover

NOTIFIER'S AGENCY: DEC

NOTIFIER'S PHONE: ____

ASSIGNED TO : KK

PIN # ____

T/A # ____

CC: ____

EPA ID# ____

CLOSED DATE :

FINAL CLASSIFICATION :

2632 RDC-00337

Spill # 93-09400

BY J.M. DATE 11.4.93 LAWLER, MATUSKY & SKELLY ENGINEERS

ENVIRONMENTAL SCIENCE & ENGINEERING CONSULTANTS

ONE BLUE HILL PLAZA
POST OFFICE BOX 1508
PEARL RIVER, NEW YORK 10965

CHKD. BY ____ DATE ____ SHEET NO. ____ OF ____

JOB NO. 650-025

SUBJECT ____

299 MAIN - NEW CASSEL, WESTBURY

SOIL SAMPLE COLLECTED 11.2.93
FROM BORING IN FRONT OF BUILDING
(ON MAIN ST.)
FROM 49-51 FT BELOW GRADE

TOLUENE	7,000	PPB
CHLOROBENZENE	220	
ETHYLBENZENE	2,300	
M- & P-XYLENE	45,000	
O-XYLENE	32,000	

Water Sample 88'-90'
Toluene 38 ppb
m+p xylene 120 ppb
O xylene 58 ppb

Water table @ 55' below grade

Spill # 93-8940

BY JM DATE 11-4-93 LAWLER, MATUSKY & SKELLY ENGINEERS

CHECKED BY ____ DATE ____ ENVIRONMENTAL SCIENCE & ENGINEERING CONSULTANTS

ONE BLUE HILL PLAZA
POST OFFICE BOX 1509
PEARL RIVER, NEW YORK 10965

SHEET NO. ____ OF ____

JOB NO. 650-025

SUBJECT: ____

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Water Sample 88'-90'
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O xylene 58 ppb

Water table @ 55' below grade

00-17-1 (5/76)
Formerly GA-4

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

TRANSMITTAL SLIP

TO: Mr. John Conover, Haz Waste Remed

FROM: Kevin Kispert, Spills

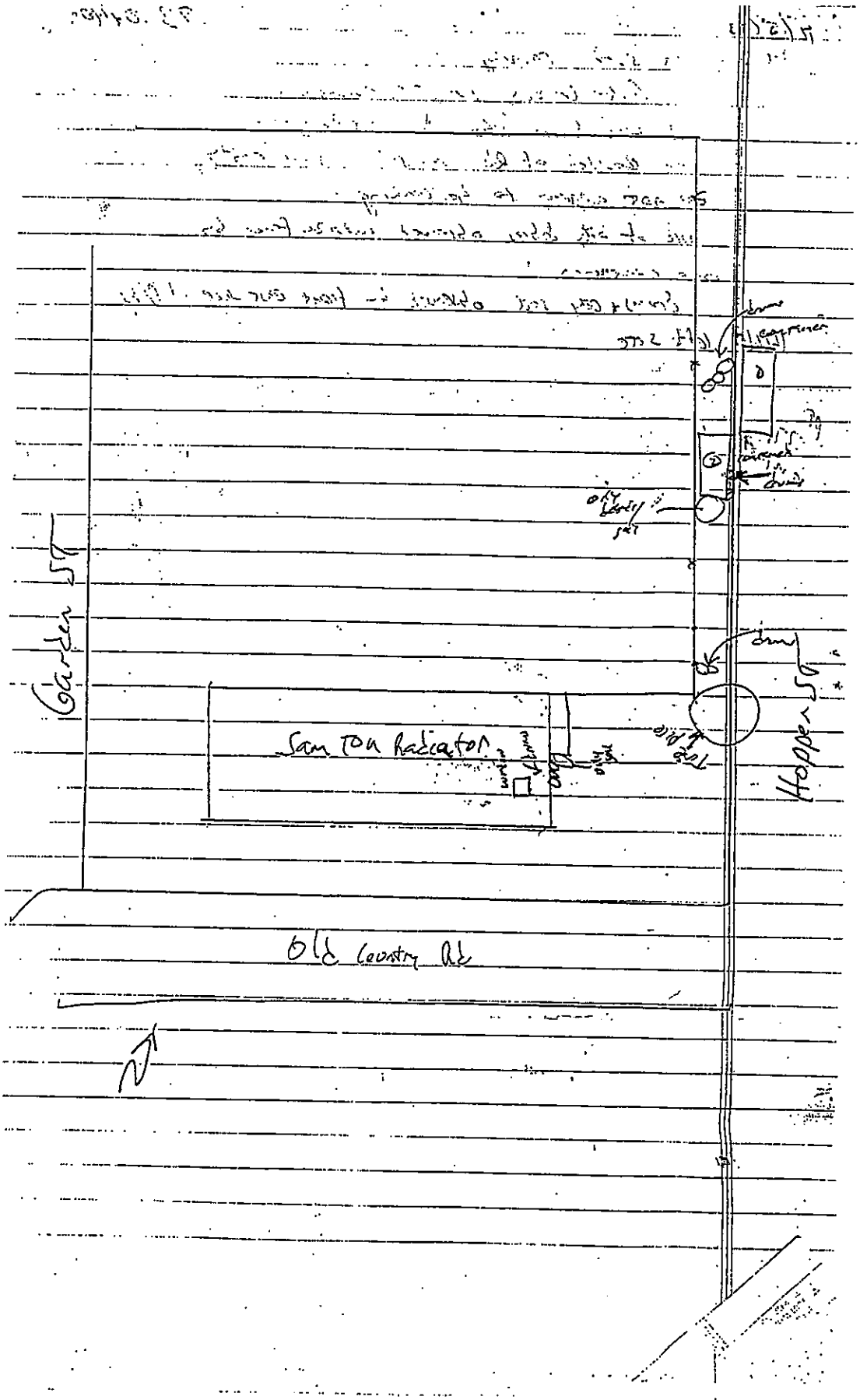
DATE: 11/8/93

RE: Spill # 93-09400, Santon Salvage, Westbury, NY
I checked out the above site, do you have any other info on this site?

FOR ACTION AS INDICATED:

- ☐ Please Handle
- ☒ Prepare Reply
- ☐ Prepare Reply for Signature
- ☐ Information
- ☐ Approval
- ☐ Prepare final/draft in _____ Copies
- ☐ Comments
- ☐ Signature
- ☐ File
- ☐ Return to me
- ☐ _____
- ☐ _____

As per J. Cooper – Haz Waste Relocation
DEC hired contractor to use
Geo probe to investigate groundwater
problem in the area
– did not approach R.A.


Garden St
Hopper St
San Ton Radiator
Old Country Rd

11/5/93 93-09400

1420 on site, raining

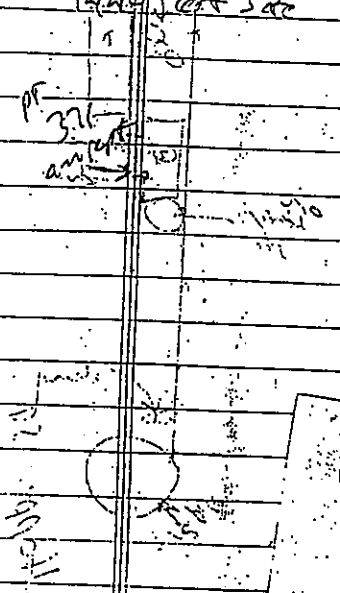
Gate locked, no Trespassing sign

Several drums observed outside gate on shoulder of Rd — on soil. Some empty, do not appear to be leaking.

pile of oily debris observed outside fence by one container

Drums + oily soil observed by front east side of Bldg

1440 left site



11/9/93 re spill 93-09400

Kevin

This is a soil + groundwater sample from in front of Sam TON 299 Main John C

93-09400

11/5/93 1430 93-09400

11/5/93 1430 Samton 93-09400

11/5/93 1420 Samton 93-09400

11/5/93 1425 Samton 93-09400

Front exit

11/5/93 1420 Samton 93-09400

Lobby South side

11/5/93 1420 Samton 93-09400

ONE STOP
ONE STOP
AUTO & TRUCK CENTER, INC.
299 Main Street, Westbury, NY 11590
(516) 338-4000 • Fax (516) 338-0093

STATE-OF-THE-ART AUTO & TRUCK MECHANICAL REPAIR / EXPERT COLLISION & PAINTING / RECYCLING

JUNE 25, 1997

RECEIVED
JUN 26 1997
NYSDEC DIV. ENV. ENF.
EASTERN FIELD UNIT

TO: JEANNA E. HUSSEY, ESQ.

RE: 299 MAIN STREET #01-30-0435

DEAR JEANNA:

IN JANUARY 1994, I TOOK OVER THE PROPERTY AT 299 MAIN STREET, WESTBURY, N.Y. 11590.

I LEASED THE PROPERTY AS SHOWN ON EXHIBIT "A", AND I MOVED IN DECEMBER 1996.

I REPAIR AUTO & TRUCKS, AND BODY WORK.

I AM SENDING YOU ALL MY WASTE OIL, HAZADOUS WASTE FROM THE BODY SHOP AND ANTIFREEZE RECEIPTS.

I DID NOT CONTAMINATED THIS PROPERTY. THIS PROPERTY WAS CONTAMINATED BEFORE I MOVE BY PREVIOUS TENANTS. THE NAME OF THE PREVIOUS TENANTS WERE: SAM-TON SAVAGE
AND: ISLAND TRANSPORT CORP.

NOTICE OF PERMIT

for:

- [ ] CONSTRUCTION
- [ ] INITIAL ISSUE
- [ ] REISSUANCE
- [x] OPERATION
- [ ] RENEWAL
- [ ] MODIFICATION

has been issued to: ISLAND TRANSPORTATION CORP.

address: 299 MAIN STREET, WESTBURY, NEW YORK 11590

for a project described as: HOLD TO HAUL HAZARDOUS WASTE

under the Environmental Conservation Law,
Article 27, Title 5, Part 360 (Solid Waste Management Facilities)

NOTE:

- This Notice of Permit must be posted on the project site in such a manner that it is protected from weather and is in a location readily visible to the public.
- A copy of the Permit with the general and special conditions noted thereon will be shown to anyone upon request.

Issuing Officer: MORRIS BRUCKMAN, P.E.

BLDG.#40, SUNY, STONY BROOK, NEW YORK 117[illegible]
Address

30-H-56	1/21/81	1/20/82
Permit No.	Issue Date	Expiration Date

New York State
Department of Environmental Conservation

47-12-2 (8/77)

2632 RDC-00346

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR APPROVAL [illegible] OPERATE A SOLID WASTE MANAGEMENT FACILITY

FOR STATE USE ONLY

PROJECT NO.	DATE RECEIVED
[illegible]	[illegible]

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

1. OWNER'S NAME: PETER PIORETTI	2. ADDRESS (Street, City, State, Zip Code): [illegible]	3. Telephone No.: [illegible]
4. OPERATOR'S NAME: SAME	5. ADDRESS (Street, City, State, Zip Code): [illegible]	6. Telephone No.: [illegible]
7. ENGINEER'S NAME: NONE	8. ADDRESS (Street, City, State, Zip Code): [illegible]	9. Telephone No.: [illegible]
10. ON-SITE SUPERVISOR: [illegible] CROPPER	11. ADDRESS (Street, City, State, Zip Code): 116 RUDER AVE. DIX HILLS NY 11746	12. Telephone No.: 516-643-4577

13. HAS THE INDIVIDUAL NAMED IN ITEM 10 ATTENDED A DEPARTMENT SPONSORED OR APPROVED TRAINING COURSE?
☐ Yes Date Course Title Location ☒ No

14. PROJECT/FACILITY NAME	15. COUNTY IN WHICH FACILITY IS LOCATED	16. ENVIRONMENTAL CONSERVATION REGION
ISLAND TRANSPORTATION CORP.	NASSAU	NO MAP

17. TYPE OF PROJECT FACILITIES: ☐ Composting ☐ Transfer ☐ Shredding ☐ Baling ☐ Sanitary Landfill ☐ Incineration ☐ Pyrolysis ☐ Resource Recovery-Energy ☐ Resource Recovery-Materials ☒ Other TRUCKING COMPANY

18. HAS THIS DEPARTMENT EVER APPROVED PLANS AND SPECIFICATIONS AND/OR ENGINEERING REPORTS FOR THIS FACILITY? ☐ Yes Date ☒ No

19. LIST WASTES NOT ACCEPTED
NONE

20. BRIEFLY DESCRIBE OPERATION

PETROLEUM PRODUCT TRANSPORTER WITH REPAIR FACILITY FOR OWN TRACTOR TRAILERS

21. IF FACILITY IS A SANITARY LANDFILL, PROVIDE THE FOLLOWING INFORMATION:
a. Total useable area: (Acres) Initially Currently
b. Distance to nearest offsite, downgradient water supply well Feet
c. No. of groundwater monitoring wells Upgradient Downgradient

22. INDICATE WHICH ATTACHMENTS, IF ANY, ARE INCLUDED WITH THIS APPLICATION:
☐ Form 47-19-2 or SW-7 ☐ Operations Plan & Report ☐ USGS Topographic Map ☐ Record Forms ☐ Other
☐ Construction Certificate ☐ Boring Logs ☐ Water Sample Analysis ☐ None

23. CERTIFICATION:
I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

10/21/80 [illegible]
Date Signature and Title

FIELD COPY

2632 RDC-00347

NYSDEC Spill Logs

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
8604508	10/14/86	10/30/86	MOBIL	6060 BRUSHHOLLOW ROAD	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
GASOLINE	0	Tank Test Failure	Gas Station	Groundwater
GASOLINE	0	Tank Test Failure	Gas Station	Groundwater

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
8605013	11/6/86	3/11/89	ISLAND POLYETHYLENE	75 GARDEN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	0	Other	Comm/Indust	Groundwater
#2 FUEL OIL	0	Other	Comm/Indust	Groundwater

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
8605257	11/17/86	11/16/87	PETRO	522 GRAND BLVD	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	0	Tank Test Failure	Gas Station	Groundwater
#2 FUEL OIL	0	Tank Test Failure	Gas Station	Groundwater

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
8606479	1/19/87	1/21/87	PERILLO BROS OIL	1058 GRAND BLVD	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	5	Human Error	Tank Truck	On land
#2 FUEL OIL	5	Human Error	Tank Truck	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
8701680	5/29/87	6/4/87	LILCO	GRAND BLVD & GARDEN ST	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
NON PCB OIL	1	Equipment Failure	Comm/Indust	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9706313	8/25/97	8/29/97		GARDEN STREET/MAIN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
UNKNOWN MATERIAL	0	Abandoned Drum	Unknown	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9706902	2/12/96		ONE STOP AUTO & TRUCK CTR	299 MAIN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
ANTIFREEZE	0	Housekeeping	Comm/Indust	On land
WASTE OIL	0	Housekeeping	Comm/Indust	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9707483.	9/24/97		NORTH HEMPSTEAD HOUSING	899 BROADWAY	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	0	Tank Test Failure	Non-Comm/Inst	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9708907	10/30/97	11/27/97	MORRIS RESIDENCE	225 GARDEN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	2	Human Error	Commercial Vehicle	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9710428	3/1/96			HOPPER STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
UNKNOWN HAZARDOUS MATERIAL	0	Unknown	Unknown	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9710721	12/19/97	1/28/98	ACME BUS	1 BRUSHHOLLOW ROAD	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
ANTIFREEZE	0	Deliberate	Comm/Indust	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9307861	9/28/93		TWN NO HEMPSTEAD HWY GARA	970 BRUSHHOLLOW ROAD	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
GASOLINE	0	Other	Non-Comm/Inst	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9308133	10/4/93		ZAMPINI RESIDENCE	702 URBAN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	5	Equipment Failure	Private Dwelling	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9308228	10/6/93	5/16/97	LARIOS RESIDENCE	1124 BROADWAY	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	0	Equipment Failure	Private Dwelling	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9308336	10/8/93	7/5/95	ROYAL GUARD FENCE	550 MAIN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
GASOLINE	0	Tank Test Failure	Comm/Indust	Air

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9309079	10/26/93	10/28/93	ROYAL GUARD FENCE CO	550 MAIN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
GASOLINE	0	Tank Test Failure	Comm/Indust	Groundwater

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9309400	11/2/93		SAMTON SALVAGE	299 MAIN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
UNKNOWN PETROLEUM	0	Housekeeping	Comm/Indust	On land

NEW YORK STATE SUPERFUND CONTRACT

PRELIMINARY SITE ASSESSMENT REPORT

REVISED DRAFT

Volume I

Report Text
Appendices A-C
(Report in 5 volumes)

New Cassel Industrial Area Site
North Hempstead, Nassau County

Site No. 130043

Work Assignment No. D002676-2.2

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road
Albany, New York 12233

October 1994

Prepared By:

LAWLER, MATUSKY & SKELLY ENGINEERS
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

File No. 650-027

CHAPTER 1

EXECUTIVE SUMMARY

The New Cassel Industrial Area (NCIA) is located in the unincorporated village of Westbury, in the Town of North Hempstead, Nassau County, New York. Approximately 200 industrial or commercial businesses occupy this 170-acre site. The Nassau County Department of Health (NCDOH) in conjunction with a private consulting firm conducted a subsurface investigation of the NCIA in 1985 to evaluate groundwater quality in the vicinity of this site and several others in the county identified as possessing groundwater contamination problems. The study identified fairly extensive halogenated volatile organic contamination of groundwater beneath the site, and recommended further study. NCDOH also petitioned the New York State Department of Environmental Conservation (NYSDEC) to classify the site as a hazardous waste site. The site was listed as a Class 2 by NYSDEC in 1988.

Since the site was listed, numerous owners of property within the site have petitioned NYSDEC to segregate and remove their properties from the Class 2 list. NYSDEC has qualifiedly delisted all properties for which they received delist petitions. The qualification included in the delisting notifications was that if the pending site investigation revealed evidence that these properties were the cause of the contamination, they would be relisted.

Lawler, Matusky & Skelly Engineers (LMS) was contracted by NYSDEC to conduct a preliminary site assessment (PSA) for the NCIA. This report presents the findings of the first six tasks of the PSA. Task 1 consisted of a file review and procurement from the various town, county, and state agencies holding information pertinent to the site. Task 2 consisted of compilation of a comprehensive database summarizing the information gathered in Task 1. Task 3 consisted of the collection and analysis of groundwater samples from 56 monitoring wells already located at the site. Task 4 consisted of the analysis of samples collected from 40 groundwater probes located strategically throughout the site. The Geoprobe locations were sampled from multiple depths to provide vertical contaminant distribution information. This task also included preparation of a draft report presenting the results of Tasks 1 to 4 along with LMS' recommendations for additional work. Task 5 consisted of a second phase of groundwater probes and suspected source area sampling along with selected facility inspections. Task 6 is the preparation of this report

The analytical data generated from the sampling have been reduced and used to generate contaminant plume maps. Several groundwater volatile organic compound (VOC) contaminant plumes were delineated during the assessment, and the properties potentially contributing to

each of these plumes have been identified. The contaminant plume distributions have been analyzed with respect to current and previous property usage for the entire site, incorporating chemical use and spill information gathered from extensive file review.

The PSA results have identified several areas exhibiting significant groundwater contamination within the NCIA. The bulk of the contamination is centered in three areas within the site: one in each of the western, central, and eastern sections. In each of these contaminated areas separate plumes based on the contaminants, the concentrations, and sources can be subdivided. LMS has detected two plumes in the western section, three in the central section, and two in the eastern section. Beyond these plume areas, the remaining area of the NCIA appears to be relatively uncontaminated.

Following the objectives stated in Chapter 2, LMS recommends that the NCIA site be removed from the hazardous site listing and that seven separate sites be added to the list. The delisting of the whole site would delist/remove the clean blocks/lots listed below; the relisting of the seven plume areas would then list only the major contaminated areas.

It is not clear what classification all seven plumes can be given, however. All plume areas have documented significant impact to the environment - the contaminant concentrations in an aquifer connected to a drinking supply aquifer are orders of magnitude higher than drinking standards and are a serious threat. But the second criterion for listing a site, documentation of a release or presence of hazardous wastes, has not been demonstrated in all plumes. The plume areas can be divided into the following categories:

- Documented Sole Sources. These plumes have one documented source and a relatively clearly defined contaminant plume that results from the sole source. These sites can be listed as Class 2, listing the facility where the source was discovered as the site. Two plumes, 570 Main Street and 125 State Street, are recommended for this category.

- Documented Multiple Sources. These plumes have good documentation that a number of sources were responsible for the contaminant plume. However, a number of other facilities within the plume area were also likely contributors to the contamination based on historical information, but documented data do not exist. These plumes can be listed as Class 2 sites as documented sources were recorded. LMS recommends that the source facilities and all the potential or suspected facilities within the plume be included as the site. One plume, Arkwin/Tishcon, is recommended for this category.

- Suspected Multiple Sources. These plumes have good historical information that a number of facilities within the plume were the likely source; however,

documented data do not exist to date. LMS does not know whether the historical data are sufficient to document hazardous waste. We recommend two alternatives: (1) research the existing data files in more detail so as to find documented hazardous waste at one or more facilities, thereby listing the plume area as a Class 2 site (similar to above); or (2) list as Class 2a and research and investigate the potential sources in detail. These plumes, Garden Street/Hopper Street, Sylvester Street/Kinkel Street, and GP-1/-39, are recommended for this category.

- No Sources. These plumes have no documentation or other evidence to support the release of hazardous waste as found in the groundwater. Simply stated, we found no sources. We recommend these sites be classified 2a and additional investigations be conducted to find the source. One plume, Block 328, is recommended for this category.

CHAPTER 2

OBJECTIVES

The overall objectives of the preliminary site assessment at the New Cassel Industrial Area were to:

- Delineate the contaminant plumes under the site. It has been documented that the groundwater under the site is contaminated with VOCs; however, whether there were a number of plumes, whether the plumes were connected, and/or whether there were areas with no contamination was not known.

- Locate the source of the contaminants. The whole site was listed as a Class 2 site, meaning that all of the property owners were potentially responsible parties (PRPs), even though many site operations may never have released any contaminants. The purpose of this investigation was to document the use, release, or spillage of contaminants and as best as possible correlate the resultant contamination with delineated plumes, i.e., find the most likely PRPs.

- Redefine the site according to measured contamination. The investigation and remediation of a 170-acre site with 200 PRPs is difficult. Results of the PSA narrowed the site to a number of measured and documented plumes with known or recorded sources. Sites documented as plume sources can remain on the hazardous list, and be scheduled for remedial investigations and feasibility studies and/or remedial measures. The uncontaminated areas of NCIA can be delisted.

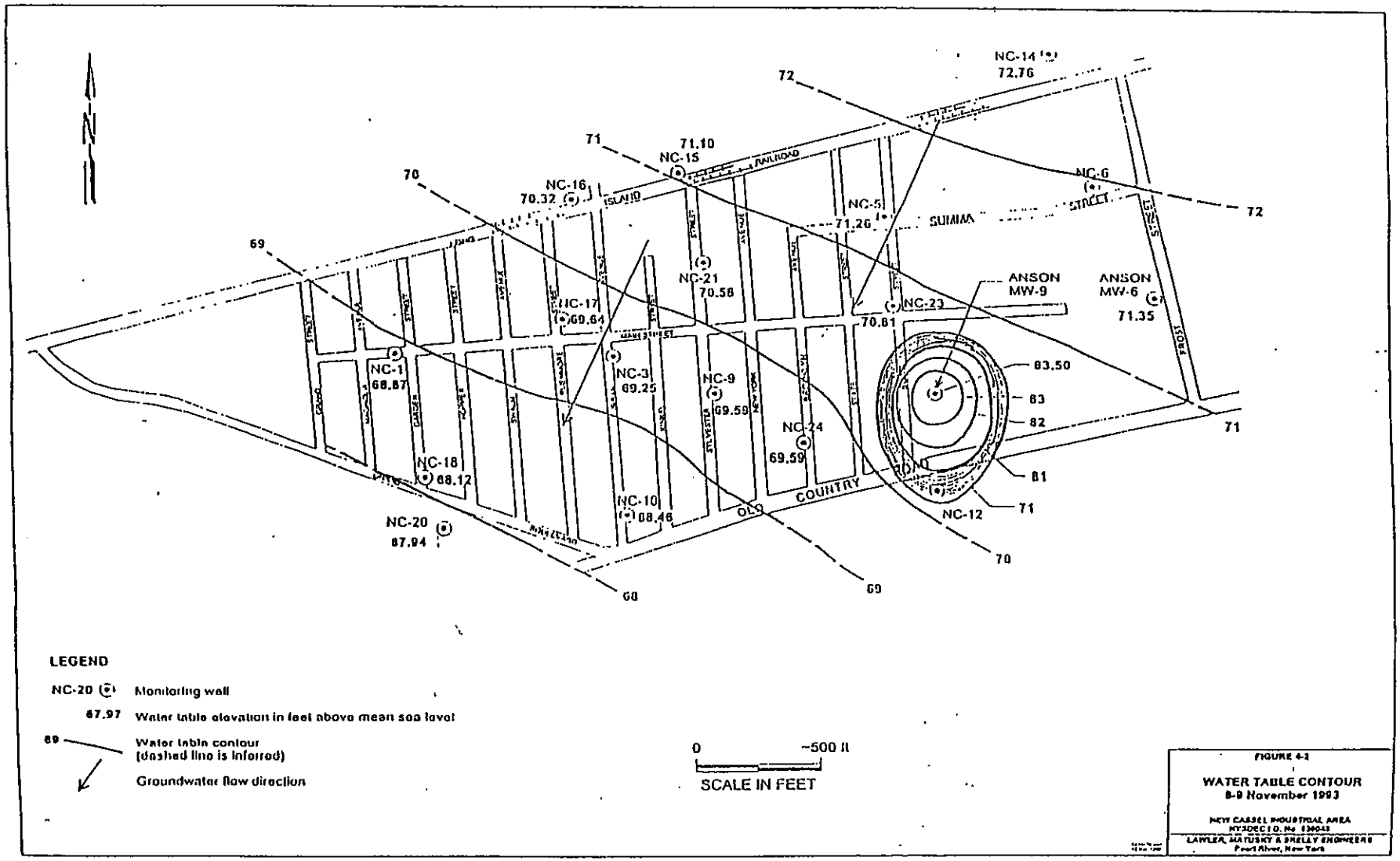

NC-14
72.76
72
71
71.10
NC-15
70
NC-16
70.32
ISLAND
RAILROAD
NC-6
STREET
72
NC-5
71.26
SUMMA
69
NC-21
70.58
ANSON
MW-9
ANSON
MW-6
71.35
NC-17
69.64
NC-23
70.81
NC-1
68.87
NC-3
69.25
NC-9
69.59
83.50
83
82
71
NC-24
69.59
NC-18
68.12
81
71
NC-10
68.46
OLD
COUNTRY
NC-12
NC-20
67.94
70
68
69
LEGEND
NC-20 Monitoring well
67.97 Water table elevation in feet above mean sea level
69 Water table contour (dashed line is inferred)
Groundwater flow direction
0 ~500 ft
SCALE IN FEET
FIGURE 4-1
WATER TABLE CONTOUR
8-9 November 1993
NEW CASSEL INDUSTRIAL AREA
LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York

TABLE 4-2 (Page 3 of 3)

LIST OF PROPERTIES WHICH RECIEVED SITE INSPECTIONS

New Cassel Indrustrial Area

BLOCK & LOT NUMBERS	ADDRESS	OWNER	OCCUPANT	SECTION
70, 16-17, 54-55	80-86 Magnolia Ave.	80 Magnolia Avenue Co. 80 Magnolia Ave. Westbury, NY 11590	Alltec Inc.	Western
70, 40-42	81 Garden St.	Eighty-1 Garden St. Rlty 390 Willis Avenue Roslyn Hieghts, NY 11577	Warehouse ?	Western
144, 31-50	299 Main St.	F. Scappatura 1015 Old Country Road Westbury, NY 11590	One Stop Auto and Truck Center	Western
73, 1-12, 63-75	570 Main St.	Foray Construction Co. 570 Main St. Westbury, NY 11590	Castle Collision and Vacant - Formerly IMC Magnetics	Western
70, 43-44	87-89 Garden St.	Frank A. Miceli 1159 Fernwood Dr. Valley Stream , NY 11580	Rapid Rivet and Fastener Corp.	Western
70, 35-39	75 Garden St.	Grimace Realty Corp. 514 Grand Blvd. Westbury, NY 11590	Island Poly Bag and Supply	Western
71, 5-8	542 Main St.	H. Greenberg 155 Argyle Rd. Brooklyn, NY 11218	Al's Tool and Die	Western

80-86 Magnolia Avenue. Alltec Inc., which sells and services power washers, has been on-site for three years (Appendix B, Photo 30). The occupants are unaware of past uses: the building had apparently been vacant for some time. Soaps and cleaners are stored but no solvent-based cleaners. Alltec had no knowledge of any leach pools on-site. Several suspected pools were identified to the rear and front of the building, but the owner objected to any sampling so the presence of former leach pools could not be verified.

299 Main Street. One Stop Auto and Truck Centers has occupied this address since April 1994 (Appendix B, Photos 21 and 22). A full service auto and truck garage, the firm currently has no underground storage. There were no floor drains within the garage, although there was a grated drain along the garage doors. Where this drain discharges is unknown as the rear lot has been recently paved, covering over signs of old leach pools (Appendix B, Photo 23). The site was formerly a junkyard (Sam-Ton Salvage) for approximately 20 years. Several features at the site suggest that there once was underground storage at the site (Appendix B, Photo 24). Heavy BTEX contamination was noted in a soil sample just above the water table in GP-22 located near this address.

570 Main Street. Castle Collision is located in the southern portion of the building at this address; the northern portion is vacant. Castle Collision is a full service auto body repair and painting garage. The site was formerly in use by IMC Magnetic, which manufactured precision pumps for the aircraft industry. When IMC Magnetic moved to Haupaug, New York, a number of leaching pools, septic tanks, and floor drains were abandoned.

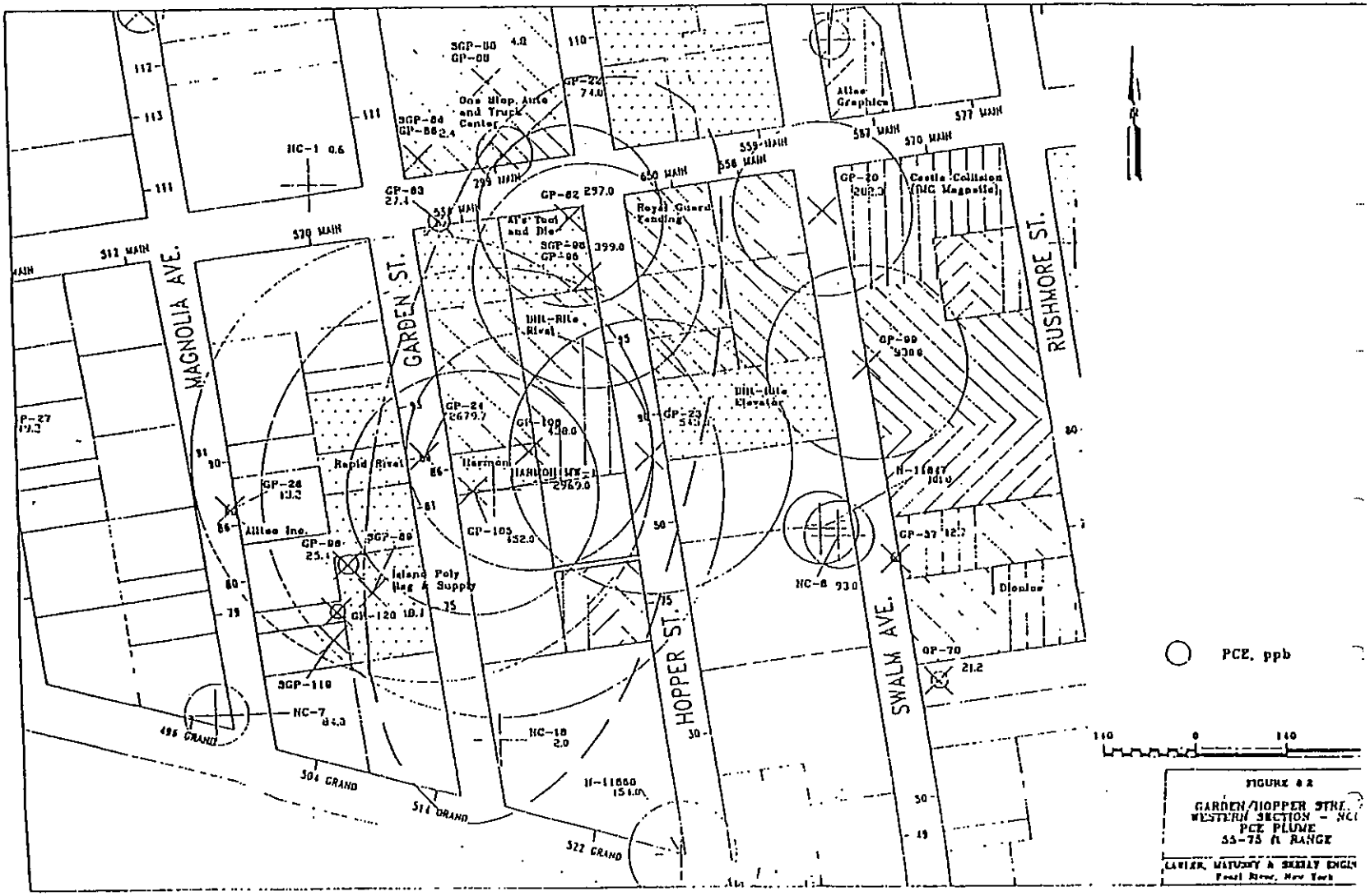
Apparently these disposal locations were in use until 1990 when the site was hooked into the county sewer system. The site is currently under closure; IMC's environmental consultant, Anson Environmental, during its closure investigation, identified three source areas on-site that are grossly contaminated with VOCs and metals. These source areas remain in place awaiting NYSDEC approval of an IRM proposed by Anson Environmental. Area 1 is a series of leach pools and a septic tank located near the corner of Main and Rushmore streets. Laboratory testing of the septic tank showed concentrations of PCE at 94,300 ppb and chromium at 27,000 ppb. Area 2, located near the corner of Swalm and Main streets, consists of two connected leach pools that apparently received discharges from the floor drains. Laboratory sampling of these two leach pools showed extremely high concentrations of toluene, xylene, methyl chloride, PCE, TCE, TCA, cadmium, chromium, and lead. In leach pool 2B PCE concentrations were 13.9% (1.39×10^8 ppb), indicating the presence of dense, non-aqueous phase liquid (DNAPL) in the pores of the sediments located within this pool. Area 3, located in an alley between the building and the southern property boundary, consists of a septic tank and two leach pools. Elevated levels of chromium were found in the septic tank (ST3, 50,000 ppb) and both leach

FILE REVIEW DATABASE

WESTERN SECTION

New Cassel Industrial Area

TAX LOT	ADDRESS	CURRENT OCCUPANT	PREVIOUS SITE USAGE	WASTEWATER DISCHARGE HISTORY	HISTORIC CHEMICAL/WASTE INVENTORY	CONTAMINATION SOURCE POTENTIAL RANKING
	Town is Westbury ZIP is 11590		back to 1971 determined from review of Coles Directory 1972-1992		Information is from NCDOH BLR Hazardous Chemical/Waste Storage Locations databases run dates 3/87, 2/88, 6/88,9/89 Note, these databases are not always current; see Island Transport below Island moved out 1982, records do not reflect this	
BLOCK 144– TWO SEPARATE PROPERTIES				no record		
11,144,27-54	299 Main St.	SAM-TON SALVAGE (USED CAR PARTS)(since 1987) This property was observed to be vacant during October 1993. There had been a fire that destroyed the interior of the building.The business moved to 96 Urban Ave.The building is being repaired. -ALSO, Scibelli Automotive occupies a building in the NE corner of the property	Island Transportation and Asphalt Petroleum occupied between 1972 and 1982; as of 1971 Mid-Island Transit and Crestwood Bus Service occupied the property	During Geoprobe Investigation heavy BTEX contamination was discovered in soils just above the water table; moderate groundwater contamination	ISLAND TRANSPORTATION (1971-82) methanol-500 gal TCE -60 gal mineral spirits-520 gal Waste Org.-non-halog. –3710gal	–HIGH– (BTEX)
11,144,55-61	1 Hopper St.	Nassau-Suffolk Recycling	no record 1992;Occupied by Baldwin Collision 1989-1991; no record 1983-1988;Frank's Fign Auto 1981-1982;Nassau Auto Wrckng 1971-1980.		lacquers, lacquer thinners Auto repainting observed during Geoprobe investigation	–MODERATE– lacks downgradient monitoring point data
BLOCK 146 – SEVEN SEPARATE PROPERTIES						
11,145,20-25	132 Hopper	Frank & Sons Auto Wrecking	A & F Auto Wrecking 1971-1992		no record in NCDOH chem Invent	–LOW–
11,145,26-30	120 Hopper St.	EZ-EM Co & RAC Mechanical RAC since 1981	Occupied by Royal Athletic Supply between 1975 and 1980, no record prior to 1975.		ROYAL ATHLETIC paint-55000 gal	GP-21 is downgradient; NO –LOW–
11,145,31-37, 41, 65	110 Hopper St.	Flexitherm Corp. since 1990	Occupied by Contemporary Packaging,1972-1976. No record 1976-1989,and prior to 1972		CONTEMPORARY PCKGNG IPA-1300 gal ethanol-22000gal PA-1300 gal Waste Ink-24000 lbs Waste Non-halo solvents-2200 gal	–MODERATE ?– prop. is upgrad. of GP-22 (heavy BTEX) a boring between the two would provide confirmation


MAGNOLIA AVE.
GARDEN ST.
HOPPER ST.
SWALM AVE.
RUSHMORE ST.
One Stop Auto and Truck Center
Royal Guard Fending
Castle Collision (MC Magnetic)
Atlas Graphics
Dill-Rite Rival
Dill-Rite Elevator
Rapid Rival
Harmon
Alltec Inc.
Island Poly Bag & Supply
Dionice
NC-1 0.6
NC-7 84.3
NC-8 93.0
NC-18 2.0
GP-22 74.0
GP-82 297.0
GP-83 27.4
GP-24 2679.7
GP-28 13.2
GP-105 452.0
GP-20 202.3
GP-99 930.0
GP-37 12.7
GP-70 21.2
GP-23 543
SGP-89
SGP-110
GP-120 10.1
GP-98 25.1
SGP-88 GP-88 4.0
SGP-84 GP-86 2.4
SGP-98 GP-98 399.0
HARMON MW-1 2969.0
N-11847 101.0
N-11860 154.0
512 MAIN
570 MAIN
577 MAIN
587 MAIN
559 MAIN
558 MAIN
650 MAIN
299 MAIN
496 GRAND
504 GRAND
514 GRAND
522 GRAND
PCE, ppb
140 0 140
FIGURE 8.2
GARDEN/HOPPER STRE.
WESTERN SECTION - NC
PCE PLUME
55-75 ft RANGE
LAWLER, MATUSKY & SKELLY ENGIN
Pearl River, New York

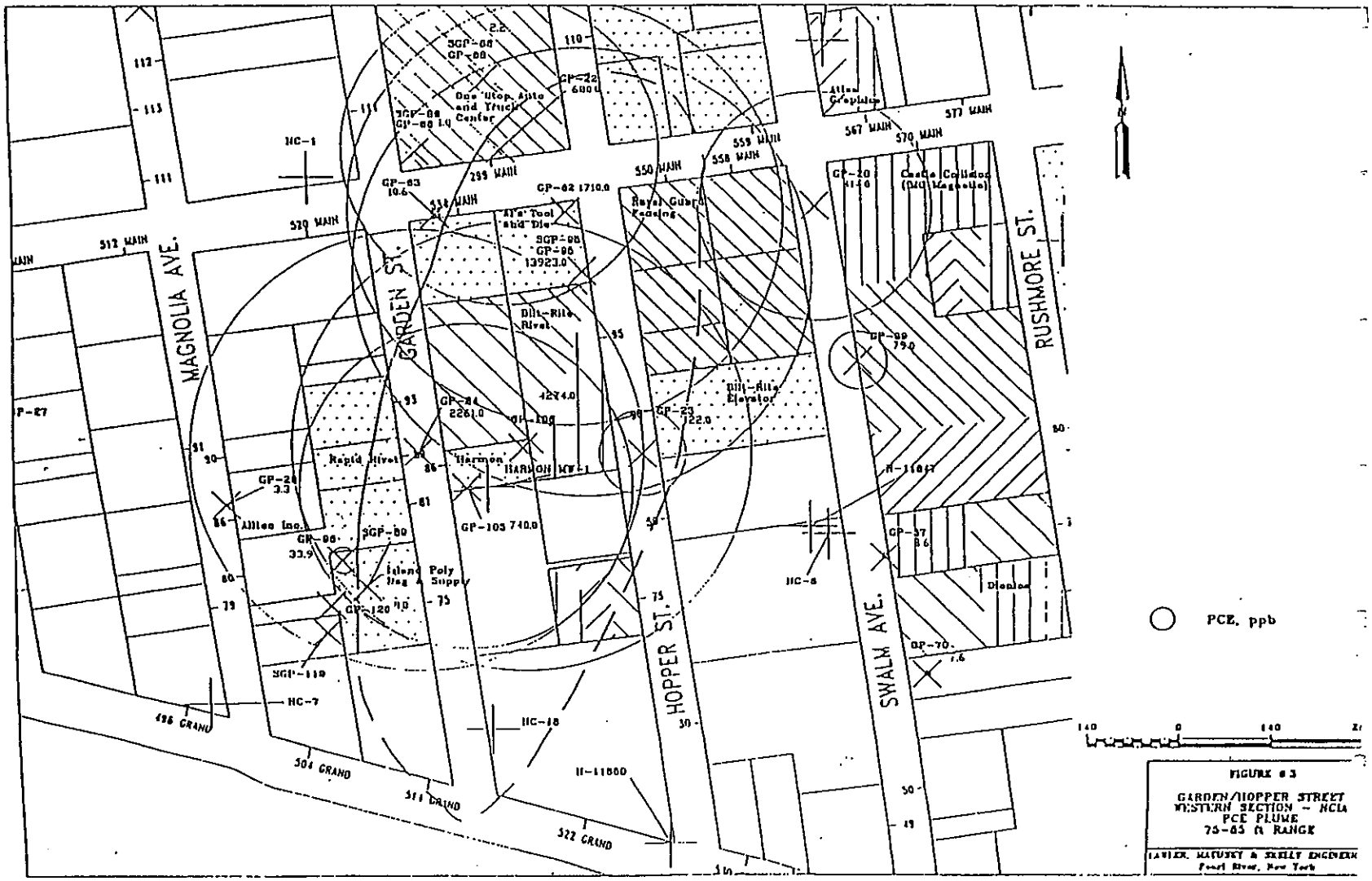


FIGURE 6.3

GARDEN/HOPPER STREET
WESTERN SECTION - NCIA
PCE PLUME
75-85 ft RANGE

LANDER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York

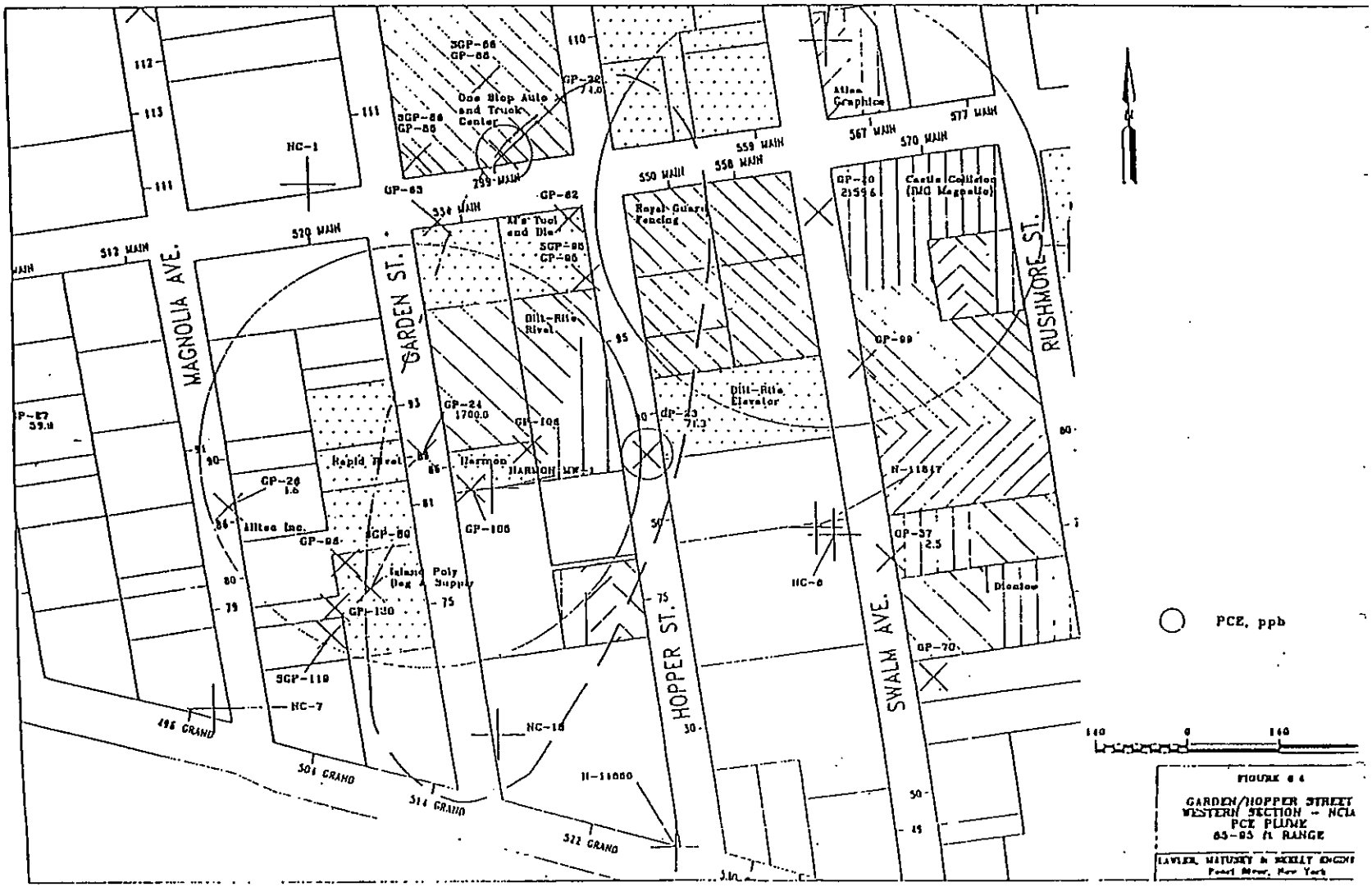


FIGURE 6.4

GARDEN/HOPPER STREET WESTERN SECTION - NCIA PCE PLUME 85-95 ft RANGE

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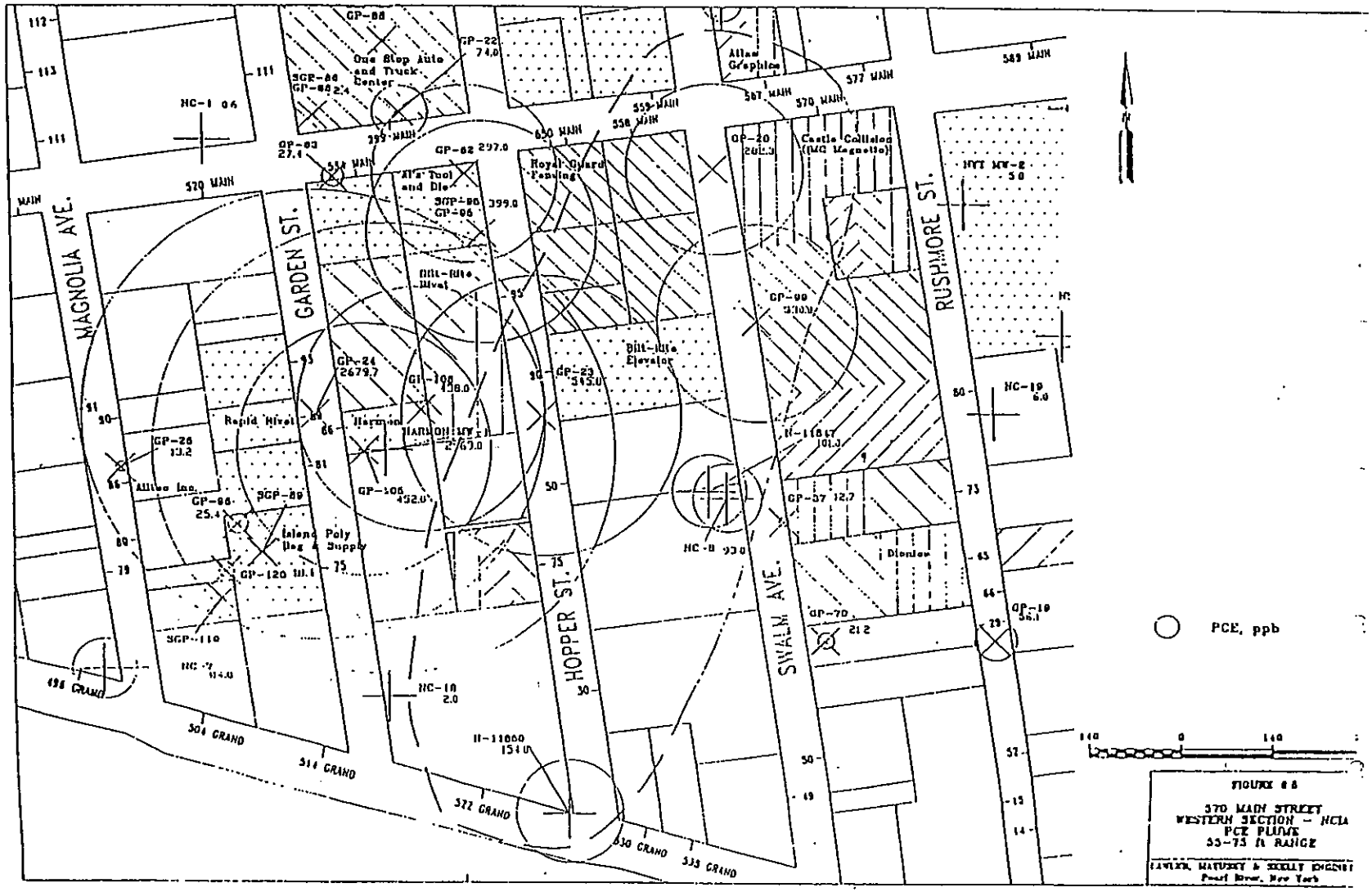
Pearl River, New York


MAGNOLIA AVE.
GARDEN ST.
HOPPER ST.
SWALM AVE.
RUSHMORE ST.
One Stop Auto and Truck Center
Royal Guard Fencing
Bilt-Rite Rivet
Bilt-Rite Elevator
Rapid Rivet
Harmon
Alltec Inc.
Island Poly Bag & Supply
Castle Collision (MG Magnetic)
Atlas Graphics
Dionice
570 MAIN
577 MAIN
589 MAIN
567 MAIN
570 MAIN
559 MAIN
558 MAIN
650 MAIN
599 MAIN
554 MAIN
520 MAIN
496 GRAND
504 GRAND
514 GRAND
522 GRAND
530 GRAND
538 GRAND
PCE, ppb
140 0 140
FIGURE 8.8
570 MAIN STREET
WESTERN SECTION - HCIA
PCE PLUME
55-75 ft RANGE
LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York

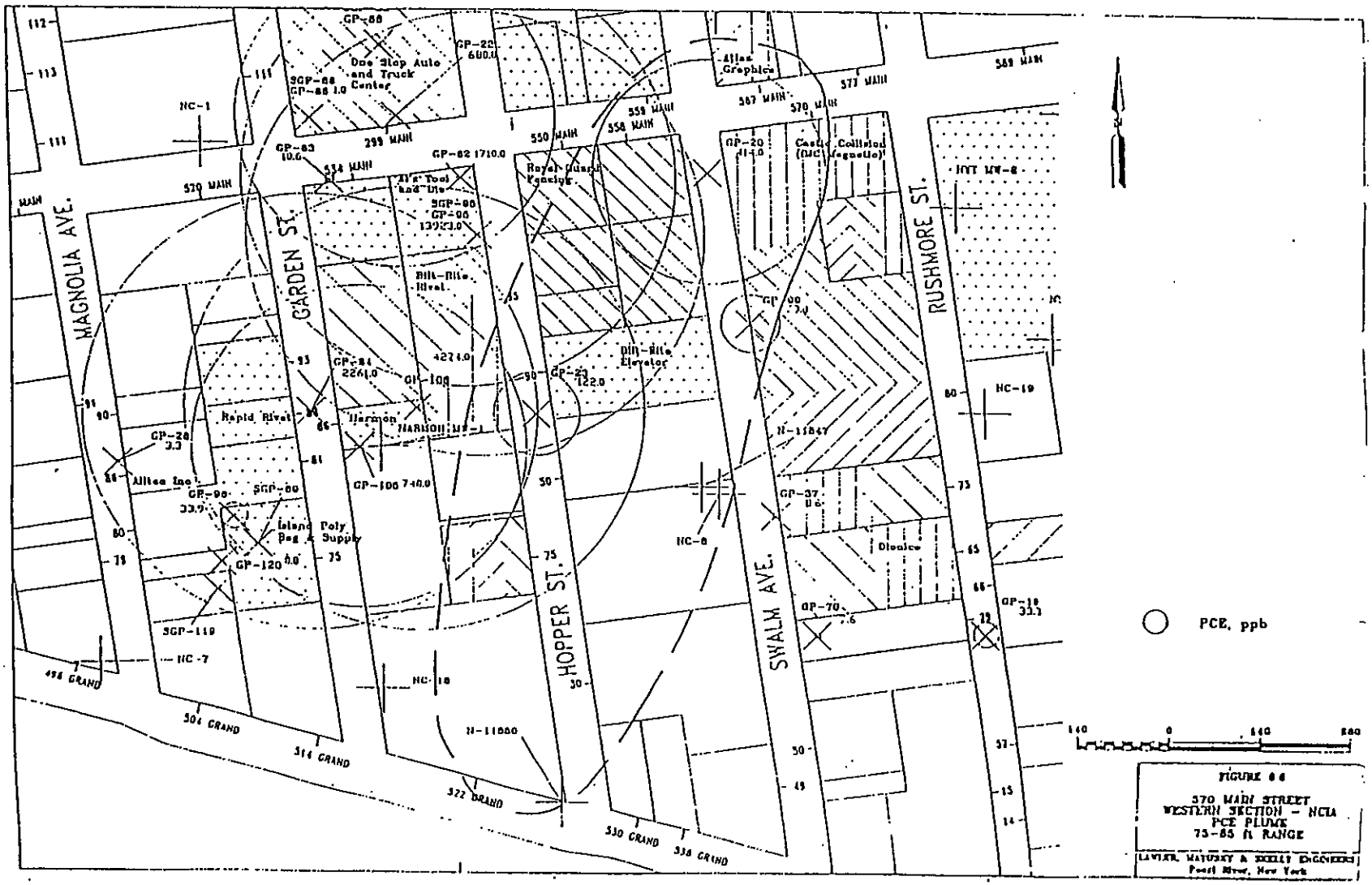


FIGURE 8.6
570 MAIN STREET
WESTERN SECTION - NCIA
PCE PLUME
75-85 ft RANGE
LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York

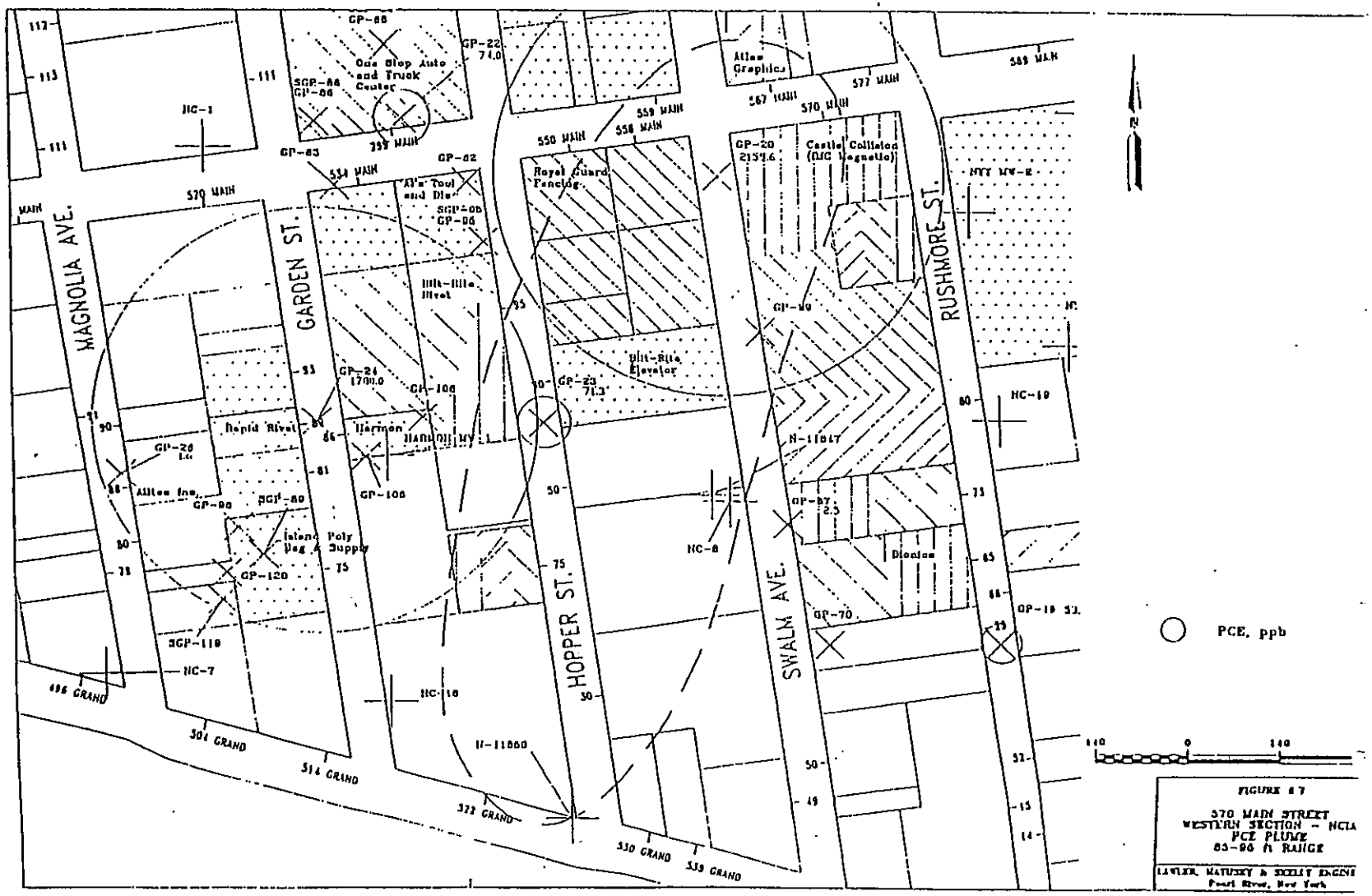

MAGNOLIA AVE.
GARDEN ST.
HOPPER ST.
SWALM AVE.
RUSHMORE ST.
One Stop Auto and Truck Center
Royal Guard Fencing
Bilt-Rite Rivet
Bilt-Rite Elevator
Rapid Rivet
Harmon
Island Poly Bag & Supply
Atlas Graphics
Castle Collision (IMC Magnetic)
Dionice
570 MAIN
559 MAIN
558 MAIN
550 MAIN
577 MAIN
567 MAIN
570 MAIN
569 MAIN
534 MAIN
599 MAIN
496 GRAND
504 GRAND
514 GRAND
522 GRAND
530 GRAND
539 GRAND
NC-1
NC-7
NC-8
NC-10
NC-19
GP-22 74.0
GP-23 71.3
GP-24 1700.0
GP-20 2157.6
GP-87 2.5
GP-70
GP-120
GP-106
SGP-119
N-11860
N-11817
PCE, ppb
140 0 140
FIGURE 4.7
570 MAIN STREET
WESTERN SECTION - NCIA
PCE PLUME
85-96 ft RANGE
LAWLER, MATUSKY & SKELLY ENGINE
Pearl River, New York

FIGURE 7.1

SITE-WIDE - NCIA
DATA SUMMARY
55-75 ft DEPTH RANGE

LAWLER, MATUSKY & SKELLY ENGI
Pearl River, New York

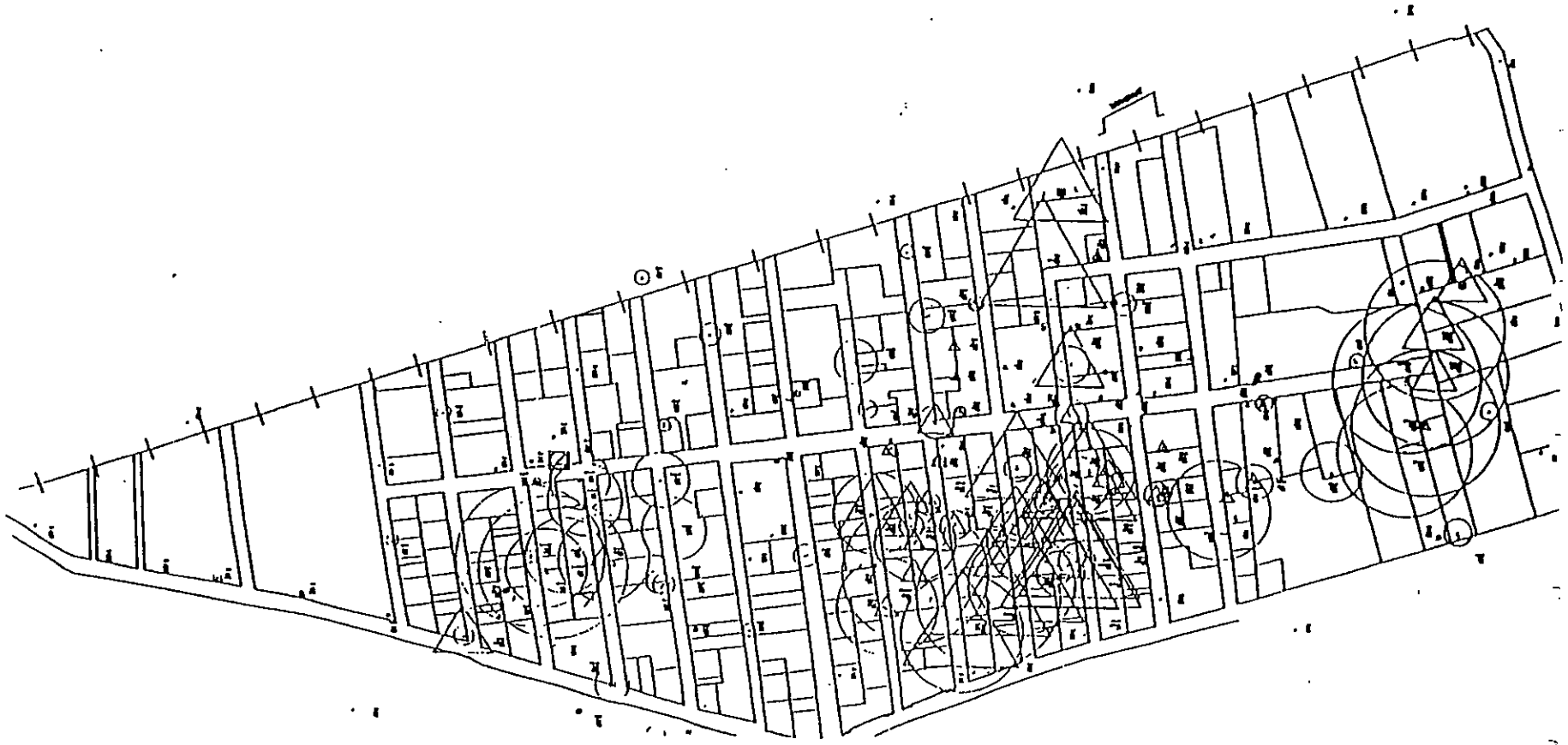
N

PCE

TCA

BTEX

NOTE:
NOT TO SCALE



NEW YORK STATE SUPERFUND CONTRACT

SITE INVESTIGATION REPORT

New Cassel Industrial Area Site
North Hempstead, Nassau County

Site No. 130043

Work Assignment No. D002676-2.2

DATE: February 1995

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
Langdon Marsh, *Commissioner*

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., P.E., *Director*

By:
Lawler, Matusky & Skelly Engineers

NEW YORK STATE SUPERFUND CONTRACT

SITE INVESTIGATION REPORT

FINAL

New Cassel Industrial Area Site
North Hempstead, Nassau County

Site No. 130043

Work Assignment No. D002676-2.2

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road
Albany, New York 12233

February 1995

Prepared By:

LAWLER, MATUSKY & SKELLY ENGINEERS
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

File No. 650-028

CHAPTER 1

EXECUTIVE SUMMARY

The New Cassel Industrial Area (NCIA) is located in the unincorporated village of Westbury, in the Town of North Hempstead, Nassau County, New York. Approximately 200 industrial or commercial businesses occupy this 170-acre site. The Nassau County Department of Health (NCDOH), in conjunction with a private consulting firm, conducted a subsurface investigation of the NCIA in 1985 to evaluate groundwater quality in the vicinity of this and several other sites in the county found to possess groundwater contamination problems. The investigation identified fairly extensive halogenated volatile organic contamination of groundwater beneath the site, and recommended further study. NCDOH also petitioned the New York State Department of Environmental Conservation (NYSDEC) to classify the site as a hazardous waste site, which it did (Class 2) in 1988.

Subsequently, numerous owners of property within the site have petitioned NYSDEC to isolate and remove their properties from the Class 2 list. NYSDEC has delisted many of the properties for which it received delist petitions with the qualification that if the pending site investigation showed these properties to be the source of the contamination, they would be relisted.

Lawler, Matusky & Skelly Engineers (LMS) was contracted by NYSDEC to conduct a site investigation for the NCIA. This report presents the findings of this investigation. Task 1 consisted of a file review of information pertinent to the site from various town, county, and state agencies. During Task 2 a comprehensive database summarizing the information gathered in Task 1 was compiled. During Task 3 groundwater samples were collected for analysis from 56 monitoring wells already located at the site. Samples collected from 40 groundwater probes located strategically throughout the site were analyzed in Task 4. The Geoprobe locations were sampled from multiple depths to provide vertical contaminant distribution information. This task also included preparation of a draft report presenting the results of Tasks 1 through 4 along with LMS' recommendations for additional work. Task 5 consisted of a second phase of groundwater probes and suspected source area sampling along with selected facility inspections. Tasks 6 and 7 constitute preparation of this report and additional file investigations.

The data generated from the sampling have been analyzed and used to generate contaminant plume maps. Several groundwater volatile organic compound (VOC) contaminant plumes were delineated during the assessment, and the properties potentially contributing to these plumes have been identified. The contaminant plume distributions have been analyzed with respect to

current and previous property usage for the entire site, incorporating chemical use and spill information gathered from extensive file review.

The investigation has identified several areas exhibiting significant groundwater contamination within the NCIA. The bulk of the contamination is centered in three areas within the site: one in each of the western, central, and eastern sections. In each of these contaminated areas separate plumes based on the contaminants, concentrations, and sources can be subdivided. LMS has detected two plumes in the western section, three in the central section, and two in the eastern section. Beyond these plume areas, the remaining area of the NCIA appears to be relatively uncontaminated.

Following the objectives stated in Chapter 2, LMS recommends that the NCIA site be removed from the Registry of Inactive Hazardous Waste Sites and that individual sites with documented hazardous waste disposal be added to the registry. Other sites are recommended as suspected hazardous waste sites because the data suggest that they are potentially adding to the measured contaminant plumes but hazardous waste disposal has yet to be documented. The delisting of the whole site would delist or remove all sites in the NCIA that had no hazardous waste disposal and no significant groundwater contaminants. The tax blocks are listed in Chapter 7 by section.

LMS recommends that the following sites be restored to the registry. The documentation and data supporting these recommendations are presented in Chapter 7.

Western Section

- **Castle Collision** (IMC Magnetics), 570 Main Street (Tax Block 73, lots 1-12, 63-75)
- **Atlas Graphics**, 567 Main Street (Tax Block 164, lot 66)

Central Section

- **Tishcon Corporation**, 125 State Street (Tax Block 181, lot 84)
- **Arkwin Industries**, 648-656 Main Street (Tax Block 78, lots 1-8), 662-670 Main Street (Tax Block 79, lots 1-8), 66 Brooklyn Avenue (Tax Block 79, lots 266-270)
- **Tishcon Corporation**, 30-36 New York Avenue (Tax Block 78, lots 78, 19-21), 31-33 Brooklyn Avenue (Tax Block 79, lots 79 and 56-58), 29 New York Avenue (Tax Block 77, lots 47-50)

- **Industrial Mets** (Tishcon), 68 Kinkel Street (Tax Block 76, lots 9-12)

- **Metpar Steel Products**, 95 and 97-99 State Street (Tax Block 161, lots 41, 42, and 5-8)

It is recommended that the following sites be considered suspected hazardous waste sites. They will require additional investigation to determine whether hazardous waste was disposed of on-site and impacted the groundwater:

Western Section

- **Flexitherm Corporation**, 110 Hopper Street (Tax Block 145, lots 31-37)

- **IET Labs**, 534 Main street (Tax Block 71, lots 1-4)

- **Al's Tool and Die**, 542 Main Street (Tax Block 71, lots 5-8)

- **Harmon Associates**, 86 Garden Street (Tax Block 71, lots 16-17)

- **Bilt-Rite Steel-Buck**, 95 Hopper Street (Tax Block 71, lots 9-15 and 50-58), and **Bilt Rite Elevator**, 90 Hopper Street (Tax Block 72, lots 14-17 and 59-62)

Central Section

- **Glassblock Warehouse**, 38 Kinkel Street (Tax Block 76, lots 22-29)

- **Micro-Ray Corporation**, 49 Sylvester Street (Tax Block 76, lots 66-68)

- **Doak Dermatologies**, 62 Kinkel Street and 67 Sylvester Street (Tax Block 76, lots 13-15 and 69-72)

- **Arkwin Industries**, 33 Sylvester Street (Tax Block 76, lots 57-65)

Eastern Section

- **Nationwide Paint** (?[1]), 750 Main Street (Tax Block 328, lot 178)

- **Eastern Main Street**

- **Utility Manufacturing Company**, 700 Main Street (Tax Block 320, lot 176), list as 2a

- **Former Wonder King Chemical**, 710-712 Main Street (Tax Block 328, lot 188), list as 2a

---

[1]Reported former use of this address; the exact name, however, could not be verified.

2.2.2 542 Main Street

This building has been occupied by Al's Tool and Die, Inc., a metal parts fabricator, since approximately 1968. No prior ownership is known. There is no documentation of any chemical usage at this site, other than an annual usage of 5 gallons of water soluble cutting oil. Metal shavings generated were taken to a scrap dealer.

2.2.3 550 Main Street

Owned by Royal Guard Fence Company since the 1950's, this site contains three underground fuel storage tanks and an aboveground waste oil storage tank. Two 2,500 gallon underground fuel tanks were installed in 1994 and a 4,000 gallon underground tank was installed in 1978. The 4,000 gallon underground gas tank failed a Petrotite systems test in 1989. It was cited in 1991 by the NC Fire Inspector for being out of service without removal or abandonment. NYSDEC spills records indicate that fuel spills from tanks of unspecified amounts occurred in 1989, 1993, and 1996. The spill in 1989 was due to a crack in the tank fill pipe and entered the groundwater.

There are three dry wells located in the pavement and one interior floor drain documented at this address. Sewer hookup was made in 1983. Prior to that, sewage was discharged to an on-site septic system (1954-1983). Chemical usage at this site is limited to minimal amounts of cutting oil, muriatic acid, and paint thinners (EEA 1992). Scrap metal is removed from the site.

2.2.4 299 Main Street

The western portion of the existing building at 299 Main Street was erected between 1950 and 1962 with the eastern portion added between 1962 and 1970. Since April 1994, One Stop Auto and Truck Center occupied this address. Island Transportation Corporation (ITC), a trucking company, occupied the property from at least 1963 until 1983. During its operations, it generated 400 to 500 gal/month of waste lube oil and used 40 gal/month of safety solvent #5. The liquid and solid waste was removed by authorized waste haulers, and the wash room waste was collected in two on-site cesspools. Additionally, Sam Ton Salvage, a junkyard, used this address from before 1970 until 1993. The company apparently occupied the rest of the Block 144 but used 299 Main Street as its address. In 1993, Sam Ton Salvage moved to 96 Urban Avenue.

In January 1963, two 4,000 gallon underground diesel fuel tanks were installed by ITC (NCFC 1980b). One 4,000 gallon underground gasoline tank was installed by ITC in 1966 and one 10,000 gallon underground diesel tank was installed in 1972. ITC used Trichloroethylene (TCE) to wash asphalt residues from its tank trailers prior to 1980. Approximately 275 gallons were used during a period from July to December 1978 (NCDOH 1979a). The TCE was reclaimed on-site and reused. ITC replaced the TCE with Dubois Chemical Spra-Jel (NCDOH 1979b). The chemical constituents of Spra-Jel are as follows:

Petroleum solvent, kerosene cut

7.1.1 Garden Street/Hopper Street Plume

This plume is primarily composed of TCE and its breakdown products. It was detected in GP-22, -62, and -105 and HARMON-MW-1. In general, it appears that concentrations increase with depth. PCE from a separate source or overlap from the 570 Main Street plume was also detected in several of the monitoring points. It appears that a release of target compounds has occurred in the vicinity or upgradient of GP-62. The properties that fall within this plume area and our recommendations are as follows:

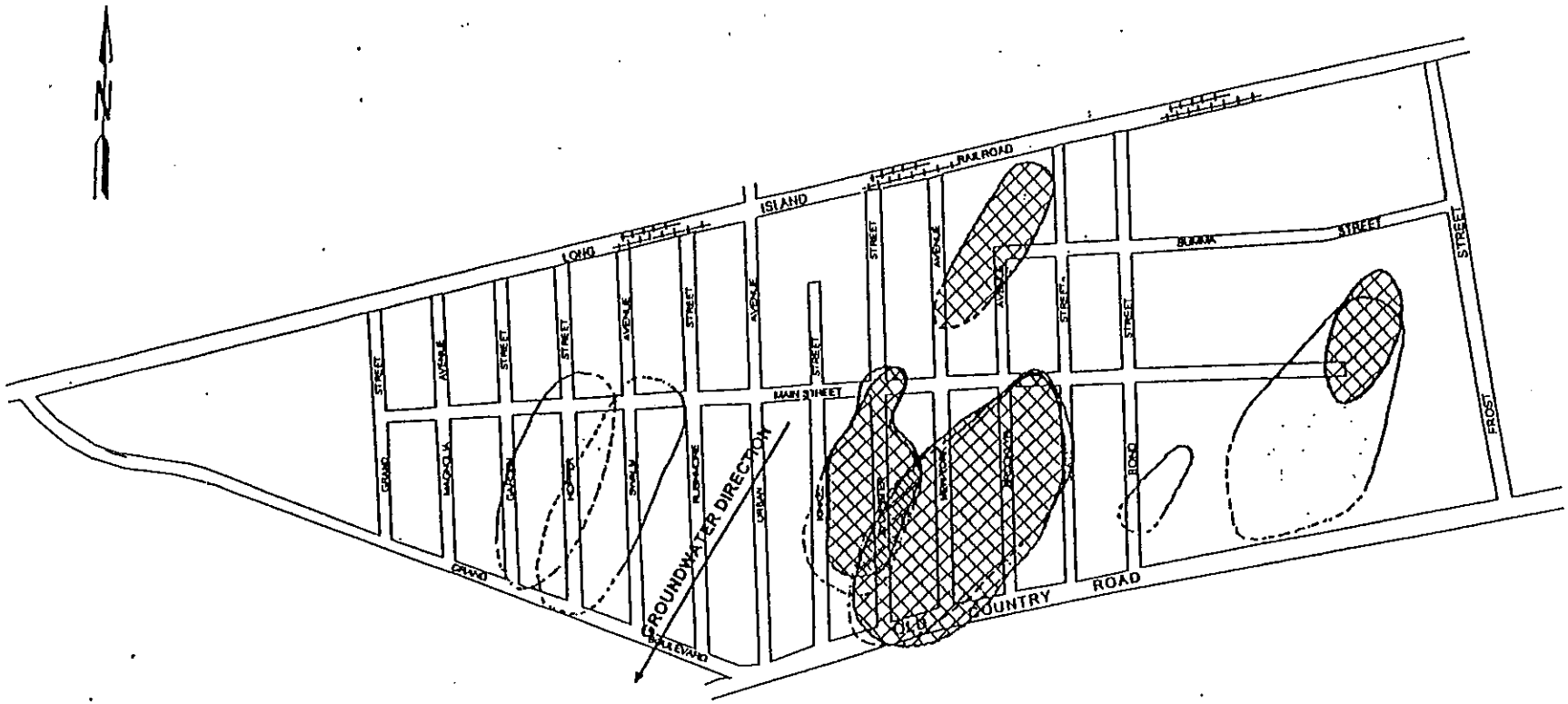
- **One Stop Auto and Truck Center**, 299 Main Street (Tax Block 145, lots 37-44). This is the only address within this plume area that has a documented use of a target compound. A former use at the site, Island Transport, reportedly used 80 gal of TCE per year. Several groundwater (GP-86 and -88) and soil (SGP-86 and -88) samples did not identify a source of chlorinated compounds. BTEX compounds were found. The downgradient point (GP-22) was not significantly elevated in comparison to the upgradient point (GP-88). The data do not support a correlation with the major contaminant plume; therefore, it is recommended that this site not be included in the registry at this time.

- **Flexitherm Corporation**, 110 Hopper Street (Tax Block 145, lots 31-37). This address is located at the very upgradient edge of this plume. The chemical usage history indicates chemicals are used at the address, but they are not chlorinated compounds. This address should be considered a suspected hazardous waste site and additional investigation may be needed.

- **IET Labs**, 534 Main Street (Tax Block 71, lots 1-4). This address is located near the upgradient edge of this plume. The chemical usage history and past uses at this address do not indicate that this address is the source. The downgradient sampling point, GP-24, does, however, exhibit high concentrations. This address should be considered a suspected hazardous waste site and additional investigations may be needed.

- **Al's Tool and Die**, 542 Main Street (Tax Block 71, lots 5-8). This address is also located near the upgradient edge of the plume and is just east of 534 Main Street. Again, the chemical use history does not indicate that this address is the source, but the downgradient point (GP-24) does exhibit high concentrations. This address should be considered a suspected hazardous waste site and additional information may be needed.

- **Harmon Associates**, 86 Garden Street (Tax Block 71, lots 16-17). This address is currently used by Harmon Associates as office space. There is no documented chemical usage. The downgradient sample, HARMON MW-1, does exhibit elevated concentrations of DCE (2300 ppb) and TCE (660 ppb). This address should be considered a suspected hazardous waste site based on the high downgradient concentrations.



LEGEND

Total PCE plume (PCE, TCE, DCEs, VC), >100 ppb

Total TCA plume (1,1,1-TCA, DCAs), >100 ppb

0 ~500 ft

APPROXIMATE SCALE
1 in. = 500 ft

FIGURE 7-1

CONTAMINANT PLUMES 1993-1994 INVESTIGATION

NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043

LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York

NEW YORK STATE SUPERFUND CONTRACT

MULTISITE PSA TASK 4 REPORT

New Cassel Industrial Area Site
North Hempstead, Nassau County

Hopper/Main Street Site	Site No. 130043J
E-Z-EM Site	Site No. 130043N
Tops Appliance City Site	Site No. 130043O
Swalm Avenue Site	Site No. 130043P
Sylvester Street Site	Site No. 130043Q
New Cassel Data Review Sites	Site No. 130043

Work Assignment No. D002676-12B-1

DATE: March 1997

Report • Appendix A

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
John Cahill, *Acting Commissioner*

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., P.E., *Director*

By:

Lawler, Matusky & Skelly Engineers LLP

CHAPTER 1

EXECUTIVE SUMMARY

The New Cassel Industrial Area (NCIA) is located in the unincorporated Village of Westbury in the Town of North Hempstead, Nassau County, New York (Figure 1-1). Approximately 200 industrial or commercial businesses occupy this 170-acre site (Figure 1-2). Due to extensive halogenated volatile organic compound (VOC) contamination of groundwater beneath the site, the New York State Department of Environmental Conservation (NYSDEC) classified the entire industrial area as a hazardous waste site in 1988.

Lawler, Matusky & Skelly Engineers LLP (LMS) was contracted by NYSDEC in 1992 to conduct a site investigation of the NCIA. The objectives of the site investigation were to delineate the contaminant plumes under the site, locate the source of the contaminants, and redefine the site according to measured contamination.

The initial investigations conducted in 1993 and 1994 identified several areas exhibiting significant groundwater contamination within the NCIA (LMS 1994). Potentially responsible parties for the two central section plumes and one of the western section plumes were identified; those facilities were listed as Class 2 on the New York State Registry of Inactive Hazardous Waste Disposal Sites. The remaining four sites within the plume regions were designated as potential registry sites requiring additional investigation. The original all-encompassing New Cassel site was removed from the registry, thereby delisting all sites except those relisted.

LMS was assigned to conduct a multisite Preliminary Site Assessment (PSA) in 1995 on the remaining four sites that required additional investigation. The objectives of the multisite PSA were to further delineate the contaminant plumes at the four sites, locate the sources of the contaminants, and assess the threat of each source to the environment. Based on the multisite PSA investigation data five properties were recommended for inclusion on the Registry of Inactive Hazardous Waste Sites, 15 properties were determined to be not included on the registry, and 12 properties were determined to be potential registry sites.

To resolve the status of the 12 remaining properties that were included in potential registry sites and address data gaps for several properties in the industrial area, Task 4 multisite PSA investigation activities were conducted. The investigation included additional file reviews, facility inspections, soil and groundwater probes, and on-site mobile laboratory analysis. The data generated from the Task 4 multisite PSA investigation documented usage of hazardous waste, identified on-site sources, and further delineated the plumes. Based on the data, the following classification of facilities within the four sites are recommend:

- Class 2 Hazardous Waste Sites:

299 Main Street	One Stop Auto & Truck Center
118-138 Swalm Avenue	Liqui-Mark Corporation
Vacant Lot (Block 145, Lots 38, 39, 40) at Corner of Hopper & Main Streets	Former Junkyard

- Remain as Class 2 Hazardous Waste Sites:

29 New York Avenue	Former Tishcon Facility

- Class 4 Hazardous Waste Sites:

750 Summa Avenue	E-Z-EM

- Remain as Potential Registry Sites Pending the Identification of an Upgradient Source:

95 Hopper Street	Bilt-Rite Steel Buck
542 Main Street	Al's Tool & Die
49 Sylvester Street	Micro-Ray Corporation
33 Sylvester Street	Arkwin Industries
36 Sylvester Street	Tishcon Corporation

- Sites That Should not Appear on the Registry:

550 Main Street	Royal Guard Fence
717-765 Main Street	E-Z-EM
776-790 Summa Avenue	NYCE Liberty Tempest
69 Sylvester Street	T. Sarro Salvage
750 Main Street	Tops Appliance City
1099 Old Country Road	Tops Appliance City
1226 Old Country Road	Westbury Toyota
110 Hopper Street	Express Steel
111-117 Swalm Street	Harco Trucking - Harmon Associates

The Task 4 PSA investigation resulted in three properties recommended for listing as Class 2 sites, confirmation of one property as a Class 2 site, one property recommended as a Class 4 site, the determination that nine properties should not appear on the registry, and the determination that five properties should remain as potential registry sites. A designation as a potential registry site was retained for these five properties after discussions with NYSDEC. The groundwater at these five properties exhibit significant contamination. However, it appears that the contamination is from an identified Class 2 site upgradient of the properties. Once the

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along the northern and western property boundary. Several drums of what appeared to be waste oil or diesel were noted to the rear of the property. Although not verified, one or more leach pools is believed to exist in the western (rear) alley.

87-89 Garden Street. Rapid Rivet and Fastener Corporation has been on-site for seven years (Appendix B, Photo 28). The company, which ships and distributes specialty rivets and fasteners, is a dry operation and does not use or store any chemicals. The space is leased and information on past uses and disposal histories is limited. A single floor drain noted inside the building was reportedly installed to accept storm water that occasionally seeps into the building. Other than toward the front or inside the building, there are no areas where a leach pool could be located. The building covers most of the lot and there are no alleys.

80-86 Magnolia Avenue. Alltec Inc., which sells and services power washers, has been on-site for three years (Appendix B, Photo 30). The occupants are unaware of past uses: the building had apparently been vacant for some time. NCDH records indicate that Impetus Industries (AEC Corporation) was formerly located at this address. Soaps and cleaners are stored but no solvent-based cleaners. Alltec had no knowledge of any leach pools on-site. Several suspected pools were identified to the rear and front of the building, but the owner objected to any sampling so the presence of former leach pools could not be verified.

299 Main Street. One Stop Auto and Truck Centers has occupied this address since April 1994 (Appendix B, Photos 21 and 22). A full-service auto and truck garage, the firm currently has no underground storage. There were no floor drains within the garage, although there was a grated drain along the garage doors. Where this drain discharges is unknown as the rear lot has been recently paved, covering over signs of old leach pools (Appendix B, Photo 23). The site was formerly a junkyard (Sam-Ton Salvage) for approximately 20 years. Several features at the site suggest that there once was underground storage at the site (Appendix B, Photo 24). Heavy BTEX contamination was noted in a soil sample just above the water table in GP-22 located near this address. NCDOH records indicate Island Transport formerly occupied the site and reportedly used 80 gal/year of trichloroethylene (TCE).

570 Main Street. Castle Collision is located in the southern portion of the building at this address; the northern portion is vacant. Castle Collision is a full-service autobody repair and painting garage. The site was formerly in use by IMC Magnetics, which manufactured precision pumps for the aircraft industry. When IMC Magnetic moved to Hauppaug, New York, a number of leaching pools, septic tanks, and floor drains were abandoned. NCDOH

299 Main Street (Block 144, Lots 37 to 44)

299 Main Street, occupied by One Stop Auto and Truck Center, was developed some time between 1950 and 1962 and consists of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formerly used as a junkyard and a transportation company. Island Transport Corporation used large quantities of BTEX-related compounds and approximately 275 gal of TCE from July to December 1978 (LMS 1996) to wash trucks.

The probes completed during the site investigation indicated that in upgradient areas PCE-related contaminants were not detected above 100 ppb (GP-85). At a downgradient position, PCE-related contaminants were found at 680 ppb in the intermediate depth sample (GP-22). Soil samples collected at SGP-86 and SGP-88 did not show any target compounds. A soil sample collected at GP-22 contained both PCE- and TCA-related compounds in a 49-51 ft sample (Figure 6-7); however, since the soil sample was taken very close to the watertable it is not known whether the contamination is truly indicative of the levels of soil contamination. PCE-related contaminants were found at 1.73 mg/kg and TCA-related contaminants at 0.092 mg/kg. In addition, total BTEX-related contaminants were found at 85.63 mg/kg in this soil sample. These levels would tend to indicate an on-site source.

Although this site has a documented use of target compounds (TCE), an on-site source and an environmental impact was not fully documented during the previous phase of the PSA. To document an environmental impact three additional upgradient and two additional downgradient probes were completed (Figure 6-1, Figure 6-2, Figure 6-3, Figure 6-4, Figure 6-5, and Figure 6-6). The results of these probes clearly indicate that this property is contributing to the groundwater contamination in the Garden/Hopper Street area. The three upgradient probes (GP-231, 223, and 253) do not show any target compounds above 100 ppb. The downgradient points GP-193, GP-194, and GP-195 clearly show elevated PCE-related contaminant concentrations at the three depth ranges (Figure 6-1, Figure 6-2, and Figure 6-3). In GP-194 (water table to 65 ft) the PCE-related contaminants total 2190 ppb (1700 ppb cis-1,2-DCE and 490 ppb TCE) (Figure 6-1). It was also noted that the individual contaminants change and become more numerous just downgradient of this property. Upgradient of the site the only contaminant noted in the groundwater is PCE, while downgradient TCE, DCE, and VC are found along with the PCE (Figure 6-6a). In GP-195 the total PCE-related contaminants are 700 ppb at the shallow depth; of this 700 ppb total, 250 ppb is cis-1,2-DCE and 450 VC (Figure 6-6a). The source of these different contaminants is likely located on this property or possibly the property just to the east, while the PCE-related contaminants at depth are from an upgradient source. Based on a documented history of chemical usage, a documented on-site

source, and a demonstrated environmental impact to groundwater, this property should be included on the registry.

Lot at the Northeast Corner of Hopper and Main Street (Block 145, Lots 38, 39, and 40)

This vacant lot was used as a junkyard; there are no permanent structures on the lot. Past uses of this property are unknown; this is a small lot and it appears unlikely that it has been used as anything other than a junkyard. The groundwater below this property has been impacted by PCE-related contaminants at all three depth ranges (Figure 6-1, Figure 6-2, and Figure 6-3); TCA-related contaminants were not detected at this property (Figure 6-4, Figure 6-5, and Figure 6-6). The PCE found at the intermediate depth at the two upgradient probe locations (GP-178R and GP-252) (Figure 6-2) is likely from the 118-138 Swalm Street site. The downgradient points on this property show a trend similar to that of those points downgradient of 299 Main Street. At this property individual contaminants change and become more numerous just downgradient of this property. Upgradient of the property the only contaminant noted in the groundwater is PCE, while downgradient TCE and DCE are found along with the PCE (Figure 6-6a). In GP-230, a downgradient point, the total PCE-related contaminants are 464 ppb at the shallow depth; of the 464 ppb total, 260 ppb is cis-1,2-DEC and 170 ppb TCE. The source of these different contaminants is likely on this property or the property just to the west. In addition to the PCE from the upgradient source, additional contaminants are found, including cis-1,2-DCE and TCE at a shallow depth (Figure 6-6a). In GP-194 at the shallow depth, total PCE-related contaminants are 2190 ppb (1700 ppb cis-1,2-DCE and 490 ppb TCE). This property or the property to the west is the apparent source for this contamination.

Documented on-site usage of target compounds could not be verified but is likely based on past site uses (junkyard). Just downgradient of this property the contaminant concentrations in the groundwater increase and the number of individual contaminants also increases immediately downgradient. Based on the size of the property and the number of samples taken around this property, it is a likely source of the noted groundwater contamination. The presence of an on-site source could not be verified because access to the property was denied by the current owner. This property should appear on the registry of inactive hazardous waste sites to allow remedial investigations to locate any possible on-site source areas.

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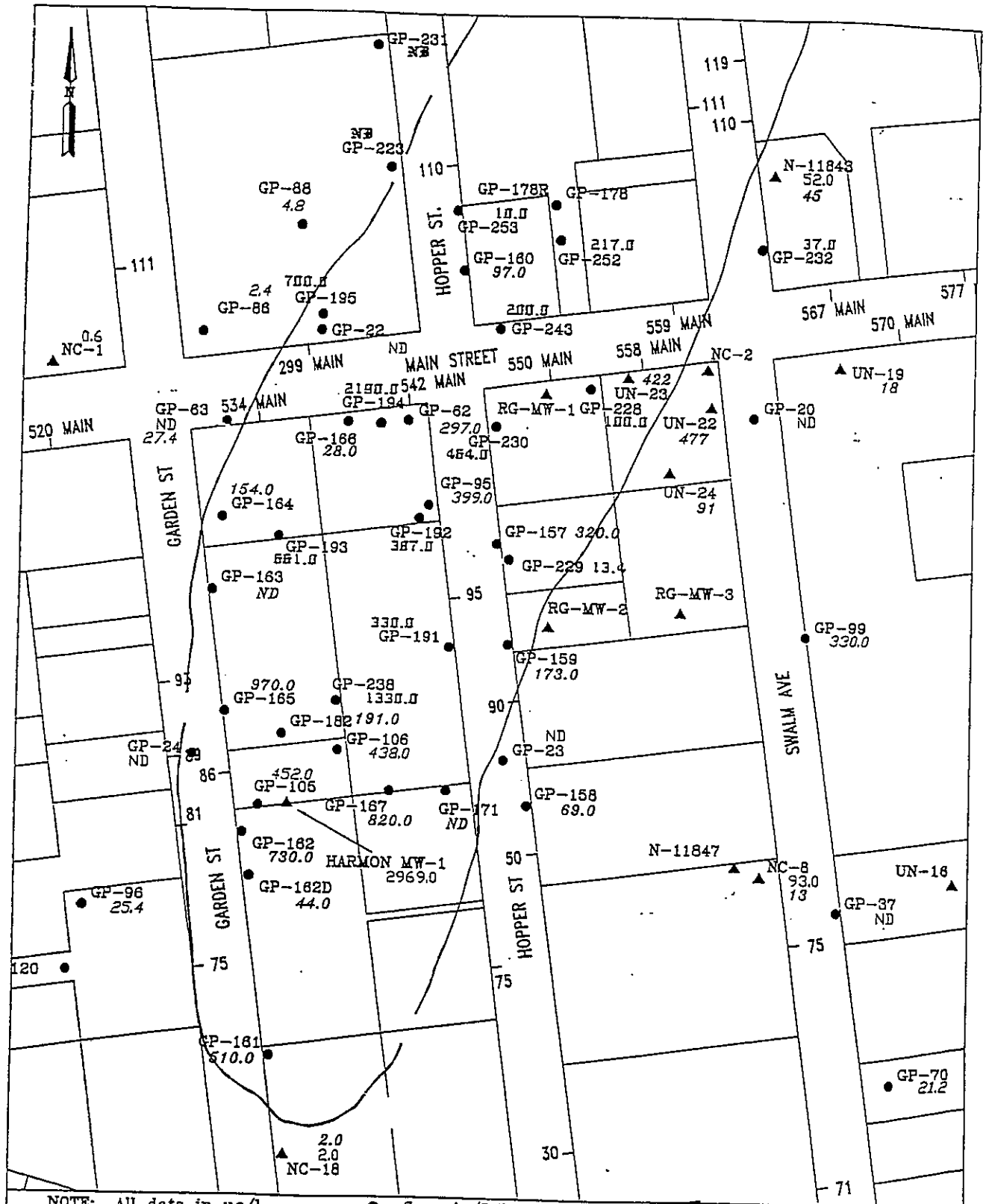


NOTE: All data in ug/l.

Scale in Feet

140 0 140

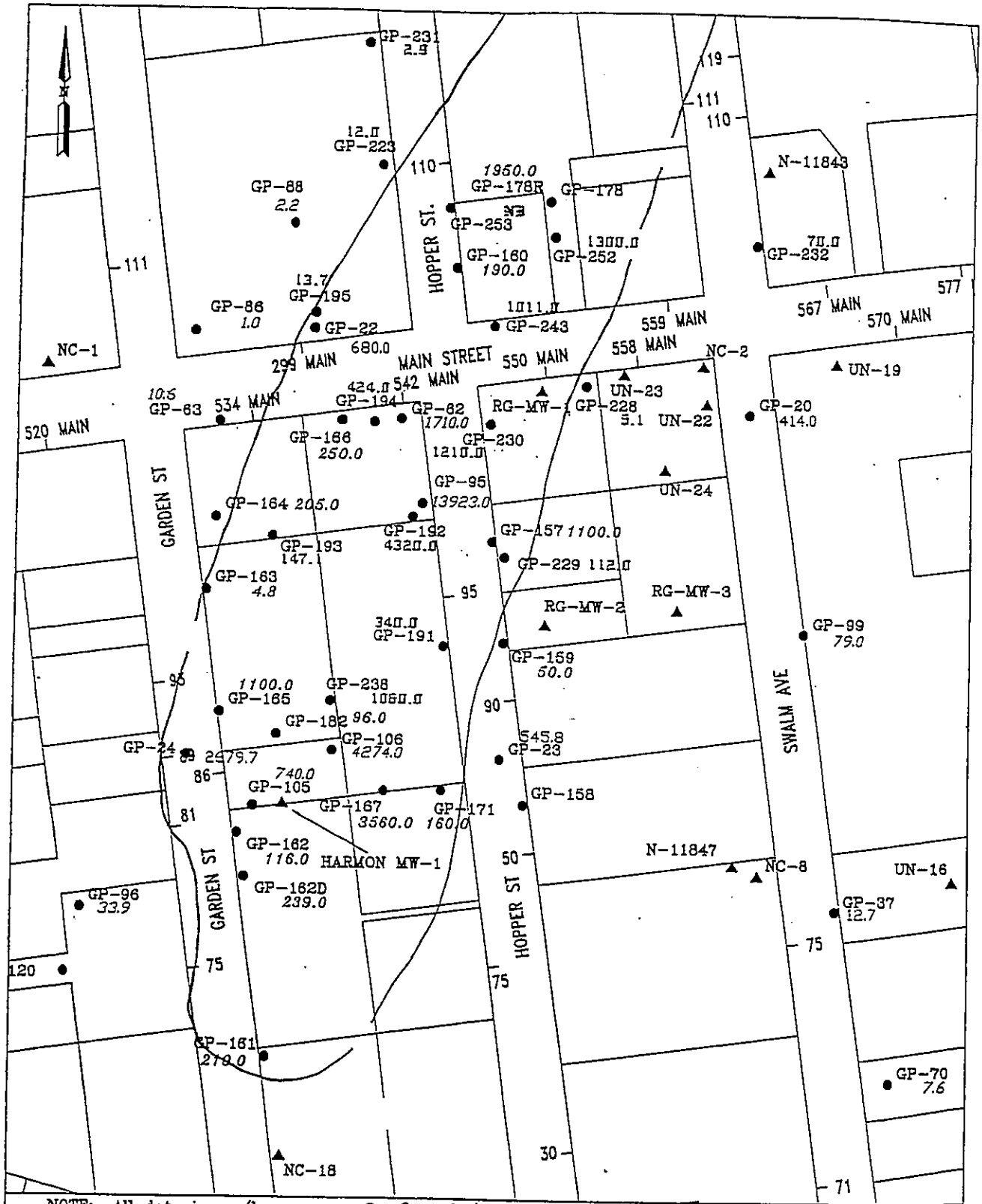
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.1
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST.
AND 95 HOPPER ST
PCE IN GROUNDWATER
WATER TABLE TO 65 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

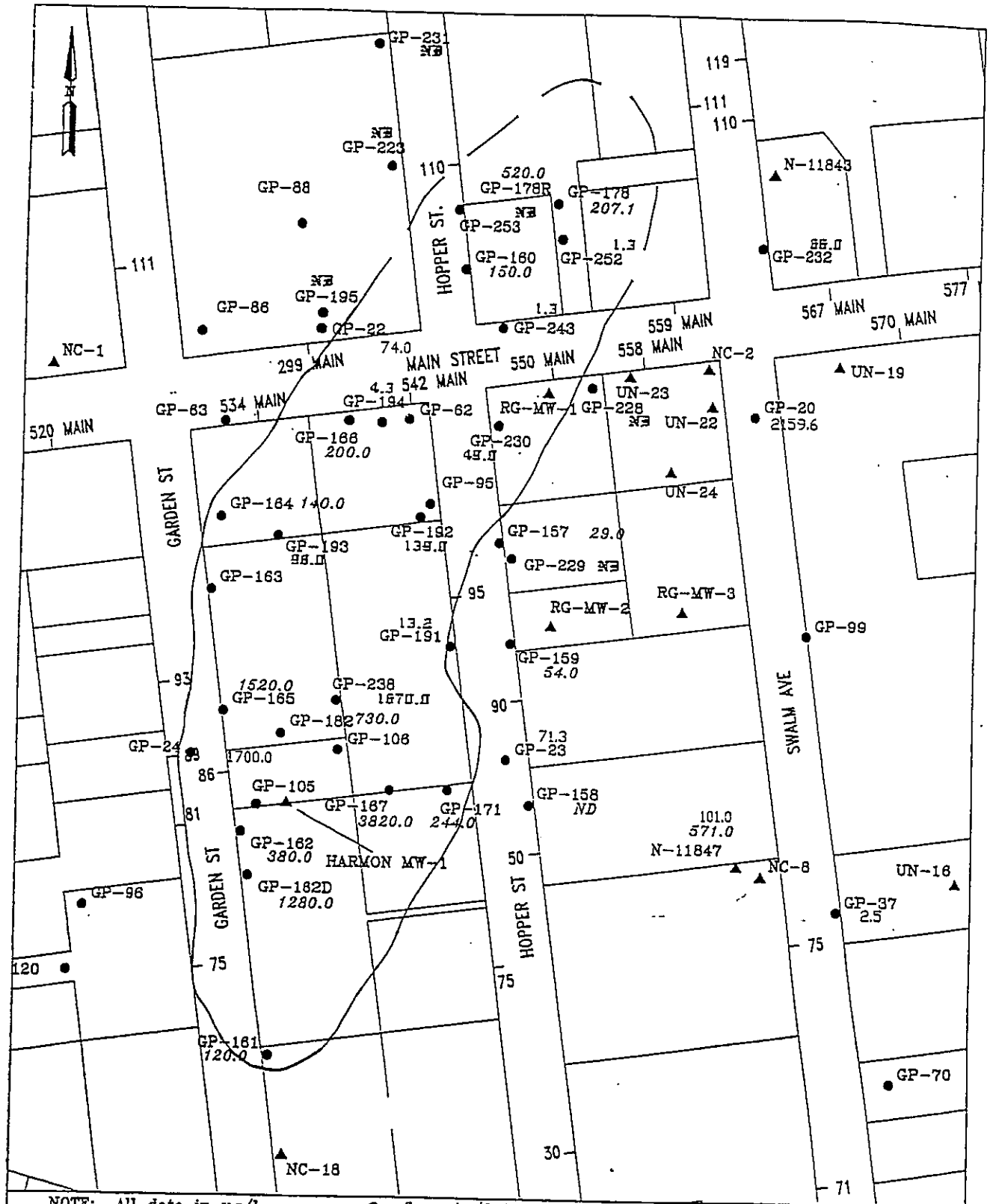
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.2
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
PCE IN GROUNDWATER
65 TO 85 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.3
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
PCE IN GROUNDWATER
85 FT +

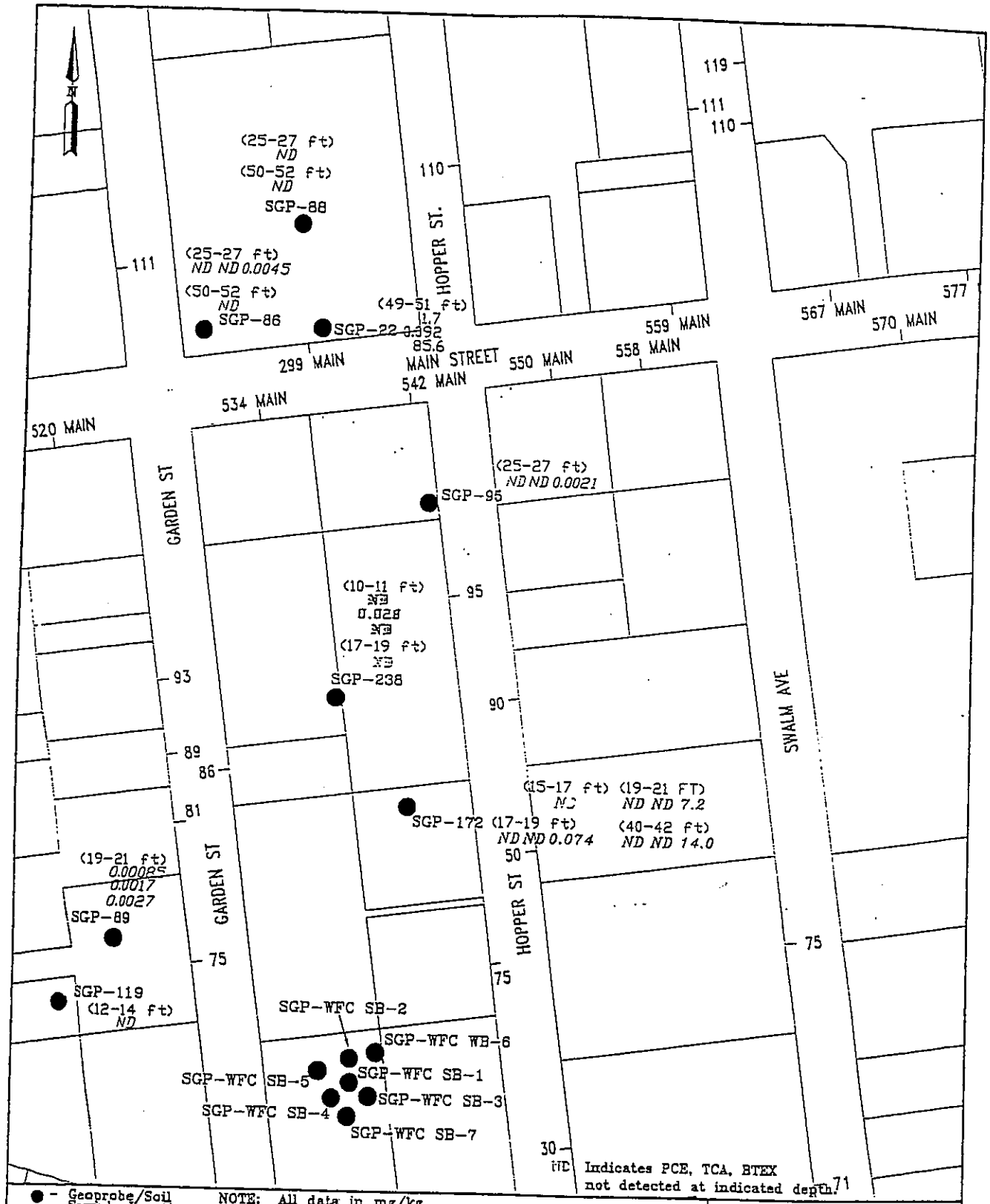


FIGURE 6.7

HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
SUBSURFACE SOILS DATA

CHAPTER 7

RECOMMENDATIONS

Based on the conclusions of Task 4 of the multisite PSA investigation, presented in Chapter 6, LMS recommends the following classification of facilities within the remaining potential registry sites and data review sites in the NCIA.

7.1 HOPPER/MAIN STREET SITE

95 Hopper Street - Bilt-Rite Steel Buck

- Documented usage of hazardous waste
- No source
- Groundwater plume documented as emerging from site
- Recommendation - this property should remain a potential registry site until an upgradient source for the on-site groundwater contamination is determined.

542 Main Street - Als Tool and Die

- No documented usage
- No source
- In general, upgradient groundwater concentration greater than downgradient, but one sample had high concentration (13,900 ppb) over cesspool area.
- Recommendation - this property should remain a potential registry site until an upgradient source for the on-site groundwater contamination is determined.

550 Main Street - Royal Guard Fence

- Documented usage of degreasers
- No source
- Groundwater plume documented as emerging from site
- Recommendation - this property should not appear on the registry of hazardous waste sites.

299 Main Street - One Stop Auto and Truck Center

- Documented usage of hazardous waste
- Target compounds detected in soils from 49-51 ft
- Groundwater plume was documented as emerging from site
- Recommendation - this property should be listed on the registry of hazardous waste sites.

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FOCUSED REMEDIAL INVESTIGATION
Work Plan

98-335

To Be Conducted At:

Site Code # 1-30-043S
299 Main Street
Westbury, New York

Client:

2632 Realty Development Corp.
1025 Old Country Road
Westbury, New York

User:

New York State Department of Environmental Conservation
Bureau of Eastern Remedial Action
Division of Environmental Remediation
50 Wolf Road
Albany, New York

Dated:

September 18, 1998

Impact Environmental
Geotechnical Services · Environmental Consulting · Environmental Engineering · Environmental Contracting
Forty-Six East Northport Road · Kings Park · New York 11754 · 516-269-8800 · Facsimile 516-269-1599 · e-mail ie4enviro@aol.com

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Dated:

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1.0 INTRODUCTION

This work plan details the various tasks that will be performed in the investigation of 299 Main Street in Westbury, New York (located in the western portion of the New Cassel Industrial Area), herein identified as the "Site". A Multisite PSA Task 4 Report prepared by Lawler, Matusky and Skelly Engineers (LMS) for the New York State Department of Environmental Conservation (NYSDEC) in 1997 identified chlorinated organic solvent contamination in the New Cassel Industrial Area (NCIA). The PSA suggested that the Site was a source of chlorinated organic solvent-related contaminants and that it should remain on the State Registry of Inactive Hazardous Waste Disposal Sites ("State Registry").

2632 Realty Development Corp. is a past owner and is the current contract vendee to repurchase the Site. The NYSDEC contends that past site operations have led to groundwater contamination beneath and hydraulically down gradient of the Site with trichloroethylene (TCE), perchloroethylene (PCE) and their transformation compounds. As such, the Site has been designated by the NYSDEC as an inactive hazardous waste disposal site, as defined in ECL 27-1301.2, because the department contends that the site presents a significant threat to the public health and the environment. The site has been listed in the State Registry as Site Number 01-30-043S.

This Focused Remedial Investigation ("Focus Study") will provide more data from which to confirm or refute the findings and recommendations of the LMS Multisite PSA Task 4 Report. The results will be submitted in a Focused Remedial Investigation Report in accordance with the provisions of the Draft Order on Consent between the NYSDEC and 2632 Realty Development Corp.

2.0 PROPOSED SITE BACKGROUND STUDY

2.1 Site Location

The subject property is located at 299 Main Street in Westbury, New York. This location is on the north side of Main Street between Hopper Street and Garden Street. The areal extent of the subject property is approximately 51,200 square feet or 1.2 acres. A site location map is provided in Plate 1. A base map for the subject property is given in Figure #1.

2.2 Site History

A 50-year site history will be conducted that will include information on past land uses on-site and uses in the immediate vicinity of site. Historic information will be compiled from various private and public

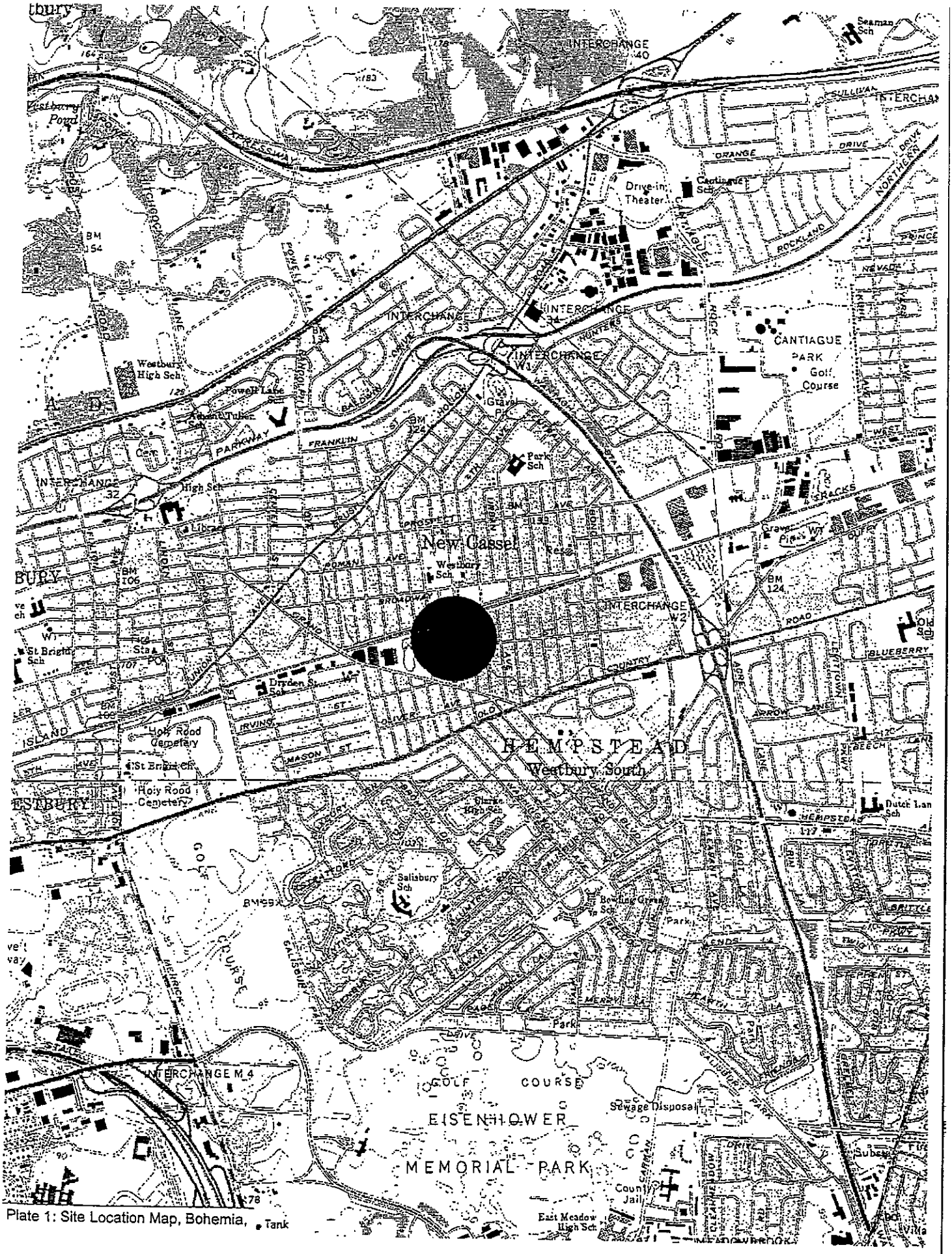

Plate 1: Site Location Map, Bohemia,

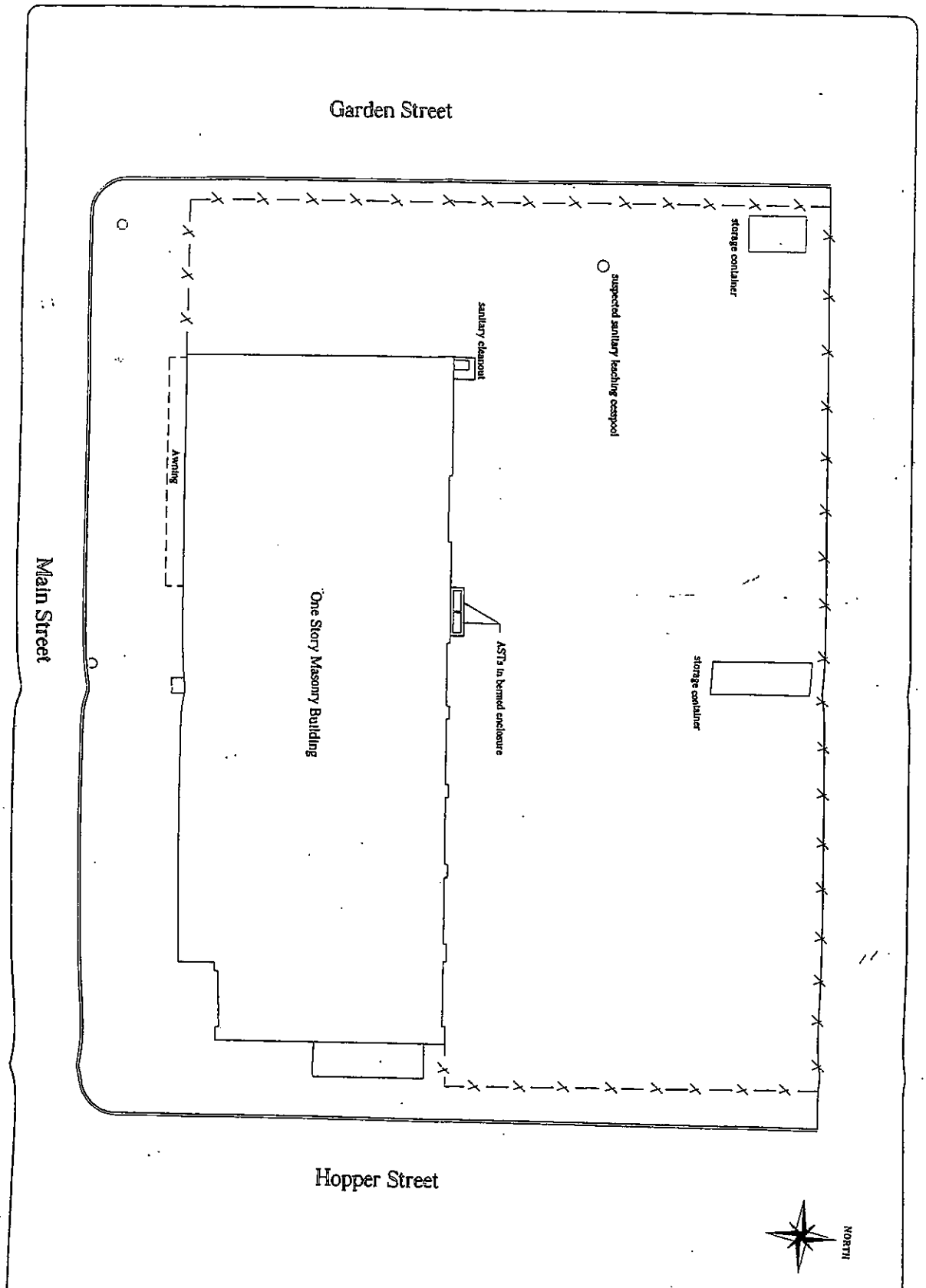

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Figure #1: Base Map

New Cassel, New York

Legend:
- groundwater probe node
- soil probe node
- monitor...

scale: 1" = 20'

sources including the Cole reverse telephone directories, Sanborn fire insurance maps, E. Belcher Hyde maps, LILCO (LIPA) records and aerial photographs.

2.3 Site Geology

A thorough discussion of site geology will be presented that will include descriptions of surficial geology, unconsolidated deposits and the underlying bedrock.

2.4 Site Geohydrology

The geohydrology of the Site will be examined using available groundwater potentiometric surface maps and data obtained from the results of the subsurface investigative activities proposed in this document. Additionally, the investigation data will be used to compile a potentiometric map of the water table, determine groundwater transport rates and understand the dynamics of on-site contaminant migration. On-site soils, as well as the location of underground aquifers and the presence of pre-existing wells, will be discussed.

3.0 SITE INVESTIGATIVE ACTIVITIES

3.1 Site Visit

A site survey will be performed in the presence of an official from the NYSDEC. The survey will identify the present location of on-site buildings, parking lots, drains, underground injection wells, and potential areas of surface contamination (as indicated by the presence of drums, stored or spilled liquid contaminants, or stains). All information collected during the site visit will be entered in a site survey form (See Appendix A).

3.2 Remote Sensing Survey

A ground penetrating radar (GPR) survey will be performed to confirm or refute the presence of suspected underground storage tanks on the subject property. The GPR survey will also be used to locate subsurface anomalies that could represent underground storage tanks or inaccessible underground injection wells.

The data collected during the survey will be reviewed by the operator and compared against past experience, technical judgment, and prior Site knowledge to classify the anomalies. When an underground storage tank (UST) or injection well is identified, the location will be marked using a small flag and plotted onto the site plan. On asphalt, spray paint will be used to delineate the size and orientation of any UST or injection well.

3.3 Locating and Mapping Subsurface Sampling Locations

Soil probes will be installed at locations on the surface of the site on a 50-ft. x 50-ft. square grid. The proposed arrangement of the probe locations is presented in Figure #2. The probe locations will be surveyed on the site and marked using small flags. Any potential point pollution sources identified from the remote survey will be marked with a different flag and subsequently mapped onto the site plan.

The proposed location of the groundwater wells and geoprobe sampling probes are presented in Figure #3. These locations will be surveyed on the site from the site plan and marked using a small flag.

3.4 Evaluation of Emergency Procedures

The routes of emergency egress will be evaluated and marked with surveyor's flagging if necessary. This will be done to ensure that routes of emergency egress from all boring locations cannot be temporarily blocked by equipment or on-site vehicles. Additionally, the site safety plan will be reviewed on-site by all workers to insure compliance.

4.0 PROPOSED INVESTIGATION OF SITE SOIL AND GROUNDWATER QUALITY

4.1 Soil Sampling

Nine soil probes will be installed at locations on the surface of the site on a 50-ft. x 50-ft. square grid. Samples will be obtained from each probe location on a 15-ft. vertical interval to groundwater. Accordingly, the total number of soil samples proposed for collection will be 27. Analysis of these samples will be performed using USEPA test method 8260 for volatile organic compounds. Table 1 below provides a target analyte list for USEPA Method 8260.

A visual inspection of all samples that will be recovered during the installation of each of the probes will be conducted to identify any gross signs of chemical contamination and to classify the sample media.

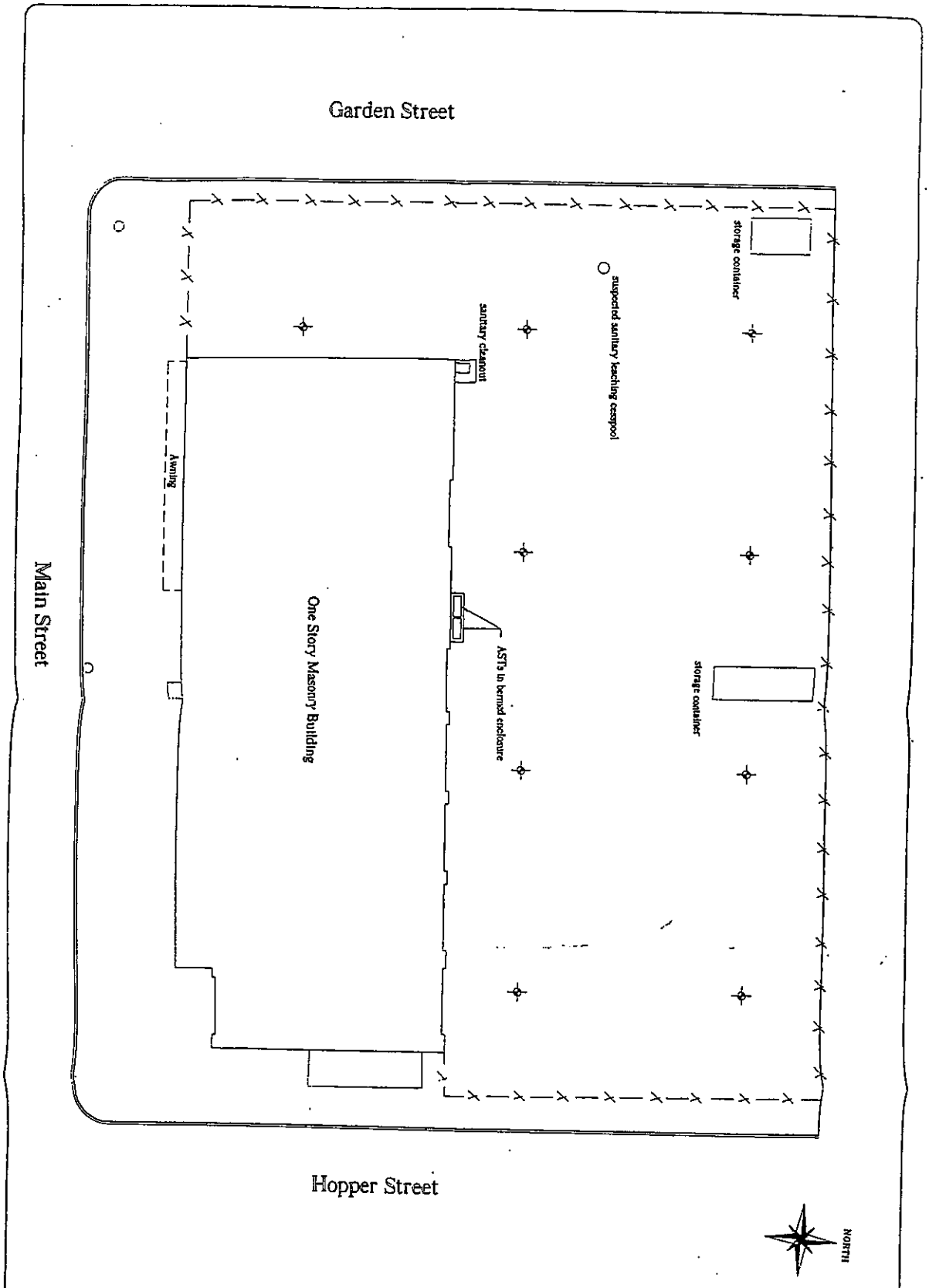

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Figure #2: Soil Acquisition Plan

New Cassel, New York

Legend:
- groundwater probe node
- soil probe node
- monitoring well

scale: 1" = 20'

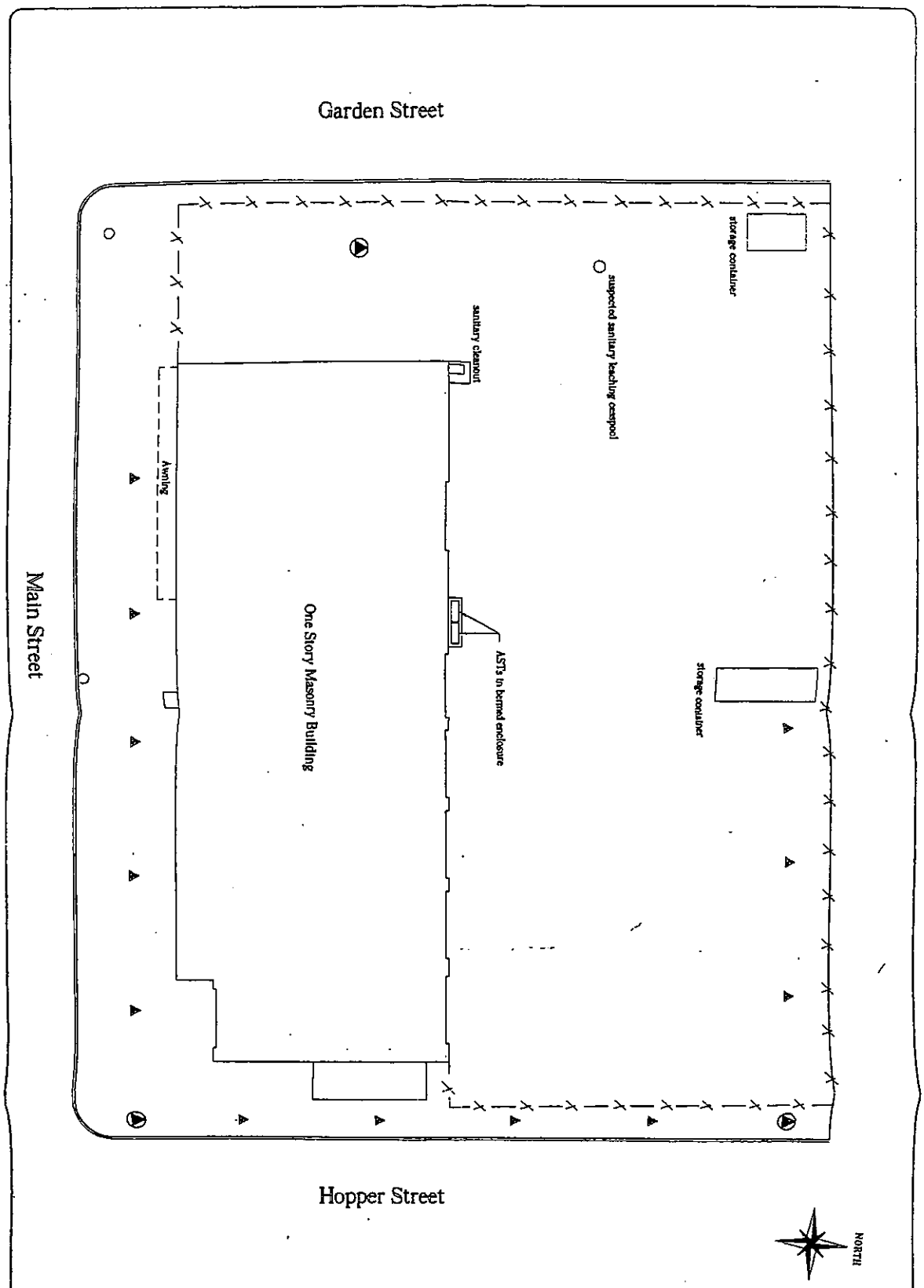

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Figure #3: Groundwater Acquisition Plan

New Cassel, New York

Legend:
- groundwater probe node
- soil probe node
- monitoring well

scale: 1" = 20'

Table 1 **USEPA Target Analyte Compounds Determined by Method 8260**

Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Boromethane
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
2-Chlorotoluene
4-Chlorotoluene
Dibromochloromethane
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
Dibromomethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene
p-Isopropyltoluene
Methylene chloride
Naphthalene
n-Propylbenzene
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluormethane
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl chloride

4.2 Groundwater Sampling

A total of three groundwater monitoring wells will be installed, developed and sampled using the procedures outlined in *A Compendium of Superfund Field Operations Methods*, USEPA, 1987, and 6 NYCRR Part 360.2.11 (C) (1) (I). Twelve additional groundwater samples will be acquired from Geoprobe temporary well points. Analysis of these samples will be performed using USEPA test method 624 for volatile organic compounds.

4.3 Proposed Investigation of Point Source Pollution Areas

The information obtained from the site survey (Section 3.1) and the remote survey (Section 3.2) will be used to determine the locations in which hazardous materials, if any were processed, handled, or stored on the subject property (identified as point sources).

4.3.1 Underground Injection Wells

Soil probes will be installed within the confines of any storm water drywells, leaching lagoons, waste water disposal wells, retention pits or cesspools identified on-site. Samples will be secured from the probes on a 15-foot vertical interval to groundwater. Analysis of these samples will be performed using USEPA test method 8260 for volatile organic compounds.

4.3.2 Storage Tanks

Soil probes will be installed at locations adjacent to any underground storage tanks identified on-site. Samples will be taken from the probes at intervals of eight (8) to ten (10) feet and twelve (12) to fourteen (14) feet below existing grade. Analysis of these samples will be performed using USEPA test methods relevant to the tank content.

In the case of above ground storage tanks, samples will be secured by hand from locations beneath the base. Analysis of these samples will be performed using USEPA test methods relevant to the tank content.

5.0 PROPOSED SUBSURFACE INVESTIGATION PROCEDURES

5.1 GPR Survey Procedures

A qualified Impact Environmental Consulting, Inc. technician will specify a coordinate system on the plainmetric surface of the site to map any subsurface dielectric anomalies detected on the premises. The operator uses knowledge of the subsurface soil composition to calibrate the SIR-2 system to site specific conditions. Factor settings such as range, gain, number of gain points, and scans per unit will be modified to yield the most accurate data to describe the subsurface conditions.

Upon finding a dielectric anomaly, a more spatially specific coordinate system will be designed over the area to determine its size, shape, and orientation.

5.2 Subsurface Geoprobe Installation

Subsurface probes will be installed using a Geoprobe hydraulically powered probing tool (see information on Geoprobe Systems in Appendix B, Figure 2.1, Page 5). Mechanized, vehicle mounted probe systems apply both static force and hydraulically powered percussion hammers for tool placement (static down forces up to 3,000 pounds combined with percussion hammers of eight horsepower continuous output). Recovery of large sample volumes will be facilitated with a probe-driven sampler. The probe-driven sampler consists of a hollow probe that opens via a remote control mechanism at the selected sampling depth in the soil profile to allow soil to enter as it is advanced. Discrete media samples will be secured at the desired depths and are contained within a non-reactive transparent plastic sleeve that lined the hollow probe. The plastic sleeves will be removed for subsequent inspection and sample aliquot acquisition.

5.3 Sample Characterization

A visual inspection of all samples that will be recovered during the installation of each of the probes will be conducted to identify any gross signs of chemical contamination and to classify the sample media. Gradation classifications will be performed in accordance with the Unified Soil Classification System. Color classifications will be made in accordance with the Munsell Classification System.

5.4 Geoprobe Temporary Well Point Sampling Procedure

The groundwater sampling system that will be used is the Screen Point 15 that is designed to accurately collect grab samples of groundwater. The Screen Point 15 uses a screen with a standard slot size of 0.004 inches that is sealed inside a 1.5-inch ID alloy steel sheath as it is driven to depth. The screen is sealed

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inside the sheath with Neoprene O-rings, which prevents infiltration of formation fluids until the desired depth is attained. When the screen has been driven to the depth of interest in the formation, extension rods are used to hold the screen in position as the driving rods are retracted approximately 4 feet. The 4-foot long sampler sheath forms a seal above the screen as it is retracted. A total of 41.5 inches of slotted screen is placed into contact with the formation. The Screen Point 15 groundwater sampler has a total boring diameter of 1.5 inches, and the outside diameter of the screen is 1.0 inch. This provides for a maximum of 0.25 inches between the screen and the natural formation as the sampler sheath is retracted. These conditions approach the ideal for natural formation development that can be conducted when lower turbidity samples are required.

Each groundwater sample will be collected from the sampler utilizing 3/8-inch in diameter disposable tubing equipped with a bottom check valve. The tubing is extended from the surface down to the sampler. The tubing is oscillated up and down continuously until the check valve has trapped an adequate volume of a groundwater sample. The tubing is then removed and the water is poured into appropriate sample vessels for subsequent laboratory analysis.

5.5 Construction of Site Monitoring Wells

The new wells will be constructed using a five and one-half inch diameter hollow stem auger. The auger annulus will allow the installation of a four-inch monitoring well casing and wire wrapped screen section. The screen slot size will be a function of the gradation of the filter pack (able to hold back at 95% of the filter pack). A filter pack will be installed within the annular space of the auger. The filter pack will extend to a depth of six inches below the bottom of the well screen to a point one-foot above the water table. The material used for the filter pack will consist of clean siliceous sand. The grain size of the filter pack sand will be three to five times the average (50% passing) size of the formation material as determined from existing and proposed sieve analysis. This will minimize the amount of the material entering the well from the screened part of the formation and, at the same time, not inhibit water inflow into the well. A finer grained siliceous sand pack will be placed to a point one-foot above the water table (approximately thirty feet in thickness). A Bentonite seal will be placed above the sand pack using a tremie pipe to form a seal at least three feet thick. Above the seal, a one-foot, fine-grained siliceous sand will be placed to minimize grout infiltration.

Each of the wells will be constructed of four-inch schedule PVC riser, screened at a discrete interval in the saturated soil column. The screen depths of the proposed deep wells will range from twenty-feet below sea level to forty-feet below sea level. The screened length of each of the wells will be twenty-feet (the bottom twenty-feet). The wells will be constructed of PVC as it possesses the required tensile

strength (risers and threading) to accommodate the required installation depths. Additionally, PVC is resistant and non-reactive with contaminants typically found in landfill plumes and thus will be appropriate material for long term performance without contributing or removing contaminants from the groundwater. The PVC riser and screens will be interconnected with standard flush threaded couplings (ASTM F-480) containing fluorocarbon (Viton) O-rings. A filter pack will be installed around the outside of each well using a tremie pipe. The material used for the filter pack will consist of a uniform clean siliceous sand. The PVC screens will be wire wrapped.

A bentonite seal will be placed above the sand pack using a tremie pipe to form a seal at least three feet thick. Above the seal, a one-foot fine-grained siliceous sand pack will be placed to minimize grout infiltration. The balance of the casing annulus will be filled with grout to the surface. The grout will consist of a commercially available high-solids cement/bentonite grout. The grout mixture will set up without being diluted by formation of water, and will displace water in the annular space to ensure a continuous seal.. The grout will be placed under pressure using a tremie pipe.

An eight-inch steel casing (manway) will be placed over the four-inch diameter protective screened casing and secured in a surface well seal to adequately protect it. A drain hole will be drilled at the base of the steel casing. A vent hole will be located near the top of the steel casing to prevent explosive gas build up and to allow well water levels to respond naturally to changes in barometric pressure. The annulus of the casing will be filled with gravel. A twelve-inch weather sealed locking cap will have at least two inches of clearance between the top of each clustered well cap and the bottom of the locking cap. Duplicate keys to the locking cap will be submitted to the NYSDEC.

A concrete surface seal will be constructed. The surface seal will extend below the frost line. The top of the seal will be constructed by pouring concrete into a form with a minimum three-foot side. The seal will prevent surface runoff from ponding and entering the well casing. In areas of excessive vehicle traffic, protective bollards will be installed around the seal. Complete construction diagrams for the proposed wells are provided in Appendix C.

The wells will be developed between sampling events by purging three well volumes from each.

6.0 RECORD KEEPING AND DOCUMENTATION

A site field log and a master sample log will be used on-site to record notes pertaining to the sampling. For the groundwater wells, a well log sheet will be used to record information. A sample form is provided in Appendix D.

ICM Laboratories will be used for all laboratory work in this study. A statement of qualifications for ICM can be found in Appendix E.

6.1 Sample Tracking System

In order to provide for proper identification in the field, and proper tracking in the laboratory, all samples must be labeled clear and in a consistent fashion using the procedures and protocols described below and with the following subsections.

Sample labels will be waterproof and have a pre-assigned, unique number that is indelible.
Field personnel must maintain a field notebook. This notebook must be water resistant with sequentially numbered pages. Field activities shall be sequentially recorded at a later time. The notebook, along with the chain of custody form, must contain sufficient information to allow reconstruction of the sample collection and handling procedure at a later time. Each sample shall have a corresponding notebook entry that includes:

Sample ID number
Well location and number
Date and time
Analysis for which sample was collected
Additional comments as necessary
Sampler's name

Each sample must have a corresponding notebook entry on a chain-of-custody form. The manifest entry for sampling at any one well is to be completed before sampling is initiated by the same sampling team at any other well. In cases where the samples leave the immediate control of the sampling team, the samples must be sealed.

6.2 Sample Identification System

Each sample collected shall be designated by an alphanumeric code that shall identify the type of sampling location, the specific location, the matrix sampled, and a specific sample designation. Site specific procedures are described below.

Sample identifications shall contain a sequential code consisting of three segments. The first segment shall designate the project number. The second segment shall identify the location type. Location types shall be identified by a two-letter code. For example, MW will be used for monitoring well and GP for geoprobe. The third segment shall identify the specific sample location. The specific sampling location shall be identified using a three-digit number.

The fourth segment shall identify the matrix type and sample designation or identifier that identifies the sample depth, the sample event number, or other designation depending on the sample type. The matrix type shall be designated by a two-letter code. For example: GW will be used for groundwater. The sample identifier shall be represented by a two digit numeric code. Sampling events or rounds, such as for groundwater sampling shall be numbered in sequence beginning with "01" that corresponds to the round of sampling.

The following shall be a general guide for sample identification:

First Segment	**Second Segment**	**Third Segment**	**Fourth Segment**
NNN	AA	NNN	AANN
Project #	Location Type	Specific Type	Matrix Sample Identifier
963	MW	281	GW01

Symbol Definitions:	Location Type:	Matrix Type:
A = Alphabetic	MW = Monitoring Well	S = Soil
N = Numeric	GP = Geoprobe	GW = Groundwater

Sample Identifier:

1st round of sampling = 01

2nd round of sampling = 02

6.3 Sample Containers and Analytical Requirements

As required in the NYSDEC Analytical Sampling Protocol (ASP), all sample containers must be provided by the laboratory. If glass bottles are used, extra glass bottles will be obtained from the laboratory to allow for accidental breakage that may occur. Necessary preservatives will be placed in the sample bottles by the laboratory. The sample bottles will be handled carefully so that preservatives and glassware are not inadvertently spilled. All soil samples will be put into four 6-ounce glass jars with teflon liners. All liquid samples will be put into 40-ml glass vials with teflon liners.

6.4 Sample Packaging

Samples shall be packaged and shipped according to Section 6.2 of the USEPA's *Compendium of Superfund Field Operations Methods* entitled, "Packaging, Labeling, and Shipping." Chain of custody forms, sample labels, custody seals, and other sample documents shall be filled out as specified in the USEPA *CLP Users Guide*. Sample bottles and samples shall either be delivered/picked up at the site daily by ICM Laboratories, or delivered via overnight courier.

The proper procedures for packaging and shipping must be followed once the samples have been collected.

<u>Packaging</u>

Prior to shipment, samples must be packaged in accordance with current US DOT regulations. All required government and commercial carrier shipping papers must be filled out. The procedure below should be followed regardless of transport method.

As required in the NYSDEC ASP, samples will be transported in metal ice chests or sturdy plastic coolers.

Remove previously used labels, tape, and postage from cooler.

Ship filled sample bottles in same cooler in which empty bottles were received.

Check that all bottle labels are complete.

Check that all sample bottles are tightly capped.

Affix return address labels.

Be sure that chain-of-custody forms are complete.

Wrap sample bottles in bubble pack and place in cooler.

Pack bottles with extra bubble pack, vermiculite, or Styrofoam.

Keep samples refrigerated in cooler with bagged ice or frozen cold packs. Do not use ice for packing material.

Separate and retain the sampler's copy of chain-of-custody.

Tape paperwork in zipper bag to inside of cooler lid.

Close cooler and apply signed and dated custody seal in such a way that the seal must be broken to open the cooler.

Securely close cooler lid with packing or duct tape. Be sure to tape latches and drain plugs in closed position.

Shipping

Samples should arrive at the lab as soon as possible following sample collection to ensure holding times are not exceeded. All samples must be hand delivered on the same day as sampling or sent via overnight courier. Coolers will contain ice packs to maintain a temperature below 4 °F. Samples will be delivered to the laboratory within the seven-day holding period prescribed for VOC analysis.

6.5 Sampling Documentation

The sample team or individual performing a particular activity shall be required to keep a weatherproof field notebook. Field notebooks are intended to provide sufficient data and observations to enable participants to reconstruct events that occurred during projects and to refresh the memory of the field personnel if called upon to give testimony during legal proceedings. In a legal proceeding, notes, if referred to, are subject to cross examination and are admissible as evidence. The field notebook entries should be factual, detailed, and objective. All entries are to be signed and dated. All members of the field investigation team are to use this notebook, which shall be kept as a permanent record. The field

notebook shall be filled out at the location of sample collection immediately after sampling. It shall contain sample descriptions including: sample number, sample collection time, sample location, sample description, sampling method used, daily weather conditions, field measurements, name of sampler, and other site-specific observations. The field notebook shall contain any deviations from the protocol contained herein, visitor's names, community contacts made during sampling, and geologic and other site-specific information that may be noteworthy.

Chain-of-custody forms, sample labels, custody seals, and other documents shall be filled out as specified in Section 4.0 of the USEPA *A Compendium of Superfund Field Operations Manual*, 1987. Additionally, a dedicated sampling master log shall be maintained as the field program progresses. The sample log book shall contain the sample number, sample date/time, sampling team, and chain-of-custody.

6.6 Chain-of-Custody Protocol

The primary objective of the sample custody procedures is to create an accurate written record that can be used to trace the possession and handling of all samples from the moment of their collection, through analysis, until their final disposition. Sample custody for samples collected during the investigation will be maintained by the on-site hydrogeologist or the field personnel collecting the samples. Field personnel are responsible for documenting each sample transfer and maintaining custody of all samples until they are shipped to the laboratory.

Chain-of-custody forms will be completed at the time of sample collection and will accompany the samples inside the cooler for shipment to the selected laboratory.

7.0 PERFORMANCE CRITERIA

7.1 Field and Consulting Engineering Services

All field activities will be performed by Impact Environmental Consulting, Inc. ("contractor") and its designated subcontractors. The subcontractors that are anticipated to be used for the performance of the Focus Study are presented below:

ICM Laboratories, Inc.
1152 Route 10
Randolph, NJ 07869
(973) 584-0330

ADT Drilling Corp.
51-41 59th Place
Woodside, NY 11377
(800) 238-3745

Tank Specialists (Excavators)
2 Park Place
Glen Cove, New York
(516) 759-9318

7.2 Site Representation

All on-site activities will be supervised by a representative of 2632 Realty Development Corp. that is qualified to audit all field mobilization and investigative activities. Said representative will be identified as the Project Field Manager. The Project Field Manager will be on-site during the performance of all work performed by the contractor and its subcontractors. The qualifications of key personal including the Project Field Manager are provided in Appendix F.

7.3 Chronological Description of Focus Study

The time line that will be used for the study is outlined in Table 2.

Table 2

Time Line For Study

Week 1	Week 2	Week 3	Week 4	Week 5
Site Background Study				
				Site Investigation Activities

Week 6	Week 7	Week 8	Week 9	Week 10
		Investigation of Soil and Groundwater Quality		

Week 11	Week 12	Week 13	Week 14	Week 15
	Report Preparation			

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8.0 REPORTING OF RESULTS

All laboratory-reporting procedures will comply with the NYSDEC ASP and the New York State Department of Health Environmental Laboratory Approval Program (NYSDOH ELAP).

9.0 HEALTH AND SAFETY PLAN

9.1 Emergency Response

In order to properly prepare for emergencies, personal protective equipment (PPE) will be worn by site workers and first aid equipment will be kept at the site. Material Safety Data Sheets (MSDS) will be maintained for all contaminants that workers may be exposed to.

9.1.1 Onsite Emergency Response

In the event of an accident or emergency situation, emergency procedures will be executed. Said procedures can and will be executed by the first person to observe an accident or emergency situation. The Project Field Manager will be notified about the situation immediately after emergency procedures are implemented.

A list of the pertinent personnel authorized to be present on site is as follows:

Title	Name	Telephone Number
Project Manager	George Wright	(516) 269-8800
Health & Safety Officer	Richard S. Parrish	(516) 269-8800
Project Field Manager	Keith Franzen	(516) 269-8800
Site Safety Officer	Jim Mulvey	(516) 269-8800
Client Contact	Charlotte Biblow	(516) 357-3000
Site Contact	Paula Scappatura	(516) 333-4005
State Agency Contact (NYS DEC)	Chittibabu Vasudevan	(518) 457-1708

9.1.2 Emergency Contacts

Ambulance/Emergency:	*Nassau County Medical Center* 516-572-6655
Police:	911 or *Westbury Police Dept.* 516-573-5275
Fire Department:	*Westbury Fire Dept.* 516-921-0000
Poison Control Center:	800-336-6997
Hospital:	*Nassau County Medical Center* 516-572-0123
Directions:	Take Garden Street south and turn left onto Grand Blvd. Continue east on Grand Blvd. and turn right onto Carman Ave. Travel approximately two miles south on Carman Ave. and the hospital will be on the left immediately after the Nassau County Jail.
State Police:	516-756-3300
National Response Center:	800-424-8802
US EPA (24 hour hotline):	800-424-9346

9.1.3 Who to Contact Before Initiating Subsurface Investigation Work

Impact Environmental Consulting, Inc. ("Impact") representatives are responsible for contacting appropriate agencies prior to conducting on-site activities when applicable.

Gas Company:	*Brooklyn Union Gas* 718-643-4050
Telephone Company:	*Bell Atlantic* 516-661-6000
Electric Company:	*Marketspan* 516-222-7700

9.1.4 Contingency / Evacuation Plan

It may be possible that a site emergency could necessitate the evacuation of all personnel from the site. If such a situation develops, an audible alarm shall be given for site evacuation (consisting of an air horn). Personnel shall evacuate the site in a calm and controlled fashion and regroup at a predetermined location. The route of evacuation will be dependent on wind direction, severity, type of incident, etc.

The site must not be re-entered until back-up help, monitoring equipment, and/or personal protective equipment are on hand and the appropriate regulatory agencies have been notified.

9.1.5 Standard Procedures for Injury

1. Telephone for ambulance/medical assistance if necessary. Whenever possible, notify the receiving hospital (listed in 9.1.2) of the nature of physical injury or chemical overexposure. If no phone is available, transport the person to the nearest hospital. Refer to Appendix for map to hospital.
2. Bring this Health and Safety Plan with the attached MSDS's to the medical facility with the injured person.
3. If the injury is minor, proceed to administer first aid.
4. Notify the Site Safety Officer, Project Manager, and the Regional Safety Director of all accidents, incidents, and near emergency situations.

9.1.6 Emergency Treatment

When transporting an injured person to a hospital, bring this Health and Safety Plan to assist medical personnel with diagnosis and treatment. In all cases of chemical overexposure, follow standard procedures as outlined below for poison management, first aid, and, if applicable, cardiopulmonary resuscitation. Different routes of exposure and their respective first aid/poison management procedures are outlined below.

9.1.7 Ingestion

Do not induce vomiting unless prompted by a health professional. Transport person to nearest hospital immediately.

9.1.8 Inhalation / Confined Space

Do not enter a confined space to rescue someone who has been overcome unless properly equipped and a standby person is present.

9.1.9 Inhalation / Other

Move the person from the contaminated environment. Initiate CPR if necessary. Call or have someone call for medical assistance. Refer to MSDS for additional specific information. If necessary, transport the victim to the nearest hospital as soon as possible.

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9.1.10 Skin Contact / Non-Caustic Contaminant (Petroleum, Gasoline, etc.)

Wash off skin with a large amount of water immediately. Remove any affected clothing and rewash skin using soap, if available. Transport person to a medical facility if necessary.

9.1.11 Skin Contact / Corrosive Contaminant (Acids, Hydrogen Peroxide, etc.)

Wash off skin with a large amount of water immediately. Remove any affected clothing and rewash skin with water. Transport person to a medical facility if necessary.

9.1.12 Eyes

Hold eyelids open and rinse the eyes immediately with large amounts of water for 15 minutes. Never permit the eyes to be rubbed. Transport person to a medical facility as soon as possible.

9.2 Informational Summary

9.2.1 Health and Safety Summary

Chemicals of Concern: Benzene, MTBE, Tetrachloroethene, Toluene, Trans 1,2 Dichloroethane, Trichloroethene, Xylene(s), Vinyl Chloride.

These chemicals are of moderate to low hazard. Therefore, modified level D personal protective equipment will be required at all times when on site. Changes to this requirement will be required as follows.

Level C protection, as described in this plan, will be available at a minimum for those activities that involve surface and subsurface soil (strata disturbance, such as well installation, and all subsurface media sampling activities such as split-spoon sampling and borings).

The Site Safety Officer will determine whether or not a level of protection can be upgraded or downgraded. Changes in the level of protection will be recorded in the dedicated site logbook along with the rationale for the changes. Level D protection may be used for those activities that do not pose a potential threat of exposure to toxic or hazardous substances. Typical Level D activities may include sediment, logging and groundwater sampling, as well as surficial site

surveys. Level C protection equipment should be readily available at all times. Consistent with OSHA training, prior to donning Level C, oxygen percent must be continuously monitored.

Action levels represent those conditions that a person requires an upgrade of personal protective equipment (PPE). Organic vapor concentrations are to be monitored in the field by the use of a flame ionization or photo ionization detector (FID or PID) with readings being taken in a breathing zone occupied by field personnel to determine whether an action level has been exceeded. The information presented below applies to the above chemical constituents. All air monitoring results should be logged on the Vapor Monitoring Sheet in Appendix.

All initial site access and activities will be done in Level D attire.

Ionization Detector Response

Flame Ionization Detector (FID)

Concentrations (in ppm)	Level of PPE Required
0.0 to 5.0	Level D
5.0 to 250.0	Level C
250.0 to 750.0	Level B
Above 750.0	Immediately withdraw from the area

Combustible Gas Response

Combustible Gas Indicator (CGI)

Results (% of LEL)	Procedure
0.0 to 20.0	Continue with normal activity
Above 20.0	Immediately withdraw from the area

Oxygen Detector Response

Combustible Gas Indicator (CGI)

Results (% Oxygen)	Procedure
0.0 to 19.5	Level B PPE is required
19.5 to 23.0	Continue with normal activity
Above 23.0	Immediately withdraw from the area

9.3 Introduction

This HASP describes the procedures to be followed in order to reduce employee exposure to potential health hazards that may be present at the project site. The emergency response procedures necessary to respond to such hazards are also described within this HASP.

9.3.1 Purpose

The purpose of this Health and Safety Plan (HASP) is to provide the contractor's field personnel, subcontractors, and other visitors with an understanding of the potential chemical and physical hazards that exist or may arise while the tasks of this project are being performed.

9.3.2 Objective

This Health and Safety Plan is required in accordance with OSHA 29 CFR 1910.120. The primary objective is to ensure the well being of all field personnel and the community surrounding this site. In order to accomplish this, project staff and approved subcontractors shall acknowledge and adhere to the policies and procedures established herein. Accordingly, all personnel assigned to this project shall read this HASP and sign the Agreement and Acknowledgment Statement (Appendix) to certify that they have read, understood, and agree to abide by its provisions.

The contractor's personnel have the authority to stop work performed by our sub-contractors at this site if said work is not performed in accordance with the requirements of this HASP.

9.3.3 Amendments

Any changes in the scope of work of this project and/or site conditions must be amended in writing and approved by the Regional Health and Safety Manager.

9.4 Hazard Evaluation

9.4.1 Site Tasks

The field tasks covered by the HASP may include well installation, development, gauging, and bailing; soil & groundwater handling/sampling; and confined space (excavation) entry and job task hazards.

9.4.2 Job Task Hazards

The following hazards may be encountered.

• Organic Vapors

The inhalation of volatile organic vapors during all operations can pose a potential health hazard. Hazard reduction procedures include monitoring the ambient air with a FID and the use of appropriate PPE. Workers should stand upwind of the source of contamination whenever possible.

• Flammable Vapors

The presence of flammable vapors can pose a potential fire and health hazard. Hazard reduction procedures include monitoring the ambient air with an oxygen/LEL meter (combustible gas indicator). If the LEL reading exceeds 20%, leave the site immediately and contact the fire department.

• Oxygen

Atmospheres that contain a level of oxygen greater than 23% pose an extreme fire hazard (the usual ambient oxygen level is approximately 20.5%). This hazard can be compounded by the fact that vapors associated with this site are highly flammable. All personnel encountering atmospheres that contain a level of oxygen greater than 23% must evacuate the site immediately and must notify the Fire Department. If the oxygen level is less than 19.5%, do not enter the space without level B PPE.

• Vehicular Traffic

All employees will be required to wear a fluorescent safety vest at all times while on site. In addition, supplemental traffic safety equipment use can be exercised when warranted by specific task. Supplemental equipment can be items such as cones, flags, barricades, and/or caution tape.

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9.4.3 Well Installation, Development, Gauging, Bailing; Soil & Groundwater Sampling

Skin and eye contact with contaminated groundwater and/or soil may occur during these tasks. Nitrile gloves and approved safety glasses must be worn.

9.4.4 Sample Preservation

When hydrochloric acid is used, skin and eye contact can occur. This hazard can be reduced with the use of Nitrile gloves and safety glasses. Safety goggles should be worn if there is a potential for a splash hazard.

9.4.5 Cleaning Equipment

Skin and eye contact with methanol, "Alconox", or other cleaning substances can occur while decontaminating equipment. This hazard can be reduced with the use of Nitrile gloves and safety glasses.

9.4.6 Confined Space Entry

Excavation pits, storage tanks, soil trenches, subsurface vaults, basements, and sheds are examples of confined spaces. Confined spaces can be identified as an area having one of the following characteristics:

- Limited access and egress
- Unfavorable for natural ventilation
- Not designed for continuous human occupancy

Organic and/or combustible vapors may be trapped in confined spaces, resulting in lack of oxygen (anoxia) and/or overexposure to vapors. When site work takes place in a confined space, the air must be monitored for oxygen level, flammable vapors, and toxic vapors. The following air monitoring procedures must be followed before entering a confined space.

a. Oxygen Level

   Monitor for percent oxygen with an oxygen/LEL meter (e.g., CGI) to ensure an oxygen level between 19.5 and 23%. Because of the high vapor density of the contaminants associated with this site, there is a high probability that vapors in the enclosed spaces or vaults will replace any oxygen that is present, even if the space is open to the air. Therefore, oxygen level monitoring will be done at the top, middle, and bottom of the enclosed space to determine if there is a minimum acceptable oxygen level of 19.5%

prior to entry. The oxygen/LEL meter is factory-set to sound an alarm at levels less than 19.5% oxygen. **If oxygen is less than 19.5% or greater than 23%, do not enter the space.**

b. Explosive Vapors

Monitor the percentage of the Lower Explosive Limit (LEL) with an oxygen/LEL meter to determine whether vapor concentrations within the confined space are within the flammable range. If LEL readings exceed 10%, personnel should exercise extreme caution, use non-sparking tools, and utilize ventilation engineering controls to reduce LEL levels. The oxygen/LEL meter is factory set to sound an alarm at levels greater than 20% LEL. If LEL readings exceed 20%, **personnel <u>MUST</u> leave the site immediately and contact the project manager.**

c. Toxic Vapors

Monitor for toxic vapors with a FID (e.g., Photovac OVA) to determine whether toxic vapors within the confined space exceed the action levels. PID readings will be taken at the top, middle, and bottom of a vault, shed, or other confined space to determine vapor levels.

<u>Summary</u>

Do not enter the confined space unless:

- the oxygen concentration is between 19.5 and 23%;
- the LEL is less than 20%; and
- FID readings are less than 250 ppm (a respirator must be worn if the readings exceed 5 ppm)

All monitoring equipment must be calibrated and maintained in accordance with manufacturer's recommendations.

9.4.7 Occupational Noise

Requirements set forth in the OSHA Hearing Conservation Regulation (OSHA 1910.95) shall be adhered to during work on-site. Hearing protection shall be provided to the employees where sound pressure levels exceed 85 dB. Hearing protection shall be worn where sound pressure levels in areas and/or on equipment exceeds 90 dB. Typical drilling operations have been

monitored with a sound level meter and indicate that hearing protection is required for all personnel while engaged in this action.

9.4.8 Heat Stress

Since climatic changes cannot be avoided, work schedules will be adjusted to provide time intervals for intake of juices, juice products, and water in an area free from contamination and in quantities appropriate for fluid replacement.

Heat stress may occur even in moderate temperature areas and may present any or all of the following:

a. Heat Rash

   Result of continuous exposure to heat, humid air, and chafing clothes. Heat rash is uncomfortable and decreases the ability to tolerate heat.

b. Heat Cramps

   Result of the inadequate replacement of body electrolytes lost through perspiration. Signs include severe spasms and pain in the extremities and abdomen.

c. Heat Exhaustion

   Result of increased stress on the vital organs of the body in the effort to meet the body's cooling demands. Signs include shallow breathing; pale, cool, moist skin; profuse sweating; and dizziness.

d. Heat Stroke

   Result of overworked cooling system. Heat stroke is the most serious form of heat stress. Body surfaces must be cooled and medical help must be obtained immediately to prevent severe injury and/or death. Signs include red, hot, dry skin; absence of perspiration; nausea; dizziness and confusion; strong, rapid pulse; coma; and death.

Heat Stress Prevention

A. Replace body fluids (water and electrolytes) lost through perspiration. Solutions may include a 0.1% salt and water solution or commercial mixes such as "Gatorade". Employees must be encouraged to drink more than the amount required to satisfy thirst.

B. Use cooling devices to aid the natural body ventilation. Cooling occurs through evaporation of perspiration and limited body contact with heat-absorbing protective clothing. Utilize fans and air conditioners to assist in evaporation. Long, cotton underwear is suggested to absorb perspiration and limit any contact with heat-absorbing protective clothing (i.e., coated Tyvek suits).

C. Conduct non-emergency response activities in the early morning or evening during very hot weather.

D. Provide shelter against heat and direct sunlight to protect personnel. Take breaks in shaded areas.

E. Rotate workers utilizing protective clothing during hot weather.

F. Establish a work regime that will provide adequate rest periods, with personnel working in shifts.

Heat Stress Monitoring

Heat stress may occur even in moderate temperatures and may present heat rash, heat cramps, heat exhaustion, and/or heat stroke.

Monitoring procedures should be implemented to prevent heat stress arising from environmental conditions, use of PPE, and/or intensity of workload.

For temperatures above 70 °F, the following regime shall be followed for workers wearing permeable coveralls:

Adjusted Temperature	Normal Ensemble	Impermeable Ensemble
90 °F or above	After 45 min. of work	After 15 min. of work
87.5 to 90 °F	After 60 min. of work	After 30 min. of work
82.5 to 87.5 °F	After 90 min. of work	After 60 min. of work
77.5 to 82.5 °F	After 120 min. of work	After 90 min. of work
72.5 to 77.5 °F	After 150 min. of work	After 120 min. of work

Workers wearing semipermeable or impermeable encapsulating protective clothing should be monitored for heart rate and temperature when the temperature in the work area is above 70 °F. To monitor the worker, measure:

A: Heart rate - Count the radial pulse during a 30-second period as early as possible in the rest period. If the heart rate exceeds 110 beats per minute at the beginning of the rest period, shorten the next work cycle by one-third.

B: Oral temperature - Use a clinical thermometer or similar device to measure the oral temperature at the end of the work period (before drinking). If oral temperature exceeds 99.6 °F, shorten the next work cycle by one-third.

Do not permit a worker to wear a semipermeable or impermeable garment if the core body temperature exceeds 100.6 °F.

Workers shall not be required to continue working if they feel any of the symptoms of heat stress. Rest periods should be a minimum of 15 minutes. Length of rest period should be extended as appropriate or as recommended by the Site Safety Officer or alternate.

9.4.9 Exposure: Cold Stress

Work schedules will be adjusted to provide sufficient rest periods in a heated area for warming up during operations conducted in cold weather. Also, thermal protective clothing such as wind and/or moisture resistant outerwear is recommended to be worn.

If work is performed continuously in the cold at or below -7 °C (20 °F), including wind chill factor, heated warming shelters (tents, cabins, company vehicles, rest rooms, etc.) shall be made available nearby and the worker should be encouraged to use these shelters at regular intervals, the frequency depending on the severity of the environmental exposure. The onset of heavy shivering, frostnip, the feeling of excessive fatigue, drowsiness, irritability, or euphoria, are indications for immediate return to the shelter. When entering the heated shelter, the outer layer of clothing shall be removed and the remainder of the clothing loosened to permit sweat evaporation. A change of dry work clothing shall be provided as necessary to prevent workers from returning to their work with wet clothing.

Dehydration, or the loss of body fluids, occurs in the cold environment and may increase the susceptibility of the worker to cold injury due to a significant change in blood flow to the extremities. Warm sweet drinks and soups should be provided at the work site to provide caloric intake and fluid volume. The intake of coffee should be limited because of a diuretic and circulatory effect. (Adapted from TLV's and Biological Exposure Indices 1988-1989; ACGIH)

9.5 Personal Protective Equipment

The following is a breakdown of the types of protective clothing and equipment to be used during the site activities. Personal protective equipment (PPE) is in conformance with EPA criteria for Level B, C, and D protection. All respiratory protective equipment used will be approved by NIOSH/MSHA.

Level C protection, as described in this plan, will be available at a minimum for those activities that involve surface and subsurface soil (strata disturbance such as well installation, and all subsurface media sampling activities such as split-spoon sampling and borings). Some activities may require Level B protection. In atmospheres potentially containing toluene and xylenes, the protective ensemble should include chemical resistant clothing since the two compounds have skin absorption potential.

The Site Safety Officer will determine whether or not a level of protection can be upgraded or downgraded. Changes in the level of protection will be recorded in the dedicated site logbook along with the rationale for the changes. Level D protection may be used for those activities that do not pose a potential threat of exposure to toxic or hazardous substances. Typical Level D activities may include sediment, logging and groundwater sampling, as well as surficial site surveys. Level C protection equipment should be readily available at all times. Consistent with OSHA training, prior to donning Level C, the percentage of oxygen must be continuously monitored.

<u>Level D</u>

- hard hat
- safety glasses

- steel toe and shank boots
- fluorescent vest
- splash goggles
- hearing protection (as appropriate)

Modified Level D

- hard hat
- safety glasses
- steel toe and shank boots
- fluorescent vest
- Nitrile "N-Dex" inner gloves
- latex outer boots (chemical resistant)
- splash goggles
- polyethylene coated Tyvek suit
- hearing protection (as appropriate)

Level C

- buddy system required at all times
- full face respirator with NIOSH approved OV/AG/HEPA combination cartridges (MSA GMC-H)
- Saranex coated Tyvek Suit
- inner Nitrile "N-Dex" gloves
- outer Nitrile (NBR) gloves
- steel toe and shank boots
- outer boots (chemical resistant)
- hard hat
- hearing protection (as appropriate)

Level B

- Regional Health and Safety representatives must be on site upon start-up of any project requiring level B protection. This should be understood to include subcontractors conducting

Level B activity.

- buddy system required at all times
- supplied air respirator or SCBA
- Saranex coated Tyvek Suit
- inner Nitrile "N-Dex" gloves
- outer Nitrile (NBR) gloves
- steel toe and shank boots
- outer boots (chemical resistant)
- hard hat
- hearing protection (as appropriate)

Note: Respirator cartridges will be changed once per day at a minimum. This can be accomplished at the end of the work day during respirator decontamination. If odor breakthrough is detected while wearing the respirator or if breathing becomes difficult, change cartridges immediately.

Contact with contaminated surfaces, or surfaces suspected of being contaminated, should be avoided. This includes walking through, kneeling in, or placing equipment in puddles, mud, discolored surfaces, or on drums and other containers. Eating. smoking, drinking, and/or the application of cosmetics in the immediate work area is prohibited.

When utilizing protective garments such as Tyvek suits, gloves, and booties, all seams between protective items will be sealed with duct tape.

The use of contact lenses on the job site is strongly advised against. However, when glasses are not available, contact lenses are preferred over faulty vision. When contact lenses are worn, safety glasses and/or goggles must be worn at all times while on the job site.

9.6 Decontamination

9.6.1 General

Personnel involved in work activities at the site may be exposed to compounds in a number of ways, despite the most stringent protective procedures. Site personnel may come in contact with vapors, gases, mists, or particulates in the air, or other site media while performing site duties. Use of monitoring instruments and site equipment can also result in exposure and transmittal of hazardous substances.

In general, decontamination involves scrubbing with a detergent water solution followed by clean water rinses. All disposable items shall be disposed of in a dry container. Certain parts of contaminated respirators, such as harness assemblies and leather or cloth components, are difficult to decontaminate. If grossly contaminated, they may have to be discarded. Rubber components can be soaked in detergent and water and scrubbed with a brush. In addition to being contaminated, all respirators, non-disposable protective clothing, and other personal articles must be sanitized or replaced before they can be used again if they become soiled from exhalation, body oils, and perspiration. The manufacturer's instructions should be followed in sanitizing the respirator masks.

The Site Safety Officer will be responsible for the proper maintenance, decontamination, and sanitizing of all respirator equipment.

The decontamination zone layout and procedures should match the prescribed levels of personal protection. A detailed discussion for the establishment of the project decontamination zone and the procedures required for the various levels of personnel protection follows

<u>Exclusion Zone (EZ)</u>

It is within this zone that the work activities are performed. No one shall enter this zone unless the appropriate PPE is donned.

Contaminant Reduction Zone (CRZ)

It is within this zone that the decontamination process is undertaken. Personnel and their equipment must be adequately decontaminated before leaving this zone for the support zone. This zone will be set up between the EZ and a well-ventilated open area.

Support Zone (SZ)

The support zone is considered to be uncontaminated; as such, protective clothing and equipment are not required but should be available for use in emergencies. All equipment and materials are stored and maintained within this zone. Protective clothing is put on in the SZ before entering the CRZ. The SZ will be established in a safe environment.

The following procedures have been established to provide site personnel with minimum guidelines for proper decontamination. These minimum procedures must be followed by personnel leaving the point of operations designated as the EZ. The decontamination process shall take place at a reasonable distance away from any area of potential contamination.

9.6.2 Minimum Decontamination Procedure

Personnel leaving the point of operations should wash outer gloves and boots. At a minimum, the outer boots shall be removed first and stored in an appropriate area or disposed of properly. Outer boots must be properly washed where gross contamination is evident. Personnel shall then remove and dispose of the Tyvek suits. Personnel should remove the Tyvek suits so that the inner clothing does not come in contact with any contaminated surfaces. After Tyvek removal, personnel shall remove and discard outer Nitrile gloves. Personnel shall then remove the respirator, where applicable. Respirators shall be disinfected between uses with towelettes or other sanitary methods. Potable water, at a minimum, will be present so that site personnel can thoroughly wash hands and face after leaving the point of operations.

Portable wash stations shall be utilized for easy and efficient access. The wash station shall consist of a potable water supply, hand soap, and clean towels. Portable sprayer units filled with Alconox solution and potable water should also be available to wash and rinse off grossly contaminated boots, gloves, and equipment. The Site Safety Officer will monitor

decontamination procedures to ensure their effectiveness. Modifications of the decontamination procedure may be necessary as determined by the Site Safety Officer's observations.

9.6.3 Standard Decontamination Procedure

The following decontamination procedures should be implemented during site operations for the appropriate level of protection.

Level B

Segregated equipment drop

Deposit equipment (tools, sampling devices, notes, monitoring instruments, radios, etc.) used on the site onto plastic drop cloths.

Boot covers and glove wash

Outer boots and outer gloves should be scrubbed with a decontamination solution of detergent and water or replaced.

Rinse off boot covers and gloves

Decontamination solution should be rinsed off boot covers and gloves using generous amounts of water. Repeat as many times as necessary.

Tape removal

Remove tape from around boots and gloves and place into container with plastic liner.

Boot cover removal

Remove disposable boot covers and place into container with plastic liner.

Outer glove removal

Remove outer gloves and deposit in container with plastic liner.

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Suit / safety boot wash

Completely wash splash suit, SCBA, gloves, and safety boots. Care should be exercised that no water is allowed into the SCBA regulator. It is suggested that the SCBA regulator be wrapped in plastic.

Suit / safety boot rinse

Thoroughly rinse off all decontamination solution from protective clothing.

Tank or canister changes

This is the last step in the decontamination procedure for those workers wishing to change air tanks and return to the EZ. The worker's air tank or cartridge is exchanged, new outer glove and boot covers are donned, and joints taped.

Removal of safety boots

Remove safety boots and deposit in container with a plastic liner.

SCBA backpack removal

Without removing the face piece, the SCBA backpack should be removed and placed on a table. The face piece should then be disconnected from the remaining SCBA unit and then proceed to the next station.

Splash suit removal

With care, remove the splash suit. The exterior of the splash suit should not come in contact with any inner layers of clothing.

Inner glove wash

The inner gloves should be washed with a mild decontamination solution (detergent / water)

Inner glove rinse

Generously rinse the inner gloves with water.

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Face piece removal

Without touching the face with gloves, remove the face piece. The face piece should be deposited into a container that has a plastic liner.

Inner glove removal

Remove the inner glove and deposit into a container that has a plastic liner.

Field wash

Wash hands and face thoroughly. If highly toxic, skin corrosive, or skin absorbent materials are known or suspected to be present, a shower should be taken.

Level C and Level D

The decontamination procedure for Level C and Level D personal protection will employ applicable steps detailed in the Level B decontamination process.

9.6.4 Sampling Equipment and Sample Container Decontamination

All non-disposable sampling equipment will be decontaminated with an Alconox / water solution followed by a clean water rinse. As an added precaution against cross-contamination, all non-disposable sampling equipment will be rinsed with distilled water. All disposable sampling equipment will be properly disposed of in dry containers.

Before leaving the site, all sample containers will be thoroughly decontaminated using a detergent and water solution followed by a clean water rinse. The decontamination procedure should include a complete scrubbing of the container's surface to remove possible contamination. Care must be exercised to prevent damage to sample container identification labels.

9.7 Health and Safety Requirements

9.7.1 Medical Monitoring Program

A baseline physical examination must be conducted on all employees before they are permitted to engage in sampling, cleanup, and remedial action work. A complete medical survey should be

completed on each employee upon start of employment. Yearly re-examination should be performed to update information on employee health status. Additional re-evaluation will be considered in the event of a chemical overexposure. These medical surveillance requirements shall comply with OSHA regulations as defined in 29 CFR 1910.120.

9.7.2 Training

All personnel working at this site should have received a minimum of 40 hours of initial hazardous waste activity instruction, and a minimum of three days of field experience under direct supervision of a trained, experienced person. Personnel assigned to the site will also receive eight hours refresher training per year. On-site managers and supervisors directly responsible for employees engaged in hazardous waste operations have received an additional eight hours of supervisory training. These training requirements comply with the OSHA Hazardous Waste Operations and Emergency Response Regulation, 29 CFR 1910.120.

9.7.3 Visitor Policy

All visitors and/or trainees on site must submit to the limitations described herein.

9.7.4 Work Zone Area

Work and support areas shall be established based on ambient air data and proposed work sites. They shall be established in order to contain contamination within the smallest areas possible and shall ensure that each employee has the proper PPE for the area or zone in which work is to be performed.

9.7.5 First Aid Equipment

Vehicles used for site work will be equipped with a first aid kit and safety equipment including:

- fluorescent vests
- cones (and flags as needed)
- hazard tape (barricades as needed)
- mounted fire extinguisher (10 pound A/B/C type)

- working flashlight
- water, suitable for drinking
- portable eye wash
- first aid kit with appropriate bandage material
- full body harness with lifeline (for confined space entry)

9.7.6 Fire Prevention

During equipment operation, periodic vapor concentration measurements should be taken with an explosimeter or combustimeter. If at any time the vapor concentrations exceed 20% of the LEL, then the Site Safety Officer or designated field worker should immediately shut down all operations.

Only approved safety cans will be used to transport and store flammable liquids.

All gasoline and diesel-driven engines requiring refueling must be shut down and allowed to cool prior to filling.

Smoking is not allowed during any operations within the work area in which petroleum products or solvents in free-floating, dissolved, or vapor forms, or other flammable liquids may be present.

No open flame or spark is allowed in any area containing petroleum products or other flammable liquids.

9.7.7 Heavy Machinery / Equipment

All site employees must remain aware of those site activities that involve the use of heavy equipment and machinery. Respiratory protection and protective eyewear may be worn frequently during site activities. This protective equipment significantly reduces peripheral vision of the wearer. Therefore, it is essential that all employees at the site exercise extreme caution during operation of equipment and machinery to avoid physical injury to themselves or others.

9.7.8 Additional Safety Practices

The following are important safety precautions that will be enforced during work activities.

1. Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in any area designated as contaminated.
2. Hands and face must be thoroughly washed upon leaving the work area and before eating, drinking, or any other activity.
3. Whenever decontamination procedures for outer garments are in effect, the entire body should be thoroughly washed as soon as possible after the protective garments are removed.
4. No excessive facial hair that interferes with the effectiveness of a respirator will be permitted on personnel required to wear respiratory protection equipment. The respirator must seal against the face so that the wearer receives air only through the air purifying cartridges attached to the respirator. Fit-testing shall be performed prior to respirator use to ensure a proper seal is obtained by the wearer.
5. Contact with potentially contaminated surfaces should be avoided whenever possible. One should not walk through puddles; kneel on the ground; lean, sit, or place equipment on drums, containers, vehicles, or the ground.
6. Medicine and alcohol can potentate the effect from exposure to certain compounds. Prescribed drugs and alcoholic beverages should not be consumed by personnel involved in the project.
7. Personnel and equipment in the work areas should be minimized, consistent with effective site operations.
8. Work areas for various operational activities should be established.
9. Procedures for leaving the work area must be planned and implemented prior to going to the site. Work areas and decontamination procedures must be established on the basis of prevailing site conditions.
10. Respirators will be issued for the exclusive use of one worker and will be cleaned and disinfected after each use.
11. Safety gloves and boots shall be taped to the disposable, chemical-protective suits as necessary.

12. All unsafe equipment left unattended will be identified by a "DANGER, DO NOT OPERATE" tag.
13. Noise mufflers or earplugs may be required for all site personnel working around heavy equipment. This requirement will be at the discretion of the Site Safety Officer. Disposable, form-fitting plugs are preferred.
14. Cartridges for air-purifying respirators in use will be changed daily at a minimum.

9.8 Project Personnel

9.8.1 Project Manager

The Project Manager will be responsible for implementing the project and obtaining any necessary personnel or resources for the completion of the project. Specific duties will include:

- coordinating the activities of all subcontractors, to include informing them of the required PPE and insuring their signature acknowledging this Site Safety Plan
- selecting a Site Safety Officer and field personnel for the work to be undertaken on site
- ensuring that the tasks assigned are being completed as planned and on schedule
- providing authority and resources to ensure that the Site Safety Officer is able to implement and manage safety procedures
- preparing reports and recommendations about the project to clients and affected personnel
- ensuring that all persons allowed to enter the site (i.e., EPA, contractors, state officials, visitors are made aware of the potential hazards associated with the substances known or suspected to be on site, and are knowledgeable as to the on-site copy of the specific site safety plan.
- ensuring that the Site Safety Officer is aware of all of the provisions of this site safety plan and is instructing all personnel on site about the safety practices and emergency procedures defined in the plan
- ensuring that the Site Safety Officer is making an effort to monitor site safety, and has designated a Field Team Leader to assist with the responsibility when necessary.

9.8.2 Site Safety Officer

The Site Safety Officer shall be responsible for the implementation of the site safety plan on site. Specific duties will include:

- monitoring the compliance of field personnel for the routine and proper use of the PPE that has been designated for each task.
- routinely inspecting PPE and clothing to ensure that it is in good condition and is being stored and maintained properly.
- stopping work on the site or changing work assignments or procedures if any operation threatens the health and safety of workers or the public.
- monitoring personnel who enter and exit the site and all controlled access points.
- reporting any signs of fatigue, work-related stress, or chemical exposures to the Project Manager and/or Health and Safety Officer.
- dismissing field personnel from the site if their actions or negligence endangers themselves, co-workers, or the public, and reporting the same to the Project Manager.
- reporting any accidents or violations of the site safety plan to the Project Manager and documenting the same for the project in the records.
- knowing emergency procedures, evacuation routes, and the telephone numbers of the ambulance, local hospital, poison control center, fire and police departments.
- ensuring that all project-relating personnel have signed the personnel agreement and acknowledgments form contained in this site safety plan.
- coordinate upgrading and downgrading PPE as necessary due to changes in exposure levels, monitoring results, weather, and other site conditions.
- perform air monitoring with approved instruments in accordance with requirements stated in this Site Safety Plan.

9.8.3 Project Field Manager

In the event that the Project Manager and the Site Safety Officer are not on site, the Project Field Manger will assume all responsibility of the Site Safety Officer.

9.8.4 Other Field Personnel

All field personnel shall be responsible for acting in compliance with all safety procedures outlined in the Site Safety Plan. Any hazardous work situations or procedures should be reported to the Site Safety Officer so that corrective steps can be taken.

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, Room 242
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-1708 FAX: (518) 457-4198

John P. Cahill
Commissioner

VIA FAX

March 17, 1999

Mr. George Wright, Project Manager
Impact Environmental
46 East Northport Road
Kings Park, NY 11754

Dear Mr. Wright:

Re: 299 Main Street Site No. 1-30-043S

The Department is in receipt of your revisions to the March 1, 1999, FRI Work Plan for the 299 Main Street Site(revised pages dated March 12th and March 16th). There are no issues which remain outstanding at this time.

Please send four original bound copies of the final revised work plan (with appendices) to me by Monday, March 22, 1999.

I can be reached at (518) 457-1708 if you have any questions.

Sincerely,

Anna C. Ruepp

Anna C. Ruepp
Project Engineer

cc: Jeanna Hussey
Charlotte Biblow

FOCUSED REMEDIAL INVESTIGATION
Final Work Plan

98-335

To Be Conducted At:

Site Code # 1-30-043S
299 Main Street
Westbury, New York

Client:

2632 Realty Development Corp.
1025 Old Country Road
Westbury, New York

User:

New York State Department of Environmental Conservation
Bureau of Eastern Remedial Action
Division of Environmental Remediation
50 Wolf Road
Albany, New York

Dated:

March 17, 1999

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1.0 INTRODUCTION

This work plan details the various tasks that will be performed in the investigation of 299 Main Street in Westbury, New York (located in the western portion of the New Cassel Industrial Area), herein identified as the "Site". A Multisite PSA Task 4 Report prepared by Lawler, Matusky and Skelly Engineers (LMS) for the New York State Department of Environmental Conservation (NYSDEC) in 1997 identified chlorinated organic solvent contamination in the New Cassel Industrial Area (NCIA). The PSA suggested that the Site was a source of chlorinated organic solvent-related contaminants and that it should remain on the State Registry of Inactive Hazardous Waste Disposal Sites ("State Registry").

2632 Realty Development Corp. is the current owner of the site. Groundwater beneath and down gradient of the Site is contaminated with TCE and related compounds. As such, the Site has been designated by the NYSDEC as an inactive hazardous waste disposal site, as defined in ECL 27-1301.2. The site has been listed in the State Registry as Site Number 01-30-043S.

This Focused Remedial Investigation ("Focus Study") will delineate the nature and extent of contamination and the results will be submitted in a Focused Remedial Investigation Report in accordance with the provisions of the Draft Order on Consent between the NYSDEC and 2632 Realty Development Corp. If necessary, a Focused Feasibility Study evaluating remedial action alternatives will later be submitted to the Department pursuant to the terms of the Order on Consent.

The site was developed between 1950 and 1962 and consists of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formerly used as a junkyard and for the Island Transport Corporation (a transportation company). This company used large quantities of BTEX-related compounds and approximately 275 gallons of TCE from July to December 1978 to wash trucks. The site is presently occupied by an automotive repair facility.

Sewage generated onsite is directed to the municipal sewer system. A site inspection revealed that there are no floor or bay drains present in the subject building. Two trench drains are located at the rear, one outside the far east bay door and one located at the far west bay door. There was one slop sink located in the bathroom of the subject building. This sink discharges to the sewer system.

The results of the onsite groundwater sampling revealed the presence of VC (450 ppb) and DCE (250 ppb) at GP-195 at the water table to 65 ft. At the 65 to 85-ft. depth, PCE and TCE were detected at GP-195 at 12 ppb and 1.7 ppb respectively. The concentration of PCE at GP-223 was 12 ppb and at GP-231 it was 2.9 ppb (65 to 85 ft. depth). The level of TCA was not detectable at the three sampling locations.

Onsite soil sampling at SGP-22 indicated BTEX at a concentration of 85.6 ppm. BTEX was detected at 0.0045 ppm at SGP-86.

2.0 PROPOSED SITE BACKGROUND STUDY

2.1 Site Location

The subject property is located at 299 Main Street in Westbury, New York. This location is on the north side of Main Street between Hopper Street and Garden Street. The areal extent of the subject property is approximately 51,200 square feet or 1.2 acres. A site location map is provided in Plate 1. A base map for the subject property is given in Figure #1.

2.2 Site History

A 50-year site history will be conducted that will include information on past land uses on-site and uses in the immediate vicinity of site. Historic information will be compiled from various private and public sources including the Cole reverse telephone directories, Sanborn fire insurance maps, E. Belcher Hyde maps, LILCO (LIPA) records and aerial photographs. Information regarding past and current chemical use, chemical storage, spills, and previous environmental investigations will also be obtained from the Nassau County Department of Health, the NYSDEC (Region 1 Office – Stonybrook), and other related agencies.

2.3 Site Geology

A thorough discussion of site geology will be presented that will include descriptions of surficial geology, unconsolidated deposits and the underlying bedrock.

2.4 Site Geohydrology

The geohydrology of the Site will be examined using available groundwater potentiometric surface maps and data obtained from the results of the subsurface investigative activities proposed in this document. Additionally, the investigation data will be used to compile a potentiometric map of the water table, determine groundwater transport rates and understand the dynamics of on-site contaminant migration. On-site soils, as well as the location of underground aquifers and the presence of pre-existing wells, will be discussed.

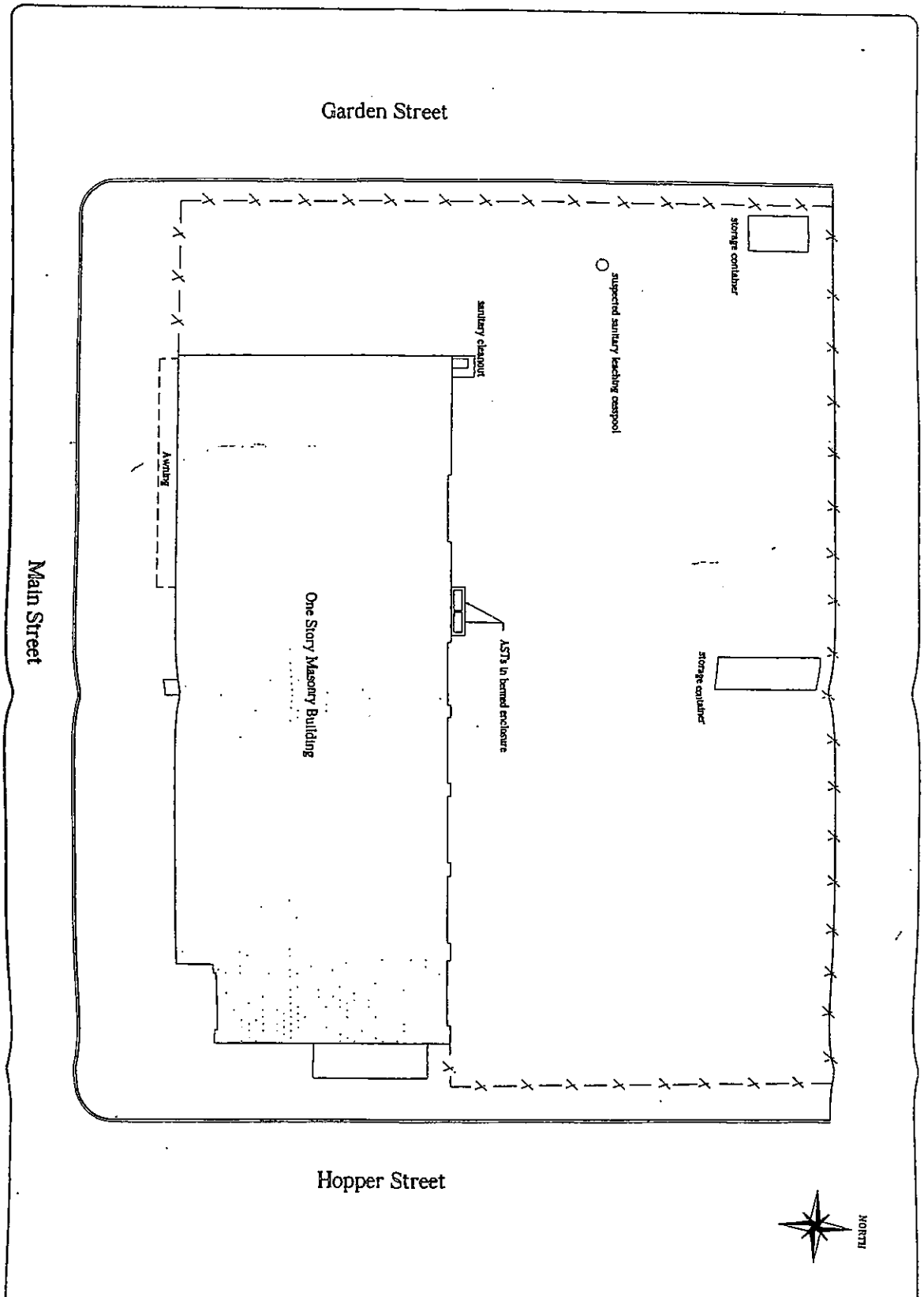

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Figure #1: Base Map

New Cassel, New York

scale: 1" = 20'

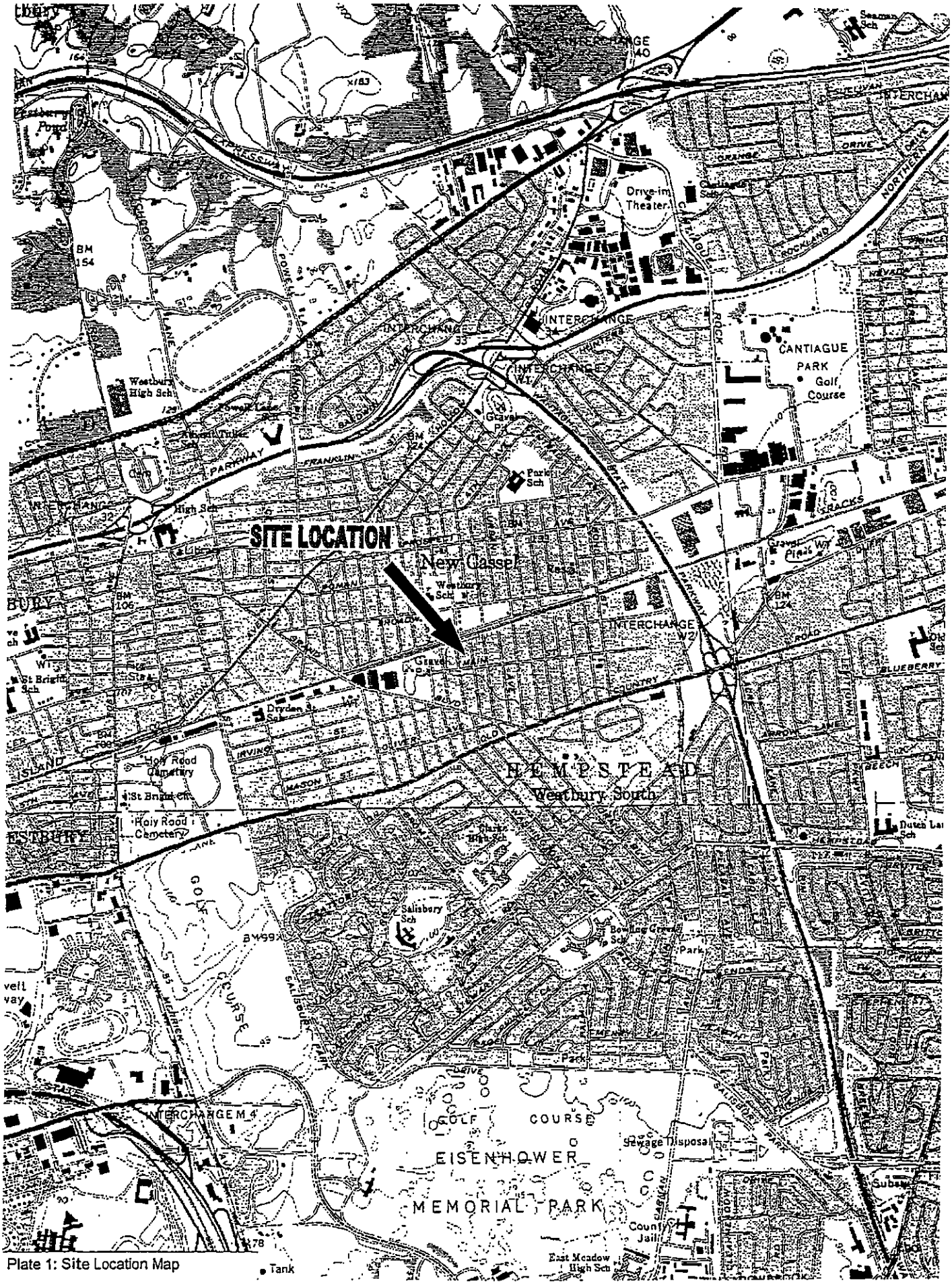


Plate 1: Site Location Map

3.0 SITE INVESTIGATIVE ACTIVITIES

3.1 Site Visit

A site survey will be performed under the oversight of an official from the NYSDEC. The survey will identify the present location of on-site buildings, parking lots, drains, underground injection wells, and potential areas of surface contamination (as indicated by the presence of drums, stored or spilled liquid contaminants, or stains). The location of any floor drains that may exist within the building will also be determined. All information collected during the site visit will be entered in a site survey form (See Appendix A).

3.2 Remote Sensing Survey

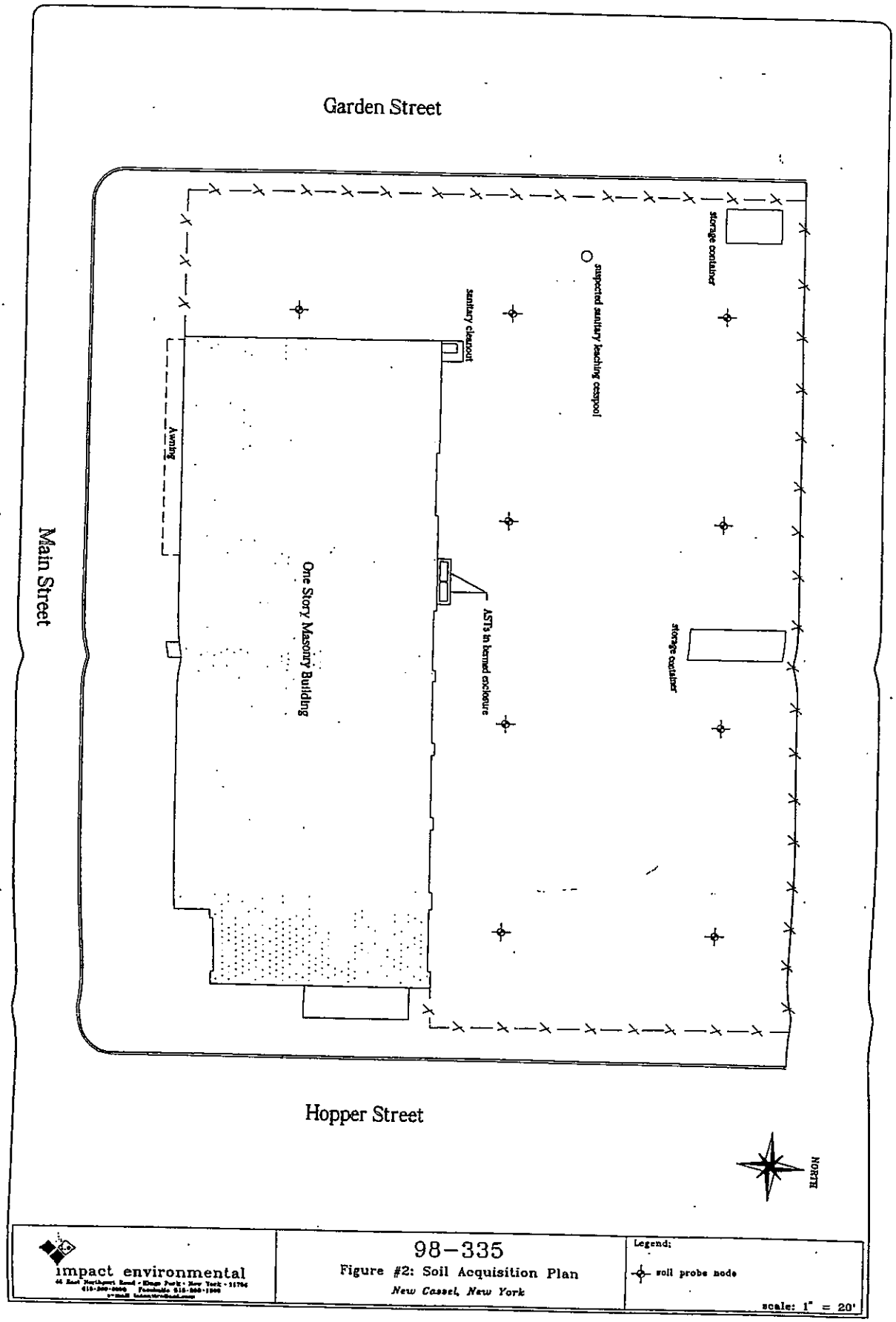
A ground penetrating radar (GPR) survey will be performed to locate the presence of any sources which may exist on the subject property, such as underground storage tanks, cesspools, leaching pools, etc. The GPR survey will also be used to locate subsurface anomalies that could represent sources of soil and/or groundwater contamination.

The data collected during the survey will be reviewed by the operator and compared against past experience, technical judgment, and prior Site knowledge to classify the anomalies. When a potential source is identified, the location will be marked using a small flag and plotted onto the site plan. On asphalt, spray paint will be used to delineate the size and orientation of any potential source.

3.3 Locating and Mapping Subsurface Sampling Locations

Soil probes will be installed at locations on the surface of the site on a 50-ft. x 50-ft. square grid. The proposed arrangement of the probe locations is presented in Figure #2. The probe locations will be surveyed on the site and marked using small flags. Any potential point pollution sources identified from the remote survey will be marked with a different flag and subsequently mapped onto the site plan.

The proposed location of the groundwater wells and Geoprobe sampling probes are presented in Figure #3. These locations will be surveyed on the site from the site plan and marked using a small flag.


Garden Street
Main Street
Hopper Street
storage container
suspected sanitary leaching cesspool
sanitary cleanout
Awning
One Story Masonry Building
ASTs in bermed enclosure
storage container
NORTH
impact environmental
98-335
Figure #2: Soil Acquisition Plan
New Cassel, New York
Legend:
soil probe node
scale: 1" = 20'

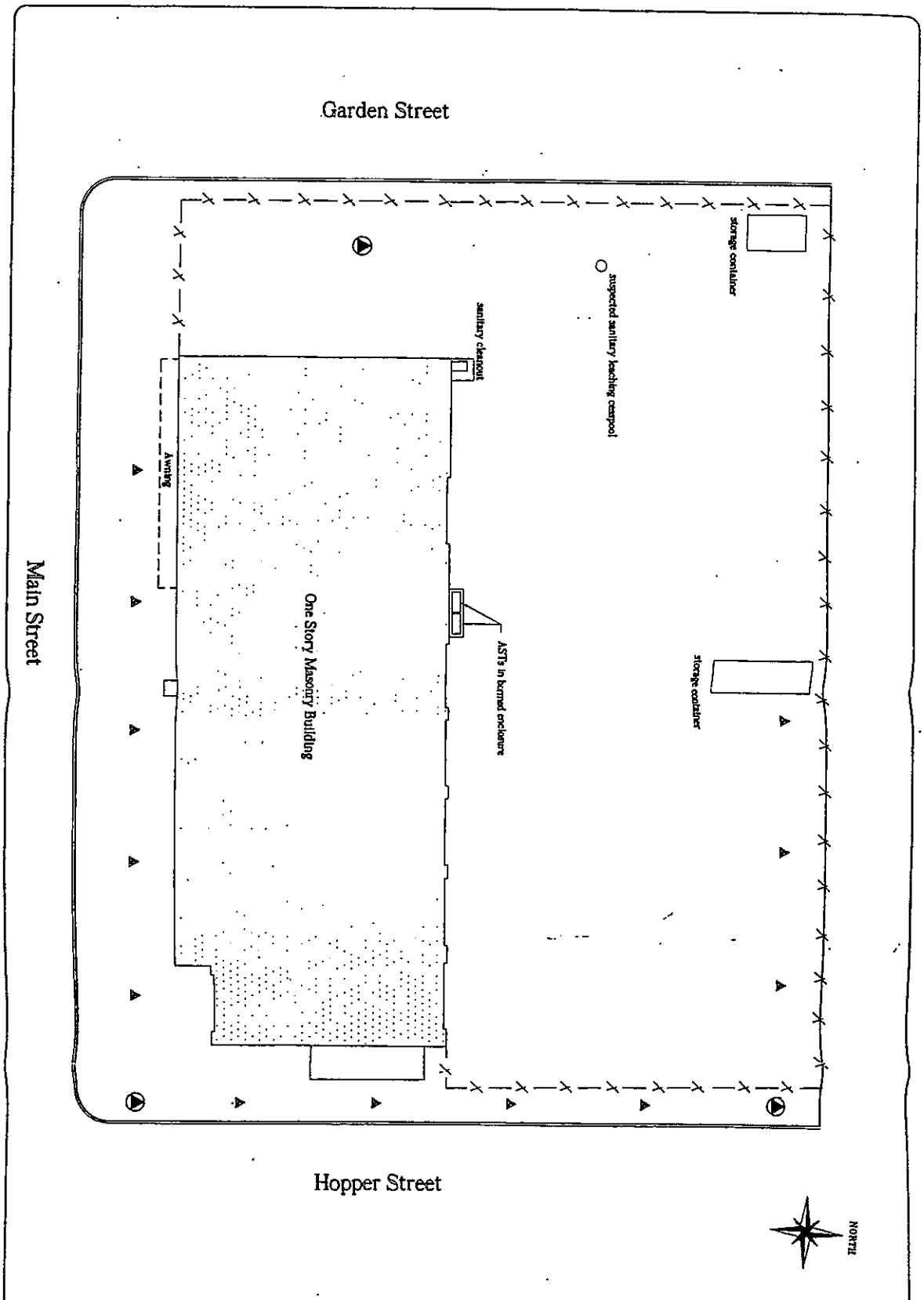


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Figure #3: Groundwater Acquisition Plan

New Cassel, New York

Legend:
▲ groundwater probe node
monitoring well

scale: 1" = 20'

3.4 Evaluation of Emergency Procedures

The routes of emergency egress will be evaluated and marked with surveyor's flagging if necessary. This will be done to ensure that equipment or on-site vehicles cannot temporarily block routes of emergency egress from all boring locations. Additionally, the site safety plan will be reviewed on-site by all workers to insure compliance.

4.0 PROPOSED INVESTIGATION OF SITE SOIL AND GROUNDWATER QUALITY

4.1 Soil Sampling

Nine soil probes will be installed at locations on the surface of the site on a 50-ft. x 50-ft. square grid. Samples will be obtained from each probe location on a 15-ft. vertical interval to groundwater. A soil sample will also be obtained from each location at a depth of 10 feet. Additional samples will be obtained where contamination is suspected based upon the results of the GPR survey and the site history. Analysis of these samples will be performed using USEPA test method 8260 for volatile organic compounds. Table 1 provides a target analyte list for USEPA Method 8260.

A visual inspection of all samples that will be recovered during the installation of each of the probes will be conducted to identify any gross signs of chemical contamination and to classify the sample media.

4.2 Groundwater Sampling

A total of three groundwater monitoring wells will be installed, developed and sampled using the procedures outlined in *A Compendium of Superfund Field Operations Methods*, USEPA, 1987, and 6 NYCRR Part 360.2.11 (C) (1) (I). A minimum of ten additional groundwater samples will be acquired from Geoprobe temporary well points. These well points will be installed at locations where soil contamination is likely based upon the results of the GPR survey and site history. The groundwater samples will be recovered at a depth of approximately 70 feet below grade. Analysis of these samples will be performed using USEPA test method 624 (modified to include target analytes and tentatively identified compounds (TICs) for volatile organic compounds). Additionally, the laboratory will perform the calibration on the samples every 12 hours.

Table 1 **USEPA Target Analyte Compounds Determined by Method 8260**

Benzene	Methylene chloride
Bromobenzene	Naphthalene
Bromochloromethane	n-Propylbenzene
Bromodichloromethane	Styrene
Bromoform	1,1,1,2-Tetrachloroethane
Boromethane	1,1,2,2-Tetrachloroethane
n-Butylbenzene	Tetrachloroethene
sec-Butylbenzene	Toluene
tert-Butylbenzene	1,2,3-Trichlorobenzene
Carbon tetrachloride	1,2,4-Trichlorobenzene
Chlorobenzene	1,1,1-Trichloroethane
Chloroethane	1,1,2-Trichloroethane
Chloroform	Trichloroethene
Chloromethane	Trichlorofluormethane
2-Chlorotoluene	1,2,3-Trichloropropane
4-Chlorotoluene	1,2,4-Trimethylbenzene
Dibromochloromethane	1,3,5-Trimethylbenzene
1,2-Dibromo-3-chloropropane	Vinyl chloride
1,2-Dibromoethane	
Dibromomethane	
1,2-Dichlorobenzene	
1,3-Dichlorobenzene	
1,4-Dichlorobenzene	
Dichlorodifluoromethane	
1,1-Dichloroethane	
1,2-Dichloroethane	
1,2-Dichloropropane	
1,3-Dichloropropane	
2,2-Dichloropropane	
1,1-Dichloropropene	
Ethylbenzene	
Hexachlorobutadiene	
Isopropylbenzene	
p-Isopropyltoluene	

4.3 Proposed Investigation of Point Source Pollution Areas

The information obtained from the site survey (Section 3.1) and the remote survey (Section 3.2) will be used to determine the locations in which hazardous materials, if any were processed, handled, or stored on the subject property (identified as point sources).

4.3.1 Underground Injection Wells

Soil probes will be installed within the confines of any storm water drywells, leaching lagoons, waste water disposal wells, retention pits or cesspools identified on-site. Samples will be secured from the probes on a 15-foot vertical interval to groundwater. Analysis of these samples will be performed using USEPA test methods 8270, 8260, 8015, and 6010 for volatile and semivolatile organic compounds as well as metals.

4.3.2 Storage Tanks

The subject property has been found to contain four (4) underground storage tanks (USTs). These tanks include one 10,000-gallon diesel fuel tank, two 4,000-gallon diesel fuel tank, and one 4,000-gasoline tank. Records indicated that the tanks were abandoned in July 1990.

Two (2) 275-gallon above ground waste oil and fuel oil tanks were found to be located along the rear wall of the subject building. One (1) 275-gallon tank that is labeled as motor oil is located inside the concrete block enclosure on the east side of the building. One empty, abandoned 275-gallon steel tank was noted along the west side of the site.

Soil probes will be installed at locations adjacent to any underground storage tanks identified on-site. Samples will be taken from the probes at intervals of eight (8) to ten (10) feet and twelve (12) to fourteen (14) feet below existing grade. Analysis of these samples will be performed using USEPA test methods 8021 (STARS) and 8270 (STARS).

In the case of above ground storage tanks (AGTs), samples will be secured by hand from locations beneath the base. The analysis of these samples will be performed using USEPA test methods 8021 (STARS) and 8270 (STARS).

5.0 PROPOSED SUBSURFACE INVESTIGATION PROCEDURES

5.1 GPR Survey Procedures

A qualified Impact Environmental Consulting, Inc. technician will specify a coordinate system on the plainmetric surface of the site to map any subsurface dielectric anomalies detected on the premises. The operator uses knowledge of the subsurface soil composition to calibrate the SIR-2 system to site specific conditions. Factor settings such as range, gain, number of gain points, and scans per unit will be modified to yield the most accurate data to describe the subsurface conditions.

Upon finding a dielectric anomaly, a more spatially specific coordinate system will be designed over the area to determine its size, shape, and orientation.

5.2 Subsurface Geoprobe Installation

Subsurface probes will be installed using a Geoprobe hydraulically powered probing tool (see information on Geoprobe Systems in Appendix B, Figure 2.1, Page 5). Mechanized, vehicle mounted probe systems apply both static force and hydraulically powered percussion hammers for tool placement (static down forces up to 3,000 pounds combined with percussion hammers of eight horsepower continuous output). Recovery of large sample volumes will be facilitated with a probe-driven sampler. The probe-driven sampler consists of a hollow probe that opens via a remote control mechanism at the selected sampling depth in the soil profile to allow soil to enter as it is advanced. Discrete media samples will be secured at the desired depths and are contained within a non-reactive transparent plastic sleeve that lined the hollow probe. The plastic sleeves will be removed for subsequent inspection and sample aliquot acquisition.

5.3 Sample Characterization

A visual inspection of all samples that will be recovered during the installation of each of the probes will be conducted to identify any gross signs of chemical contamination and to classify the sample media. Gradation classifications will be performed in accordance with the Unified Soil Classification System. Color classifications will be made in accordance with the Munsell Classification System. In addition, samples will be screened for VOC contamination using an Hnu or PID meter.

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5.4 Geoprobe Temporary Well Point Sampling Procedure

The groundwater sampling system that will be used is the Screen Point 15 that is designed to accurately collect grab samples of groundwater. The Screen Point 15 uses a screen with a standard slot size of 0.004 inches that is sealed inside a 1.5-inch ID alloy steel sheath as it is driven to depth. The screen is sealed inside the sheath with Neoprene O-rings, which prevents infiltration of formation fluids until the desired depth is attained. When the screen has been driven to the depth of interest in the formation, extension rods are used to hold the screen in position as the driving rods are retracted approximately 4 feet. The 4-foot long sampler sheath forms a seal above the screen as it is retracted. A total of 41.5 inches of slotted screen is placed into contact with the formation. The Screen Point 15 groundwater sampler has a total boring diameter of 1.5 inches and the outside diameter of the screen is 1.0 inch. This provides for a maximum of 0.25 inches between the screen and the natural formation as the sampler sheath is retracted. These conditions approach the ideal for natural formation development that can be conducted when lower turbidity samples are required.

Each groundwater sample will be collected from the sampler utilizing 3/8-inch in diameter disposable tubing equipped with a bottom check valve. The tubing is extended from the surface down to the sampler. The tubing is oscillated in a controlled manner to avoid excessive turbulence that would result in a loss of volatile compound from the sample. The collection continues until the check valve has trapped an adequate volume of a groundwater sample. The tubing is then removed and the water is poured into appropriate sample vessels for subsequent laboratory analysis.

5.5 Construction of Site Monitoring Wells

The new wells will be constructed using a five and one-half inch diameter hollow stem auger. The auger annulus will allow the installation of a four-inch monitoring well casing and wire wrapped screen section. The screen slot size will be a function of the gradation of the filter pack (able to hold back at 95% of the filter pack). A filter pack will be installed within the annular space of the auger. The filter pack will extend to a depth of six inches below the bottom of the well screen to a point one-foot above the water table. The material used for the filter pack will consist of clean siliceous sand. The grain size of the filter pack sand will be three to five times the average (50% passing) size of the formation material as determined from existing and proposed sieve analysis. This will minimize the amount of the material entering the well from the screened part of the formation and, at the same time, not inhibit water inflow into the well. A finer grained siliceous sand pack will be placed to a point one-foot above the water table (approximately thirty feet in thickness). A Bentonite seal will be placed above the sand pack using a tremie pipe to form a seal at least three feet thick. Above the seal, a one-foot, fine-grained siliceous sand will be placed to minimize grout infiltration.

Each of the wells will be constructed of four-inch schedule PVC riser, screened at a discrete interval in the saturated soil column. Groundwater at the site occurs under unconfined conditions at approximately 70 feet below grade. The screen casing of the proposed deep wells will be installed at depths ranging from 10 feet below to 10 feet above the groundwater interface. The screened length of each of the wells will be twenty-feet (the bottom twenty-feet). The wells will be constructed of PVC, as it possesses the required tensile strength (risers and threading) to accommodate the required installation depths. Additionally, PVC is resistant and non-reactive with contaminants typically found in landfill plumes and thus will be appropriate material for long term performance without contributing or removing contaminants from the groundwater. The PVC riser and screens will be interconnected with standard flush threaded couplings (ASTM F-480) containing fluorocarbon (Viton) O-rings. A filter pack will be installed around the outside of each well using a tremie pipe. The material used for the filter pack will consist of uniform clean siliceous sand. The PVC screens will be wire wrapped.

A bentonite seal will be placed above the sand pack using a tremie pipe to form a seal at least three feet thick. Above the seal, a one-foot fine-grained siliceous sand pack will be placed to minimize grout infiltration. The balance of the casing annulus will be filled with grout to the surface. The grout will consist of a commercially available high-solids cement/bentonite grout. The grout mixture will set up without being diluted by formation of water, and will displace water in the annular space to ensure a continuous seal. The grout will be placed under pressure using a tremie pipe.

An eight-inch steel casing (manway) will be placed over the four-inch diameter protective screened casing and secured in a surface well seal to adequately protect it. A drain hole will be drilled at the base of the steel casing. A vent hole will be located near the top of the steel casing to prevent explosive gas build up and to allow well water levels to respond naturally to changes in barometric pressure. The annulus of the casing will be filled with gravel. A twelve-inch weather sealed locking cap will have at least two inches of clearance between the top of each clustered well cap and the bottom of the locking cap. Duplicate keys to the locking cap will be submitted to the NYSDEC.

A concrete surface seal will be constructed. The surface seal will extend below the frost line. The top of the seal will be constructed by pouring concrete into a form with a minimum three-foot side. The seal will prevent surface runoff from ponding and entering the well casing. In areas of excessive vehicle traffic, protective bollards will be installed around the seal. Complete construction diagrams for the proposed wells are provided in Appendix C.

The wells will be developed between sampling events by purging three well volumes from each. The field parameters that will be sampled are conductivity, pH, temperature, and turbidity.

6.0 RECORD KEEPING AND DOCUMENTATION

A site field log and a master sample log will be used on-site to record notes pertaining to the sampling. For the groundwater wells, a well log sheet will be used to record information. A sample form is provided in Appendix D.

ICM Laboratories will be used for all laboratory work in this study. A statement of qualifications for ICM can be found in Appendix E.

6.1 Sample Tracking System

In order to provide for proper identification in the field, and proper tracking in the laboratory, all samples must be labeled clear and in a consistent fashion using the procedures and protocols described below and with the following subsections.

Sample labels will be waterproof and have a pre-assigned, unique number that is indelible.
Field personnel must maintain a field notebook. This notebook must be water resistant with sequentially numbered pages. Field activities shall be sequentially recorded at a later time. The notebook, along with the chain of custody form, must contain sufficient information to allow reconstruction of the sample collection and handling procedure at a later time. Each sample shall have a corresponding notebook entry that includes:

Sample ID number
Well location and number
Date and time
Analysis for which sample was collected
Additional comments as necessary
Sampler's name

Each sample must have a corresponding notebook entry on a chain-of-custody form. The manifest entry for sampling at any one well is to be completed before sampling is initiated by the same sampling team at any other well. In cases where the samples leave the immediate control of the sampling team, the samples must be sealed.

6.2 Sample Identification System

Each sample collected shall be designated by an alphanumeric code that shall identify the type of sampling location, the specific location, the matrix sampled, and a specific sample designation. Site specific procedures are described below:

Sample identifications shall contain a sequential code consisting of three segments. The first segment shall designate the project number. The second segment shall identify the location type. Location types shall be identified by a two-letter code. For example, MW will be used for monitoring well and GP for Geoprobe. The third segment shall identify the specific sample location. The specific sampling location shall be identified using a three-digit number.

The fourth segment shall identify the matrix type and sample designation or identifier that identifies the sample depth, the sample event number, or other designation depending on the sample type. The matrix type shall be designated by a two-letter code. For example: GW will be used for groundwater. The sample identifier shall be represented by a two digit numeric code. Sampling events or rounds, such as for groundwater sampling shall be numbered in sequence beginning with "01" that corresponds to the round of sampling.

The following shall be a general guide for sample identification:

First Segment	**Second Segment**	**Third Segment**	**Fourth Segment**
NNN	AA	NNN	AANN
Project #	Location Type	Specific Type	Matrix Sample Identifier
963	MW	281	GW01

Symbol Definitions:	Location Type:	Matrix Type:
A = Alphabetic	MW = Monitoring Well	S = Soil
N = Numeric	GP = Geoprobe	GW = Groundwater

Sample Identifier:

1st round of sampling = 01

2nd round of sampling = 02

6.3 Sample Containers and Analytical Requirements

As required in the NYSDEC Analytical Sampling Protocol (ASP), the laboratory must provide all sample containers. If glass bottles are used, extra glass bottles will be obtained from the laboratory to allow for accidental breakage that may occur. Necessary preservatives will be placed in the sample bottles by the laboratory. The sample bottles will be handled carefully so that preservatives and glassware are not inadvertently spilled. All soil samples will be put into four 6-ounce glass jars with Teflon liners. All liquid samples will be put into 40-ml glass vials with Teflon liners.

6.4 Sample Packaging

Samples shall be packaged and shipped according to Section 6.2 of the USEPA's *Compendium of Superfund Field Operations Methods* entitled, "Packaging, Labeling, and Shipping." Chain of custody forms, sample labels, custody seals, and other sample documents shall be filled out as specified in the USEPA *CLP Users Guide*. Sample bottles and samples shall either be delivered/picked up at the site daily by ICM Laboratories, or delivered via overnight courier.

The proper procedures for packaging and shipping must be followed once the samples have been collected.

<u>Packaging</u>

Prior to shipment, samples must be packaged in accordance with current US DOT regulations. All required government and commercial carrier shipping papers must be filled out. The procedure below should be followed regardless of transport method.

As required in the NYSDEC ASP, samples will be transported in metal ice chests or sturdy plastic coolers.

Remove previously used labels, tape, and postage from cooler.

Ship filled sample bottles in same cooler in which empty bottles were received.

Check that all bottle labels are complete.

Check that all sample bottles are tightly capped.

Affix return address labels.

Be sure that chain-of-custody forms are complete.

Wrap sample bottles in bubble pack and place in cooler.

Pack bottles with extra bubble pack, vermiculite, or Styrofoam.

Keep samples refrigerated in cooler with bagged ice or frozen cold packs. Do not use ice for packing material.

Separate and retain the sampler's copy of chain-of-custody.

Tape paperwork in zipper bag to inside of cooler lid.

Close cooler and apply signed and dated custody seal in such a way that the seal must be broken to open the cooler.

Securely close cooler lid with packing or duct tape. Be sure to tape latches and drain plugs in closed position.

Shipping

Samples should arrive at the lab as soon as possible following sample collection to ensure holding times are not exceeded. All samples must be hand delivered on the same day as sampling or sent via overnight courier. Coolers will contain ice packs to maintain a temperature below 4 °F. Samples will be delivered to the laboratory within the seven-day holding period prescribed for VOC analysis.

6.5 Sampling Documentation

The sample team or individual performing a particular activity shall be required to keep a weatherproof field notebook. Field notebooks are intended to provide sufficient data and observations to enable participants to reconstruct events that occurred during projects and to refresh the memory of the field personnel if called upon to give testimony during legal proceedings. In a legal proceeding, notes, if referred to, are subject to cross-examination and are admissible as evidence. The field notebook entries should be factual, detailed, and objective. All entries are to be signed and dated. All members of the field investigation team are to use this notebook, which shall be kept as a permanent record. The field notebook shall be filled out at the location of sample collection immediately after sampling. It shall

contain sample descriptions including: sample number, sample collection time, sample location, sample description, sampling method used, daily weather conditions, field measurements, name of sampler, and other site-specific observations. The field notebook shall contain any deviations from the protocol contained herein, visitor's names, community contacts made during sampling, and geologic and other site-specific information that may be noteworthy.

Chain-of-custody forms, sample labels, custody seals, and other documents shall be filled out as specified in Section 4.0 of the USEPA *A Compendium of Superfund Field Operations Manual*, 1987. Additionally, a dedicated sampling master log shall be maintained as the field program progresses. The sample logbook shall contain the sample number, sample date/time, sampling team, and chain-of-custody.

6.6 Chain-of-Custody Protocol

The primary objective of the sample custody procedures is to create an accurate written record that can be used to trace the possession and handling of all samples from the moment of their collection, through analysis, until their final disposition. Sample custody for samples collected during the investigation will be maintained by the on-site hydrogeologist or the field personnel collecting the samples. Field personnel are responsible for documenting each sample transfer and maintaining custody of all samples until they are shipped to the laboratory.

Chain-of-custody forms will be completed at the time of sample collection and will accompany the samples inside the cooler for shipment to the selected laboratory.

7.0 PERFORMANCE CRITERIA

7.1 Field and Consulting Engineering Services

Impact Environmental Consulting, Inc. ("contractor") and its designated subcontractors, will perform all field activities. The subcontractors that are anticipated to be used for the performance of the Focus Study are presented below:

ICM Laboratories, Inc.
1152 Route 10
Randolph, NJ 07869
(973) 584-0330

ADT Drilling Corp.
51-41 59th Place
Woodside, NY 11377
(800) 238-3745

Tank Specialists (Excavators)
2 Park Place
Glen Cove, New York
(516) 759-9318

7.2 Site Representation

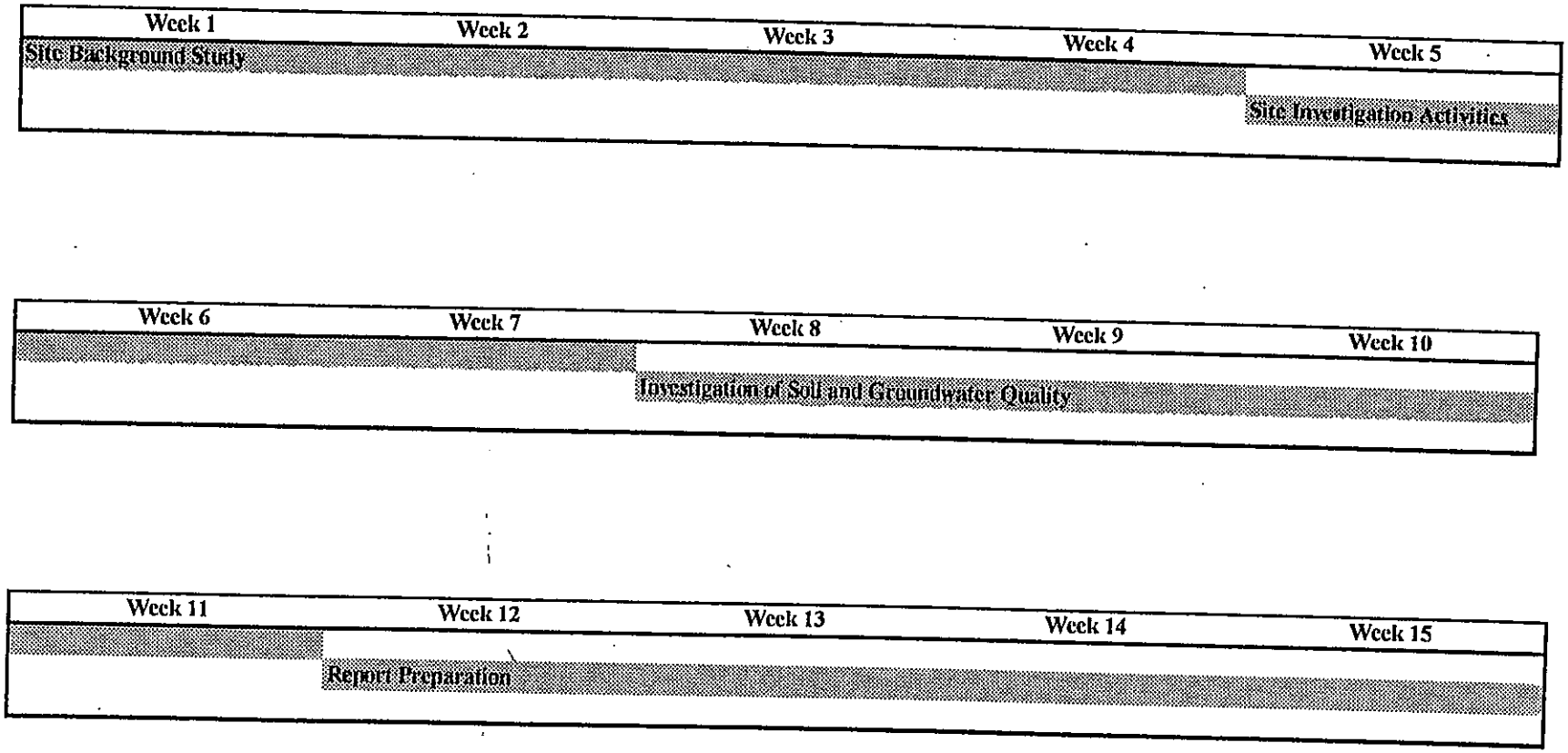
All on-site activities will be supervised by a representative of 2632 Realty Development Corp. that is qualified to audit all field mobilization and investigative activities. Said representative will be identified as the Project Field Manager. The Project Field Manager will be on-site during the performance of all work performed by the contractor and its subcontractors. The qualifications of key personal including the Project Field Manager are provided in Appendix F.

7.3 Chronological Description of Focus Study

The time line that will be used for the study is outlined in Table 2.

Table 2

Time Line For Study



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8.0 REPORTING OF RESULTS

All laboratory-reporting procedures will comply with the NYSDEC ASP and the New York State Department of Health Environmental Laboratory Approval Program (NYSDOH ELAP). In addition, all sample analyses will be done by a NYSDOH ELAP CLP certified laboratory and the data will be reported in the NYSDEC ASP Category B deliverables package format. The NYSDEC Department of Environmental Remediation (DER) Data Usability Summary Report (DUSR) will be used for data review. The data packages will be evaluated according to the DER DUSR Guidelines, Revised 9/97. Richard Parrish and George Wright will author the DUSR.

9.0 HEALTH AND SAFETY PLAN

9.1 Emergency Response

In order to properly prepare for emergencies, personal protective equipment (PPE) will be worn by site workers and first aid equipment will be kept at the site. Material Safety Data Sheets (MSDS) will be maintained for all contaminants that workers may be exposed to.

9.1.1 Onsite Emergency Response

In the event of an accident or emergency situation, emergency procedures will be executed. Said procedures can and will be executed by the first person to observe an accident or emergency situation. The Project Field Manager will be notified about the situation immediately after emergency procedures are implemented. A list of the pertinent personnel authorized to be present on site is as follows:

Title	Name	Telephone Number
Project Manager	George Wright	(516) 269-8800
Health & Safety Officer	Kristin Scroope	(516) 269-8800
Project Field Manager	Keith Franzen	(516) 269-8800
Site Safety Officer	Jim Mulvey	(516) 269-8800

Title	Name	Telephone Number
Client Contact	Charlotte Biblow	(516) 357-3000
Site Contact	Paula Scappatura	(516) 333-4005
State Agency Contact (NYS DEC)	Anna Ruepp	(518) 457-1708
Quality Assurance Officer	Rich Parrish	(516) 269-8800

9.1.2 Emergency Contacts

Ambulance/Emergency:	*Nassau County Medical Center* 516-572-6655
Police:	911 or *Westbury Police Dept.* 516-573-5275
Fire Department:	*Westbury Fire Dept.* 516-921-0000
Poison Control Center:	800-336-6997
Hospital:	*Nassau County Medical Center* 516-572-0123
Directions:	Take Garden Street south and turn left onto Grand Blvd. Continue east on Grand Blvd. and turn right onto Carman Ave. Travel approximately two miles south on Carman Ave. and the hospital will be on the left immediately after the Nassau County Jail.
State Police:	516-756-3300
National Response Center:	800-424-8802
US EPA (24 hour hotline):	800-424-9346

9.1.3 Who to Contact Before Initiating Subsurface Investigation Work

Impact Environmental Consulting, Inc. ("Impact") representatives are responsible for contacting appropriate agencies prior to conducting on-site activities when applicable.

Gas Company:	*Brooklyn Union Gas* 718-643-4050
Telephone Company:	*Bell Atlantic* 516-661-6000
Electric Company:	*Marketspan* 516-222-7700

9.1.4 Contingency / Evacuation Plan

It may be possible that a site emergency could necessitate the evacuation of all personnel from the site. If such a situation develops, an audible alarm shall be given for site evacuation (consisting of an air horn). Personnel shall evacuate the site in a calm and controlled fashion and regroup at a predetermined location. The route of evacuation will be dependent on wind direction, severity, type of incident, etc.

The site must not be re-entered until back-up help, monitoring equipment, and/or personal protective equipment are on hand and the appropriate regulatory agencies have been notified.

9.1.5 Standard Procedures for Injury

1. Telephone for ambulance/medical assistance if necessary. Whenever possible, notify the receiving hospital (listed in 9.1.2) of the nature of physical injury or chemical overexposure. If no phone is available, transport the person to the nearest hospital. Refer to Appendix for map to hospital.
2. Bring this Health and Safety Plan with the attached MSDSs to the medical facility with the injured person.
3. If the injury is minor, proceed to administer first aid.
4. Notify the Site Safety Officer, Project Manager, and the Regional Safety Director of all accidents, incidents, and near emergency situations.

9.1.6 Emergency Treatment

When transporting an injured person to a hospital, bring this Health and Safety Plan to assist medical personnel with diagnosis and treatment. In all cases of chemical overexposure, follow standard procedures as outlined below for poison management, first aid, and, if applicable, cardiopulmonary resuscitation. Different routes of exposure and their respective first aid/poison management procedures are outlined below.

9.1.7 Ingestion

Do not induce vomiting unless prompted by a health professional. Transport person to nearest hospital immediately.

9.1.8 Inhalation / Confined Space

Do not enter a confined space to rescue someone who has been overcome unless properly equipped and a standby person present.

9.1.9 Inhalation / Other

Move the person from the contaminated environment. Initiate CPR if necessary. Call or have someone call for medical assistance. Refer to MSDS for additional specific information. If necessary, transport the victim to the nearest hospital as soon as possible.

9.1.10 Skin Contact / Non-Caustic Contaminant (Petroleum, Gasoline, etc.)

Wash off skin with a large amount of water immediately. Remove any affected clothing and rewash skin using soap, if available. Transport person to a medical facility if necessary.

9.1.11 Skin Contact / Corrosive Contaminant (Acids, Hydrogen Peroxide, etc.)

Wash off skin with a large amount of water immediately. Remove any affected clothing and rewash skin with water. Transport person to a medical facility if necessary.

9.1.12 Eyes

Hold eyelids open and rinse the eyes immediately with large amounts of water for 15 minutes. Never permit the eyes to be rubbed. Transport person to a medical facility as soon as possible.

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9.2 Informational Summary

9.2.1 Health and Safety Summary

Chemicals of Concern: Benzene, MTBE, Tetrachloroethene, Toluene, Trans 1,2 Dichloroethane, Trichloroethene, Xylene(s), and Vinyl Chloride.

These chemicals are of moderate to low hazard. Therefore, modified level D personal protective equipment will be required at all times when on site. Changes to this requirement will be required as follows.

Level C protection, as described in this plan, will be available at a minimum for those activities that involve surface and subsurface soil (strata disturbance, such as well installation, and all subsurface media sampling activities such as split-spoon sampling and borings).

The Site Safety Officer will determine whether or not a level of protection can be upgraded or downgraded. Changes in the level of protection will be recorded in the dedicated site logbook along with the rationale for the changes. Level D protection may be used for those activities that do not pose a potential threat of exposure to toxic or hazardous substances. Typical Level D activities may include sediment, logging and groundwater sampling, as well as surficial site surveys. Level C protection equipment should be readily available at all times. Consistent with OSHA training, prior to donning Level C, oxygen percent must be continuously monitored.

Action levels represent those conditions that a person requires an upgrade of personal protective equipment (PPE). Organic vapor concentrations are to be monitored in the field by the use of a flame ionization or photo ionization detector (FID or PID) with readings being taken in a breathing zone occupied by field personnel to determine whether an action level has been exceeded. The information presented below applies to the above chemical constituents. All air monitoring results should be logged on the Vapor Monitoring Sheet in Appendix G.

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All initial site access and activities will be done in Level D attire.

Ionization Detector Response

Flame Ionization Detector (FID)

Concentrations (in ppm)	Level of PPE Required
0.0 to 5.0	Level D
5.0 to 250.0	Level C
250.0 to 750.0	Level B
Above 750.0	Immediately withdraw from the area

Combustible Gas Response

Combustible Gas Indicator (CGI)

Results (% of LEL)	Procedure
0.0 to 20.0	Continue with normal activity
Above 20.0	Immediately withdraw from the area

Oxygen Detector Response

Combustible Gas Indicator (CGI)

Results (% Oxygen)	Procedure
0.0 to 19.5	Level B PPE is required
19.5 to 23.0	Continue with normal activity
Above 23.0	Immediately withdraw from the area

9.3 Introduction

This HASP describes the procedures to be followed in order to reduce employee exposure to potential health hazards that may be present at the project site. The emergency response procedures necessary to respond to such hazards are also described within this HASP.

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9.3.1 Purpose

The purpose of this Health and Safety Plan (HASP) is to provide the contractor's field personnel, subcontractors, and other visitors with an understanding of the potential chemical and physical hazards that exist or may arise while the tasks of this project are being performed.

9.3.2 Objective

This Health and Safety Plan is required in accordance with OSHA 29 CFR 1910.120. The primary objective is to ensure the well being of all field personnel and the community surrounding this site. In order to accomplish this, project staff and approved subcontractors shall acknowledge and adhere to the policies and procedures established herein. Accordingly, all personnel assigned to this project shall read this HASP and sign the Agreement and Acknowledgment Statement (Appendix) to certify that they have read, understood, and agree to abide by its provisions.

The contractor's personnel have the authority to stop work performed by our sub-contractors at this site if said work is not performed in accordance with the requirements of this HASP.

9.3.3 Amendments

Any changes in the scope of work of this project and/or site conditions must be amended in writing and approved by the Regional Health and Safety Manager.

9.4 Hazard Evaluation

9.4.1 Site Tasks

The field tasks covered by the HASP may include well installation, development, gauging, and bailing; soil & groundwater handling/sampling; and confined space (excavation) entry and job task hazards.

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9.4.2 Job Task Hazards

The following hazards may be encountered.

• Organic Vapors

The inhalation of volatile organic vapors during all operations can pose a potential health hazard. Hazard reduction procedures include monitoring the ambient air with a FID and the use of appropriate PPE. Workers should stand upwind of the source of contamination whenever possible.

• Flammable Vapors

The presence of flammable vapors can pose a potential fire and health hazard. Hazard reduction procedures include monitoring the ambient air with an oxygen/LEL meter (combustible gas indicator). If the LEL reading exceeds 20%, leave the site immediately and contact the fire department.

• Oxygen

Atmospheres that contain a level of oxygen greater than 23% pose an extreme fire hazard (the usual ambient oxygen level is approximately 20.5%). This hazard can be compounded by the fact that vapors associated with this site are highly flammable. All personnel encountering atmospheres that contain a level of oxygen greater than 23% must evacuate the site immediately and must notify the Fire Department. If the oxygen level is less than 19.5%, do not enter the space without level B PPE.

• Vehicular Traffic

All employees will be required to wear a fluorescent safety vest at all times while on site. In addition, supplemental traffic safety equipment use can be exercised when warranted by specific task. Supplemental equipment can be items such as cones, flags, barricades, and/or caution tape.

9.4.3 Well Installation, Development, Gauging, Bailing; Soil & Groundwater Sampling

Skin and eye contact with contaminated groundwater and/or soil may occur during these tasks. Nitrile gloves and approved safety glasses must be worn.

9.4.4 Sample Preservation

When hydrochloric acid is used, skin and eye contact can occur. This hazard can be reduced with the use of Nitrile gloves and safety glasses. Safety goggles should be worn if there is a potential for a splash hazard.

9.4.5 Cleaning Equipment

Skin and eye contact with methanol, "Alconox", or other cleaning substances can occur while decontaminating equipment. This hazard can be reduced with the use of Nitrile gloves and safety glasses.

9.4.6 Confined Space Entry

Excavation pits, storage tanks, soil trenches, subsurface vaults, basements, and sheds are examples of confined spaces. Confined spaces can be identified as an area having one of the following characteristics:

- Limited access and egress
- Unfavorable for natural ventilation
- Not designed for continuous human occupancy

Organic and/or combustible vapors may be trapped in confined spaces, resulting in lack of oxygen (anoxia) and/or overexposure to vapors. When site work takes place in a confined space, the air must be monitored for oxygen level, flammable vapors, and toxic vapors. The following air monitoring procedures must be followed before entering a confined space.

a. Oxygen Level

Monitor for percent oxygen with an oxygen/LEL meter (e.g., CGI) to ensure an oxygen level between 19.5 and 23%. Because of the high vapor density of the contaminants associated with this site, there is a high probability that vapors in the enclosed spaces or vaults will replace any oxygen that is present, even if the space is open to the air. Therefore, oxygen level monitoring will be done at the top, middle, and bottom of the enclosed space to determine if there is a minimum acceptable oxygen level of 19.5% prior

to entry. The oxygen/LEL meter is factory-set to sound an alarm at levels less than 19.5% oxygen. **If oxygen is less than 19.5% or greater than 23%, do not enter the space.**

b. Explosive Vapors

Monitor the percentage of the Lower Explosive Limit (LEL) with an oxygen/LEL meter to determine whether vapor concentrations within the confined space are within the flammable range. If LEL readings exceed 10%, personnel should exercise extreme caution, use non-sparking tools, and utilize ventilation engineering controls to reduce LEL levels. The oxygen/LEL meter is factory set to sound an alarm at levels greater than 20% LEL. If LEL readings exceed 20%, **personnel MUST leave the site immediately and contact the project manager.**

c. Toxic Vapors

Monitor for toxic vapors with a FID (e.g., Photovac OVA) to determine whether toxic vapors within the confined space exceed the action levels. PID readings will be taken at the top, middle, and bottom of a vault, shed, or other confined space to determine vapor levels.

Summary

Do not enter the confined space unless:

- the oxygen concentration is between 19.5 and 23%;
- the LEL is less than 20%; and
- FID readings are less than 250 ppm (a respirator must be worn if the readings exceed 5 ppm)

All monitoring equipment must be calibrated and maintained in accordance with manufacturer's recommendations.

9.4.7 Occupational Noise

Requirements set forth in the OSHA Hearing Conservation Regulation (OSHA 1910.95) shall be adhered to during work on-site. Hearing protection shall be provided to the employees where sound pressure levels exceed 85 dB. Hearing protection shall be worn where sound pressure levels in areas and/or on equipment exceeds 90 dB. Typical drilling

operations have been monitored with a sound level meter and indicate that hearing protection is required for all personnel while engaged in this action.

9.4.8 Heat Stress

Since climatic changes cannot be avoided, work schedules will be adjusted to provide time intervals for intake of juices, juice products, and water in an area free from contamination and in quantities appropriate for fluid replacement.

Heat stress may occur even in moderate temperature areas and may present any or all of the following:

A. Heat Rash

Result of continuous exposure to heat, humid air, and chafing clothes. Heat rash is uncomfortable and decreases the ability to tolerate heat.

B. Heat Cramps

Result of the inadequate replacement of body electrolytes lost through perspiration. Signs include severe spasms and pain in the extremities and abdomen.

C. Heat Exhaustion

Result of increased stress on the vital organs of the body in the effort to meet the body's cooling demands. Signs include shallow breathing; pale, cool, moist skin; profuse sweating; and dizziness.

D. Heat Stroke

Result of overworked cooling system. Heat stroke is the most serious form of heat stress. Body surfaces must be cooled and medical help must be obtained immediately to prevent severe injury and/or death. Signs include red, hot, dry skin, absence of perspiration, nausea, dizziness and confusion, strong, rapid pulse, coma, and death.

Heat Stress Prevention

A. Replace body fluids (water and electrolytes) lost through perspiration. Solutions may include a 0.1% salt and water solution or commercial mixes such as

"Gatorade". Employees must be encouraged to drink more than the amount required in order to satisfy thirst.

B. Use cooling devices to aid the natural body ventilation. Cooling occurs through evaporation of perspiration and limited body contact with heat-absorbing protective clothing. Utilize fans and air conditioners to assist in evaporation. Long, cotton underwear is suggested to absorb perspiration and limit any contact with heat-absorbing protective clothing (i.e., coated Tyvek suits).

C. Conduct non-emergency response activities in the early morning or evening during very hot weather.

D. Provide shelter against heat and direct sunlight to protect personnel. Take breaks in shaded areas.

E. Rotate workers utilizing protective clothing during hot weather.

F. Establish a work regime that will provide adequate rest periods, with personnel working in shifts.

Heat Stress Monitoring

Heat stress may occur even in moderate temperatures and may present heat rash, heat cramps, heat exhaustion, and/or heat stroke.

Monitoring procedures should be implemented to prevent heat stress arising from environmental conditions, use of PPE, and/or intensity of workload.

For temperatures above 70 °F, the following regime shall be followed for workers wearing permeable coveralls:

Adjusted Temperature	Normal Ensemble	Impermeable Ensemble
90 °F or above	After 45 min. of work	After 15 min. of work
87.5 to 90 °F	After 60 min. of work	After 30 min. of work
82.5 to 87.5 °F	After 90 min. of work	After 60 min. of work
77.5 to 82.5 °F	After 120 min. of work	After 90 min. of work
72.5 to 77.5 °F	After 150 min. of work	After 120 min. of work

Workers wearing semipermeable or impermeable encapsulating protective clothing should be monitored for heart rate and temperature when the temperature in the work area is above 70 °F. In order to monitor the worker, measure:

A. Heart rate - Count the radial pulse during a 30-second period as early as possible in the rest period. If the heart rate exceeds 110 beats per minute at the beginning of the rest period, shorten the next work cycle by one-third.

B. Oral temperature - Use a clinical thermometer or similar device to measure the oral temperature at the end of the work period (before drinking). If oral temperature exceeds 99.6 °F, shorten the next work cycle by one-third.

Do not permit a worker to wear a semipermeable or impermeable garment if the core body temperature exceeds 100.6 °F.

Workers shall not be required to continue working if they feel any of the symptoms of heat stress. Rest periods should be a minimum of 15 minutes. Length of rest period should be extended as appropriate or as recommended by the Site Safety Officer or alternate.

9.4.9 Exposure: Cold Stress

Work schedules will be adjusted to provide sufficient rest periods in a heated area for warming up during operations conducted in cold weather. Also, thermal protective clothing such as wind and/or moisture resistant outerwear is recommended to be worn.

If work is performed continuously in the cold at or below -7 °C (20 °F), including wind chill factor, heated warming shelters (tents, cabins, company vehicles, rest rooms, etc.) shall be made available nearby and the worker should be encouraged to use these shelters at regular intervals, the frequency depending on the severity of the environmental exposure. The onset of heavy shivering, frostnip, the feeling of excessive fatigue, drowsiness, irritability, or euphoria, are indications for immediate return to the shelter. When entering the heated shelter, the outer layer of clothing shall be removed and the

remainder of the clothing loosened to permit sweat evaporation. A change of dry work clothing shall be provided as necessary to prevent workers from returning to their work with wet clothing.

Dehydration, or the loss of body fluids, occurs in the cold environment and may increase the susceptibility of the worker to cold injury due to a significant change in blood flow to the extremities. Warm sweet drinks and soups should be provided at the work site to provide caloric intake and fluid volume. The intake of coffee should be limited because of a diuretic and circulatory effect (Adapted from TLV's and Biological Exposure Indices 1988-1989, ACGIH).

9.5 Personal Protective Equipment

The following is a breakdown of the types of protective clothing and equipment to be used during the site activities. Personal protective equipment (PPE) is in conformance with EPA criteria for Level B, C, and D protection. All respiratory protective equipment used will be approved by NIOSH/MSHA.

Level C protection, as described in this plan, will be available at a minimum for those activities that involve surface and subsurface soil (strata disturbance such as well installation, and all subsurface media sampling activities such as split-spoon sampling and borings). Some activities may require Level B protection. In atmospheres potentially containing toluene and xylenes, the protective ensemble should include chemical resistant clothing since the two compounds have skin absorption potential.

The Site Safety Officer will determine whether or not a level of protection can be upgraded or downgraded. Changes in the level of protection will be recorded in the dedicated site logbook along with the rationale for the changes. Level D protection may be used for those activities that do not pose a potential threat of exposure to toxic or hazardous substances. Typical Level D activities may include sediment, logging and groundwater sampling, as well as surficial site surveys. Level C protection equipment

should be readily available at all times. Consistent with OSHA training, prior to donning Level C, the percentage of oxygen must be continuously monitored.

Level D

- hard hat
- safety glasses
- steel toe and shank boots
- fluorescent vest
- splash goggles
- hearing protection (as appropriate)

Modified Level D

- hard hat
- safety glasses
- steel toe and shank boots
- fluorescent vest
- Nitrile "N-Dex" inner gloves
- latex outer boots (chemical resistant)
- splash goggles
- polyethylene coated Tyvek suit
- hearing protection (as appropriate)

Level C

- buddy system required at all times
- full face respirator with NIOSH approved OV/AG/HEPA combination cartridges (MSA GMC-H)
- Saranex coated Tyvek Suit
- inner Nitrile "N-Dex" gloves
- outer Nitrile (NBR) gloves
- steel toe and shank boots
- outer boots (chemical resistant)

- hard hat
- hearing protection (as appropriate)

Level B

Regional Health and Safety representatives must be on site upon start-up of any project requiring level B protection. This should be understood to include subcontractors conducting Level B activity.

- buddy system required at all times
- supplied air respirator or SCBA
- Saranex coated Tyvek Suit
- inner Nitrile "N-Dex" gloves
- outer Nitrile (NBR) gloves
- steel toe and shank boots
- outer boots (chemical resistant)
- hard hat
- hearing protection (as appropriate)

Note: Respirator cartridges will be changed once per day at a minimum. This can be accomplished at the end of the workday during respirator decontamination. If odor breakthrough is detected while wearing the respirator or if breathing becomes difficult, change cartridges immediately.

Contact with contaminated surfaces, or surfaces suspected of being contaminated, should be avoided. This includes walking through, kneeling in, or placing equipment in puddles, mud, discolored surfaces, or on drums and other containers. Eating, smoking, drinking, and/or the application of cosmetics in the immediate work area is prohibited.

When utilizing protective garments such as Tyvek suits, gloves, and booties, all seams between protective items will be sealed with duct tape.

The use of contact lenses on the job site is strongly advised against. However, when glasses are not available, contact lenses are preferred over faulty vision. When contact lenses are worn, safety glasses and/or goggles must be worn at all times while on the job site.

9.6 Decontamination

9.6.1 General

Personnel involved in work activities at the site may be exposed to compounds in a number of ways, despite the most stringent protective procedures. Site personnel may come in contact with vapors, gases, mists, or particulates in the air, or other site media while performing site duties. Use of monitoring instruments and site equipment can also result in exposure and transmittal of hazardous substances.

In general, decontamination involves scrubbing with a detergent water solution followed by clean water rinses. All disposable items shall be disposed of in a dry container. Certain parts of contaminated respirators, such as harness assemblies and leather or cloth components, are difficult to decontaminate. If grossly contaminated, they may have to be discarded. Rubber components can be soaked in detergent and water and scrubbed with a brush. In addition to being contaminated, all respirators, non-disposable protective clothing, and other personal articles must be sanitized or replaced before they can be used again if they become soiled from exhalation, body oils, and perspiration. The manufacturer's instructions should be followed in sanitizing the respirator masks.

The Site Safety Officer will be responsible for the proper maintenance, decontamination, and sanitizing of all respirator equipment.

The decontamination zone layout and procedures should match the prescribed levels of personal protection. A detailed discussion for the establishment of the project decontamination zone and the procedures required for the various levels of personnel protection follows.

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Exclusion Zone (EZ)

It is within this zone that the work activities are performed. No one shall enter this zone unless the appropriate PPE is donned.

Contaminant Reduction Zone (CRZ)

It is within this zone that the decontamination process is undertaken. Personnel and their equipment must be adequately decontaminated before leaving this zone for the support zone. This zone will be set up between the EZ and a well-ventilated open area.

Support Zone (SZ)

The support zone is considered to be uncontaminated; as such, protective clothing and equipment are not required but should be available for use in emergencies. All equipment and materials are stored and maintained within this zone. Protective clothing is put on in the SZ before entering the CRZ. The SZ will be established in a safe environment.

The following procedures have been established to provide site personnel with minimum guidelines for proper decontamination. Personnel leaving the point of operations designated as the EZ must follow these minimum procedures. The decontamination process shall take place at a reasonable distance away from any area of potential contamination.

9.6.2 Minimum Decontamination Procedure

Personnel leaving the point of operations should wash outer gloves and boots. At a minimum, the outer boots shall be removed first and stored in an appropriate area or disposed of properly. Outer boots must be properly washed where gross contamination is evident. Personnel shall then remove and dispose of the Tyvek suits. Personnel should remove the Tyvek suits so that the inner clothing does not come in contact with any contaminated surfaces. After Tyvek removal, personnel shall remove and discard outer Nitrile gloves. Personnel shall then remove the respirator, where applicable. Respirators shall be disinfected between uses with towelettes or other sanitary methods. Potable

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water, at a minimum, will be present so that site personnel can thoroughly wash hands and face after leaving the point of operations.

Portable wash stations shall be utilized for easy and efficient access. The wash station shall consist of a potable water supply, hand soap, and clean towels. Portable sprayer units filled with Alconox solution and potable water should also be available to wash and rinse off grossly contaminated boots, gloves, and equipment. The Site Safety Officer will monitor decontamination procedures to ensure their effectiveness. Modifications of the decontamination procedure may be necessary as determined by the Site Safety Officer's observations.

9.6.3 Standard Decontamination Procedure

The following decontamination procedures should be implemented during site operations for the appropriate level of protection.

Level B

Segregated equipment drop

Deposit equipment (tools, sampling devices, notes, monitoring instruments, radios, etc.) used on the site onto plastic drop cloths.

Boot covers and glove wash

Outer boots and outer gloves should be scrubbed with a decontamination solution of detergent and water or replaced.

Rinse off boot covers and gloves

Decontamination solution should be rinsed off boot covers and gloves using generous amounts of water. Repeat as many times as necessary.

Tape removal

Remove tape from around boots and gloves and place into container with plastic liner.

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Boot cover removal

Remove disposable boot covers and place into container with plastic liner.

Outer glove removal

Remove outer gloves and deposit in container with plastic liner.

Suit / safety boot wash

Completely wash splash suit, SCBA, gloves, and safety boots. Care should be exercised that no water is allowed into the SCBA regulator. It is suggested that the SCBA regulator be wrapped in plastic.

Suit / safety boot rinse

Thoroughly rinse off all decontamination solution from protective clothing.

Tank or canister changes

This is the last step in the decontamination procedure for those workers wishing to change air tanks and return to the EZ. The worker's air tank or cartridge is exchanged, new outer glove and boot covers are donned, and joints taped.

Removal of safety boots

Remove safety boots and deposit in container with a plastic liner.

SCBA backpack removal

Without removing the face piece, the SCBA backpack should be removed and placed on a table. The face piece should then be disconnected from the remaining SCBA unit and then proceed to the next station.

Splash suit removal

With care, remove the splash suit. The exterior of the splash suit should not come in contact with any inner layers of clothing.

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Inner glove wash

The inner gloves should be washed with a mild decontamination solution (detergent / water)

Inner glove rinse

Generously rinse the inner gloves with water.

Face piece removal

Without touching the face with gloves, remove the face piece. The face piece should be deposited into a container that has a plastic liner.

Inner glove removal

Remove the inner glove and deposit into a container that has a plastic liner.

Field wash

Wash hands and face thoroughly. If highly toxic, skin corrosive, or skin absorbent materials are known or suspected to be present, a shower should be taken.

Level C and Level D

The decontamination procedure for Level C and Level D personal protection will employ applicable steps detailed in the Level B decontamination process.

9.6.4 Sampling Equipment and Sample Container Decontamination

All non-disposable sampling equipment will be decontaminated with an Alconox / water solution followed by a clean water rinse. As an added precaution against cross-contamination, all non-disposable sampling equipment will be rinsed with distilled water. All disposable sampling equipment will be properly disposed of in dry containers.

Before leaving the site, all sample containers will be thoroughly decontaminated using a detergent and water solution followed by a clean water rinse. The decontamination procedure should include a complete scrubbing of the container's surface to remove

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possible contamination. Care must be exercised to prevent damage to sample container identification labels.

9.7 Health and Safety Requirements

9.7.1 Medical Monitoring Program

A baseline physical examination must be conducted on all employees before they are permitted to engage in sampling, cleanup, and remedial action work. A complete medical survey should be completed on each employee upon start of employment. Yearly re-examination should be performed to update information on employee health status. Additional re-evaluation will be considered in the event of a chemical overexposure. These medical surveillance requirements shall comply with OSHA regulations as defined in 29 CFR 1910.120.

9.7.2 Training

All personnel working at this site should have received a minimum of 40 hours of initial hazardous waste activity instruction, and a minimum of three days of field experience under direct supervision of a trained, experienced person. Personnel assigned to the site will also receive eight hours refresher training per year. On-site managers and supervisors directly responsible for employees engaged in hazardous waste operations have received an additional eight hours of supervisory training. These training requirements comply with the OSHA Hazardous Waste Operations and Emergency Response Regulation, 29 CFR 1910.120.

9.7.3 Visitor Policy

All visitors and/or trainees on site must submit to the limitations described herein.

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9.7.4 Work Zone Area

Work and support areas shall be established based on ambient air data and proposed work sites. They shall be established in order to contain contamination within the smallest areas possible and shall ensure that each employee has the proper PPE for the area or zone in which work is to be performed.

9.7.5 First Aid Equipment

Vehicles used for site work will be equipped with a first aid kit and safety equipment including:

- fluorescent vests
- cones (and flags as needed)
- hazard tape (barricades as needed)
- mounted fire extinguisher (10 pound A/B/C type)
- working flashlight
- water, suitable for drinking
- portable eye wash
- first aid kit with appropriate bandage material
- full body harness with lifeline (for confined space entry)

9.7.6 Fire Prevention

During equipment operation, periodic vapor concentration measurements should be taken with an explosimeter or combustimeter. If at any time the vapor concentrations exceed 20% of the LEL, then the Site Safety Officer or designated field worker should immediately shut down all operations.

Only approved safety cans will be used to transport and store flammable liquids.

All gasoline and diesel-driven engines requiring refueling must be shut down and allowed to cool prior to filling.

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Smoking is not allowed during any operations within the work area in which petroleum products or solvents in free-floating, dissolved, or vapor forms, or other flammable liquids may be present.

No open flame or spark is allowed in any area containing petroleum products or other flammable liquids.

9.7.7 Heavy Machinery / Equipment

All site employees must remain aware of those site activities that involve the use of heavy equipment and machinery. Respiratory protection and protective eyewear may be worn frequently during site activities. This protective equipment significantly reduces peripheral vision of the wearer. Therefore, it is essential that all employees at the site exercise extreme caution during operation of equipment and machinery to avoid physical injury to themselves or others.

9.7.8 Additional Safety Practices

The following are important safety precautions that will be enforced during work activities.

1. Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in any area designated as contaminated.
2. Hands and face must be thoroughly washed upon leaving the work area and before eating, drinking, or any other activity.
3. Whenever decontamination procedures for outer garments are in effect, the entire body should be thoroughly washed as soon as possible after the protective garments are removed.
4. No excessive facial hair that interferes with the effectiveness of a respirator will be permitted on personnel required to wear respiratory protection equipment. The respirator must seal against the face so that the wearer receives air only

through the air purifying cartridges attached to the respirator. Fit testing shall be performed prior to respirator use to ensure the wearer obtains a proper seal.

5. Contact with potentially contaminated surfaces should be avoided whenever possible. One should not walk through puddles; kneel on the ground; lean, sit, or place equipment on drums, containers, vehicles, or the ground.
6. Medicine and alcohol can potentate the effect from exposure to certain compounds. Prescribed drugs and alcoholic beverages should not be consumed by personnel involved in the project.
7. Personnel and equipment in the work areas should be minimized, consistent with effective site operations.
8. Work areas for various operational activities should be established.
9. Procedures for leaving the work area must be planned and implemented prior to going to the site. Work areas and decontamination procedures must be established on the basis of prevailing site conditions.
10. Respirators will be issued for the exclusive use of one worker and will be cleaned and disinfected after each use.
11. Safety gloves and boots shall be taped to the disposable, chemical-protective suits as necessary.
12. All unsafe equipment left unattended will be identified by a "DANGER, DO NOT OPERATE" tag.
13. Noise mufflers or earplugs may be required for all site personnel working around heavy equipment. This requirement will be at the discretion of the Site Safety Officer. Disposable, form-fitting plugs are preferred.
14. Cartridges for air-purifying respirators in use will be changed daily at a minimum.

9.8 Project Personnel

9.8.1 Project Manager

The Project Manager will be responsible for implementing the project and obtaining any necessary personnel or resources for the completion of the project. Specific duties will include:

- coordinating the activities of all subcontractors, to include informing them of the required PPE and insuring their signature acknowledging this Site Safety Plan
- selecting a Site Safety Officer and field personnel for the work to be undertaken on site
- ensuring that the tasks assigned are being completed as planned and on schedule
- providing authority and resources to ensure that the Site Safety Officer is able to implement and manage safety procedures
- preparing reports and recommendations about the project to clients and affected personnel
- ensuring that all persons allowed to enter the site (i.e., EPA, contractors, state officials, visitors are made aware of the potential hazards associated with the substances known or suspected to be on site, and are knowledgeable as to the on-site copy of the specific site safety plan.
- ensuring that the Site Safety Officer is aware of all of the provisions of this site safety plan and is instructing all personnel on site about the safety practices and emergency procedures defined in the plan
- ensuring that the Site Safety Officer is making an effort to monitor site safety, and has designated a Field Team Leader to assist with the responsibility when necessary.

9.8.2 Site Safety Officer

The Site Safety Officer shall be responsible for the implementation of the site safety plan on site. Specific duties will include:

- monitoring the compliance of field personnel for the routine and proper use of the PPE that has been designated for each task.
- routinely inspecting PPE and clothing to ensure that it is in good condition and is being stored and maintained properly.
- stopping work on the site or changing work assignments or procedures if any operation threatens the health and safety of workers or the public.
- monitoring personnel who enter and exit the site and all controlled access points.

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- reporting any signs of fatigue, work-related stress, or chemical exposures to the Project Manager and/or Health and Safety Officer.
- dismissing field personnel from the site if their actions or negligence endangers themselves, co-workers, or the public, and reporting the same to the Project Manager.
- reporting any accidents or violations of the site safety plan to the Project Manager and documenting the same for the project in the records.
- knowing emergency procedures, evacuation routes, and the telephone numbers of the ambulance, local hospital, poison control center, fire and police departments.
- ensuring that all project-relating personnel have signed the personnel agreement and acknowledgments form contained in this site safety plan.
- coordinate upgrading and downgrading PPE as necessary due to changes in exposure levels, monitoring results, weather, and other site conditions.
- perform air monitoring with approved instruments in accordance with requirements stated in this Site Safety Plan.

9.8.3 Project Field Manager

In the event that the Project Manager and the Site Safety Officer are not on site, the Project Field Manger will assume all responsibility of the Site Safety Officer.

9.8.4 Other Field Personnel

All field personnel shall be responsible for acting in compliance with all safety procedures outlined in the Site Safety Plan. Any hazardous work situations or procedures should be reported to the Site Safety Officer so that corrective steps can be taken.

10.0 QUALITY ASSURANCE/QUALITY CONTROL PROTOCOL

The following sampling QA/QC protocol is in accordance with the United States Environmental Protection (USEPA) Agency's accepted sampling procedures for hazardous waste streams

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(Municipal Research Laboratory, 1980, *Sampling and Analysis Procedures for Hazardous Material Waste Streams*, Office of Emergency and Remedial Response, Cincinnati, Ohio. EPA-600/280-018) and The American Society of Testing and Material's (ASTM) sampling procedures.

10.1 Sampling Personnel

The activities associated with the survey, sampling and analysis plan will be performed by or under the auspices of a Quality Assurance Officer (Richard Parrish, see qualifications in Appendix F). The sample staff (samplers) will possess a minimum of a BA Degree in the Earth, Space or Biological Sciences or a BS Degree in Engineering. Samplers will have a minimum of one (1) year experience in environmental/geological fieldwork. Additionally, all samplers will have received mandatory forty-hour Occupational Safety and Health Administration (OSHA) training on working with potentially hazardous materials and appropriate Hazard Communication Program and "Right-To-Know" training.

The table below summarizes the approximate number of samples, field and trip blanks, bottle type, EPA test type, preservatives, and holding times for the proposed sampling plan.

No. Samp.	No. Field Blanks	No. Trip Blanks	Media	Test Type	Bottle Type	Preservative	Holding Times
50	0	0	Soil - Grid	EPA 8260	8 oz.glass	4 deg. C	(1)
12	0	0	Soil - UST	EPA 8021 (STARS)	8 oz.glass	4 deg. C	(1)
12	0	0	Soil - UST	EPA 8270 (STARS)	8 oz.glass	4 deg. C	(2)
12	0	0	Soil - AGT	EPA 8021 (STARS)	8 oz.glass	4 deg. C	(1)
12	0	0	Soil - AGT	EPA 8270 (STARS)	8 oz.glass	4 deg. C	(2)
12	0	0	Soil - UIW	EPA 8270(BN)	8 oz.glass	4 deg. C	(2)
12	0	0	Soil - UIW	EPA 8260	8 oz.glass	4 deg. C	(1)
12	0	0	Soil - UIW	EPA 6010	8 oz.glass	4 deg. C	(3)
12	0	0	Soil - UIW	EPA 8015	8 oz.glass	4 deg. C	(4)
13	1	1	GW	EPA 624	40 ml VOA	4 deg. C	(1)

(1) No extraction is required, holding time of 7 days from Verified Time of Sample Receipt (VTSR)

(2) Holding time of 5 days from VTSR to extraction, 40 days to analyze the extract

(3) No extraction is required, 6-month holding time from VTSR for analysis.

(4) For quantitative results, there is a 5-day holding time from VTSR to extraction, and then a 40-day holding time for analysis of the extract. For qualitative results, there is a 14-day holding time from VTSR to extraction, and then a 40-day holding time for analysis of the extract.

Note: Regardless of the analysis method used, VTSR must be within 48 hours of the time of sample collection.

10.2 Sampling Equipment

Separate QA/QC measures will be implemented for each of the instruments used in the performance of the SAP.

10.2.1 Geoprobe

Prior to arrival on the subject property and between sample locations, the probes will be decontaminated by steam cleaning, Alconox wash, and rinsing with distilled water. This will be followed by air drying as per project requirements. All sampling apparatus will be dedicated or disposable. A clean, new liner will be used for each sample. Parts will be inspected for wear and damage before each use.

10.2.2 Bailers

In order to prevent contamination, all bailers will be dedicated and disposable.

10.2.3 Organic Vapor Analyzer

Calibration of the PID will be conducted prior to sampling using a span gas of known concentration. The PID was a Photovac Micro-Tip, photo ionization detection meter.

10.2.4 Sample Vessels

All sample vessels will be "level A" certified decontaminated containers supplied by a New York State Certified Commercial Laboratory. Samples analyzed for hydrocarbons will be placed in containers with Teflon lined caps. All samples will be preserved by cooling them to a temperature of approximately four degrees Celsius.

10.3 Sample Documentation

A sample represents physical evidence. An essential part of liability reduction is the proper control of gathered evidence. To establish proper control, proper sample identification and chain-of custody procedures will be followed as discussed below.

10.3.1 Sample Identification

Sample identification will be executed by use of a sample tag, logbook and chain-of-custody form. Said documentation will provide the following information: 1) the project code; 2) the sample laboratory number; 3) the sample preservation; 4) the instrument used for source sample grabs; 5) the composite medium used for source sample grabs; 6) the date the sample was secured from the source media; 7) the time the sample was secured from the source media; and 8) the person who secured the sample from the source media.

10.3.2 Chain-of-Custody Procedures

Due to the evidential nature of samples, possession will be traced from the time the samples are collected until they are received by the testing laboratory. A sample will be considered under custody if it: is in a person's possession; if is in a person's view after being in possession; is in a person's possession and they locked it up; or, it is in a designated secure area. When transferring custody, the individuals relinquishing and receiving the samples will sign, date and note the time on the Chain-of-Custody Form.

10.3.3 Laboratory-Custody Procedures

A designated sample custodian will accept custody of the shipped samples and will verify that the information on the sample tags matches that on the Chain-of-Custody Records. Pertinent

information as to shipment, pick-up, courier, etc., will be entered in the "remarks" section. The custodian will enter the sample tag data into a bound logbook.

The laboratory custodian will use the sample tag number, or assign a unique laboratory number to each sample tag, and assure that all samples will be transferred to the proper analyst or stored in the appropriate source area. The laboratory custodian will distribute samples to the appropriate analysts. Laboratory personnel will be responsible for the care and custody of samples, from the time they are received, until the sample is exhausted or returned to the sample custodian. All identifying data sheets and laboratory records will be retained as part of the permanent documentation. Samples received by the laboratory will be retained until after analysis and quality assurance checks are completed.

10.4 Quality Assurance Officer Responsibilities

The Quality Assurance Officer (QAO) is an employee of the same consulting firm generating the work plan and acts in conjunction with the project manager to develop a site-specific quality assurance plan. The QAO must not have another position on the project, such as a project or task manager, that involves project productivity or profitability as job-performance criteria.

The project QAO must have a minimum of a bachelor's degree in chemistry or natural science with a minimum of 20 hours in chemistry. The QAO must be proficient in analytical methodology, data interpretation and validation, the development of sampling plans, quality control procedures, and auditing techniques.

The QAO will assist the project manager in the development of the sampling and analytical portion of the Quality Assurance Project Plan. The QAO or his/her designee shall conduct periodic field and sampling audits, interface with the analytical laboratory to make requests and resolve problems, interface with the data validator and develop a project-specific data usability report. Because on-site work may be necessary, verification or completion of the 40-hour OSHA safety training course and 8-hour refresher is required.

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11.0 COMMUNITY HEALTH AND SAFETY PLAN

Due to the minimal ground disturbance that is anticipated during the sampling phase of the project, it is expected that only a small impact from generated dust could occur in the vicinity of the site. Well installation using the hollow stem auger, Geoprobe sampling, and GPR work can generate dust in small quantities. The ingress and egress of onsite vehicles can also create airborne dust.

To minimize the effects of dust on the community, sampling will only be performed on days that the local wind speeds (as measured by the National Weather Service at JFK Airport) are below 15 mph. All onsite vehicles will be required to travel at speeds no greater than 15 mph.

FOCUSED REMEDIAL INVESTIGATION
Work Plan

APPENDICES

98-335

To Be Conducted At:

Site Code # 1-30-043S
299 Main Street
Westbury, New York

Client:

2632 Realty Development Corp.
1025 Old Country Road
Westbury, New York

User:

New York State Department of Environmental Conservation
Bureau of Eastern Remedial Action
Division of Environmental Remediation
50 Wolf Road
Albany, New York

Dated:

March 17, 1999

Impact Environmental
Geotechnical Services · Environmental Consulting · Environmental Engineering · Environmental Contracting
Forty-Six East Northport Road · Kings Park · New York 11754 · 516-269-8800 · Facsimile 516-269-1599 · e-mail ie4enviro@aol.com

FOCUSED REMEDIAL INVESTIGATION
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APPENDIX A

SITE SURVEY FORM

SURVEY FORM

Date: _____
Time: _____
Inspector: _____

Age of Building & Present Use	
Previous Use of Building	
Type of Sewer System (sewer or sanitary)	
Type of Heat (oil, natural gas, or electric)	
Storage Tanks (location, capacity, consumption)	
Additional Material Use & Storage	
Wastes Entering, Generated On, or Leaving Site	
Past Spill Incidents (location, contaminants)	
Asbestos Survey	
Location of Tanks	
Location of Floor Drains	
Location of Dry Wells	

APPENDIX B

GEOPROBE SYSTEM INFORMATION

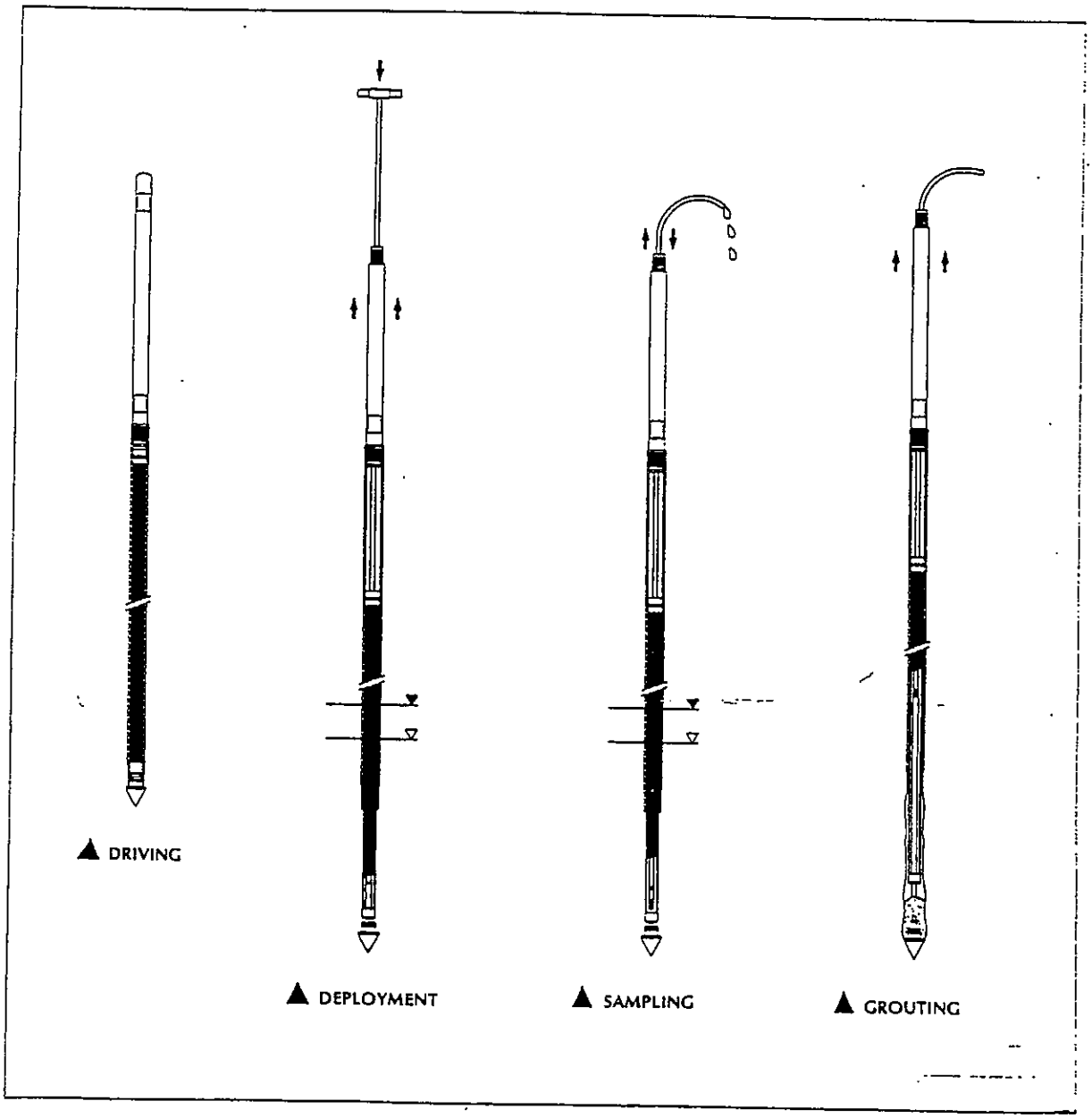
GEOPROBE SCREEN POINT 15 GROUNDWATER SAMPLER

STANDARD OPERATING PROCEDURE

Technical Bulletin No. 95-1500

PREPARED: October, 1995

REVISED: September, 1997



GEOPROBE SCREEN POINT 15 GROUNDWATER SAMPLER

Geoprobe® Systems

A DIVISION OF KEJR ENGINEERING

Geoprobe® is a Registered Trademark of Kejr Engineering, Inc., Salina, Kansas Screen Point 15 Groundwater Sampler manufactured under U.S. Patent 5,612,498

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1.0 OBJECTIVE

The objective of this procedure is to drive a sealed stainless steel or PVC screen to depth, deploy the screen, obtain a representative water sample from the screen interval, and grout the probe hole during abandonment. The Screen Point 15 Groundwater Sampler enables the operator to conduct abandonment grouting that meets American Society for Testing and Materials (ASTM) Method D 5299 requirements for decommissioning wells and borings for environmental activities (ASTM 1993).

2.0 BACKGROUND

2.1 Definitions

Geoprobe®: A brand name of high quality, hydraulically powered machines that utilize both static force and percussion to advance sampling and logging tools into the subsurface. The Geoprobe brand name refers to both machines and tools manufactured by Geoprobe Systems, Salina, Kansas. Geoprobe tools are used to perform soil core and soil gas sampling, groundwater sampling, soil conductivity and contaminant logging, grouting, and materials injection.

Screen Point 15 Groundwater Sampler: A direct push device consisting of a PVC or stainless steel screen that is driven to depth within a sealed, steel sheath and then deployed for the collection of representative groundwater samples. The assembled Screen Point 15 Sampler is 52 inches (1321 mm) long with an OD of 1.5 inches (38 mm). Upon deployment, up to 41 inches (1041 mm) of screen can be exposed to the formation.

Casing Puller: An assembly which makes it possible to retract the sampler string with extension rods protruding from the top of the probe rods. For units originally equipped with the GH40 Soil Probing Hammer, a Casing Pull Kit is available as part number GW4600K. Units originally equipped with the SK58 hammer, or retrofitted with the GH40 hammer require a different casing pull kit. Contact Geoprobe Systems for specific information.

Rod Grip Pull System: An attachment mounted on the GH40 Soil Probing Hammer which makes it possible to retract the sampler string with extension rods protruding from the top of the probe rods. The rod grip pull system utilizes hammer support brackets which greatly enhance probe unit durability. This system is therefore preferred over the Casing Pull Kit. The Rod Grip Pull System for use with 1.0- and 1.25-inch probe rods is available as GH1250K.

2.2 Discussion

In this procedure, the assembled Screen Point 15 Groundwater Sampler (Fig. 2.1A) is threaded onto the leading end of a Geoprobe probe rod and driven into the subsurface with a Geoprobe soil probing machine. Additional probe rods are subsequently added and driven until the desired sampling interval is reached. While the sampler is driven to depth, O-ring seals at the drive head and expendable drive point provide a watertight system. This system eliminates the threat of formation fluids entering the screen before deployment and assures sample integrity.

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Once at the desired sampling interval, extension rods are sent downhole until the leading rod contacts the bottom of the sampler screen. The tool string is then retracted approximately 44 inches (1118 mm) while the screen is held in place with the extension rods (Fig. 2.1B). As the tool string is retracted, the expendable point is released from the sampler sheath. An O-ring on the screen head maintains the seal at the top of the screen. As a result, any liquid entering the sampler during screen deployment must first pass through the screen. The tool string and sheath may be retracted the full length of the screen or as little as a few inches if a small sampling interval is desired.

The Screen Point 15 Sampler utilizes either a stainless steel screen with a standard slot size of 0.004 inches (0.10 mm) or a PVC screen with a standard slot size of 0.010 inches (0.25mm). Both screen have an exposed length of 41 inches (1041 mm). Alternate slot sizes and lengths may be custom ordered. Contact Geoprobe Systems for available options. The screens are constructed such that a check valve or mini-bailer can be inserted into the screen cavity. This makes direct sampling possible from anywhere within the saturated zone. A removable plug in the lower end of the screens allows the user to grout as the sampler is extracted for further use.

Groundwater samples can be obtained in a number of ways. The most common method utilizes polyethylene or Teflon® tubing and a Tubing Bottom Check Valve (GW42). The check valve (with check ball) is attached to one end of the tubing and inserted down the casing until it is immersed in groundwater. Water is pumped through the tubing and to the ground surface by oscillating the tubing up and down. If oscillating the tubing is undesirable (such as when sampling for volatiles analysis), lower the check valve and tubing to the bottom of the sampler without the check ball. Then drop the check ball into the tubing from the ground surface. The ball will seat in the check valve and trap the sample in the tubing. Collect the sample by withdrawing and draining the tubing.

An alternative means of collecting groundwater samples is to attach a peristaltic or vacuum pump to the tubing. This method is limited in that water can be pumped to the surface from a maximum depth of approximately 26 feet (8 m). Another technique for groundwater sampling is to use a stainless steel Mini-Bailer Assembly (GW41). The mini-bailer is lowered down the inside of the casing below the water level where it fills with water and is then retrieved from the casing.

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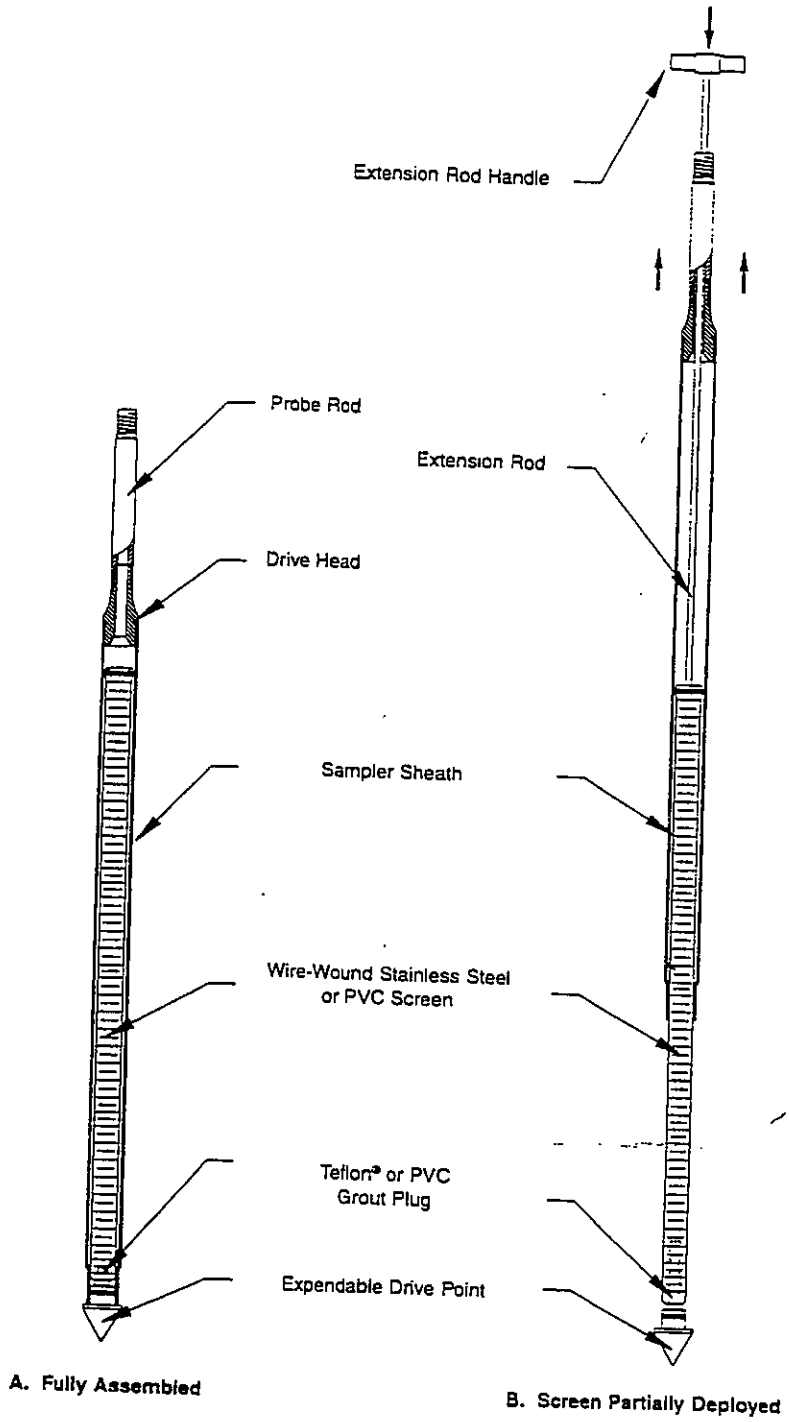

FIGURE 2.1
Screen Point 15 Groundwater Sampler

3.0 REQUIRED EQUIPMENT

The following equipment is required to successfully recover representative groundwater samples with the Geoprobe Screen Point 15 Groundwater Sampler and probing system. See Figure 3.1 for Screen Point 15 parts identification.

Screen Point 15 Groundwater Sampler Parts	Quantity	Part Number
O-ring Service Kit , 1.0-inch rods (100 of each O-ring)	-1-	GW1504K
O-ring Service Kit, 1.25-inch rods (100 of each O-ring)	-1-	GW1505K
Sampler Sheath	-1-	GW1510*
Drive Head, 0.625-inch bore, 1.25-inch rods (optional)	-1-	GW1512
Drive Head, 0.5-inch bore, 1.25-inch rods	-1-	GW1513
Drive Head, 1.0-inch rods	-1-	GW1515
Screen, Wire-Wound Stainless Steel, 4-Slot	-1-	GW1520*
Screen, PVC, 10-Slot (optional)	-1-	GW1530
Screen Push Adapter	-1-	GW1535*
Grout Plug Push Adapter	-1-	GW1540*
Grout Nozzle	-1-	GW1545
Grout Plugs, Teflon® (Pkg. of 25)	-1-	GW1550K
Grout Plugs, PVC (Pkg. of 25)	-1-	GW1551K*
Expendable Drive Points, Steel (Pkg. of 25)	-1-	GW1555K*
Expendable Drive Points, Aluminum (Pkg. of 25) (optional)	-1-	GW1555ALK
Screen Point 15 Groundwater Sampler Kit for 1.0-inch rods		GW1500K
Includes (*) items plus:		
O-ring Service Kit, 1.0-inch rods (100 or each O-ring)	-1-	GW1504K
Drive Head, 1.0-inch rods	-1-	GW1515
Screen Point 15 Groundwater Sampler Kit for 1.25-inch rods		GW1512K
Includes (*) items plus:		
O-ring Service Kit, 1.25-inch rods (100 or each O-ring)	-1-	GW1505K
Drive Head, 1.25-inch rods	-1-	GW1513

Geoprobe Tools	Quantity	Part Number
Drive Cap, 1.25-inch probe rods**	-1-	AT1200
Slotted Pull Cap, 1.25-inch probe rods (optional)**	-1-	AT1203
Pull Cap, 1.25-inch probe rods**	-1-	AT1204
Probe Rod, 1.25-inch x 48-inch***	Variable	AT1248
O-rings for 1.25-inch Probe Rods (Pkg. of 25)	Variable	AT1250R
Extension Rod, 36-inch (optional)	Variable	AT67
Extension Rod, 48-inch	Variable	AT671
Extension Rod, 1-meter (optional)	Variable	AT675
Extension Rod Coupler	Variable	AT68
Extension Rod Handle	-1-	AT69
Extension Rod Jig	-1-	AT690
Quick Link Extension Rod Connectors (Optional)	Variable	AT694K
Casing Pull Kit (for GH-40 hammer)	-1-	GW4600K
Rod Grip Pull System (may be used in place of GW4600K)	-1-	GH1250K

**Accessories for 1.0-inch OD probe rods are also available from Geoprobe Systems.
***Geoprobe 1.0-inch and 1.25-inch OD probe rods are available in lengths of 36-, 48-, and 60 inches, as well as 1 meter.

Additional Tools	Quantity
Adjustable Wrench	-1-
Pipe Wrenches	-2-

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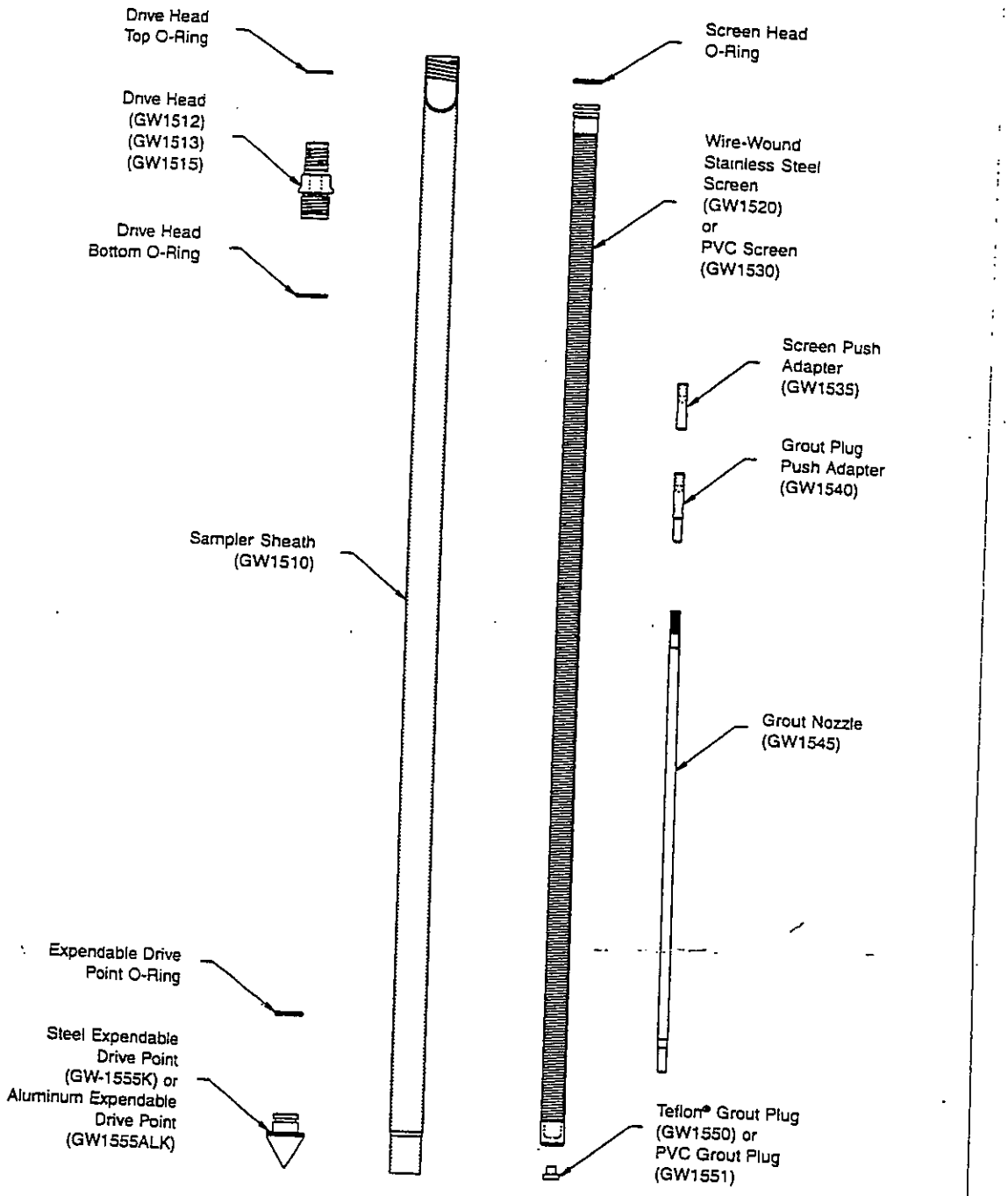

FIGURE 3.1
Screen Point 15 Groundwater Sampler Parts

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4.0 OPERATION

4.1 Basic Operation

The Screen Point 15 Groundwater Sampler utilizes a stainless steel or PVC screen which is encased in an alloy steel sampler sheath. An expendable drive point is placed in the lower end of the sheath while a drive head is attached to the top. O-rings on the drive head and expendable point provide a watertight sheath which keeps contaminants out of the system as the sampler is driven to depth. Once the desired sampling interval is reached, extension rods equipped with a screen push adapter are inserted down the inside diameter of the probe rod string. The tool string is then retracted approximately 44 inches (1118 mm) while the screen is held in place with the extension rods. At this point the system is ready for groundwater sampling. When sampling is complete, a removable plug in the bottom of the screen allows for grouting below the sampler as the tool string is retrieved.

4.2 Decontamination

In order to collect representative groundwater samples, all Screen Point 15 parts must be thoroughly cleaned before and after each use. Scrub all metal parts using a stiff, long-bristle brush and a nonphosphate soap solution. Steam cleaning may be substituted for hand-washing if available. Rinse with distilled water and allow to air-dry before assembly.

4.3 Sampler Assembly (Fig. 4.1)

Part numbers are listed for a standard sampler using 1.25-inch x 48-inch probe rods. Refer to Page 6 for screen, grout plug, drive head, extension rod, and probe rod alternatives.

1. Install an O-ring on a steel expendable drive point (GW1555K). Firmly seat the expendable point in the necked end of a sampler sheath (GW1510).

2. Place a PVC grout plug (GW1551) in the lower end of a wire-wound stainless steel screen (GW1520). Install an O-ring in the groove on the upper end of the screen. Slide the screen inside of the sampler sheath with the grout plug toward the bottom of the sampler. Ensure that the expendable point was not displaced by the screen.

3. Install a bottom O-ring on a drive head (GW1513). Thread the drive head onto the sampler sheath. Attach a drive cap (AT1200) to the top of the drive head. Ensure that the threads engage completely. Tighten with an adjustable wrench if necessary.

4. Sampler assembly is complete.

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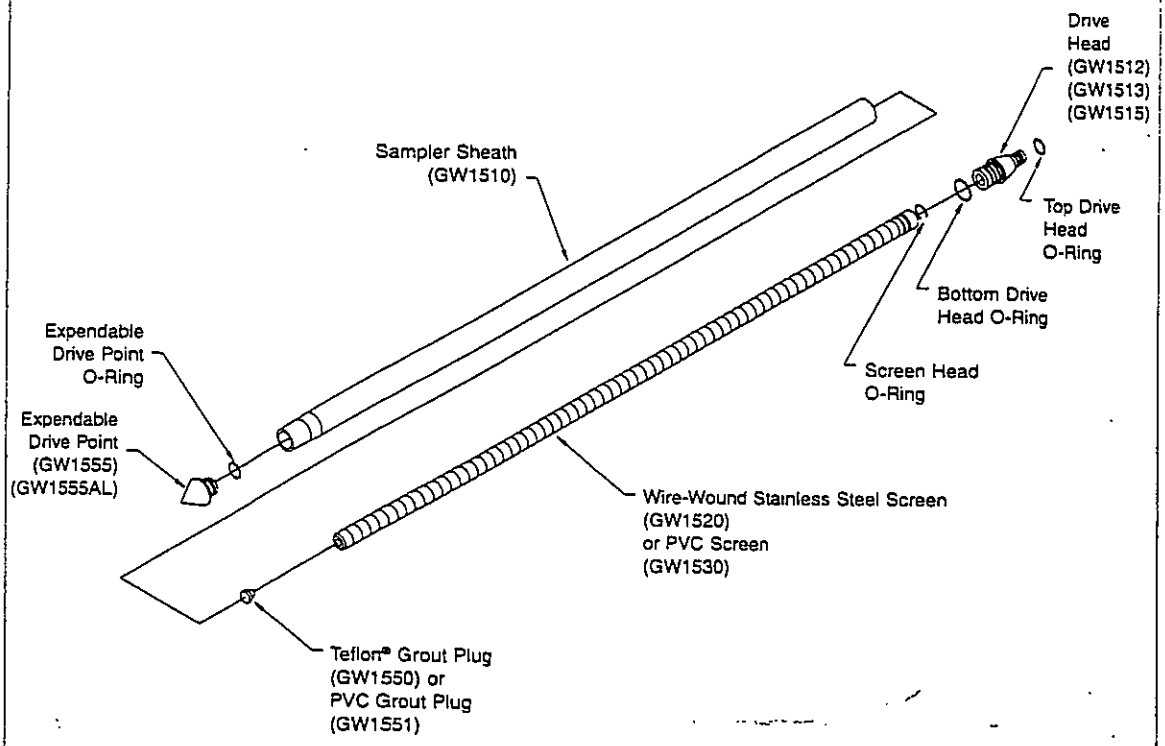

FIGURE 4.1
Screen Point 15 Groundwater Sampler Assembly

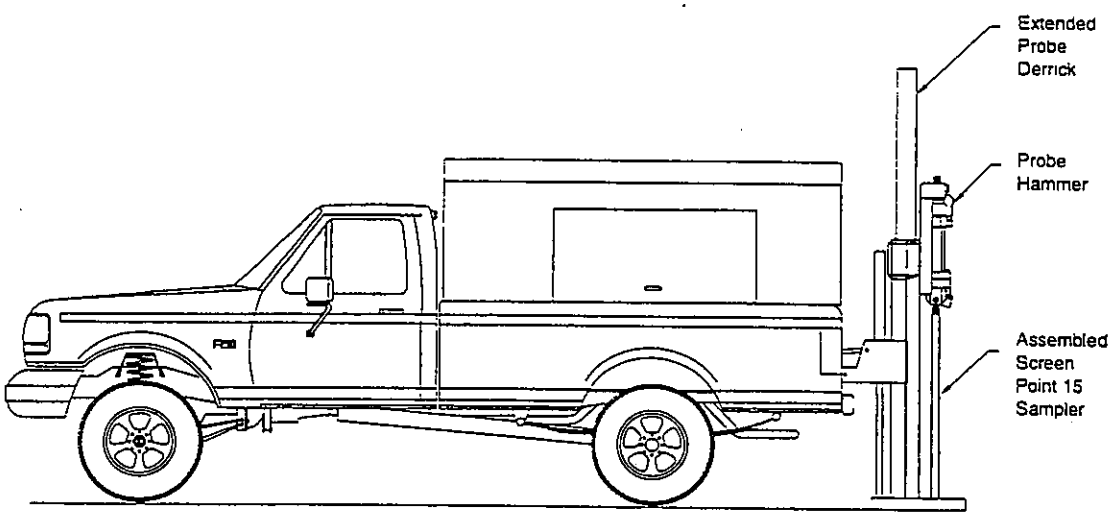

FIGURE 4.2
Screen Point 15 Groundwater Sampler in Driving Position

4.4 Driving the Screen Point 15 Sampler

To provide adequate room for screen deployment with the casing puller assembly, the probe derrick should be extended a little over halfway out of the carrier vehicle before driving the Screen Point 15 Sampler

1. Begin by placing the assembled sampler (Fig. 2.1) in the driving position beneath the hammer on the extended probe derrick (Fig. 4.2).

2. Drive the sampler with throttle control at slow speed for the first 1 or 2 feet to ensure that the sampler is driving straight. Switch the throttle control to fast speed for the remainder of the probe stroke.

3. Completely raise the hammer assembly. Remove the drive cap and place an O-ring in the top groove of the drive head. Distilled water may be used to lubricate the O-ring if needed. Add a 1.25-inch x 48-inch probe rod (AT1248) and reattach the drive cap to the rod string. Drive the sampler the entire length of the new rod with the throttle control at fast speed.

4. Repeat Step 3 until the desired sampling interval is reached. Approximately 12 inches (305 mm) of the last probe rod must extend above the ground surface to allow attachment of the puller assembly. A 12-inch (305 mm) rod may be added if the tool string is over-driven.

5. Remove the drive cap and retract the probe derrick away from the tool string.

4.5 Screen Deployment

1. Thread the screen push adapter (GW1535, Fig. 4.3) on an extension rod (AT67, AT671, or AT675). Attach a coupler (AT68) to the other end of the extension rod. Lower the extension rod inside of the probe rod taking care not to drop it down the tool string. An extension rod jig (AT690, Fig. 4.3) may be used to hold the rods.

2. Add extensions until the adapter contacts the bottom of the screen. To speed up this step, extension rod Quick Links (AT694K, Fig. 4.3) are recommended.

3. Maneuver the probe assembly into position for pulling.

   Note: In this section, "Puller" refers to either the Casing Pull Kit (GW4600K) or Rod Grip Pull System (GH1250K). The operator may choose which option to use. Refer to Figures 4.4 and 4.5 for puller configurations.

4. Ensure that at least 48 inches (1219 mm) of extension rod protrudes from the probe rod. Thread an extension rod handle (AT-69, Fig. 4.3) on the top extension.

5. Retract probe rods and sampler sheath while physically holding the screen in place with the extension rods (Fig. 4.5B). A slight knock with the extension rod string will help to dislodge the expendable point and start the screen moving inside the sheath. Raise the hammer and pull bracket assembly about 44 inches (1118 cm). At this point the screen head will contact the necked portion of the sampler sheath (Fig. 4.5C.) and the extension rods will rise with the probe rods. The screen is now deployed. Use care when deploying a PVC screen so as not to break the screen when it contacts the bottom of the sampler sheath.

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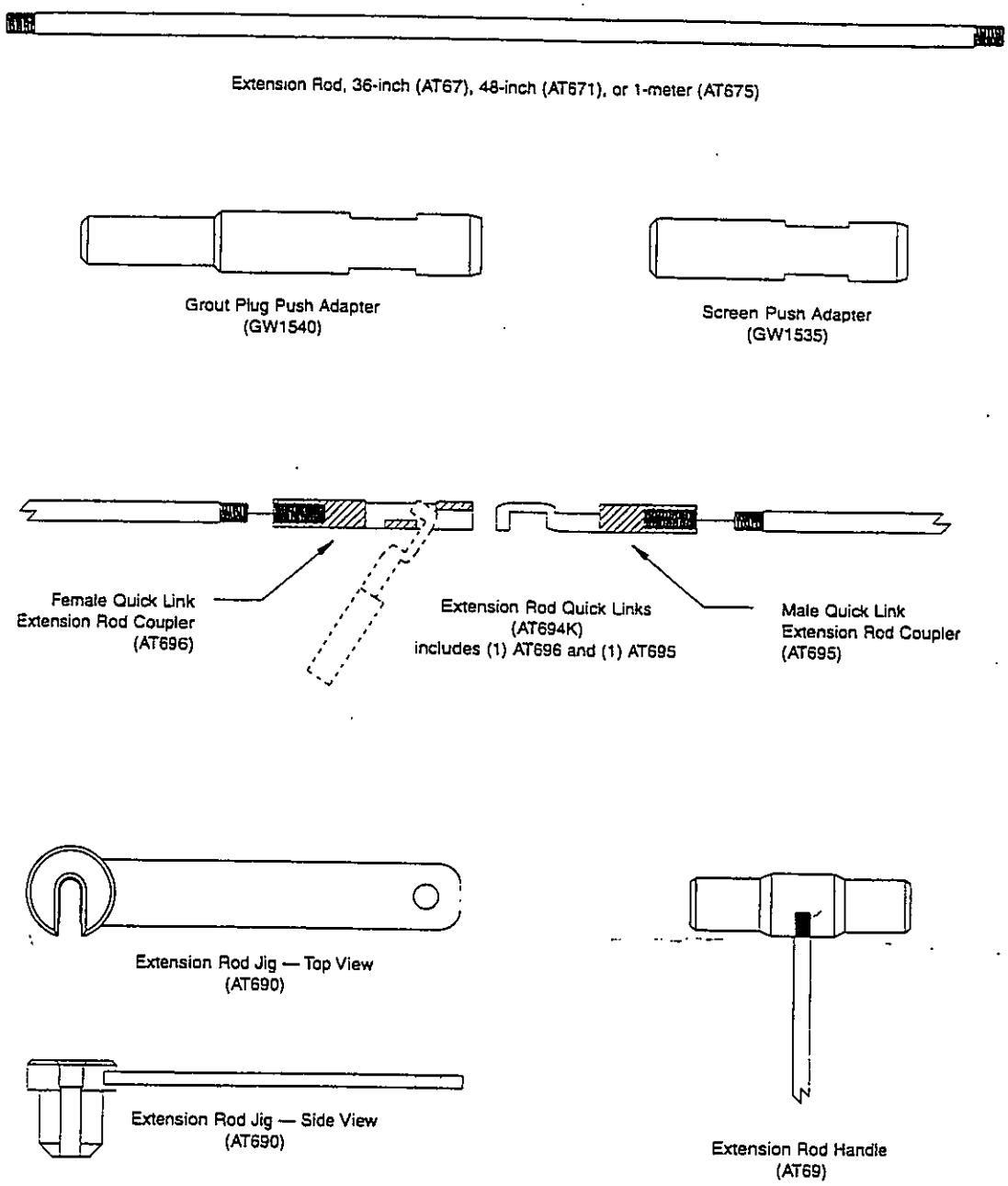

FIGURE 4.3
Geoprobe Extension Rods and Accessories

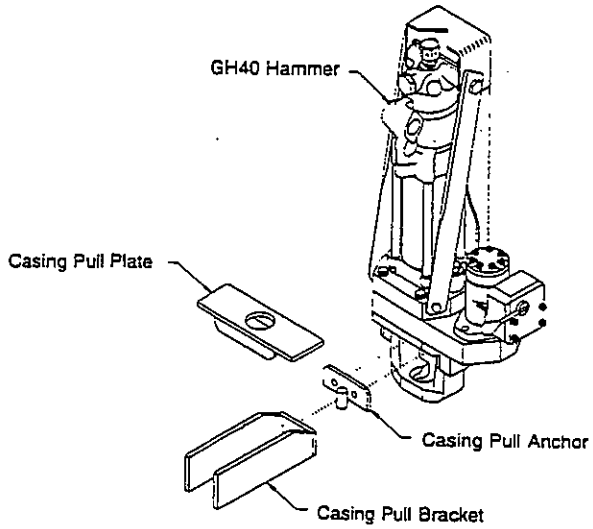

FIGURE 4.4
Casing Puller Assembly for Units Originally Equipped With The GH-40 Hammer

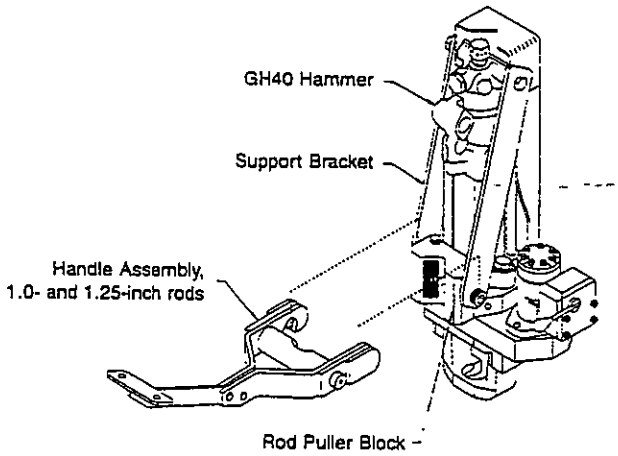

FIGURE 4.5
Rod Grip Pull System for Units Equipped With The GH-40 Hammer

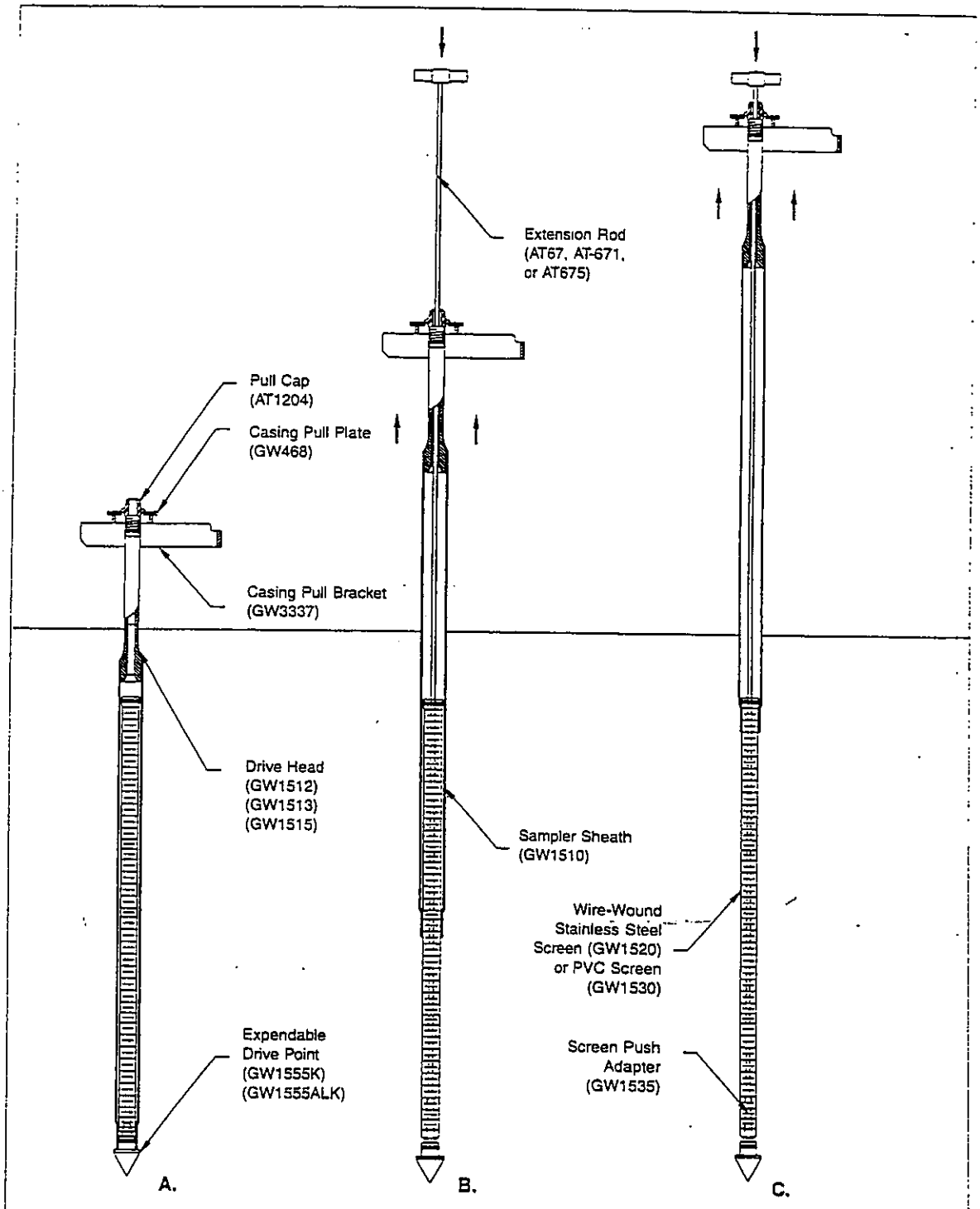

FIGURE 4.6
Screen Deployment Using a Casing Pull Kit

6. Lower the hammer assembly and retract the probe derrick. Remove the top extension rod and handle, pull cap, and top probe rod. Finally, extract all extension rods.

7. Groundwater samples can now be collected with a mini-bailer, peristaltic or vacuum pump, tubing bottom check valve assembly, or other acceptable small diameter sampling device.

8. When inserting the tubing down the rod string to collect a sample, ensure that the tubing enters the screen interval. The tubing will sometimes catch on the edge of the funnel opening of the screen head. An up-and-down motion combined with rotation helps move the tubing past the lip and into the screen.

4.6 Abandonment Grouting

The Screen Point 15 Sampler can meet ASTM D 5299 requirements for abandoning environmental wells or borings when grouting is conducted properly. A removable grout plug makes it possible to deploy tubing through the bottom of the screen. A GS500 or GS1000 Grout Machine is then used to pump grout into the open probe hole as the sampler is withdrawn. The following procedure is presented as an example only and should be modified to satisfy local abandonment grouting regulations.

1. Maneuver the probe assembly into position for pulling. Attach the puller to the top probe rod. Raise the tool string approximately 4 to 6 inches (102 to 152 cm) to allow removal of the grout plug.

   Note: A Slotted Pull Cap (AT1203) is needed if utilizing the Casing Pull Kit (GW4600K). This allows connection of the pull cap to the tool string with poly tubing extending from the top of the probe rod.

2. Thread the grout plug push adapter (GW1540, Fig. 4.3) onto an extension rod. Insert the adapter and extension rod inside the probe rod string. Add extensions until the adapter contacts the grout plug at the bottom of the screen. When the extension rods are slightly raised and lowered, a relatively soft rebound should be felt as the adapter contacts the grout plug. This is especially true when using a PVC screen.

3. Place a mark on the extension rod even with the top of the probe rod. Apply downward pressure on the extension rods and push the grout plug out of the screen. The mark placed on the extension rod should now be below the top of the probe rod. Remove all extension rods.

   Note: When working with a stainless steel screen, it may be necessary to raise and quickly lower the extension rods to jar the grout plug free. When the plug is successfully removed, a metal-on-metal sensation may be noted as the extension rods are gently "bounced" within the probe rods.

4. A grout nozzle (GW1545) is now connected to polyethylene tubing and inserted into the probe rods and down through the bottom of the screen (Fig. 4.7). It may be necessary to pump a small amount of clean water through the tubing during deployment to jet out sediments that settled in the bottom of the screen. Resistance will sometimes be felt as the grout nozzle passes through the drive head. Once again, rotate the tubing while moving it up-and-down to ensure that the nozzle has reached the bottom of the screen and is not hung up on the drive head.

   Note: All probe rods remain strung on the tubing as the tool string is pulled. Provide extra tubing length to allow sufficient room to lay the rods on the ground as they are removed. An additional 20 feet is generally enough.

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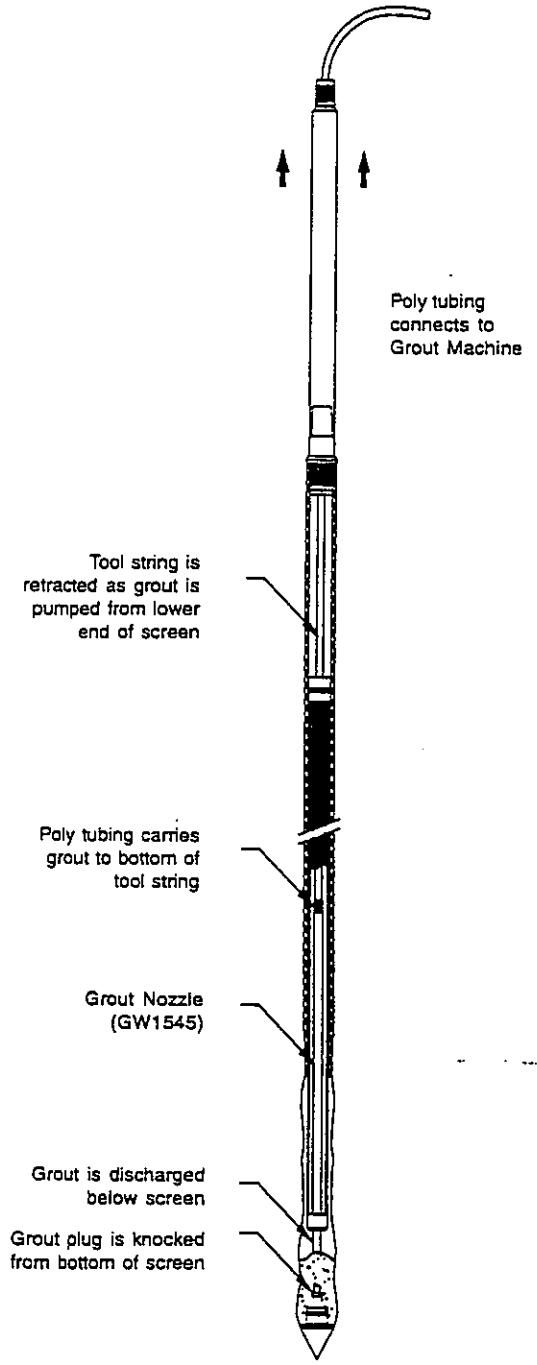

FIGURE 4.7
Grouting Through The Screen Point 15 Groundwater Sampler

Note: You may use the same poly tubing to grout the hole as was used to collect the groundwater sample. After sampling, completely lower the tubing to the bottom of the screen. Place a mark on the tubing even with the top of the rod string. Remove the tubing. Make a second mark on the tubing one grout nozzle length below the first mark. Now attach the nozzle to the leading end of the tubing and lower it to the bottom of the screen. The second mark on the tubing will be just below the top of the probe rods when the grout nozzle is fully deployed.

5. Position the probe assembly for pulling, taking care not to pinch or bind the tubing. Operate the grout pump while pulling the first rod. Coordinate pumping and pulling rates so that grout fills the void left by the sampler. Remove the split pull cap and unscrew the probe rod. Slide the rod over the tubing and place it on the ground near the end of the tubing to leave room for the remaining probe rods.

6. Repeat Step 5 until the sampler is retrieved. Do not bend or kink the tubing when pulling and laying out the probe rods. Sharp bends create weak spots in the tubing which may burst when pumping grout. Remember to operate the grout pump only when pulling the rod string. The probe hole is thus filled with grout from the bottom up as the rods are extracted.

7. Promptly clean all probe rods and sampler parts before the grout sets up and clogs the equipment.

4.7 Retrieving the Screen Point 15 Sampler

If grouting is not required, the Screen Point 15 sampler can be retrieved by pulling the probe rods as with most other Geoprobe sampling applications. The Rod Grip Pull System (GH1250K) should be used for this process as it allows the operator to remove rods without releasing the tool string. This keeps rods from falling to the bottom of the probe hole. If a rod grip pull system is not available, utilize a standard Pull Cap (AT1204). The process of retrieving the sampler with a standard pull cap is given below.

1. Position the probe derrick and hammer assembly over the tool string. Thread a pull cap (AT1204) onto the top probe rod.

2. Lower the hammer latch over the pull cap and retract the tool string one probe rod length.

3. Remove the pull cap and top probe rod and repeat Step 2 until the sampler sheath is at the ground surface.

4. Physically pull the sampler sheath and screen out of the ground taking care not to bend the screen on the way out. The Screen Point 15 Groundwater Sampler is now retrieved and ready to decontaminate for further use.

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5.0 REFERENCES

American Society for Testing and Materials (ASTM). 1993. ASTM 5299 Standard Guide for Decommissioning of Groundwater Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities: *1993 Annual Book of ASTM Standards, Vol. 0408.* Philadelphia, PA.

Geoprobe Systems, 1997, "97-98 Tools and Equipment Catalog."

Geoprobe Systems, 1995, "1995-96 Tools and Equipment Catalog."

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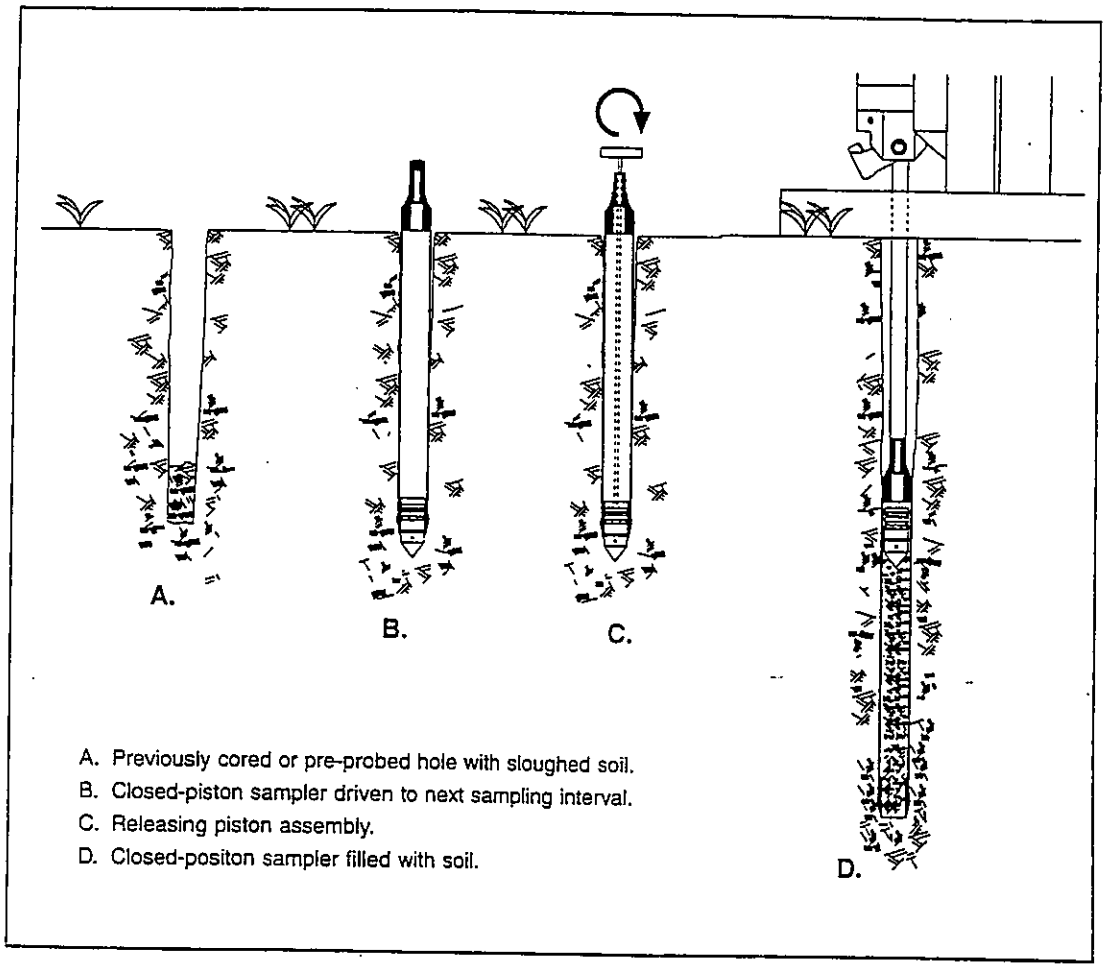
GEOPROBE MACRO-CORE® SOIL SAMPLER

STANDARD OPERATING PROCEDURE

Technical Bulletin No. 95-8500

PREPARED: November, 1995

REVISED: September, 1997



SAMPLING WITH THE MACRO-CORE® CLOSED-PISTON SOIL SAMPLER

Geoprobe® Systems

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Kejr Engineering, Inc., Salina, Kansas

Macro-Core® is a Registered Trademark of
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Macro-Core® Soil Sampler manufactured
under US Patent 5,606,139.

Macro-Core® Closed-Piston Drive Point
manufactured under US Patent 5,542,481

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1.0 OBJECTIVE

The objective of this procedure is to collect a representative soil sample at depth and recover it for visual inspection and/or chemical analysis.

2.0 BACKGROUND

2.1 Definitions

Geoprobe®*: A brand name of high quality, hydraulically-powered machines that utilize both static force and percussion to advance sampling and logging tools into the subsurface.
** Geoprobe® is a registered trademark of Kejr Engineering, Inc., Salina, Kansas*

Macro-Core® Soil Sampler*: A solid barrel, direct push device for collecting continuous core samples of unconsolidated materials at depth. Although other lengths are available, the standard Macro-Core® Sampler has an assembled length of approximately 52 inches (1321 mm) with an outside diameter (OD) of 2.2 inches (56 mm). Collected samples measure up to 1300 ml in volume in the form of a 1.5-inch x 45-inch (38 mm x 1143 mm) core contained inside a removable liner. The Macro-Core® Sampler may be used for open-tube as well as closed-piston sampling.
** Macro-Core® is a registered trademark of Kejr Engineering, Inc., Salina, Kansas*

Liner: A 1.75-inch OD x 46-inch long (44 mm x 1168 mm) removable/replaceable, thin-walled tube inserted inside the Macro-Core® sample tube for the purpose of containing and storing soil samples. Liner materials include stainless steel, Teflon®, PVC, and PETG.

2.2 Discussion

In this procedure, the assembled Macro-Core Soil Sampler is attached to the leading end of a Geoprobe probe rod and driven into the subsurface using a Geoprobe soil probing machine. Additional probe rods are connected in succession to advance the sampler to depth. The Macro-Core Sampler may be used as an open-tube or closed-piston sampler.

The simplest and most common use of the Macro-Core Sampler is as an open-tube sampler (Fig. 2.1A). In this method, coring starts at the ground surface with an open-ended sampler. From the ground surface, the Macro-Core Sampler is advanced one sampling interval and then retrieved from the hole with the first soil core. In stable soils, the open-tube sampler is inserted back down the same hole to obtain the next core. Geoprobe operators have reported coring to depths exceeding 30 feet (9 m) with this method.

In unstable soils which tend to collapse into the core hole, the Macro-Core Sampler can be equipped with a piston assembly (Fig. 2.1B). This assembly actually locks into the cutting shoe and prevents soil from entering the sampler as it is advanced to the bottom of an existing hole.

The Macro-Core Closed-Piston Sampler is not designed to be driven through undisturbed soil. Soil is first removed to sampling depth with an open-tube sampler, or a pilot hole may be made with a Macro-Core Pre-Probe. A Macro-Core Piston Assembly is then installed and the sampler is inserted ~~or~~ driven back down the same hole. When the leading end of the sampler reaches the top of the next sampling interval, the piston is unlocked using extension rods inserted down the inside of the probe rods.

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Once the piston is relieved, the tool string is simply driven another sampling interval. Soil entering the sampler pushes the piston assembly to the top of the sample liner where it is retrieved upon removal of the liner and soil core.

Loose soils will sometimes fall out of the Macro-Core Sampler as it is retrieved from depth. The Macro-Core Core Catcher (Fig. 2.1) was designed to alleviate this problem. Excellent results are obtained when the core catcher (sometimes called a basket retainer) is used with saturated sands and other non-cohesive soils. A core catcher is not necessary when sampling tight soils and may actually inhibit sample recovery. Constructed of PVC, the core catcher may be used with PVC, PETG, Teflon®, and stainless steel liners.

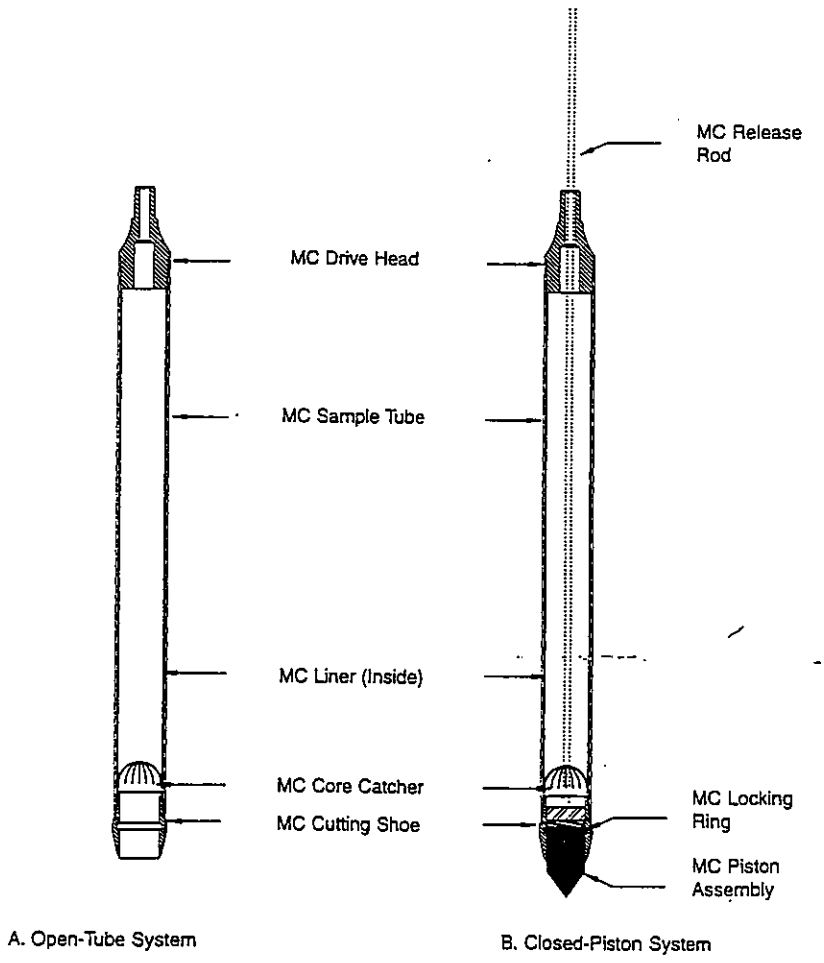

FIGURE 2.1
Macro-Core® Soil Sampler Assemblies

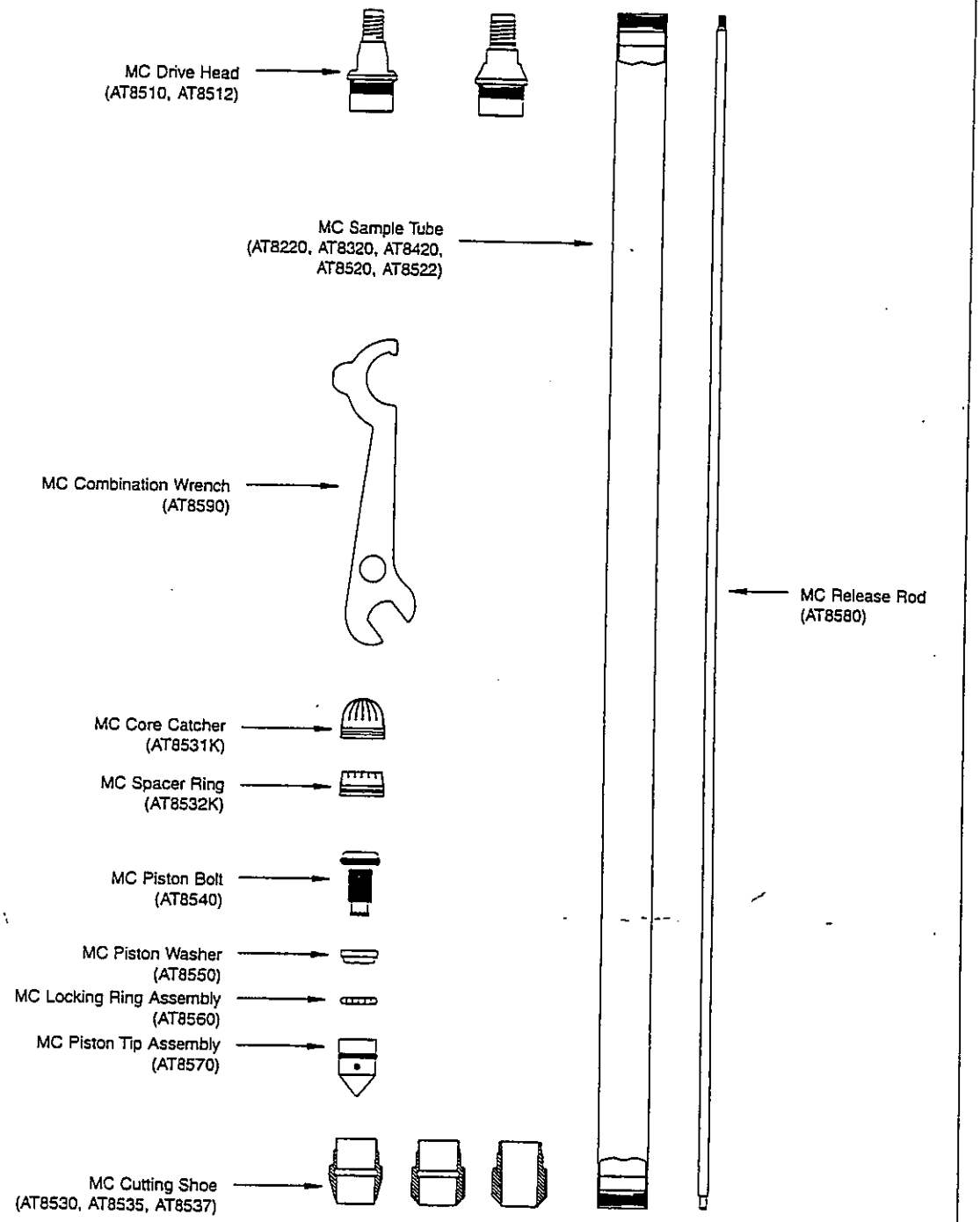

FIGURE 3.1
Macro-Core® Soil Sampler Parts

3.0 REQUIRED EQUIPMENT

The following equipment is used to recover samples using the Geoprobe Macro-Core Soil Sampler and probing system. Although many options are available (sampler length, liner material, etc.), the basic sampler configuration does not change. Refer to Figure 3.1 (previous page) to view the major components of the Macro-Core sampler.

MACRO-CORE SAMPLER PARTS	PART NUMBER
MC Drive Head, for use with 1.0-inch probe rods	AT8510
MC Drive Head, for use with 1.25-inch probe rods	AT8512
MC Sample Tube, 24-inch, unplated	AT8220
MC Sample Tube, 36-inch, unplated	AT8320
MC Sample Tube, 1-meter, unplated	AT8420
MC Sample Tube, 48-inch, Ni-plated	AT8520
MC Sample Tube, 48-inch, unplated	AT8522
MC Cutting Shoe, standard	AT8530
MC Cutting Shoe, heavy-duty	AT8535
MC Cutting Shoe, 0.125 inches undersized	AT8537
MC Combination Wrench	AT8590
Nylon Brush for MC Sample Tubes	BU700

MACRO-CORE PISTON PARTS	PART NUMBER
MC Closed-Piston Kit*	AT8501K
MC Piston Assembly*	AT8505
MC Piston Bolt	AT8540
MC Piston Washer	AT8550
MC Locking Ring Assembly	AT8560
MC Locking Ring Springs (pkg. of 10)	AT8561K
MC Locking Ring Pins (pkg. of 12)	AT8562
MC Piston Tip Assembly	AT8570
MC Piston O-rings (pkg. of 25)	AT8570R
MC Piston Tip Cup Point Set Screws (pkg. of 10)	AT8571
MC Piston Tip Half-Dog Set Screws (pkg. of 10)	AT8572
MC Piston Release Rod	AT8580

MACRO-CORE LINERS AND ACCESSORIES	PART NUMBER
MC Stainless Steel Liner Assembly, 48-inch	AT7235
MC Teflon® Liner Assembly, 48-inch	AT724
MC PETG Liner, thin-wall, 48-inch, (box of 66)	AT725K
MC Vinyl End Caps (66 pair)	AT726K
MC Heavy-Duty PETG Liner Assembly, 48-inch (box of 66)	AT825K
MC PVC Liner Assembly, clear, 24-inch (box of 66)	AT922K
MC PVC Liner Assembly, clear, 36-inch (box of 66)	AT923K
MC PVC Liner Assembly, clear, 1-meter (box of 66)	AT924K
MC PVC Liner Assembly, clear, 48-inch (box of 66)	AT925K
MC Liner Cutter Kit*	AT8000K
MC Liner Cutting Tool	AT8010
MC Liner Cutter Holder	AT8020
MC Liner Cutter Blades (pkg. of 5)	AT8030
MC Liner Circular Cutting Tool	AT8050
MC Core Catchers (pkg. of 25)	AT8531K
MC Spacer Rings (pkg. of 25)	AT8532K

*See Page 7 for component listing.

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GEOPROBE TOOLS**	PART NUMBER
Drive Cap, for use with 1.25-inch probe rods	AT1200
Pull Cap, for use with 1.25-inch probe rods	AT1204
Probe Rod, 1.25 inches x 36 inches	AT1236
Probe Rod, 1.25 inches x 1 meter	AT1239
Probe Rod, 1.25 inches x 48 inches	AT1248
Probe Rod, 1.25 inches x 60 inches	AT1260
MC Pre-Probe, 2-inch OD	AT1247
MC Pre-Probe, 2.5-inch OD	AT1242
MC Pre-Probe, 3-inch OD	AT1252
Extension Rod, 36-inch	AT67
Extension Rod, 48-inch	AT671
Extension Rod, 1-meter	AT675
Extension Rod Coupler	AT68
Extension Rod Handle	AT69
Extension Rod Quick Links	AT694K
Machine Vise	FA300

ADDITIONAL TOOLS

Allen Wrench, 1/8 inch
Pipe Wrenches (2)

Three items in the parts listing on Pages 6 were identified with an asterick (*). A listing of the components of each item is given below.

MACRO-CORE KIT / COMPONENT	QUANTITY	PART NUMBER
MC Liner Cutter Kit		AT8000K
MC Liner Cutting Tool	-1-	AT8010
MC Liner Cutter Holder	-1-	AT8020
MC Liner Cutter Blades (pkg. of 5)	-1-	AT8030
MC Closed-Piston Kit		AT8501K
MC Locking Ring Springs (pkg. of 10)	-1-	AT8561K
MC Cutting Shoe, standard	-1-	AT8530
MC Piston Assembly	-1-	AT8505
MC Piston Assembly		AT8505
MC Piston Bolt	-1-	AT8540
MC Piston Washer	-1-	AT8550
MC Locking Ring Assembly	-1-	AT8560
MC Piston Tip Assembly	-1-	AT8570

**Geoprobe tools and accessories are also available for use with 1.0-inch OD (outside diameter) probe rods.

4.0 OPERATION

Size and material options have resulted in an extensive list of Macro-Core part numbers. To simplify the instructions presented in this document, part numbers are listed in the illustrations only. Refer to Pages 6 and 7 for a complete parts listing.

4.1 Decontamination

Before and after each use, thoroughly clean all parts of the soil sampling system according to project requirements. A new, clean liner is recommended for each use if using PETG, PVC, or Teflon® liners.

Stainless Steel Liners from Geoprobe Systems are cleaned at the factory with an agitated detergent bath at a temperature of approximately 180 degrees F. After rinsing with 180-degree tap water, the liner is air dried, wrapped in PVC outer cladding, and capped with vinyl end caps.

Thoroughly clean the sampler before assembly, not only to remove contaminants but also to ensure correct operation. Dirty threads complicate assembly and may lead to sampler failure. Sand is particularly troublesome as it can bind liners in the sample tube resulting in wasted time and lost samples.

4.2 Field Blank

It is suggested that a field blank be taken on a representative sample liner prior to starting a project and at regular intervals during extended projects. Liners can become contaminated in storage. A field blank will prove that the liners do not carry contaminates which can be transferred to soil samples. The following information is offered as an example method which may be used to take a field blank. Make the appropriate modifications for the specific analytes of interest to the investigation.

Example Procedure:

REQUIRED EQUIPMENT

MC Liner ..... (1)
MC Vinyl End Caps ..... (2)
Distilled Water ..... (100 ml)
VOA Vial (or other appropriate sample container) ..... (1)

1. Place a vinyl end cap on one end of the liner.
2. Pour 100 milliliters of distilled water (or other suitable extracting fluid) into the liner.
3. Place a vinyl end cap on the open end of the liner.
4. From the vertical position, repeatedly invert the liner so that the distilled water contacts the entire inner surface. Repeat this step for one minute.
5. Remove one end cap from the liner, empty contents into an appropriate sample container, and cap the container.
6. Perform analysis on the extract water for the analytes of interest to the investigation.

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4.3 Open-Tube Sampler Assembly

1a. **With MC Core Catcher.** Place the open end of an MC Core Catcher over the threaded end of an MC Cutting Shoe as shown in Figure 4.1. Apply pressure to the core catcher until it snaps into the machined groove on the cutting shoe.

NOTE: AT725K (thin-wall PETG) liners have a swedged end which is generally slipped directly over the groove in the cutting shoe (Fig. 4.2). To use a core catcher with these liners, cut approximately 3/8 inches (10 mm) of material from the swedged end of the liner and proceed to Step 2.

1b. **Without MC Core Catcher.** Push the base of an MC Spacer Ring onto the threaded end of a cutting shoe until it snaps into place (Fig. 4.3).

NOTE: With the exception of AT-725K (thin-wall PETG) liners, all liners must utilize either a spacer ring or core catcher. PETG liners have a swedged end which slides directly over the end of the cutting shoe. Attach the liner to the cutting shoe (Fig. 4.2) before proceeding to Step 2.

2. Thread the cutting shoe into one end of an MC Sample Tube (Fig. 4.4). Tighten until the end of the sample tube contacts the machined shoulder of the cutting shoe.

3. Insert the appropriate liner into the sample tube (Figure 4.4). (The liner is all ready installed if using thin-wall PETG liners (AT725K) without a core catcher).

4. Connect an MC Drive Head to the top of the sample tube (Fig. 4.4) and securely tighten with the MC Combination Wrench (Fig. 4.5). Ensure that the end of the sample tube contacts the machined shoulder of the drive head.

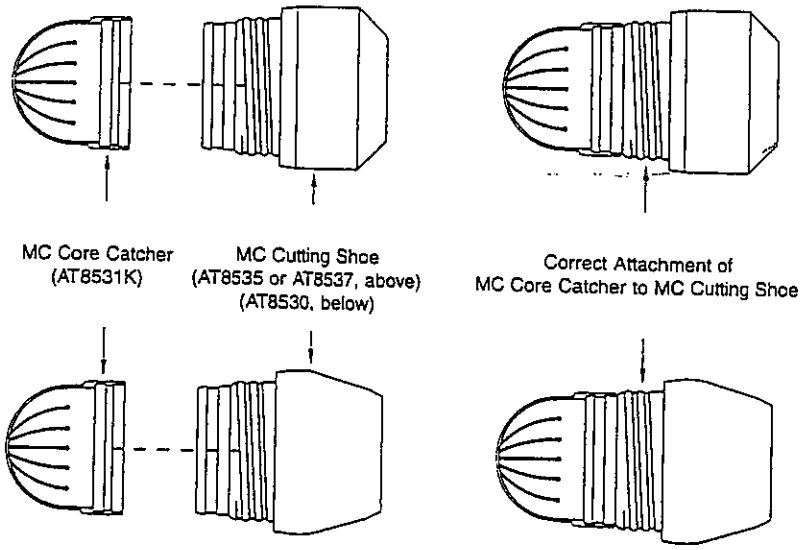

FIGURE 4.1
Macro-Core® Core Catcher Attachment

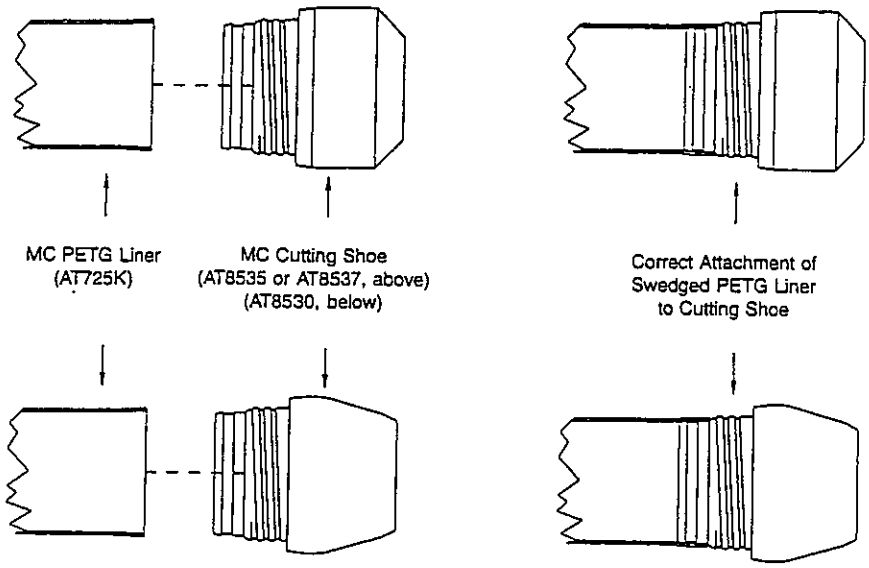

FIGURE 4.2
Macro-Core® PETG Liner Attachment

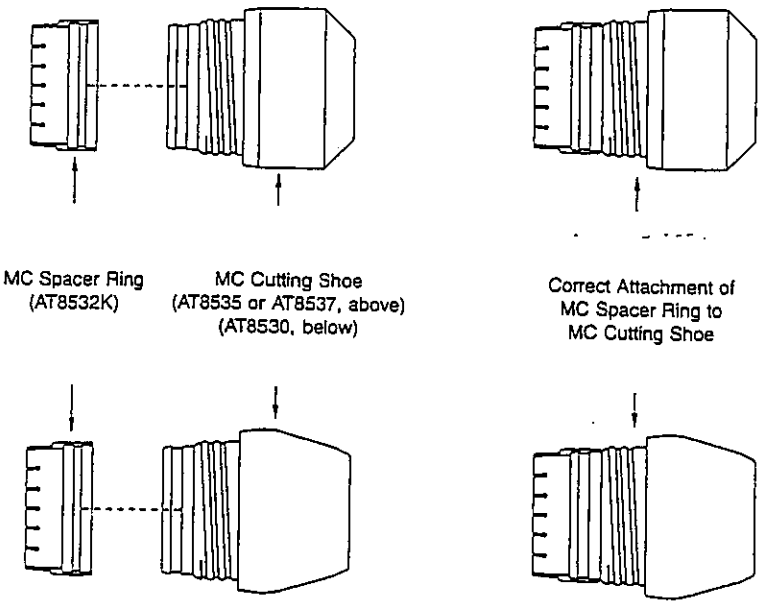

FIGURE 4.3
Macro-Core® Spacer Ring Attachment

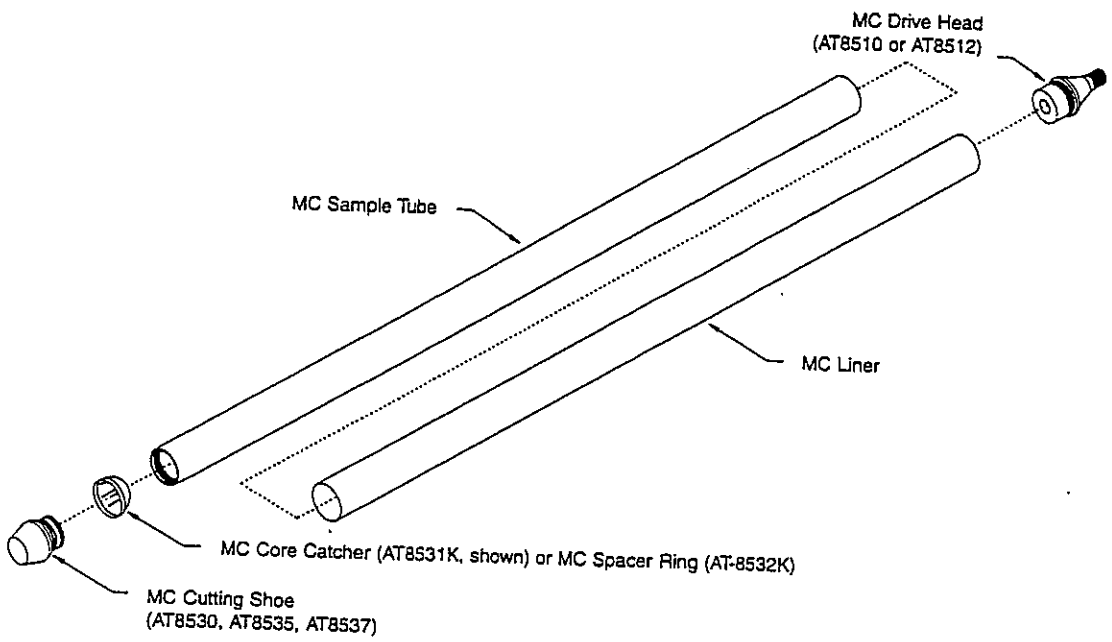

FIGURE 4.4
Macro-Core® Open-Tube Sampler Assembly

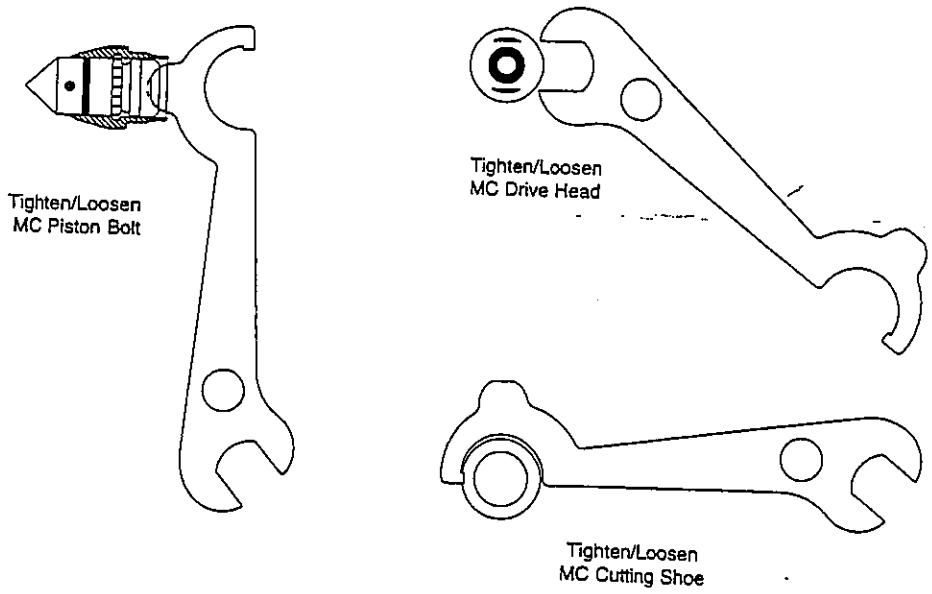

FIGURE 4.5
Macro-Core® Combination Wrench Applications

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4.4 Closed-Piston Sampler Assembly (Fig. 4.6)

1. Install an O-ring in the machined groove on the piston bolt head (A) and piston tip (B).

2. Place a piston washer on a piston bolt with the radius side away from bolt head.

3. Position a locking ring on the piston bolt and thread the bolt into the piston tip.

   NOTE: Piston bolt and tip are left-hand threaded.

4. Screw the piston bolt down tight and install a half-dog set screw in the hole on the side of the piston tip. With a 1/8-inch allen wrench, tighten the set screw until it contacts the stem of the piston bolt, then back it out one-quarter turn.

5. Back the piston bolt out until the set screw hits the bottom shoulder on the bolt (approximately four full turns). The bolt must be tight against the set screw to prohibit the set screw from turning while completing Step 6.

6. Lock the half-dog set screw into place by installing a cup point set screw in the same hole. The cup point set screw should be tight but the piston bolt should remain free to turn approximately four full turns.

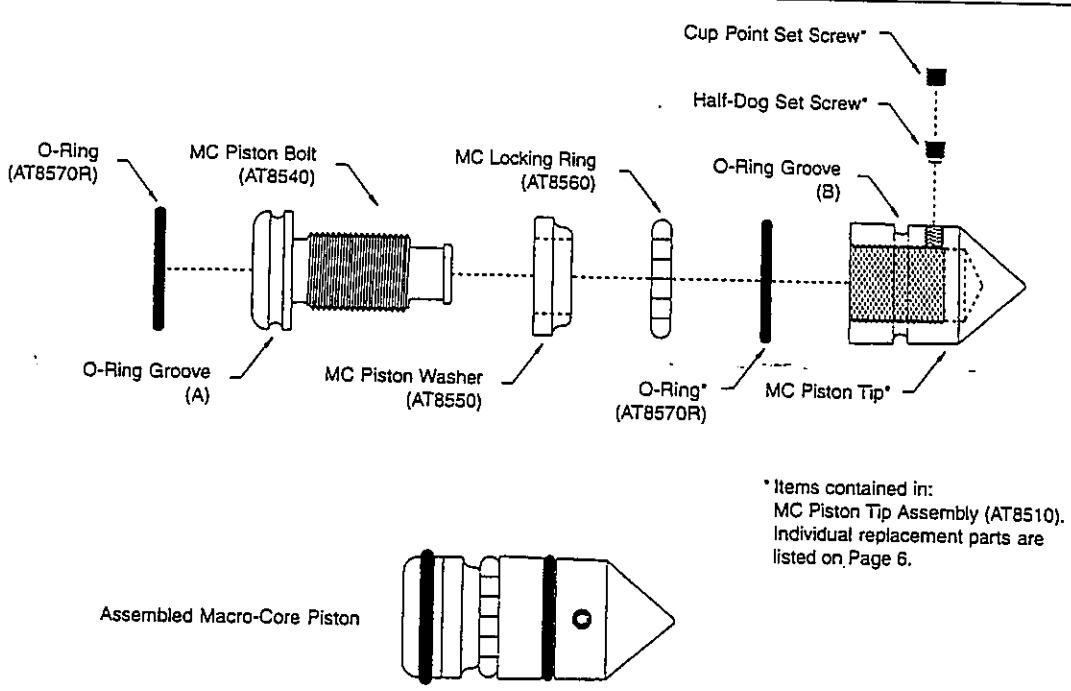

FIGURE 4.6
Macro-Core® Piston Assembly (AT8505)

NOTE: The top of the cup point set screw must not protrude from the piston tip. File or grind the set screw flush with the side of the tip if necessary. The piston assembly is ready to install in the cutting shoe.

7. Slide an assembled piston into a cutting shoe. The piston should be placed so that one half of the set screw (located on the side of the tip) protrudes from under the edge of the cutting shoe (Fig. 4.7).

8. Tighten the piston bolt (left-hand threads) using the combination wrench (Fig 4.8).

9a. **With MC Core Catcher.** Place the open end of a core catcher over the threaded end of a cutting shoe (Fig. 4.9). Apply pressure to the core catcher until it snaps into the machined groove on the cutting shoe.

NOTE: AT725K (thin-wall PETG) liners have a swedged end which is generally slipped directly over the groove in the cutting shoe (Fig. 4.10). To use a core catcher with these liners, simply cut approximately 3/8 inches (10 mm) of material from the swedged end of the liner and continue to Step 10.

Figure 4.8. Using MC Combination Wrench to tighten MC Piston Bolt inside MC Cutting Shoe.

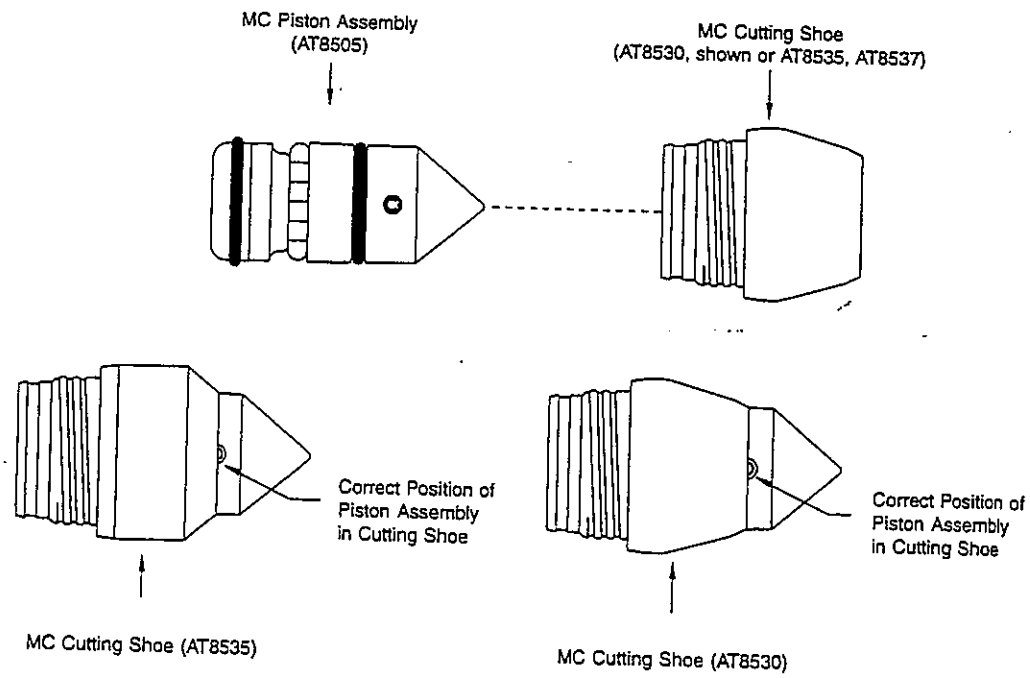

FIGURE 4.7
Installation of Macro-Core® Piston Assembly into Cutting Shoe

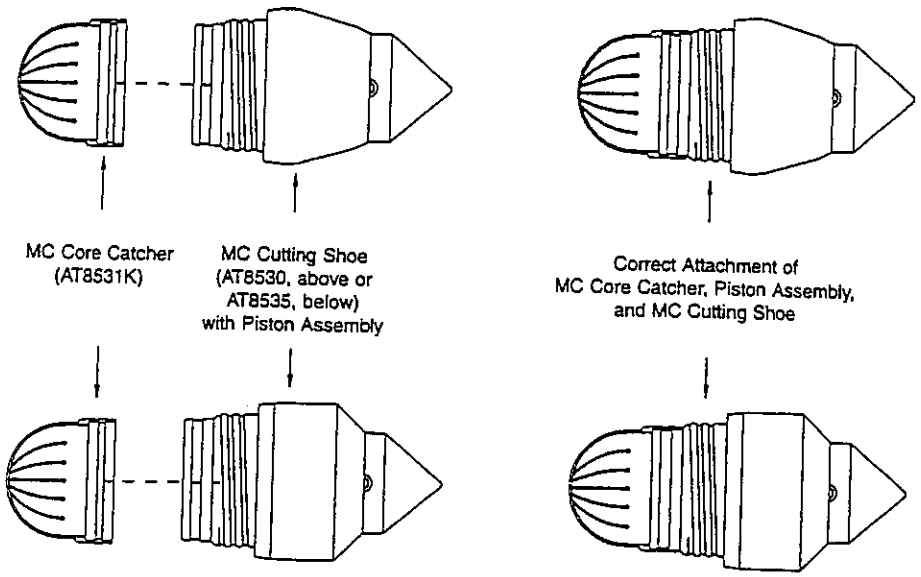

FIGURE 4.9
Macro-Core® Core Catcher Attachment with Piston Assembly

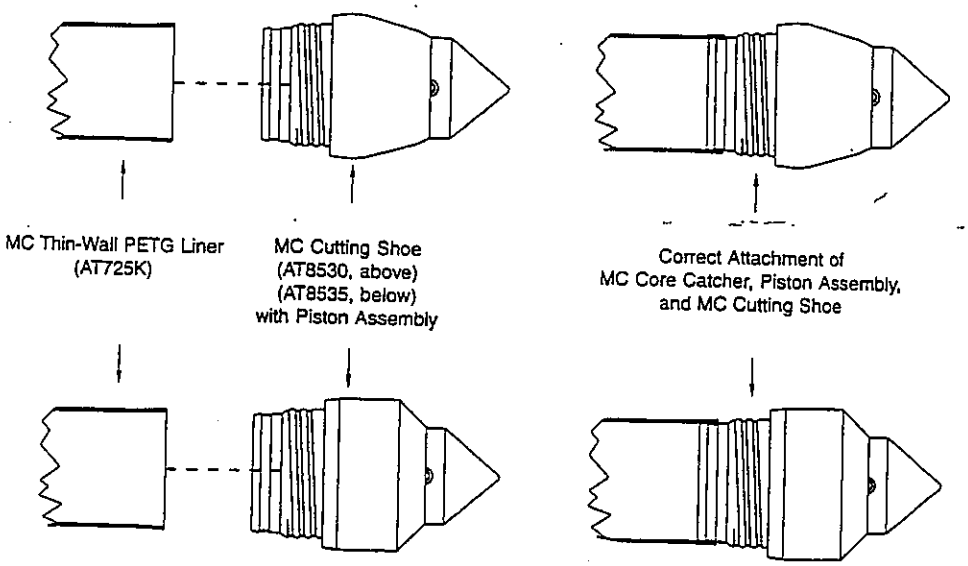

FIGURE 4.10
Macro-Core® Thin-Wall PETG Liner Attachment with Piston Assembly

9b. **Without Core Catcher.** Push the base of an MC Spacer Ring onto the threaded end of a cutting shoe until it snaps into place (Fig. 4.11).

NOTE: With the exception of AT725K (thin-wall PETG) liners, all liners must utilize either a spacer ring or core catcher. PETG liners have a swedged end which slides directly over the end of the cutting shoe. When using PETG liners, attach the liner to the cutting shoe (Fig. 4.10) before proceeding to Step 10.

10. Thread the cutting shoe into one end of an MC Sample Tube (Fig. 4.12). Tighten until the end of the sample tube contacts the machined shoulder of the cutting shoe.

11. Insert the appropriate liner into the sample tube (Fig. 4.12). (The liner is all ready installed if using PETG liners without a core catcher.)

12. Connect a drive head to the top of the sample tube (Fig. 4.12) and securely tighten with the combination wrench (Fig. 4.5) until the end of the sample tube contacts the machined shoulder of the drive head.

4.5 Pilot Hole

A pilot hole prevents excessive sampler wear in tough soils and saves time when a discrete soil core is desired. The pilot hole is created by driving a 2.0-, 2.5-, or 3.0-inch MC Pre-Probe (see page 6 for part numbers) to the top of the sampling interval. Soil surfaces containing gravel, asphalt, hard sands, or rubble should be pre-probed to reduce wear on the cutting shoe and to avoid damage to the sampler. To save time when collecting a discrete soil core, pre-probe to the sampling interval rather than coring to depth with the sampler.

4.6 Open-Tube Sampling

The Macro-Core Open-Tube Sampler is used to gather continuous soil cores from the surface to depths exceeding 30 feet. A representative soil sample is obtained by driving the sampler one sampling interval from ground surface into undisturbed soil. Upon retrieving the sampler, the liner and soil core are removed. The sampler is then properly decontaminated, reassembled with a new liner, and inserted back down the same hole to take the next soil core.

The Macro-Core Cutting Shoe is tapered to minimize the amount of soil scraped from the core walls when inserting the sampler back down an existing hole. In spite of this, non-cohesive soils will often collapse to the bottom of the hole. This slough material then enters the sampler as the next soil core is collected, resulting in a non-representative sample. A Closed-Piston Macro-Core Sampler is required under such conditions. Instructions for sampling with the Open-Tube Macro-Core Sampler follow.

1. Attach a drive cap to the sampler drive head of an assembled Open-Tube Macro-Core Sampler (Section 4.3).

2. Install a hammer anvil and anvil retainer cap assembly. Raise the hammer latch while driving the Macro-Core Sampler to avoid contact with the drive head.

3. Raise the hammer assembly to its highest position by fully extending the probe cylinder. If using a 48-inch or 1-meter sample tube with a Geoprobe Model 4200, 4220, or 420U Probe Unit, raise the machine foot to allow sufficient room to position the sampler below the hammer.

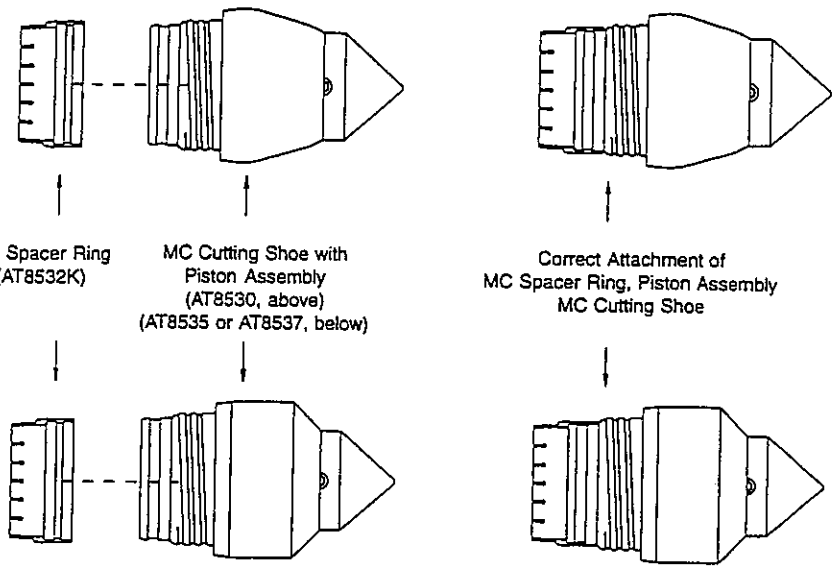

FIGURE 4.11
Macro-Core® Spacer Ring Attachment With Piston Assembly

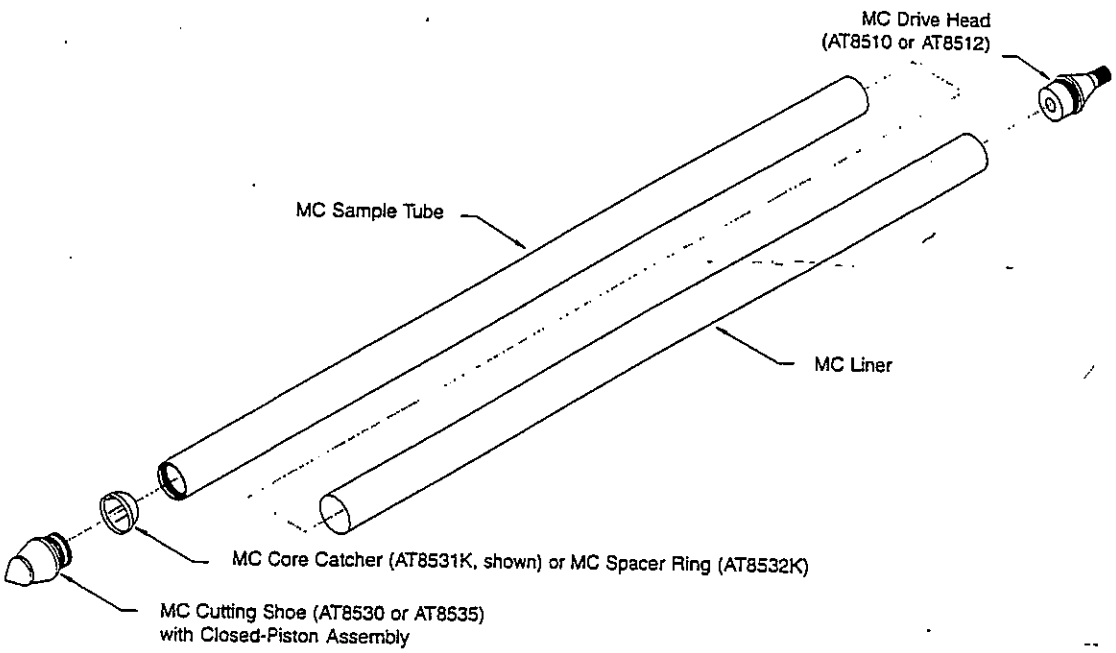

FIGURE 4.12
Macro-Core® Closed-Piston Sampler Assembly

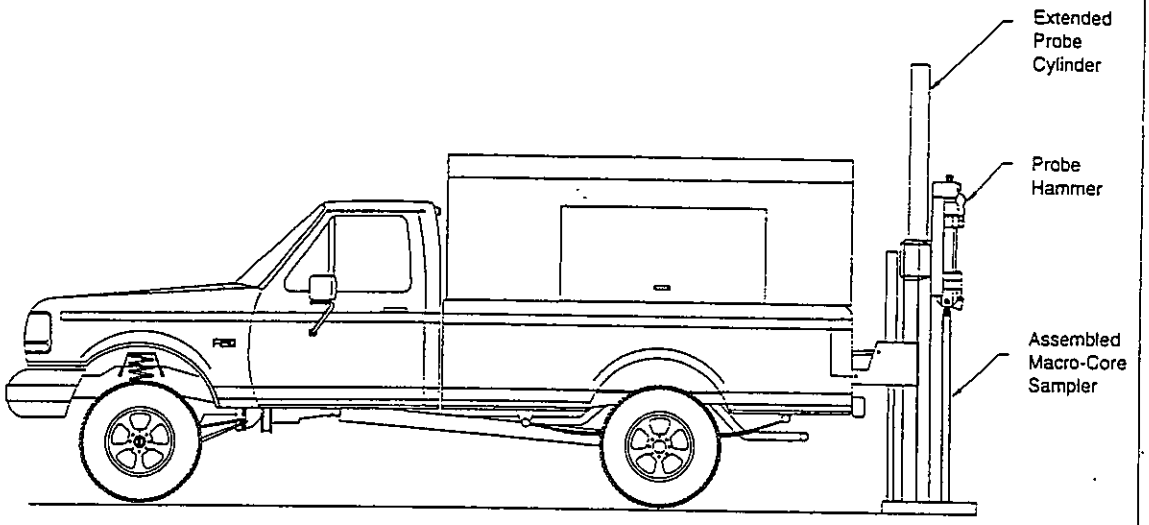

FIGURE 4.13
Macro-Core® Soil Sampler in Driving Position

4. Place the sampler in the driving position (Fig. 4.13). The sampler should always be positioned parallel to the derrick axis.

5. If using a 48-inch or 1-meter sampler tube with a Geoprobe Model 4200, 4220, or 420U Probe Machine, begin applying downward force on the sampler by lowering the machine foot. When the foot contacts the ground surface, apply downward force with the probe cylinder control only. All other Geoprobe units may start initially with the probe cylinder control.

   GEOPROBE TIP: **Activate the hammer whenever collecting soil. Hammering forces soil into the sample tube and increases recovery.**

6. Drive the sampler until the drive head reaches the ground surface (Fig. 4.14A).

***CAUTION**

Some soil conditions may warrant using an MC Pre-Probe before attempting to collect a soil core. Damage may occur if the sampler is driven into rock or any other impenetrable layer.

7. To sample at consecutive intervals, push a sampler down the previously opened hole (Fig. 4.14B) until the top of the next sampling interval is reached (Fig. 4.14C). Drive the tool string another sampling interval to fill the sampler with soil (Fig. 4.14D). An open-tube sampler may be used for consecutive sampling or, if soil slough is expected, a closed-piston sampler is available.

***CAUTION**

All parts must be completely threaded together before being driven. Driving an improperly assembled sampler will result in component damage.

8. Retrieve the sampler as described in Section 4.8: Sampler Retrieval.

4.7 Closed-Piston Sampling

It is often difficult to collect representative soil cores from significant depths with an open-tube sampler due to soil slough. Because of this, the Macro-Core sampler can be equipped with a piston which locks into the cutting shoe. This allows the sealed sampler to pass through the slough material and be opened at the appropriate sampling interval.

NOTE: **The closed piston system is meant to be inserted through previously opened holes. It is not designed to be driven from the surface through undisturbed materials.**

The MC Closed-Piston System can be used only with AT8500 series Macro-Core tools. The AT8500 series replaces the AT720 series Macro-Core tools.

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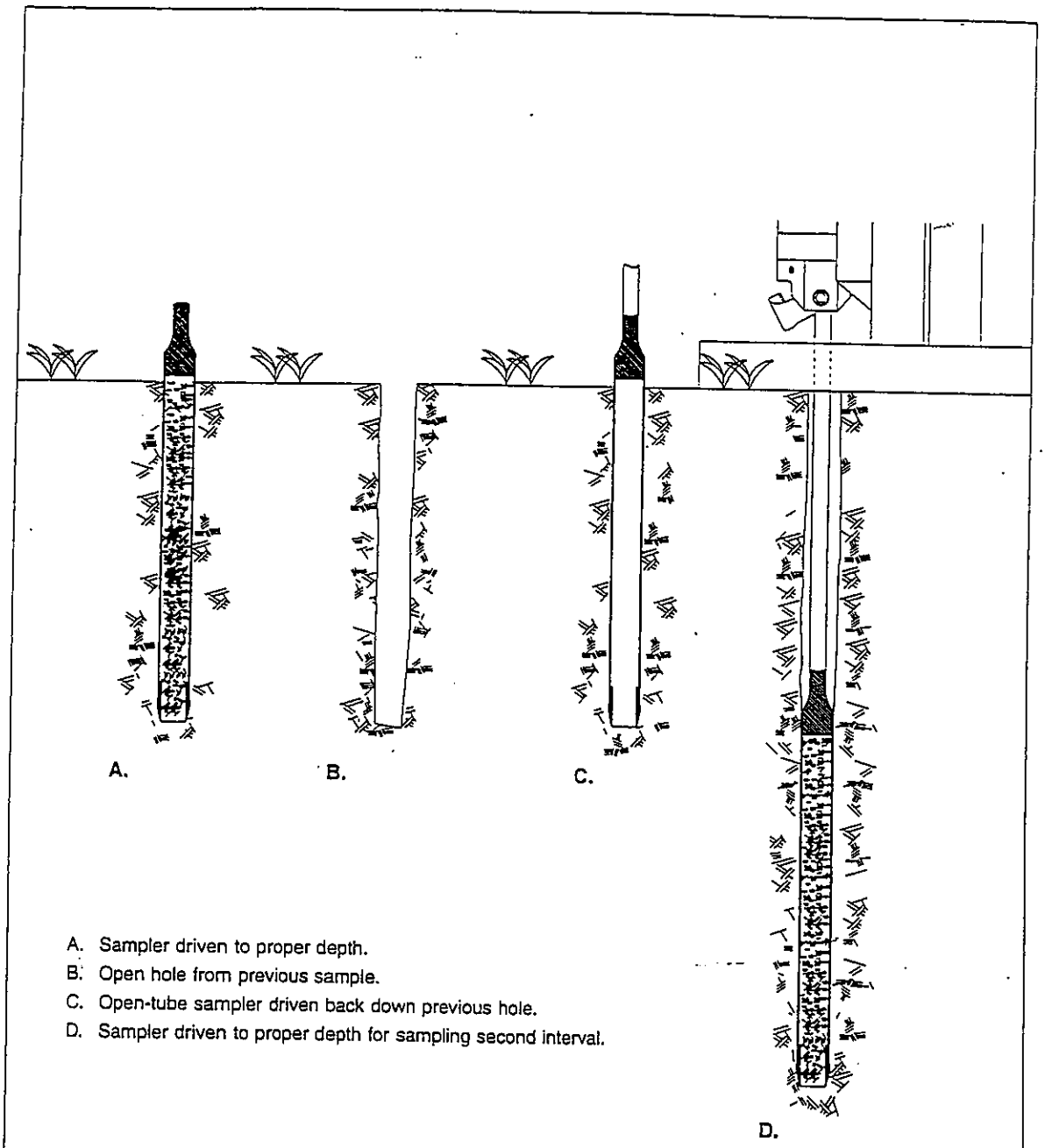


A. Sampler driven to proper depth.
B. Open hole from previous sample.
C. Open-tube sampler driven back down previous hole.
D. Sampler driven to proper depth for sampling second interval.

FIGURE 4.14
Phases of Macro-Core® Open-Tube Soil Sampling

1. Attach a drive cap to the drive head of an assembled Closed-Piston Macro-Core Sampler (Section 4.4).

2. Install a hammer anvil and anvil retainer cap assembly. Raise the hammer latch while driving the sampler to avoid contact with the drive head.

3. Raise the hammer assembly to its highest position by fully extending the probe cylinder. If using a 48-inch or 1-meter sample tube with a Geoprobe Model 4200, 4220, or 420U Probe Unit, raise the machine foot to allow sufficient room to place the sampler below the hammer.

4. Place the sampler tip in the **previously opened hole** (Fig. 4.15A). Lower the probe until the hammer anvil contacts the sampler drive head.

5. If using a 48-inch or 1-meter sample tube with a Geoprobe Model 4200, 4220, or 420U Probe Machine, begin applying downward force on the sampler by lowering the machine foot. When the foot contacts the ground surface, apply downward force with the probe cylinder control only. All other Geoprobe units may start initially with the probe cylinder control.

6. Drive the sampler until it reaches the desired sampling interval (Fig. 4.15B). Add probe rods as needed.

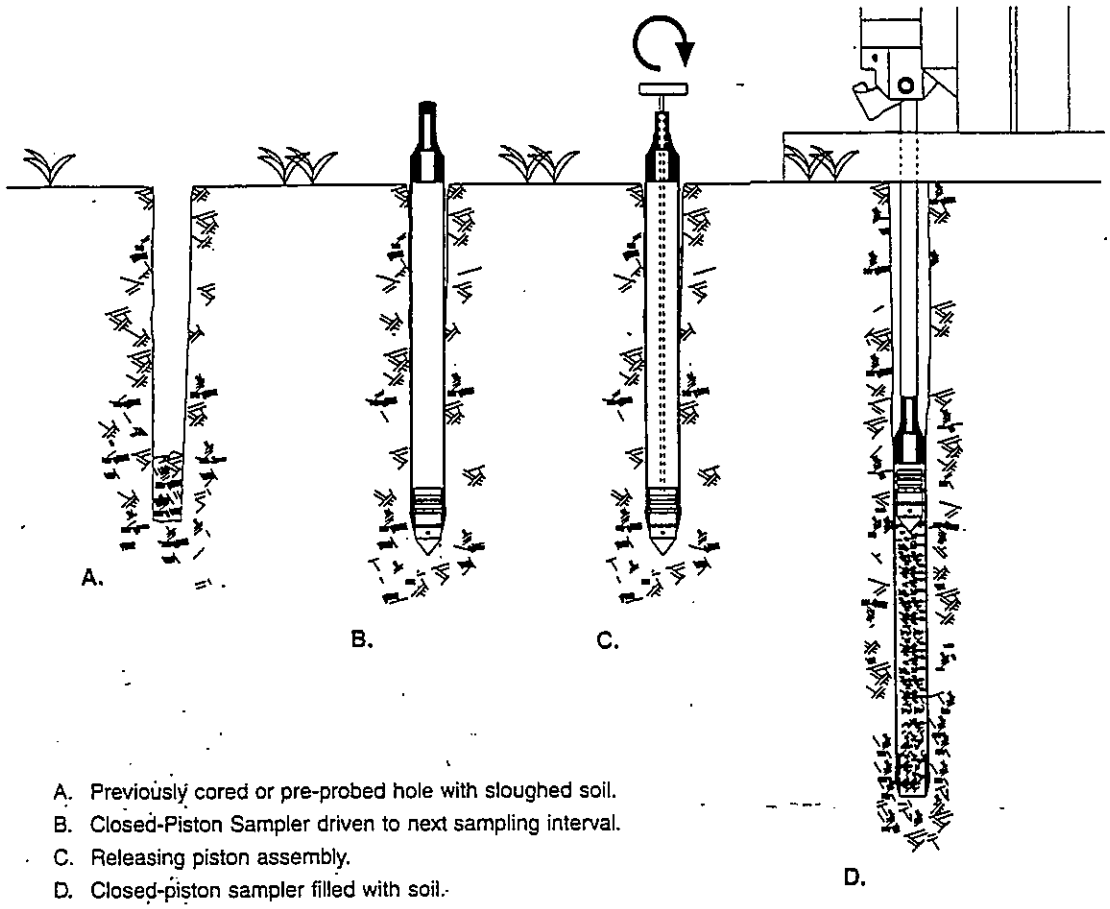
***CAUTION**

Care should be taken when driving the Macro-Core Sampler down a previously opened hole. Low side friction may allow the sampler and probe rods to drop down the hole. To prevent equipment loss, attach a pipe wrench to the top of the rod string when advancing or retrieving the sampler.

7. Move the probe unit away from the top of the probe rods to allow room for work.

8. Remove the drive cap and insert an MC Piston Release Rod (Fig. 3.1) down the inside of the probe rods (Fig. 4.16). (Refer to Fig. 4.19 for identification of extension rod accessories.) Hold onto the release rod and attach an Extension Rod Coupler or Extension Rod Quick Links. Attach an Extension Rod to the release rod (Fig. 4.17) and lower the jointed rods down hole. Continue adding extensions until the release rod contacts the bottom of the sampler. The operator may opt to use the Extension Rod Jig to hold the down-hole extension rods while adding additional rods.

9. Attach an Extension Rod Handle to the top extension rod and slowly rotate the handle clockwise (Fig. 4.15C and 4.18). The release rod will drop into the groove in the piston bolt (Fig. 4.20). The operator should feel the extension rods move slightly as the release rod falls into the groove. Rotate the handle clockwise approximately four complete revolutions. Resistance to rotation is generally noted at this point. If the rods continue to rotate, however, do not continue for more than four complete revolutions. The piston assembly is now released and will be pushed to the top of the sampler as the liner is filled with soil (Fig. 4.15D).



A. Previously cored or pre-probed hole with sloughed soil.
B. Closed-Piston Sampler driven to next sampling interval.
C. Releasing piston assembly.
D. Closed-piston sampler filled with soil.

FIGURE 4.15
Phases of Macro-Core® Closed-Piston Soil Sampling

Figure 4.16. MC Release Rod is inserted down inside of the probe rods.

Figure 4.17. Extension Rods are attached to the MC Piston Release Rod using Extension Rod Quick Links.

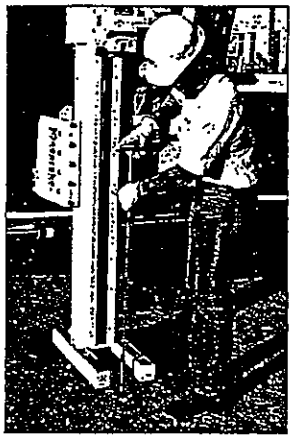


Figure 4.18. Extension Rods are rotated clockwise to release the MC Piston assembly.

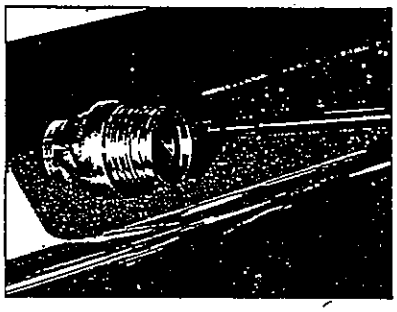


Figure 4.20. MC Release Rod fits into groove in MC Piston Bolt Head.

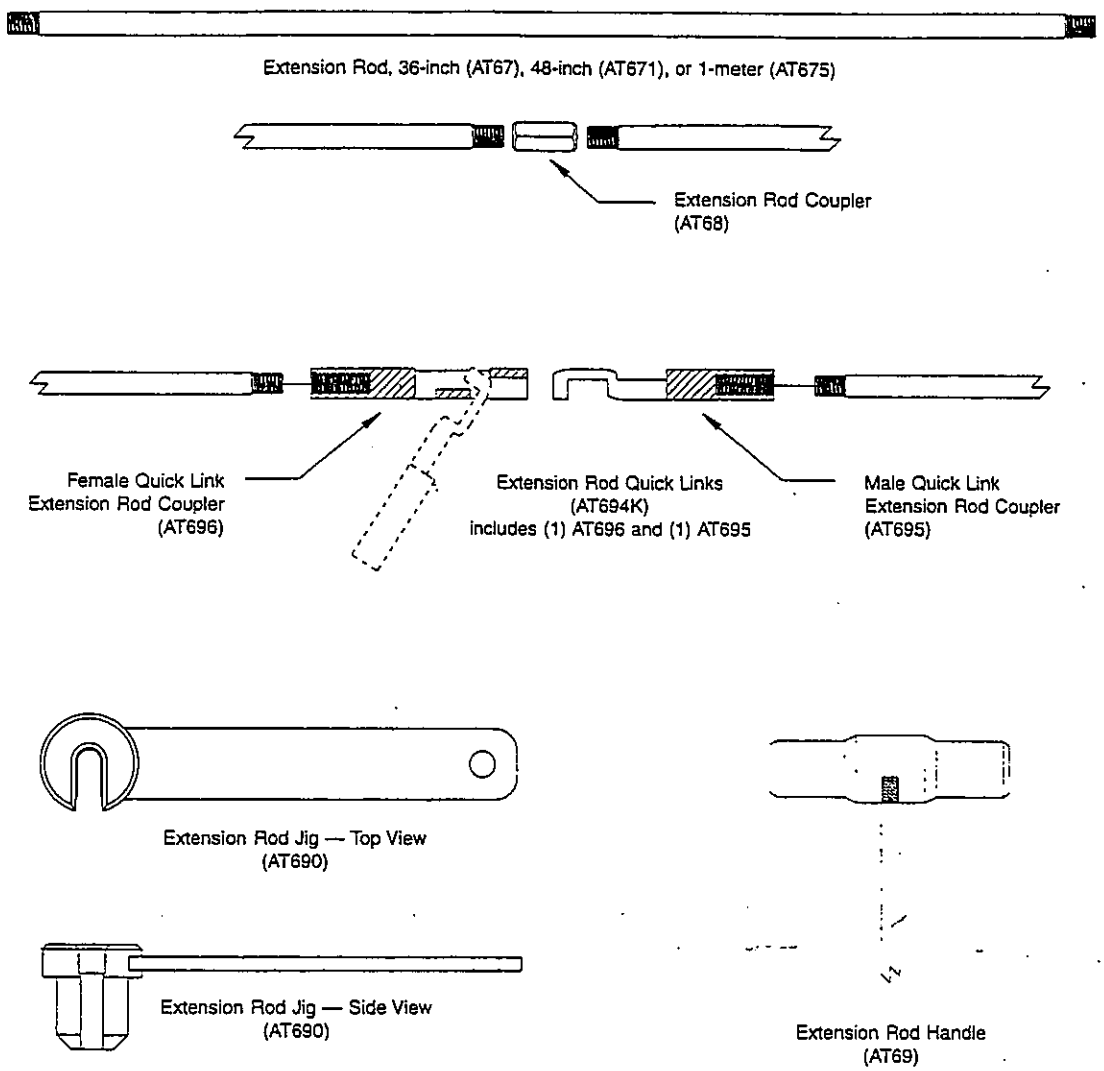


FIGURE 4.19
Geoprobe Extension Rods and Accessories

10. Remove the release rod and extension rods. The piston assembly will not be attached to the end of the extension rod but will remain inside the sample tube.

11. Add a probe rod to the tool string, attach the drive cap, and reposition the probe unit. Drive the tool string another sampling interval to fill the liner with soil. Do not over-drive the sampler.

GEOPROBE TIP: **Activate the hammer whenever collecting soil. Hammering forces soil into the sampler tube and increases recovery.**

4.8 Sampler Retrieval

1. Attach a pull cap to the top probe rod. Close the hammer latch over the pull cap and pull the tool string up one rod length by actuating the PROBE control lever.

2. Remove the rod and repeat Step 1 until the sampler drive head is just above the ground surface. Probe rods are sometimes difficult to loosen by hand. Use pipe wrenches to free tight threads.

***CAUTION**

Care should be taken when retrieving the Macro-Core sampler. Low side friction may allow the sampler and probe rods to drop down the hole. Attach a pipe wrench to the top of the rod string to prevent equipment loss.

3. Attach the pull cap to the sampler drive head (Fig. 4.21). Pull the sampler out of the ground (Fig. 4.22) by raising the PROBE control lever. If using a 48-inch or 1-meter sample tube with a Geoprobe Model 4200, 420U, or 4220 Probe Machine, the probe cylinder will fully extend before the sampler is completely free. Attempt to raise the sampler by actuating the FOOT control.

***CAUTION**

The rear of the carrier vehicle may be pulled downward as the foot cylinder is activated if the sampler is lodged tightly in the ground. Damage to the unit base frame may occur under such circumstances.

If the sampler cannot be retrieved without excessive resistance, follow these steps:

1. Lower the FOOT control and disengage the hammer latch from the pull cap.

2. Raise the probe foot at least 12 inches (305 mm) above the ground surface. Stack several boards or place timber blocks under the foot to act as a foot extension.

3. Lower the hammer assembly and close the hammer latch over the sampler pull cap.

4. Use the PROBE control to lift the sampler completely out of the ground.

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4.9 Soil Core Recovery

The soil sample is easily removed from the Macro-Core Sampler by unscrewing the cutting shoe and pulling out the liner. A few sharp taps on the cutting shoe will often loosen the threads sufficiently to allow removal by hand. If needed, the exterior of the cutting shoe features a notch for attaching the combination wrench to loosen tight threads (Fig. 4.23). With the cutting shoe removed (Fig. 4.24), simply pull the liner and soil core from the sample tube (Fig. 4.25).

If the closed-piston sampler is used, the piston assembly is now retrieved from the end of the liner (Fig. 4.26). Secure the soil sample by placing a vinyl end cap on each end of the liner.

Undisturbed soil samples can be obtained from Teflon®, PVC, and PETG liners by splitting the liner. Geoprobe offers two tools for cutting sample liners. The MC Liner Cutter Kit (AT8000K) is used to make longitudinal cuts in the liner and includes a tool that holds the liner for cutting. The MC Liner Circular Cutting Tool (AT8050) is used to segment the liner by cutting around the outside circumference of the liner. Refer to Figures 4.27 and 4.28 for more information on liner cutting.

Figure 4.21. Pull Cap attached to MC Drive Head.

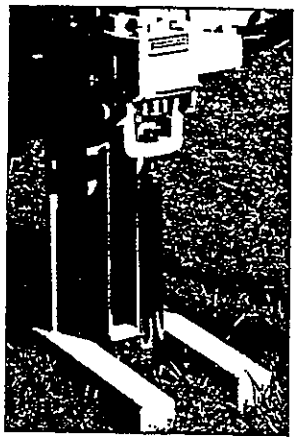

Figure 4.22. MC Soil Sampler is pulled with Geoprobe unit.

Figure 4.23. Loosening the MC Cutting Shoe with the MC Combination Wrench.

Figure 4.24. Removing MC Cutting Shoe and liner from MC Sampler Tube.

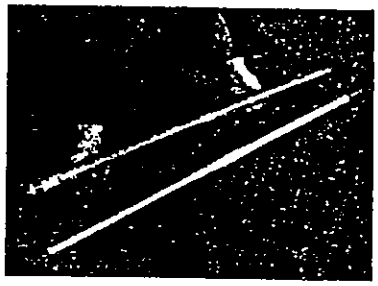

Figure 4.25. Macro-Core liner filled with soil core.

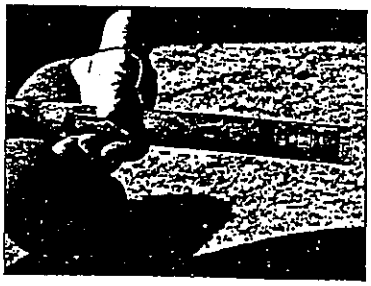

Figure 4.26. MC Piston assembly is retrieved from liner at the top of the soil core.

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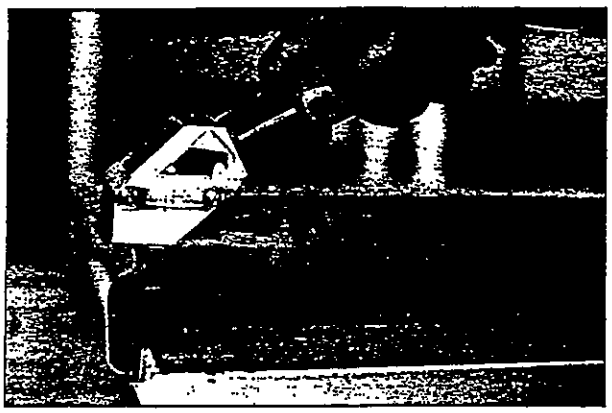

Figure 4.27. MC Liner Cutter (AT8000K) makes a quick, safe cut through even the toughest of liner materials.

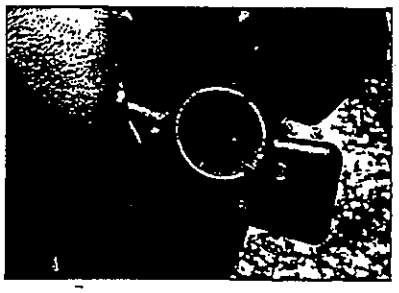

Figure 4.28. MC Circular Cutting Tool (AT8050) cuts around the outside of the filled MC liner.

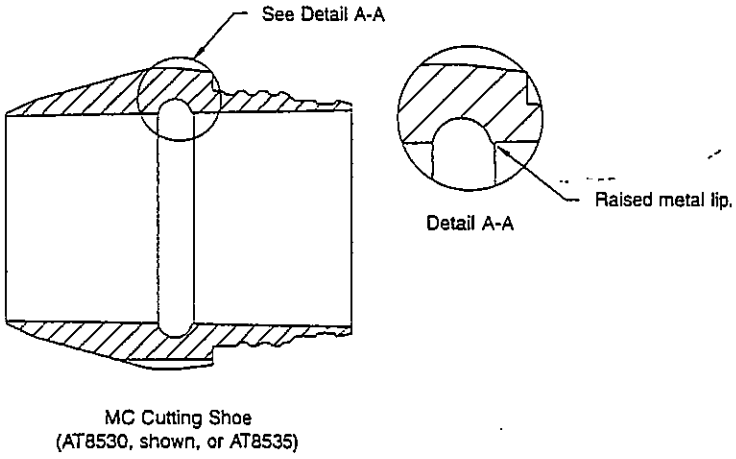

FIGURE 4.29
Macro-Core® Cutting Shoe with Mushroomed Locking Ring Groove

4.10 Macro-Core Closed-Piston Operating Tips

The Macro-Core piston assembly requires proper maintenance to ensure reliable operation. The following tips will increase the effectiveness of closed-piston sampling:

1. Cleanliness is the most important factor affecting piston operation. Ensure piston bolt threads and locking ring are free of soil particles and corrosion before each use. Completely thread and unthread the piston bolt to verify operation. Disassemble the piston tip and wash the individual parts using clean water and a Nylon Brush for MC Sample Tubes (BU700) if necessary. Allow parts to dry before assembling if piston is to be stored before use. Disassemble used pistons before storing to prevent piston bolt corrosion.

2. Never store a cutting shoe with the piston installed. Install the piston assembly immediately before sampling.

3. Lubricate piston assembly with distilled water before installing in the cutting shoe.

4. Once the assembly is fully seated in the cutting shoe, tighten the piston bolt with an oscillating movement; thread the bolt in 90 degrees then back 45 degrees. When the end of thread travel is reached, work the last 30 degrees of travel back and forth several times. Tightening the piston bolt in this manner allows the metal pins of the locking ring to correctly align in the cutting shoe.

5. Do not lock the piston bolt 100 percent counterclockwise. Fully tighten the bolt and then loosen approximately 10 degrees.

6. When releasing the piston downhole, only turn the piston bolt 4 clockwise revolutions.

7. Clean the piston assembly with distilled water and a nylon brush between samples. It is not necessary to completely disassemble the piston at this time. Pay particular attention to the locking ring and ensure that all sand and grit is removed from between the metal lock pins.

8. Locking rings are expensive but can be restrung on new springs. If a locking ring breaks, save the pieces for reuse. (Refer to Page 6 for replacement parts). To restring a locking ring, follow these simple steps:

   a. There is a small loop at each end of a new locking ring spring. Make sure one loop is bent perpendicular to the other. One loop should also be completely closed while the other is slightly open.

   b. Attach a clamp as close to the open end as possible (without contacting the loop) to hold the spring. Fisherman fly-tying pliers work well for this procedure. Take care not to damage the spring by applying too much pressure.

   c. String 12 locking ring pins (macaroni-shaped metal pieces) on the closed end, stretching the spring as necessary. Be careful not to overstretch and damage the spring.

   d. Hook the open end of the spring through the closed end and bend the loop closed.

   e. Remove the clamp and gently stretch the locking ring several times to ensure that the loops will not open.

9. A locking ring groove is machined into the cutting shoe. Over time, the edges of this groove may begin to mushroom from use (Fig. 4.29). The raised metal lip formed by the mushroomed groove may cause the locking ring (and subsequently the piston) to bind in the cutting shoe. Remove the raised metal with a file or die grinder

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4.11 Tips to Maximize Sampling Productivity

The following suggestions are based on the collective experiences of Geoprobe operators:

1. Organize your truck or van to maximize efficiency. Assign storage areas to all tools and equipment for easy location. Store samplers, extension rods, and liners in racks. Above all, minimize the number of items lying loose in the back of the vehicle.

2. Take three or four samplers to the field. This allows the collection of several samples before stopping to clean and decontaminate the equipment. A system is sometimes used where one individual operates the probe while another marks the soil cores and decontaminates the used samplers.

3. A machine vise is a real plus. With the sampler held in a vise, the operator has both hands free to remove the cutting shoe (Fig. 4.30), drive head, and sample liner (Fig. 4.31). Cleanup is also easier with both hands free. Geoprobe offers an optional Machine Vise (FA300) which mounts directly on the probe derrick (Fig. 4.32).

4. Extension Rod Quick Links (Fig. 4.33) are the best choice among connectors. These are real time savers. The quickest and easiest method for deploying extension rods is to assemble sections of up to three rods with threaded connnectors. Each section is then connected with Quick Links. Up to three rods can be inserted or removed from the probe string at once, greatly reducing deployment time.

5. When releasing the piston assembly, a pair of locking pliers may be used to turn the extension rods. The locking pliers will be quicker and easier to install than the extension rod handle in some situations.

6. Organize your worksite. The best way to maximize sampling efficiency is to practice with the sampler and identify a comfortable setup. Lay out all tools and equipment before probing. An example layout is shown in Figure 4.34.

   A collapsible table or stand is handy to hold decontaminated sampler tubes and liners. Equipment may also be protected from contamination by placing it on a sheet of plastic on the ground.

   Keep probe rods separate by identifying a location for "new" rods as well as a "put down pile." Initially drive the sampler with a new rod. As the rod is removed during sampler retrieval, place it in the put down pile for reuse. Drive the sampler to the top of the next sampling interval by using all of the rods in the put down pile. A new rod (located in a separate pile) is added and the string is driven to collect the next soil core. Once again, each probe rod is removed and placed in the put down pile as the sampler is retrieved. The cycle is repeated until all of the soil cores are recovered. This method eliminates the need to count rods while driving the sampler.

7. Cleanup is very important from the standpoint of operation as well as decontamination. Remove all dirt and grit from the threads of the drive head, cutting shoe, and sample tube with a nylon brush (BU700). Without sufficient cleaning, the cutting shoe and drive head will not thread completely onto the sample tube. The threads may be damaged if the sampler is driven in this condition.

   Ensure that all soil is removed from inside the sample tube. Sand particles are especially troublesome as they can bind liners in the sampler. Full liners are difficult to remove under such conditions. In extreme cases the soil sample must be removed from the liner before it can be freed from the sample tube.

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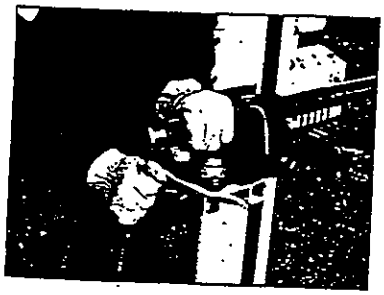

Figure 4.30. Removing MC Cutting Shoe with filled sampler tube held in Machine Vise.

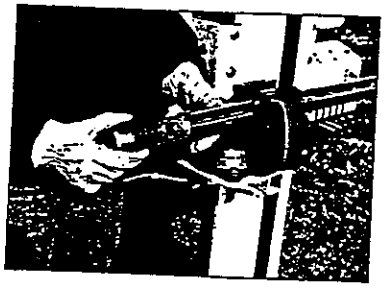

Figure 4.31. Removing filled liner with sampler tube held in Machine Vise.

Figure 4.33. Machine Vise mounted directly on Geoprobe unit.

Figure 4.33. Using Extension Rod Quick Links to connect Extension Rods.

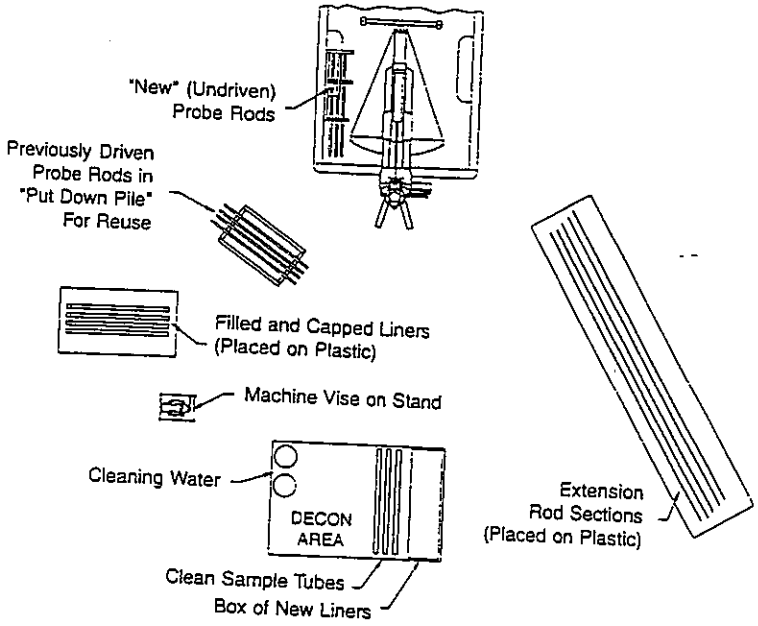

FIGURE 4.34
Equipment Layout Example to Maximize Sampling Productivity.

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8. The piston assembly may remain lodged in the cutting shoe when disassembling by hand, even though the piston bolt is completely loosened. This is because the locking ring and piston washer do not release from the groove in the cutting shoe as the piston bolt unthreads out of the tip. Hammering on the piston tip will have no effect because you are, in essence, forcing the tip tighter against the locking ring. To dislodge the piston, turn the assembly over and tap the top of the cutting shoe on a solid object. If the assembly still does not release, tap on the piston bolt with a hammer (taking care not to damage the release rod slot). This will jar the piston tip and bolt enough to release the locking ring from the groove in the cutting shoe.

*** CAUTION**

Do not push the piston assembly out of the cutting shoe by placing your hands on the piston tip. The cutting shoe is sharp and may cause injury when the assembly suddenly comes free. It is best to place the tip against a solid object, grasp the cutting shoe, and push the shoe over the assembly.

9. Although available for use with two sizes of probe rods, 1.25-inch OD rods are recommended for the Macro-Core Sampler. The larger rod diameter limits downhole deflection of the tool string and ultimately provides a more durable system. A new thread design also makes the 1.25-inch rods quicker and easier to thread together than previous 1-inch probe rods.

10. The Heavy-Duty MC Cutting Shoe (AT8535) is machined with more material at the critical wear areas. It can be used in place of the Standard MC Cutting Shoe (AT8530) and is designed to lengthen service life under tough probing conditions.

    Expansive clays and coarse sands can "grab" and collapse liners as the sample tube is filled with soil. A 1/8-inch Undersized MC Cutting Shoe (AT8537) will help alleviate this problem. The smaller diameter core (1.375 inches) allows expanding clays and coarse sands to travel up the sample liner without binding. The piston assembly can not be used with this cutting shoe.

11. Maximize the thread life of the sample tube by varying the ends in which the drive head and cutting shoe are installed. The dynamic forces developed while driving the sampler are such that the threads at the drive head wear more quickly than at the cutting shoe. Regularly switching ends will maintain relatively even wear on the sample tube.

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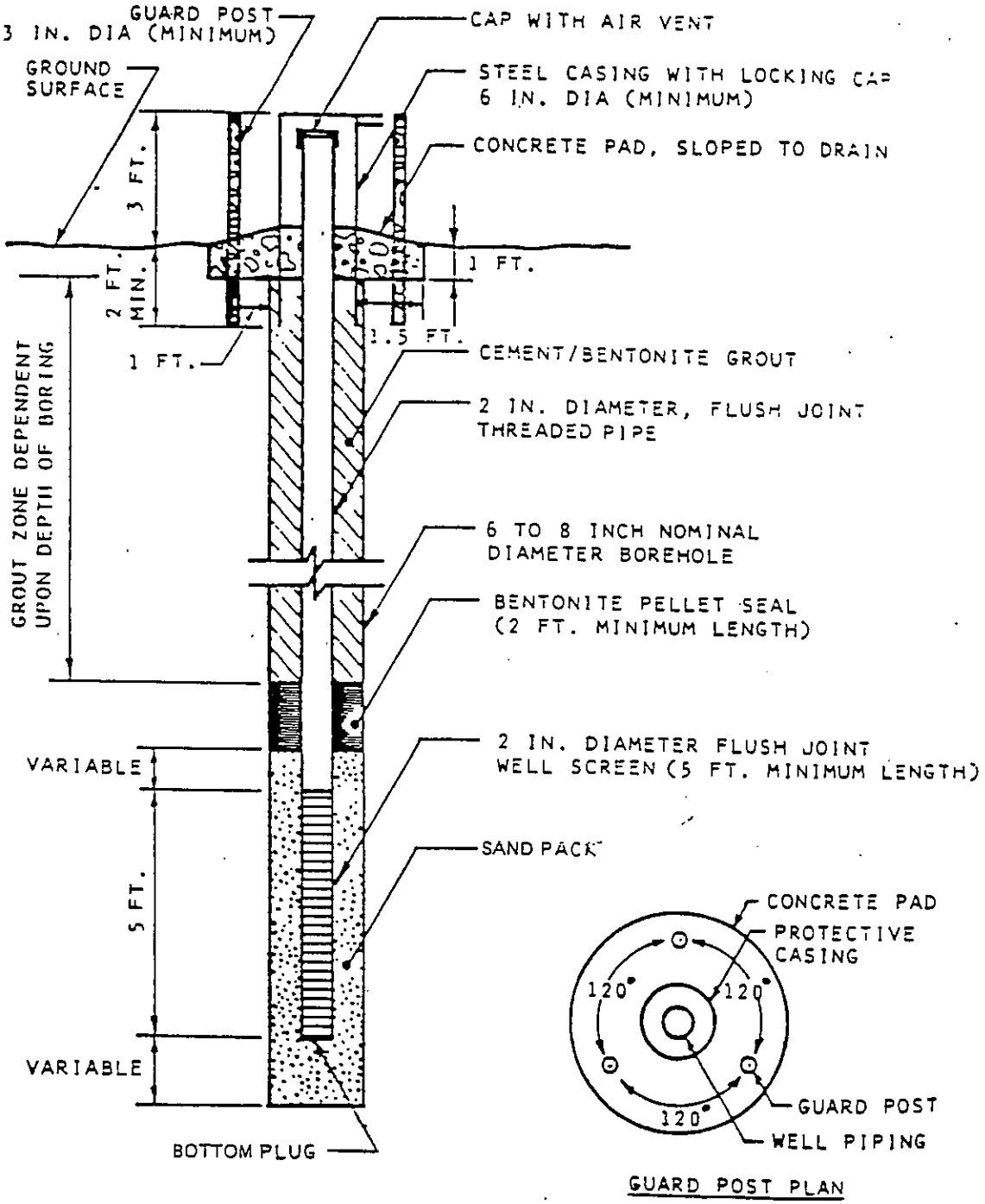
APPENDIX C

WELL CONSTRUCTION DIAGRAMS

TYPICAL MONITORING WELL INSTALLATION



Taken from USEPA "A Compendium of Superfund Field Operation Methods", 1987

APPENDIX D

WELL LOG SHEET

APPENDIX E

ICM LABS STATEMENT OF QUALIFICATIONS

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Industrial Corrosion Management
ICM Laboratories

General Information

ICM Laboratories has developed this manual to allow the reader to assess our technical and operational capabilities. We will describe our facilities and instrumentation, organizational structure which includes key staff, certifications, quality assurance program and methodologies we employ.

Company History

Industrial Corrosion Management, Inc. (ICM Laboratories) is an independent laboratory providing high quality analytical services to companies across the United States. Our primary business focuses on analyses for compliance with any regulatory issues regarding soil, water, oil, or hazardous waste.

Initially, ICM Laboratories was created to offer very rapid analysis and interpretation of air conditioning fluids such as Lithium Bromide, oils and refrigerants. Large central heating and air conditioning units are very sensitive to the chemical condition of these operating fluids. If they are not properly balanced or treated, numerous corrosion problems arise.

However, until ICM was created in 1974, normal turn around times for these analyses approached several weeks, and all the while the equipment performed inefficiently.

ICM changed this concept. We provided rapid analysis of air conditioning solutions in a time frame which permitted servicemen to solve critical problems in the field. The business grew and gradually served hundreds of organizations across the United States.

ICM entered the field of environmental testing in 1978. At that time, the certification of laboratories for environmental testing was just beginning. We were initially certified for the bacteriological, limited chemical and inorganic sections. In 1980, we were certified for the organic analyses. ICM now has approximately 16 years experience in the environmental analytical testing industry.

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Corporate Philosophy

With environmental pressures mounting in the United States, it is important to be able to find a laboratory that is not only quality driven, but also timely and cooperative. ICM's philosophy mandates that we generate high quality data in a timely fashion that is complemented with a high level of service. Many laboratories have the certifications necessary to conduct analytical testing. ICM believes it is the quality and the service which a laboratory offers that distinguish it from another.

Geographical Area Serviced

ICM services clients throughout the United States. The majority of our clients are located in the Middle Atlantic states. ICM utilizes overnight carrier services such as Federal Express, for projects that are located outside our local area. This practice enables us to service clients with sample containers throughout the United States.

US EPA and NJ DEPE Contract Laboratory Program

Experience with analytical protocol is critical to ensure that a project is completed properly and will withstand strict government scrutiny.

ICM Laboratories has had a great deal of experience in the US EPA Contract Laboratory Program. We were awarded our first contract in 1986. We have also been awarded a contract for the US EPA Contract Laboratory Program Special Analytical Services (SAS) Division work. These contracts are only available to laboratories who are in good standing in the US EPA CLP program.

The US EPA SAS contracts can also be far more demanding than the routine contract work. For example, the SAS division may require that you submit a CLP hardcopy report for 165 semivolatile soils within a 15 day period. ICM accomplished this task successfully. This request compels a lab to pull resources together and react quickly.

As you may know, the New Jersey Department of Environmental Protection and Energy also has a contract laboratory program. NJ DEPE awarded ICM a contract in 1993. Approximately 40

laboratories completed for these contracts and only a small number of laboratories were given awards.

ICM's contract includes Task IV, New Jersey's State Superfund Program as well as Task III, analysis of non-aqueous/alternative wastewater sample analysis.

Section 2

Facilities and Instrumentation

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Facilities and Instrumentation

ICM Laboratories is located at 1152 Route 10 in Randolph, New Jersey. We are approximately four miles from Route 80 and Route 46.

ICM currently occupies 21,500 square feet of industrial building space including laboratories, offices, conference rooms, refrigerated storage, and field equipment storage. This area is divided into the following:

A. Laboratory Space	9,000 square feet
B. Office Space	8,500 square feet
C. Storage Space	4,000 square feet

Each individual laboratory has its own ventilation system. Separate systems are advantageous because the laboratory minimizes contamination from various chemicals utilized in each laboratory.

A central station burglar system with a 24 hour per day, 7 day per week, surveillance system secures all laboratory, office, and storage space. The security system utilizes a combination of keys and passwords. Passwords are only given to those with security clearance and are periodically modified.

All visitors are required to sign the visitors log, located at the main entrance. Sign in is required for security and health and safety purposes in case of an emergency.

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ICM Laboratories

West Bay	P		16
Stock Room/ Shipping & Receiving	O	Support Services Office Field Sampling Office Sampler preparation	15
	N	File Box Storage	14
	M		13
	L		12
General Chemistry Office	K		11
General Chemistry Lab	J		10
General Chemistry Lab	I	Accounting/Personnel Computer/Operations	9

BREEZEWAY

(Metals) Inorganics Lab	H	Executive Office Area	8
(Metals) Inorganics Lab	G	Sample Log-in	7
Extractions Lab	F	Customer Service Break Room	6
Extractions/Gas Cylinder Storage	E	Sales Manager's Office QA Manager's Office Lab Coordinator's Office	5
	D		4
Organics Lab	C	Secretarial Department	3
Organics Lab	B	Quality Assurance Department / File Box Storage	2
Microbiology Lab	A	GC - GC/MS Office	1

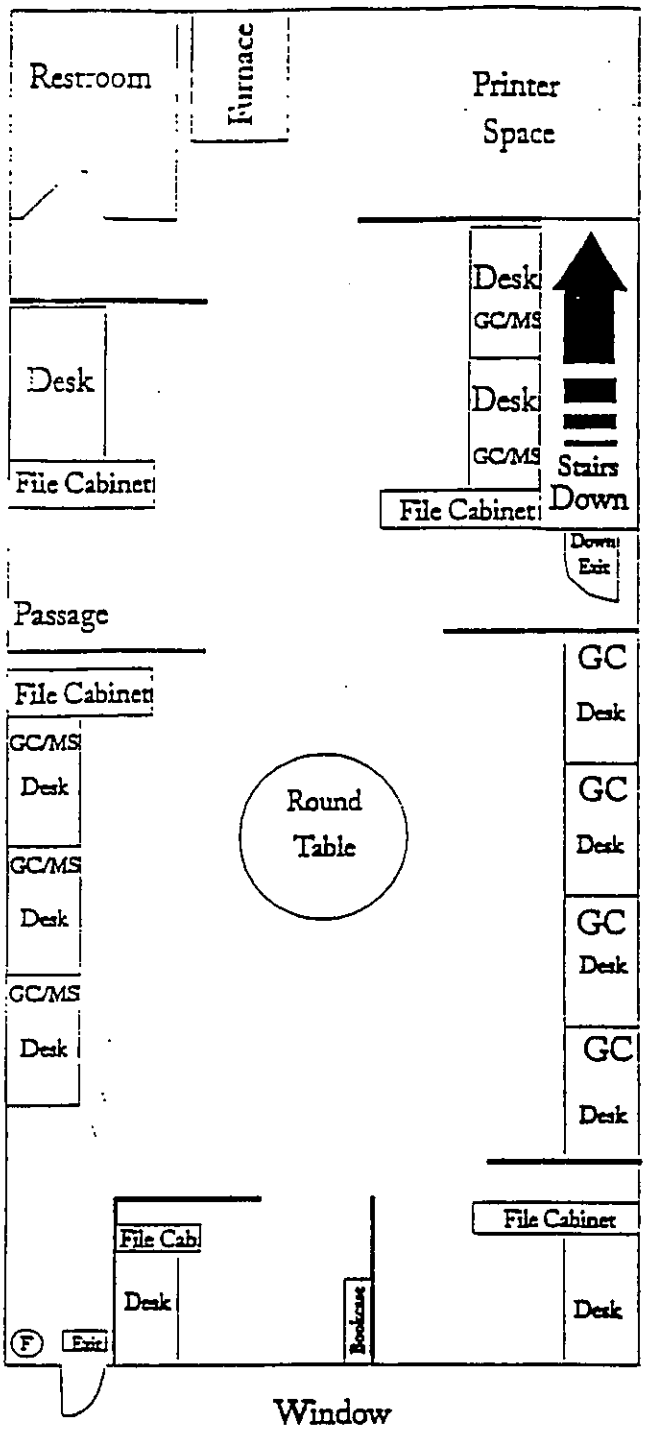
Lower Level

Upper Level

Bay 1

GC/MS Office

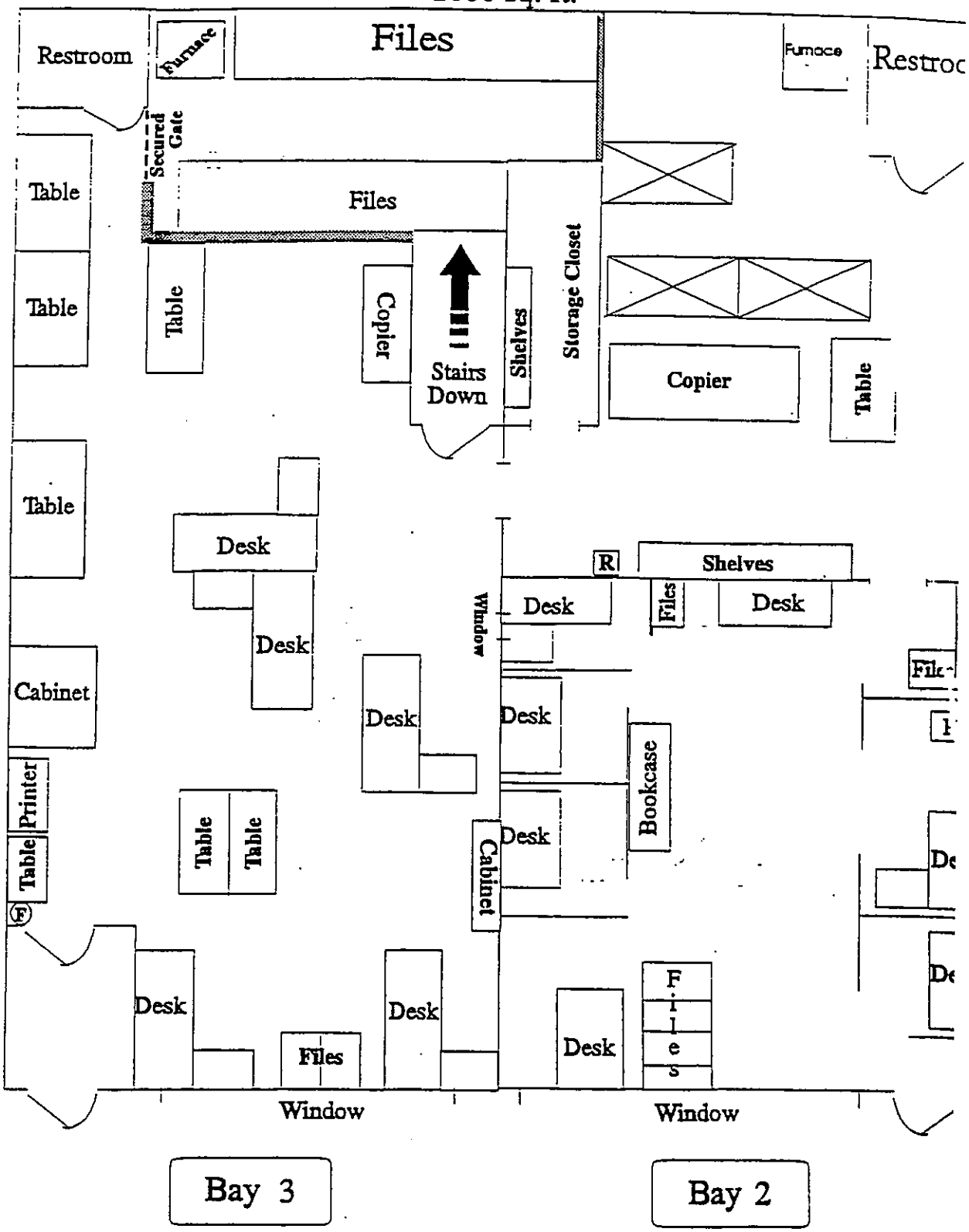
1,000 sq. ft.



F = Fire Extinguisher

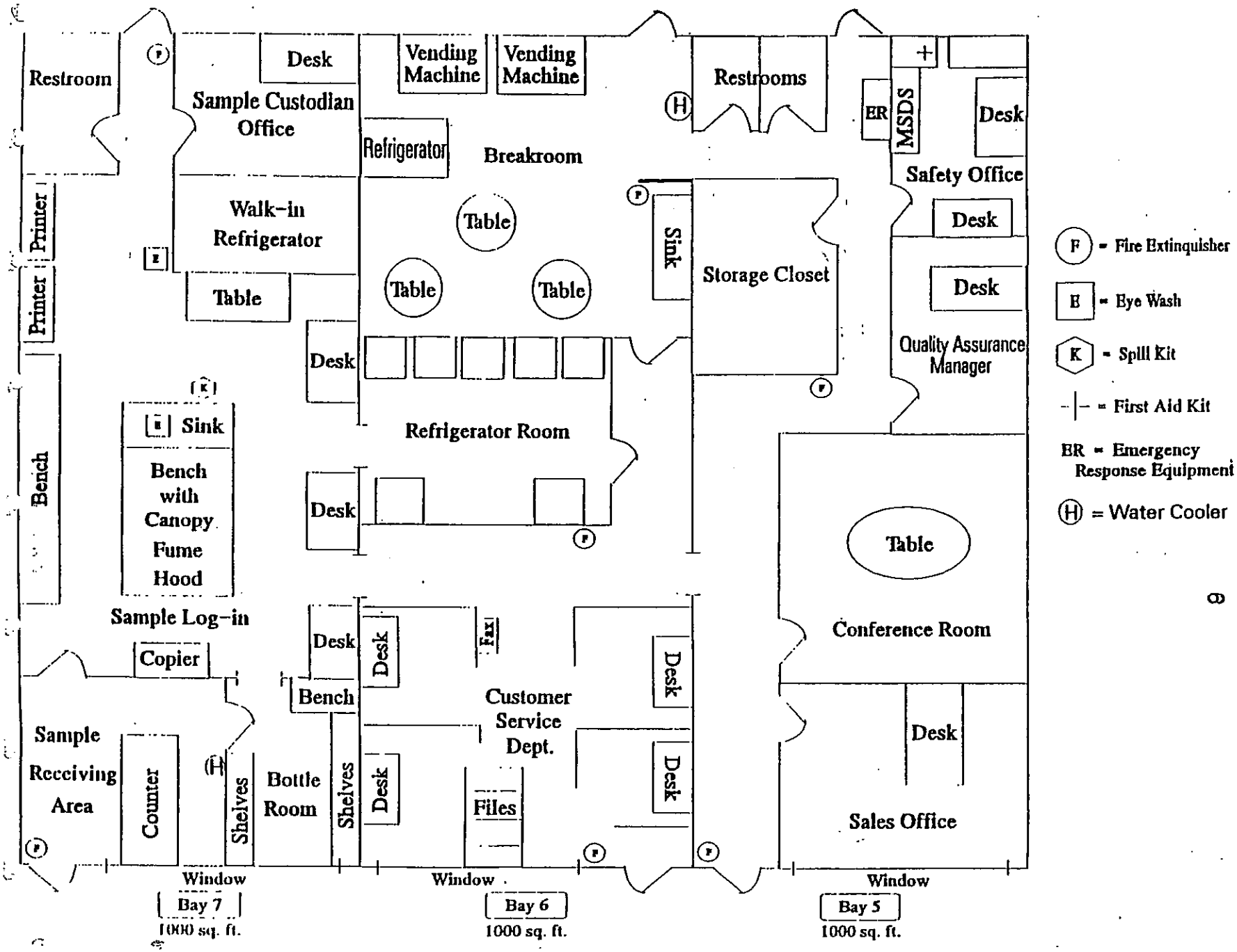
Secretarial & QA Departments

2000 sq. ft.



F = Fire Extinguisher

R = Refrigerator



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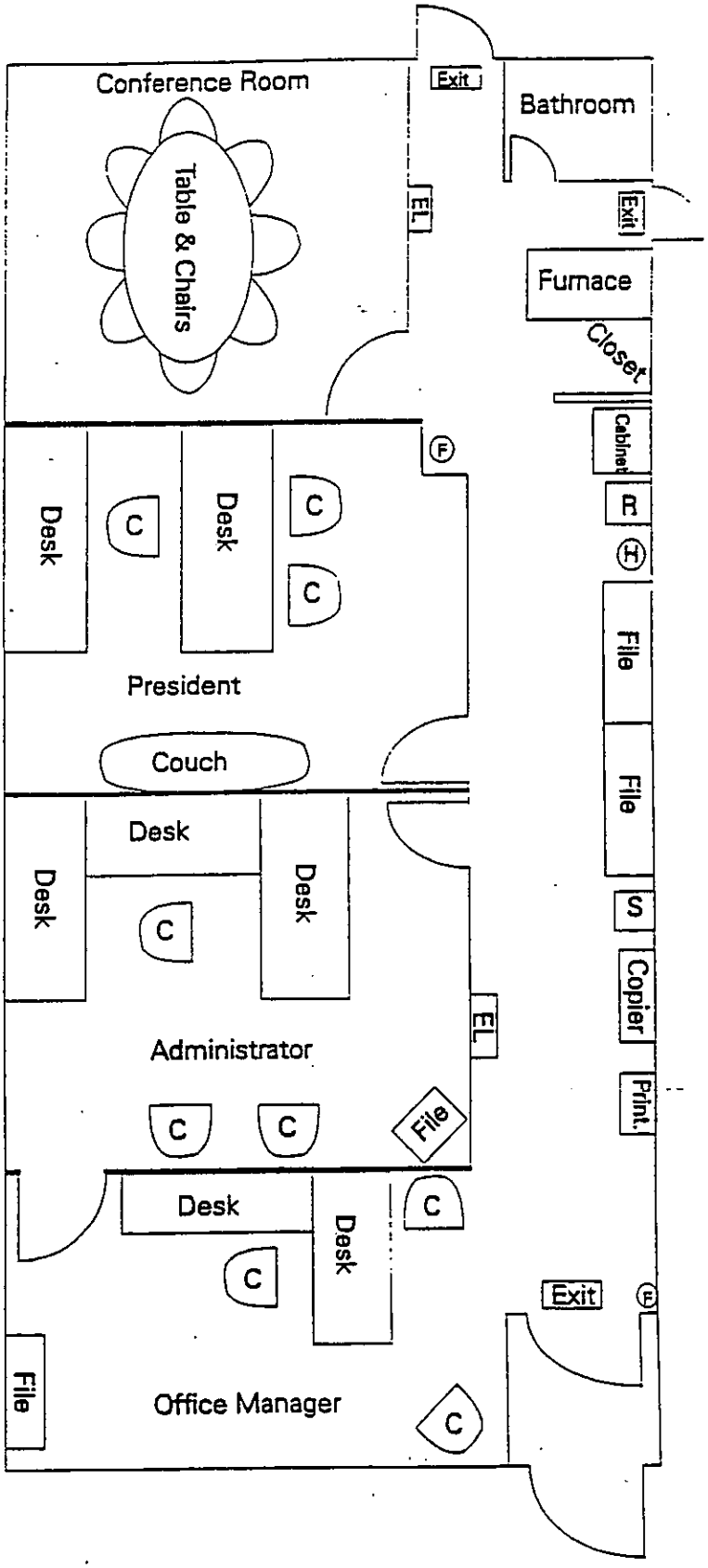
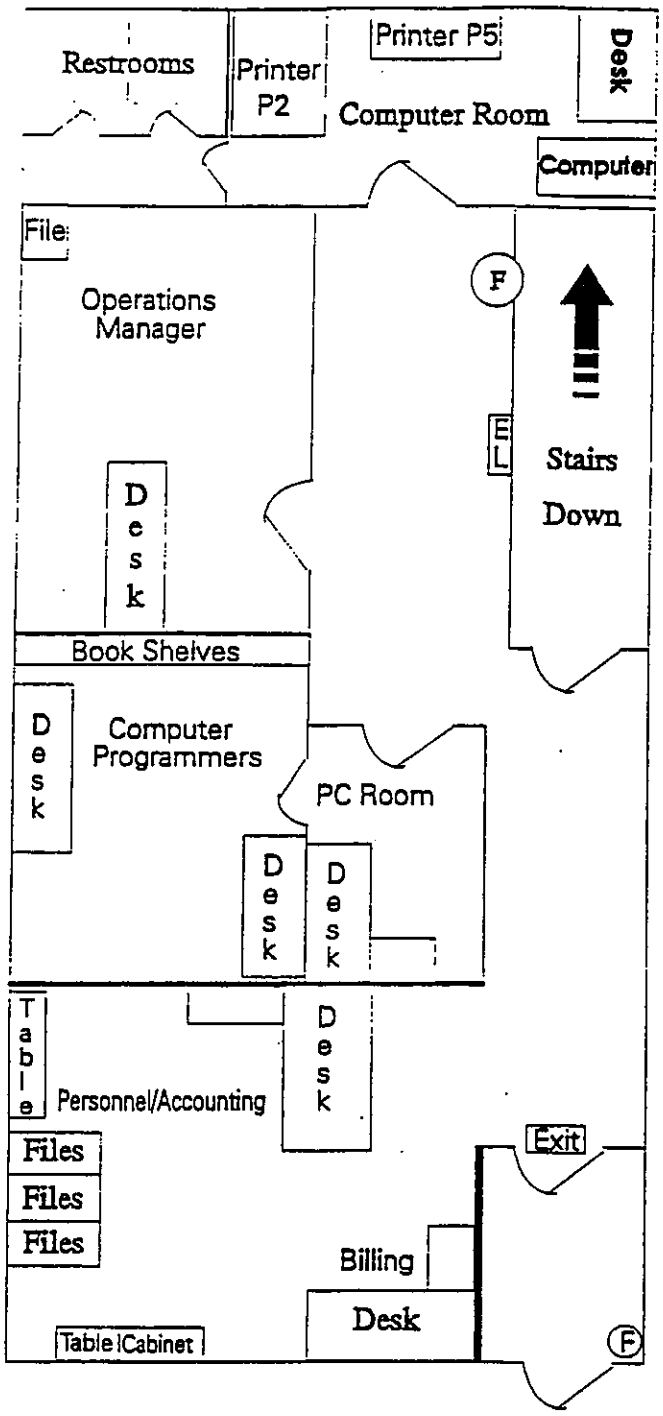


Bay 8

Executive Office Are

- (F) = Fire Extinquish
- (H) = Water Cooler
- EL = Emergency Lig
- S = Shredder
- C = Chair
- R = Refrigerator



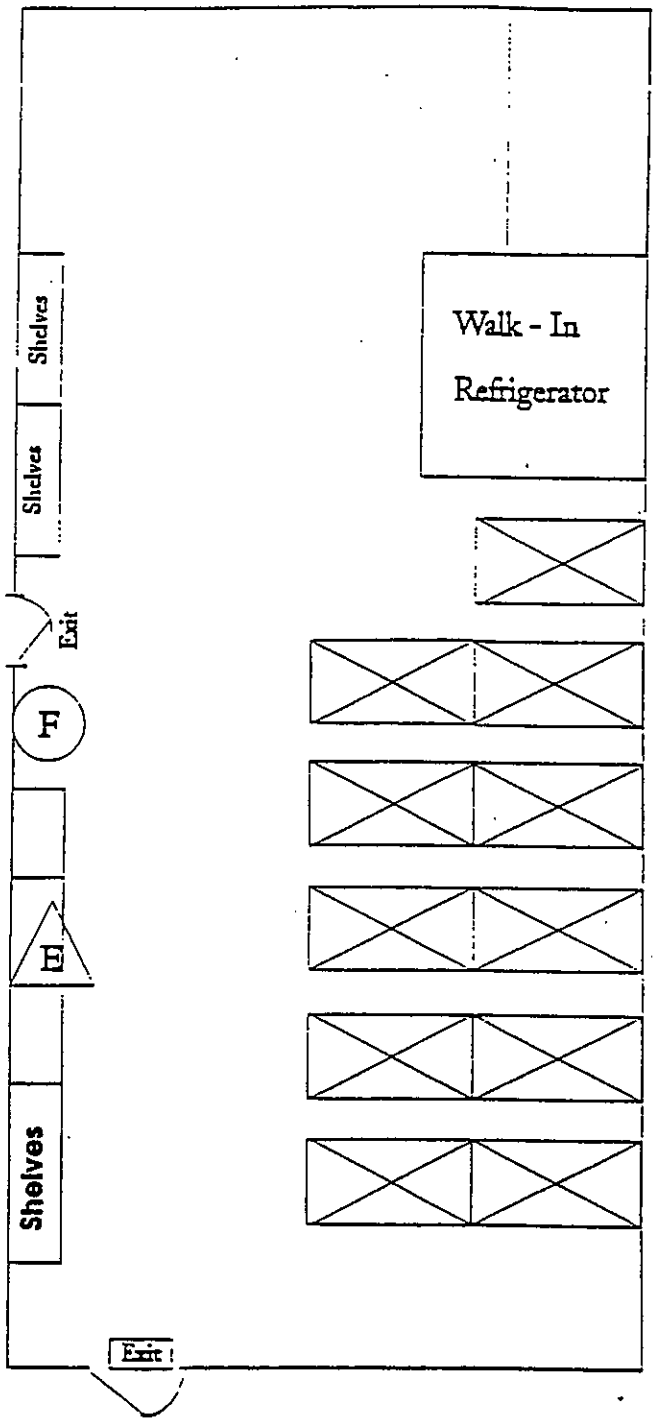
Bay 9

Accounting/Personnel Computer/Operations

1000 sq. feet

F = Fire Extinguisher

EL = Emergency Light



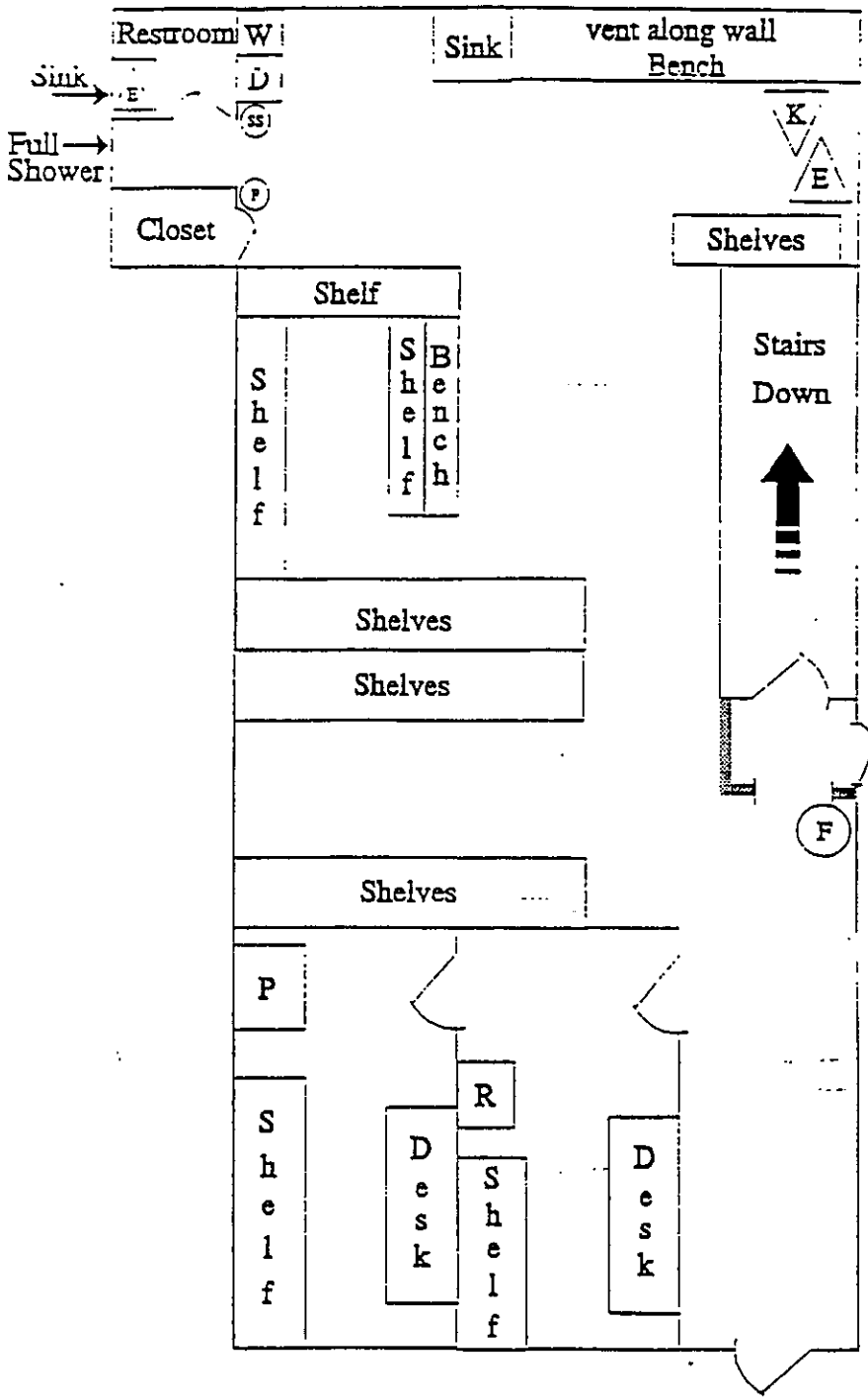
Bay 14

File Box Racks &
Storage Bay

1,000 sq. ft.

F = Fire Extinguisher

E = Emergency Light



Bay 15

Sampling Department
and
Bottle Preparation Area

1,000 sq. ft.

F = Fire Extinguisher

E = Eye Wash

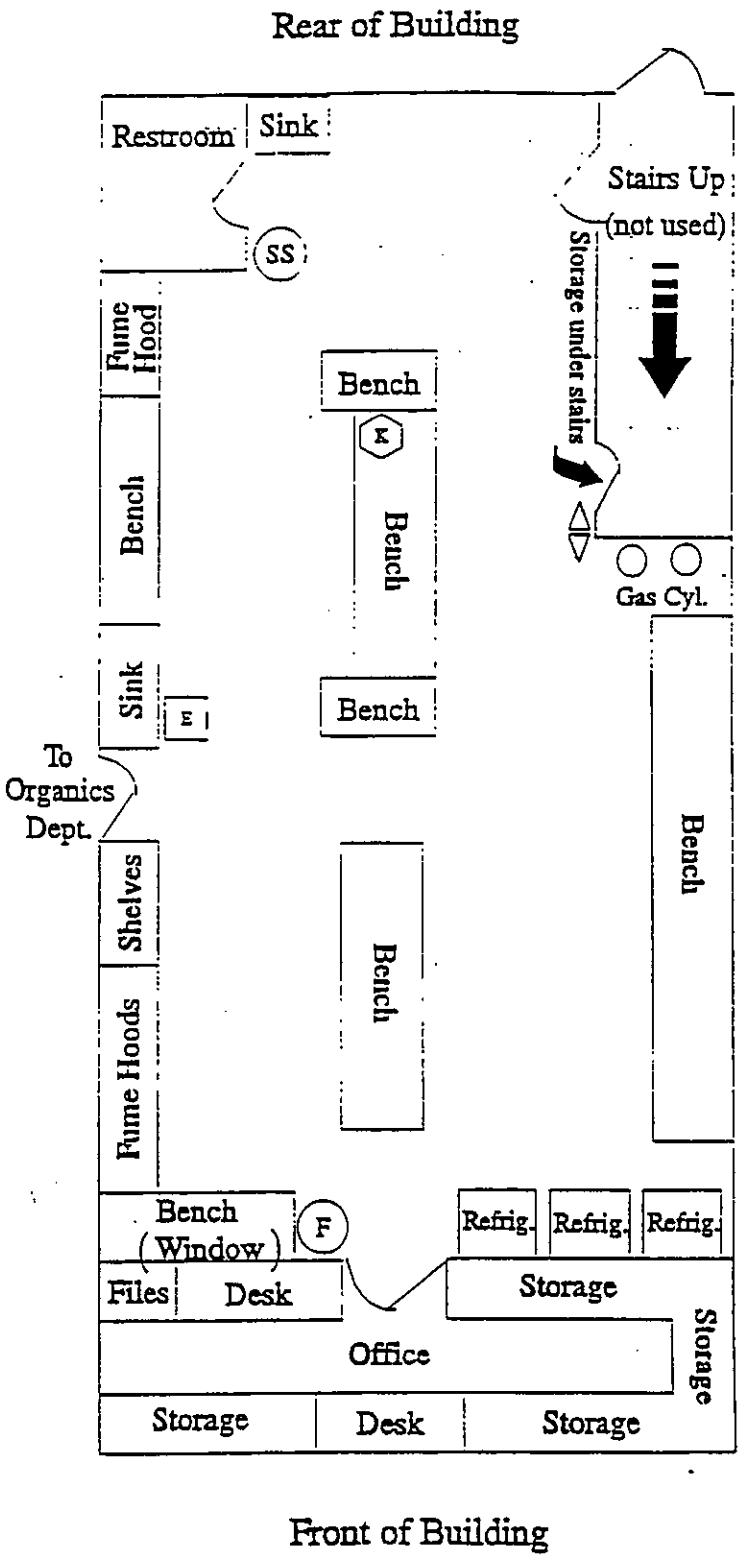
K = Spill Kit

R = Refrigerator

P = Printer

W = Washing Machine

D = Dryer



Bay A

Microbiology

1,000 sq. ft.

F = Fire Extinguisher

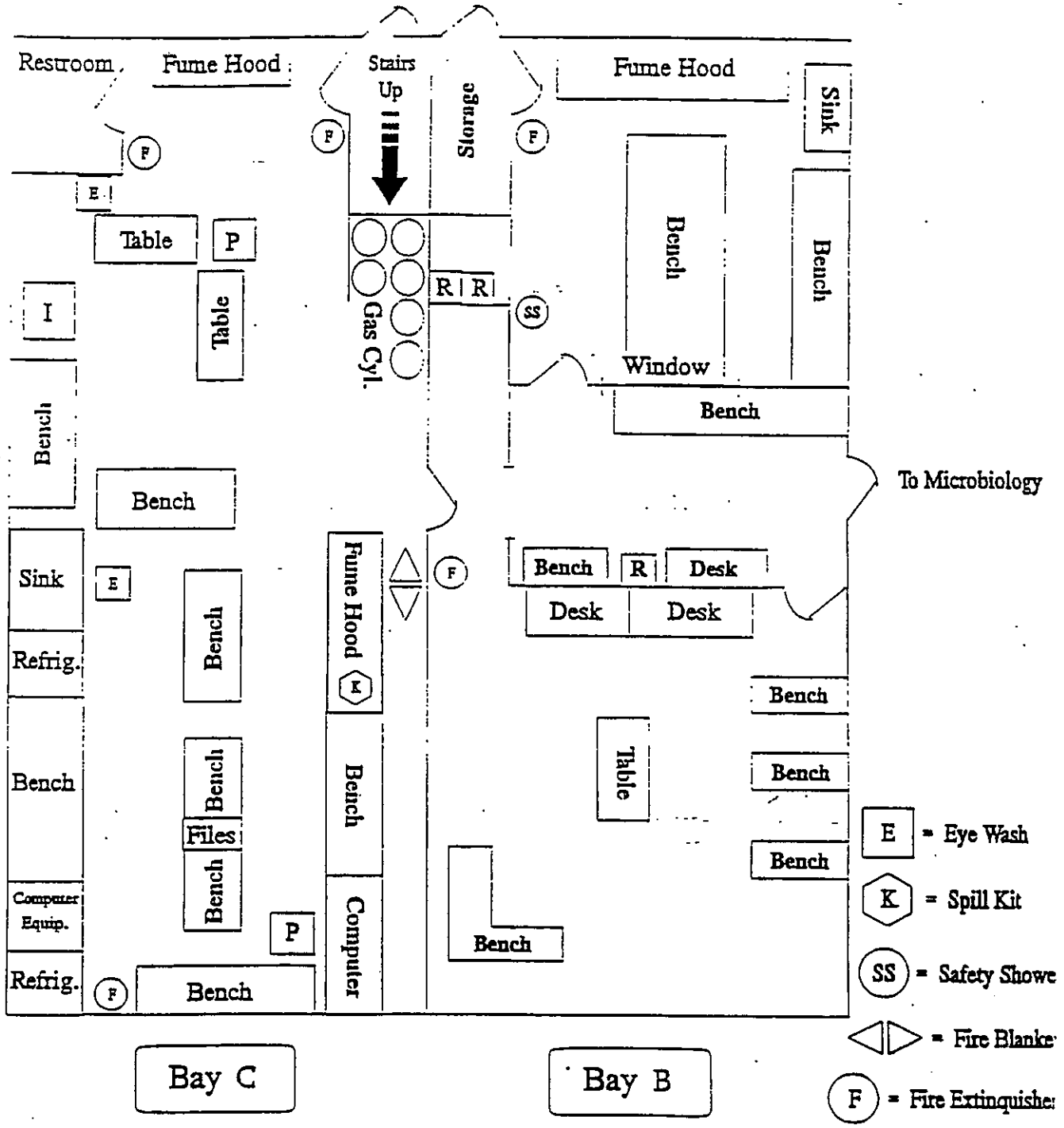
E = Eye Wash

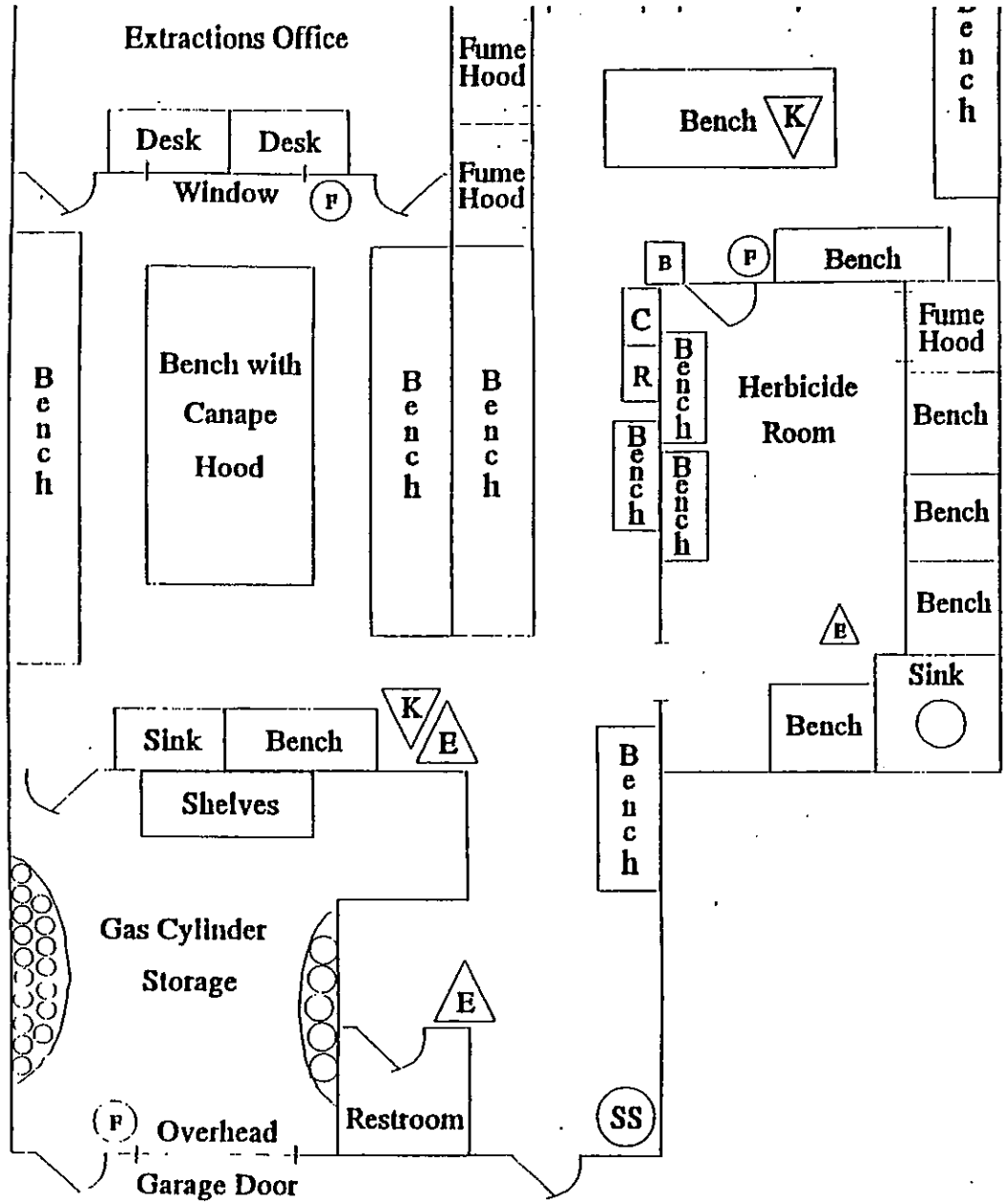
K = Spill Kit

= Fire Blanket

SS = Safety Shower

Organics Department
2000 sq. ft.





Bay E & F

Extractions Laboratory
1650 sq. ft.

E = Eye Wash

F = Fire Extinguisher

K = Spill Kit

B = Fire Blanket

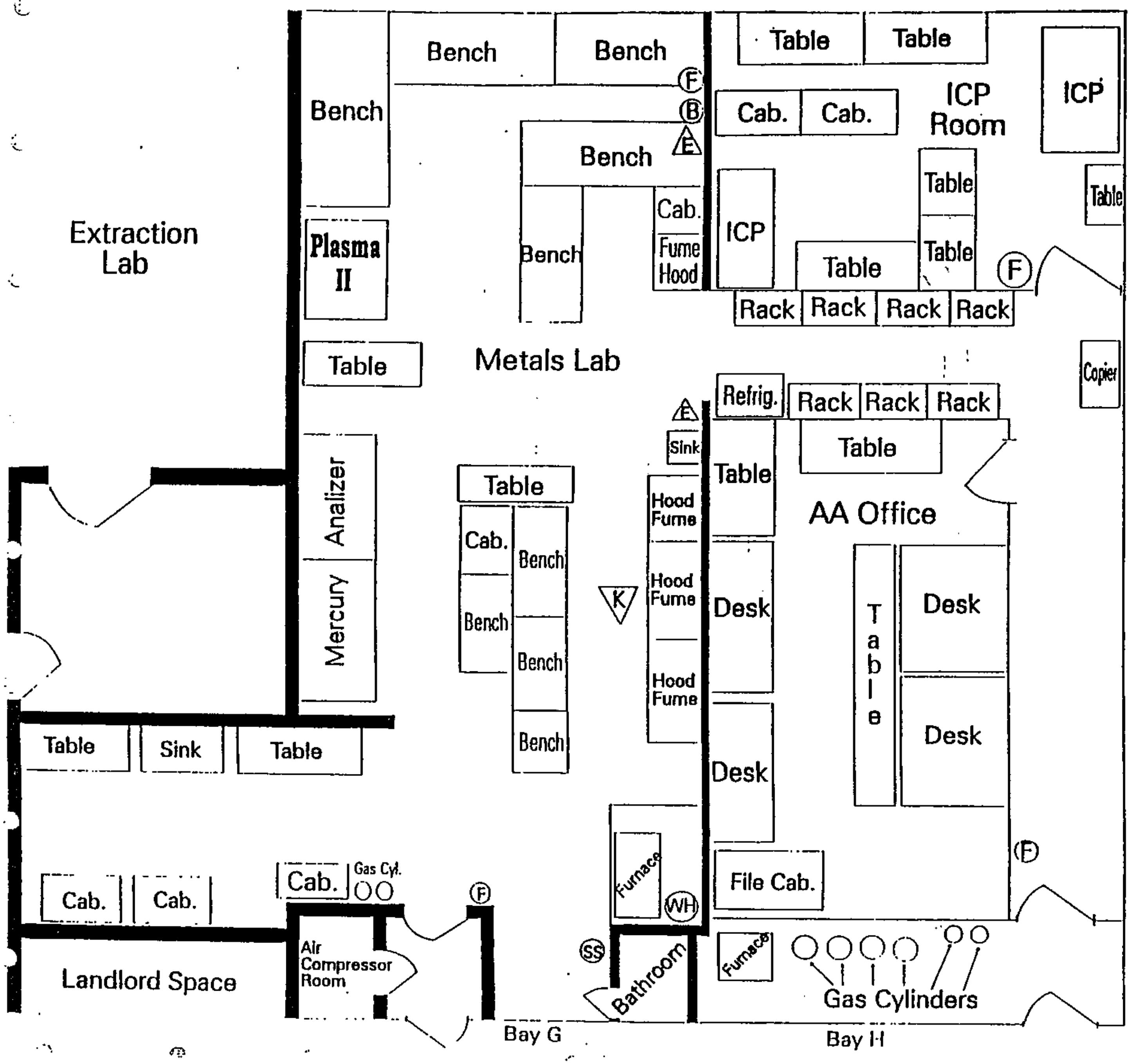
SS = Safety Shower

R = Refrigerator

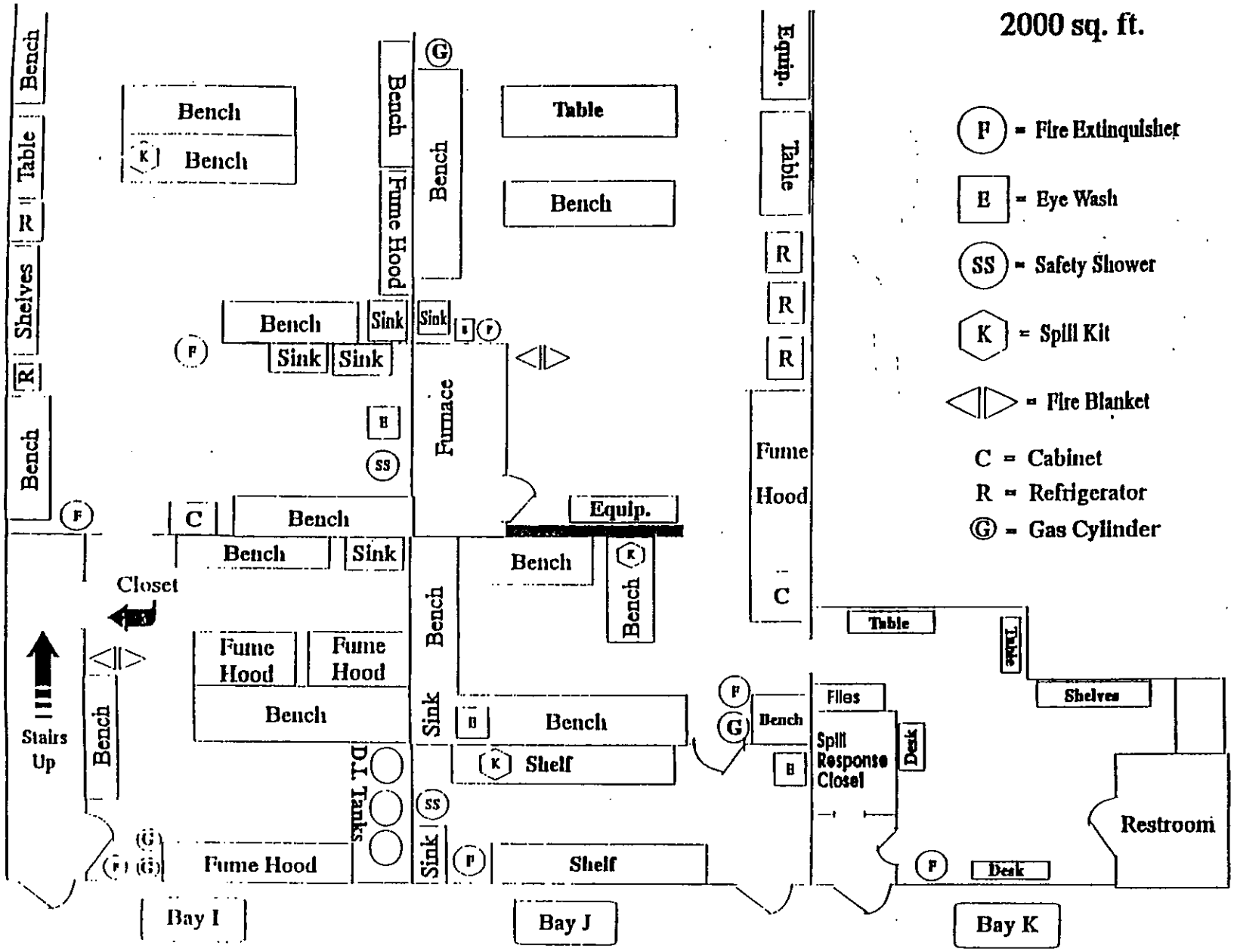
C = Cabinet

Bay G & H

Inorganics Laboratory
2050 sq. ft.



- Eye Wash (E)
- Spill Kit (K)
- Water Heater (WH)
- Fire Extinguisher (F)
- Safety Shower (SS)
- Fire Blanket (B)



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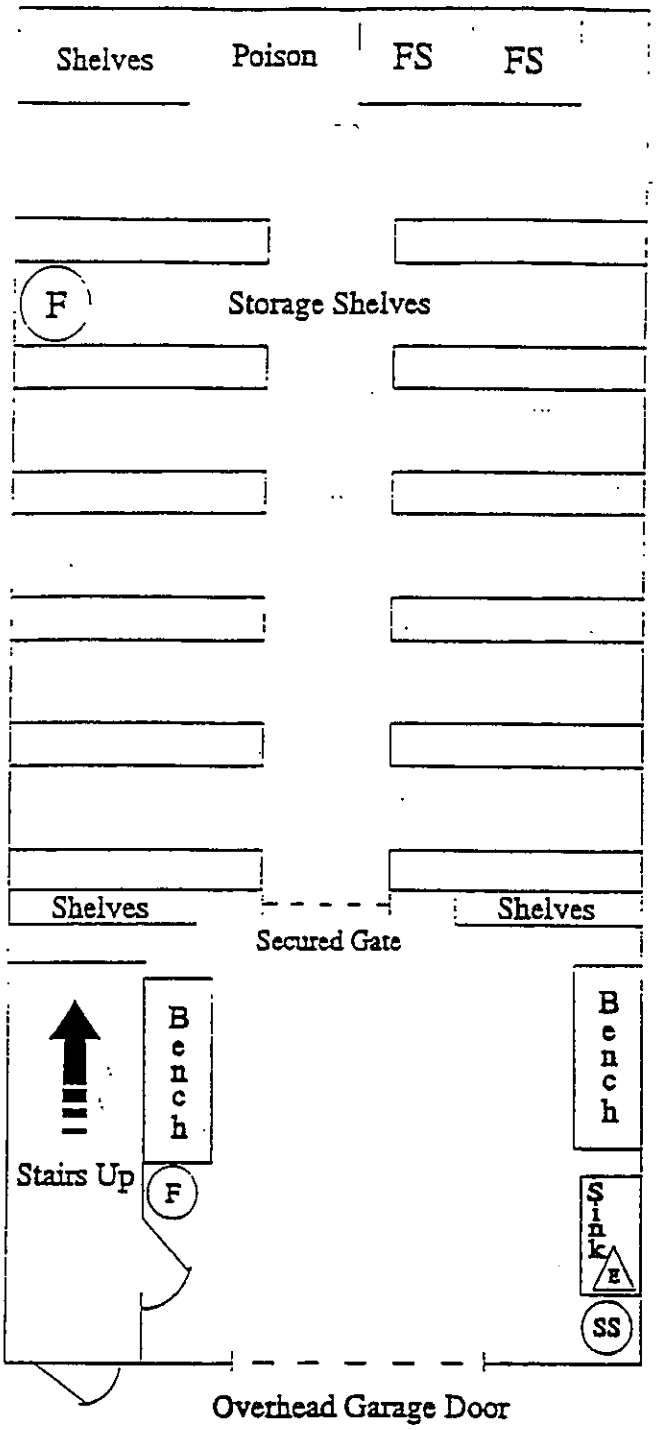


Bay O

Shipping and Receiving

1,000 sq. ft.

F = Fire Extinguisher

E = Eye Wash

K = Spill Kit

SS = Safety Shower

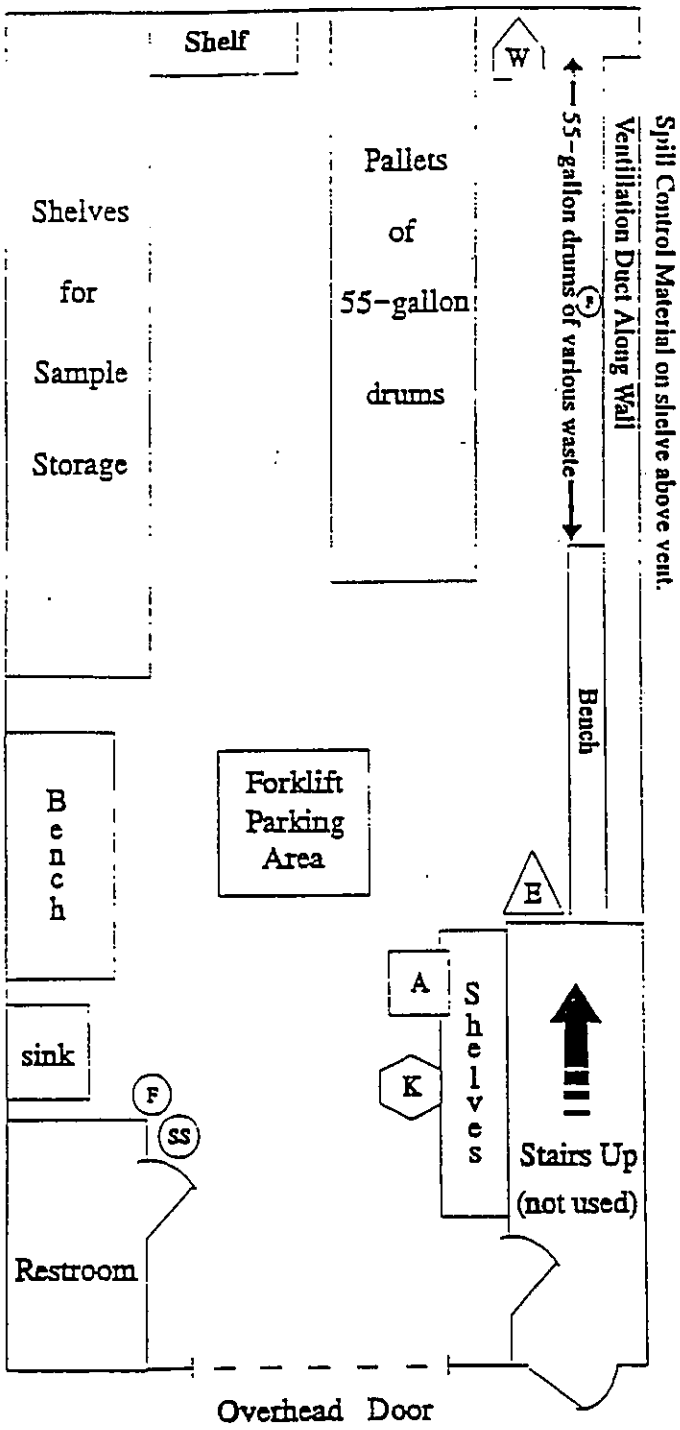
FS = Flammable Storage Cabinets

Bay P

West Bay

Waste accumulation
and
Sample Storage

1,000 sq. ft.



F = Fire Extinguisher

E = Eye Wash

K = Spill Kit

SS = Safety Shower

A = Air Line Respirator

W = Water Valve and Ho

Instrumentation

Facility Description

1. Computer Systems

Manufacturer	Number of Units
IBM System AS400 E20 with 23 megabytes RAM and 3 gigabytes storage. Supports 250 devices (terminals, printers). Presently, eleven printers are supported along with 50 workstation terminals.	1

2. Gas Chromatography/Mass Spectroscopy:

Manufacturer	Number of Units
A. Hewlett Packard GC/MS Model 5995C with an RTE-6 data system.	1
1. Auxiliary Equipment: Tekmar Auto Model 7000	1
B. Two Hewlett Packard GC/MS Model 5970B MSD with an RTE-6 data system and five 5970B's with a third HP1000 computer using RTE-A.	7
1. Auxiliary Equipment:	
Hewlett Packard Sampler Model 7673	3
Tekmar 2000/2016 automatic purge and trap configured for both packed and capillary columns.	2
Tekmar 3000/2016 Combination	2
Gateway 2000 personal computers interfaced with the RTE data systems	3

3. **Gas Chromatography:**

Manufacturer	Number of Units
A. Tracor GC Model 565 with a Hall detector and PID detector.	1
1. Auxiliary Equipment:	
Hewlett Packard Integrators Model 3392A and 3396A	2
Tekmar Purge and Trap LSC-2 and Model ALS Samplers	1
B. Tremetrics GC Model 9000 with Hall and PID detector. Capability for packed and capillary columns.	1
1. Auxiliary Equipment:	
Tekmar Purge and Trap LSC-2 and ALS sampler, Model 2000/2016	1
C. Tremetrics Model 9001 with a Hall and FID detector, having packed and capillary column capabilities.	1
1. Auxiliary Equipment:	
Hewlett Packard Automatic Sampler Model 7673 auto sampler	1
D. Hewlett Packard GC Model 5840 with a FID and EC detector.	1
1. Auxiliary Equipment:	
Hewlett Packard Integrator	1
Hewlett Packard Automatic Sampler Model 7672A	1
E. Hewlett Packard GC Model 5890 with dual EC detectors and capillary column capability	3

1. Auxiliary Equipment:

Hewlett Packard Automatic Sampler Model 7673A	1
One GC is interfaced to a RTEA 900 Computer for data reduction using the Aquarius software.	1
Two GCs are interfaced to a 386DX PC for data reduction and storage using Lab Quest Software.	1

All Tracor and Tremetric GCs are interfaced with a 386DX computer for data reduction using Lab Quest Software.

4. Atomic Absorption/Emission Spectrophotometry

Manufacturer	Number of Units
A. Perkin-Elmer Plasma II Inductively Coupled Argon Plasma Spectrophotometer, dual channel sequential instrument	1
1. Auxiliary Equipment:	
Autosampling device	1
Model 7700 computer	1
B. Perkin-Elmer Atomic Absorption Spectrophotometer Model 5100 with a Zeeman graphite furnace	3
2. Auxiliary Equipment:	
Automatic sampler Model AS60	3
Gateway 2000 Personal Computer	3
C. Perkin-Elmer Atomic Absorption Spectrophotometer Model 2380	1
D. Thermal Jarrel Ash Simultaneous Inductively Coupled Plasma Spectrometer Model 61E	1
1. Auxiliary Equipment:	
IBM PC	1

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5. Organic Sample Preparation Apparatus

Manufacturer	Number of Units
A. Heat Systems-Ultrasonics, Inc. Sonicator Model W-380 475 Watts with pulsing capability	3
B. ABC Laboratory GPC Autoprep, Model 1002B and Model 1000 from Analytical Bio-Chemistry Laboratories, Inc.	2
1. Auxiliary Equipment:	
UVD-1 UV Detector	1
SCR-1 Strip Chart Recorder	1
C. Organomation N-Evap Analytical Evaporator, Model 112	1
D. Boekel Steam Baths	3
E. Analytical Testing & Consulting Services Inc. Zero Head Space Extraction Vessel, Model C102	8
F. Labline Orbital Shakers	3
G. IEC Centrifuge	1
H. Labline Multiunit Extraction Heater	3
I. Lindberg Muffle Furnace	4

6. **Miscellaneous Instrumentation**

Manufacturer	Number of Units
A. Lachat Quik Chem Automated 4 Channel Ion Analyzer	1
B. O.I. Corporation TOC Analyzer Model 524C	1
C. Dohrmann TOX Analyzer Model DX20	1
D. Mitsubishi TOX Analyzer 10 Sigma	1
E. Perkin-Elmer Infrared Spectrophotometer Model 710B	1

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F. Perkin-Elmer Infrared Spectrophotometer Model 1600 Series FTIR 1

G. Milton Roy Spectrophotometer Model 20D 1

H. Milton Roy Spectrophotometer Model 21D 1

7. Vehicle Fleet

Our vehicle fleet allows ICM to service clients in New Jersey, New York, and Pennsylvania. In addition to sample pick-up, we offer field sampling services for ground water. All our field samplers have 40 Hour OSHA training and are fully versed in proper sampling and custody procedures.

In addition to the above listed instrumentation and apparatus, ICM Laboratories maintains a full array of standard laboratory equipment such as pH meters, analytical balances, and glassware. We also have ampul refrigeration for maintaining samples at proper temperature.

To ensure continuation of operations, ICM has strategically placed back-up power sources in case of a power outage.

Instrument Preventative Maintenance

A maintenance and repair log book is kept for each instrument. Regularly scheduled maintenance, instrument repairs, and/or any instrument problems are recorded, dated, and initialed. The following are the maintenance schedules for the major instrumentation:

1. Hewlett Packard Gas Chromatography/Mass Spectroscopy:

   Monthly:

   A. Dust around instrument and instrument surfaces to reduce airborne particles.
   B. Check all fans and clean to remove dust from filter.
   C. Remove Syringe, clean, reinstall or replace (SVs).
   D. Remove all glassware and acid wash (VOAs).

   Semi-Annually:

   A. Replace roughing pump oil.
   B. Replace aux pump oil (VOAs).
   C. Replace forline trap absorbent.
   D. Lubricate turbo pump.
   E. Methanol rinse Tekmar (VOAs).

   Annually:

   A. Renew chemical filter.
   B. Clean injection port.
   C. Clean jet separator.

   As Needed:

   A. Clean source.
   B. Change column.
   C. Change trap.

2. **Tracor/Tremetric Gas Chromatographs:**

   Monthly:

   A. Replace hydrocarbon trap.

Semi-Annually:

A. Replace resin and n-propanol (Hall).

As Needed:

A. Maintain n-propanol reservoir (Hall).
B. Clean PID lamp window or replace lamp (when sensitivity is lost).
C. Detach and thoroughly clean purging vessels and inspect Teflon ferrules (replace if necessary).
D. Replace trap and condition new trap at 180°C overnight (when trap produces poor bromoform sensitivities or a pressure drop in excess of 3 psi).
E. Replace column and condition new column overnight (when peak tailing, poor resolution, or a pressure in excess of 60 psi is required to obtain 40 ml/min carrier flow occur).

3. **Hewlett Packard Gas Chromatographs:**

Daily:

A. Change septums.

Monthly:

A. Dust around instrument and instrument surfaces to reduce airborne particles.
B. Check all fans and clean to remove dust from the filter.
C. Remove all rinse bottles, clean and/or replace.
D. Remove syringe, clean and/or replace.

Semi-Annually:

A. Renew chemical filter
B. Clean injection ports
C. Perform wipe test for radiation at detector entrance fitting, detector housing, and detector exit.

As Needed:

A. Clean inlet inserts or liners.
B. Replace glasswool at head of column and clean with methanol.
C. Replace a small portion of column packing.
D. Condition columns.
E. Replace column and condition new column overnight when peak tailing, poor resolution, column bleed, or retention time shifts occur.

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4. **Mettler Balances:**

With Each Use:

A. Check level indicator bubble.

Daily:

A. Check 2 S-weights
B. Clean pan, pan brake, and floor of chamber.

Monthly:

A. Clean housing, weighing chamber, and mirrors.
B. Check 5 S-weights.

Annually:

A. Serviced by Mettler.

5. **pH Meters:**

Daily:

A. Calibrated daily or prior to use with 3 buffer solutions, pH 4, 7, and 10.
B. At the end of each day the pH bulbs are capped with filling solution.
C. Airhole is closed to prevent evaporation and crystallization of filling solution.

Weekly:

A. Filling solution replaced.

6. **Spectrophotometers:**

Daily:

A. Clean instrument thoroughly.

Monthly:

A. Performance tested with standard (to insure photometric accuracy, linearity, and precision). This is done every month.
B. Lamps and mirrors checked and cleaned (more frequently if drifting or difficulty zeroing).

Semi-Annually:

A. Serviced by Bausch & Lomb (or more frequently if needed).

7. **Infrared Spectrophotometer:**

Daily:

A. Clean cells.
B. Polystyrene Test Spectrum checked.
C. Balance adjustment.

As Needed:

A. Oil pen carriage.

8. **TOC Analyzer:**

Daily:

A. Replace all drying tubes.
B. Clean and grease the cutter plunger.
C. Clean glass barrel.

Monthly:

A. Clean flow measuring meters.

As Needed:

A. Replace ascarite (when it turns whitish-gray).
B. Adjustment of infrared optical balance.

9. **Perkin-Elmer Plasma II ICP:**

Weekly:

A. Check water cooling system and replace filter cartridge if plugged.
B. Inspect torch, glassware and aerosol injection tube for traces of deposits or signs of melting.
C. Check pump tubing and replace as flat spots develop; check pump roller to insure that there are no binding spots which might affect precision.
D. Keep autosampler carousel clean and spill-free.
E. Clean and check nebulizer and spray chambers.

Periodically:

A. Clean plasma torch assembly.
B. Check purge window and clean if necessary.

10. **Perkin-Elmer Graphite Furnace AA Model 5100:**

Daily:

A. Wipe contact rings before each new tube.
B. Check contact rings for wear.
C. Condition new tube.
D. Clean quartz window with methanol.
E. Clean workhead surface.
F. Keep autosampler carousel clean and spill-free.

Periodically:

A. Clean graphite contact cylinder.
B. Check sampling capillary regularly and replace if damaged or deteriorating.
C. Inspect pump assembly and tighten any loosening parts.
D. Check optics and carefully remove any dust.

11. **Perkin-Elmer AA Model 2380:**

Daily:

A. Clean burner head and mixing chamber.
B. Empty drain bottle and check water trap in tubing.
C. Keep instrument and recorder clean and spill-free.

Periodically:

A. Check optics and carefully remove any dust.
B. Clean absorption cell (cold vapor).
C. Acid-clean dispersion frit (cold vapor).

12. **Thermo-Jarrell Ash ICAP 61E:**

Daily:

A. Inspect torch glassware and aerosol injection tube for traces of deposits or signs of melting.
B. Check pump tubing and replace as flat spots develop. Check all pump tubing connections for leaks or clogs.
C. Visually check spray chamber for proper nebulizer operation.

Periodically:

A. Clean and check nebulizer and spray chamber.
B. Lubricate slider rods of autosampler with a light machine oil.
C. Remove cooling fan filters on back of instrument and vacuum clean.
D. Perform white light and dark current test.

13. Instrument Service Contractors:

In addition to the preventative maintenance performed by ICM, the following contractors perform essential maintenance and repairs:

A. Milton Roy for the Spectrophotometers
B. Perkin-Elmer for the Atomic Absorption, Plasma II ICP, and Infrared Spectrophotometer
C. Thermo-Jarrell Ash for the ICAP 61E
D. Compco Analytical & Hewlett Packard for GC and GC/MS
E. IBM for the computers
F. Tekmar for the purge and trap samplers
G. Tracor for the Tracor GC
H. O.I. Corporation for the TOC Analyzer
I. Mettler for the analytical balances
J. Lachat for the autoanalyzer

14. Laboratory Reagents and Supplies:

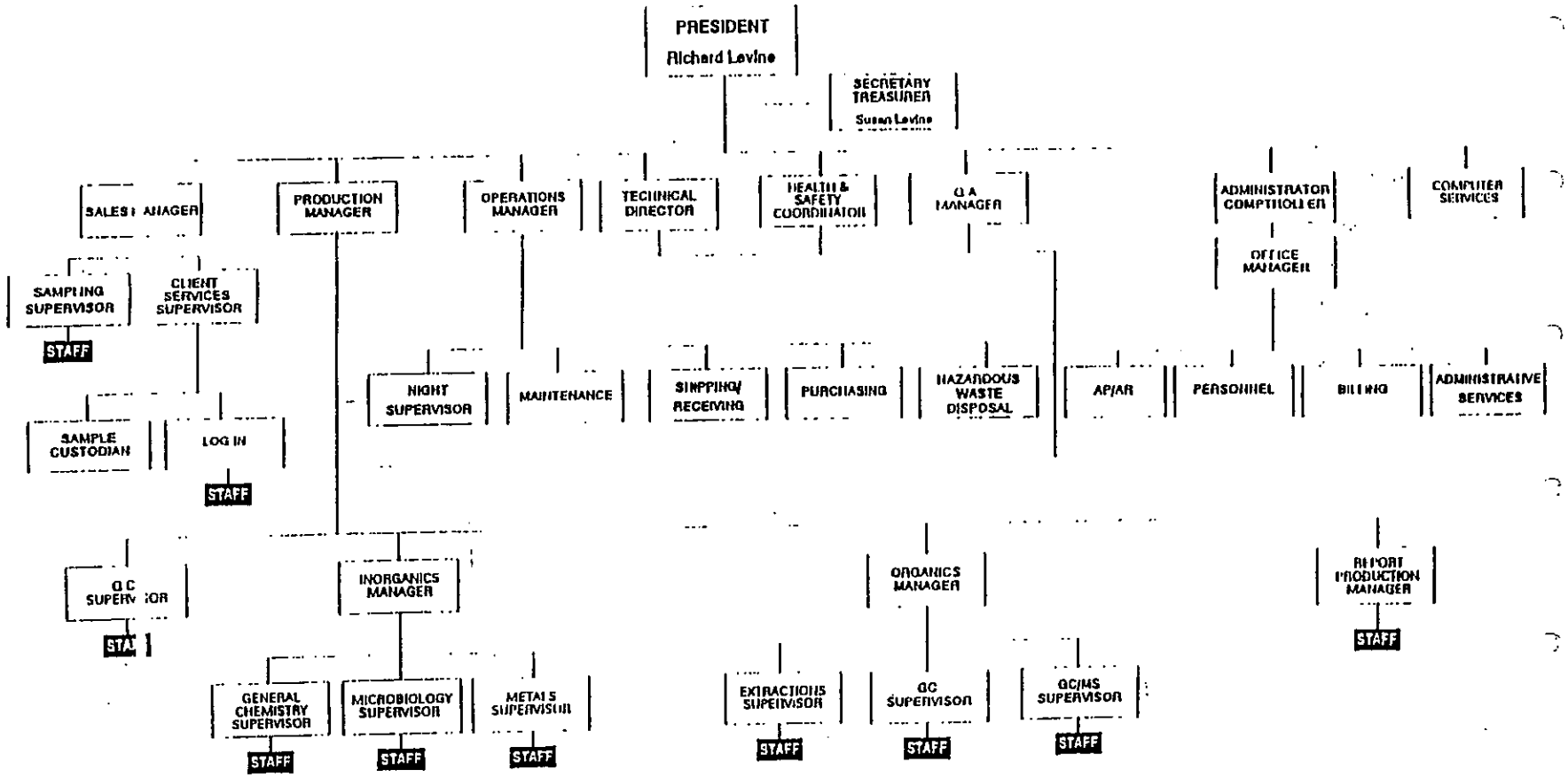
All reagents and supplies are purchased from reputable suppliers such as Fisher Scientific, VWR Scientific, and Supelco. All chemicals and glassware are of the highest possible quality for proper application. The Production Support area maintains a stockroom of appropriate supplies. All chemicals are dated upon receipt and opening. The oldest chemicals are used first and any chemical which reach their expiration date are properly discarded.

Section 3

Organizational Structure

2632 RDC-00582

ICM LABORATORIES ORGANIZATIONAL CHART



Training

ICM ensures that all new employees go through a training period. Training includes an introduction to ICM company policies and philosophy, QA/QC practices, safety, and waste disposal. In addition to general policies, each employee is trained in the tasks they are hired to perform.

A variety of individuals are involved in a new employee's training. Individuals include the Safety Coordinator, Quality Assurance Officer, and the department supervisor.

The training period varies depending upon the experience and technical position of the new employee. The typical span of time is one to six months.

When the initial training is completed regarding company policies and safety practices, the department supervisor assumes the training responsibility. During this time, the trainee is introduced to the reference tools needed to perform his duties, tools such as our Standard Operating Procedures. The supervisor works with the new analyst as he/she is performing the analysis. The trainee is encouraged to ask questions and to take notes concerning the analysis.

Gradually, the trainee becomes more experienced with the methodologies and is able to work independently from the supervisor. It is the supervisor's responsibility to determine the time in which the employee can work independently.

All ICM supervisors and managers periodically monitor their employees to ensure that the analysts are performing the methodologies in accordance with ICM Standard Operating Procedures and QA/QC policies. In addition, blind samples are sent through the laboratory to further ensure all methods are working properly.

RICHARD LEVINE

EDUCATION:

1973	University of Illinois Urbana, IL PhD Candidate
1971	University of Illinois Urbana, IL MS Physical Chemistry
1968	Carnegie Mellon University Pittsburgh, PA BS Chemistry

PROFESSIONAL EXPERIENCE:

2/74 - Present

Lab Director
ICM Laboratories - Division of Industrial Corrosion Management, Inc.

Supervising overall operation of ICM Laboratories - work flow, personnel, and finances. Performing long range planning. Since 1982, duties include Computer Systems Software Manager and Programmer. Migrated IBM System 23 to IBM 36, and now to AS400. Developed highly sophisticated environmental LIMS software utilized for data management, generation of deliverables, computerized accounting and purchasing, etc. Supervises programmers working throughout the company.

8/73 - 2/74

Senior Research Chemist
Drew Chemical
Boonton, NJ

Formulation of products, chemical analyses, and reports for water treatment.

6/71 - 8/73

Chemist
University of Illinois - Physical Plant
Urbana, IL

Responsible for all chemically related aspects of corrosion control in water treatment and performing related chemical analyses. Developed rapid analytical techniques for Lithium Bromide analysis in steam absorption refrigeration systems.

9/68 - 6/71	Lecturer, Teacher Graduate Fellow University of Illinois - Dept. of Chemistry Urbana, IL Taught course in undergraduate chemistry and graduate courses in Quantum Mechanics.
1/66 - 9/68	Assistant Research Chemist Gulf Oil Company Pittsburgh, PA Heterogeneous catalysis for petroleum products. Performing analyses using Gas Chromatograph and Gas Chromatograph/Mass Spectrometer. Also construction and maintenance of GC/MS units.

PUBLICATIONS:

Various in the fields of Corrosion Analysis and Control, Water Treatment, Chemical Systems, and Environmental Problems

AWARDS:

Who's Who - 1979 thru Present
Finalist - Inc. Magazine
Entrepreneur of The Year 1991

SUSAN LEVINE

EDUCATION:

1969	University of Pittsburgh Pittsburgh, PA B.S. Psychology

PROFESSIONAL EXPERIENCE:

1974 - Present	Secretary/Treasurer ICM Laboratories-Division of Industrial Corrosion Mangaement, Inc. Duties include comptroller, administrator, managing financial and administrative aspects of company.

ELIZABETH PRICE

EDUCATION:

1978	New Jersey Institute of Technology Newark, NJ Doctoral Candidate, Graduate courses in Environmental Engineering and Chemistry
1975	New Jersey Institute of Technology Newark, NJ M.S. Environmental Engineering
1961	Seton Hall University South Orange, NJ 20 Graduate Credits in Chemistry
1956	Duke University Durham, NC B.S. Chemistry

PROFESSIONAL EXPERIENCE:

1984 - Present	Technical Director ICM Laboratories - Division of Industrial Corrosion Management, Inc. Technical Supervision for Organic, Inorganic, and General Chemical analyses of water, wastewater, soils, hazardous waste, etc. Data review of all GC results. Review and interpretation of chromatograms for Pesticide/PCB and Volatile Organics GC analyses. Method research and development. Supervision and/or analysis of Pesticide/PCB fraction of EPA-CLP samples.
1979 - Present	Adjunct Professor New Jersey Institute of Technology Adjunct Professor for "Environmental Chemistry", "Environmental Microbiology", and "Water and Wastewater Analysis".
1978 - 1984	Director-Environmental Laboratory Civil and Environmental Eng. Dept-NJ Institute of Technology. Conducted and supervised funded research and studies and developed and maintained the laboratory's competence in current test procedures

including A.A. - Graphite furnace and GC/MS (Gas Chromatograph/Mass Spectrometer) methods.

1976 - 1984 Consultant for various water quality studies and surveys including those for Lake Hopatcong Regional Planning Board, Johns-Manville Development Corp., Lake Shawnee Club, S.B. Thomas, Inc., and Lakeland Laboratories.

1971 - 1978 Director
Lakeland Laboratories
Supervised all technical aspects of the environmental laboratory operation, including compliance with EPA and State quality assurance guidelines for laboratory certification.

1976 Adjunct Professor
Middlesex County College
Adjunct Professor in "Environmental Science".

1956 - 1961 Chemist
Pacquin-Leeming Division of Chas. Pfizer
Worked on the development of analytical methods for combinations of ingredients in pharmaceutical preparations in accordance with N.F. and U.S.P. guidelines.

PUBLICATIONS:

"Sewage Treatment Plants Combat Odor Problems" Water & Sewage Works, October 1978. This article was a winner of the Annual O & M Award.

"Trace Organics by GC/MS," chapter in Pollution Control Handbook, P. Cheremisinoff, Ed., Ann Arbor Science, 1981.

"Airless Digestion Aired" Water & Sewage Works, April 1980

Biogas Production and Utilization, Ann Arbor Science, 1981

"Methods of Biogas Generation and Comparisons" Lecture Books, International Symposium-Workshop on Renewable Sources, Mar. 18-22, 1983, Lahore, Pakistan. E. Price was invited lecturer, session, & workshop chairman.

"The Microbiology of Anaerobic Digestion" and "Biogas Generation", two chapters in Biotechnology Handbook, Cheremisinoff and Ouellette, Ed., Butterworth/Ann Arbor Sci., 1984.

ICMMC

EDUCATION:

1991	Emilcott Associates, Inc. - Certificate for completing RCRA Hazardous Waste Training Program.
1991	Emilcott Associates, Inc. - Certificate for completing Hazardous Materials Training Program
1990	St. Clares - Riverside Medical Center - Certificate for completing CPR Training
1986	Spectra - Certificate for completing Atomic Absorption Course
1984	Nassua Community College Garden City, NJ Non-matriculated, Computer Science
1982	Perkin-Elmer - Certificate for completing Atomic Spectroscopy and Plasma Emission Course
1980	Southeastern Massachusetts University North Dartmouth, MA B.S. Marine Biology

PROFESSIONAL EXPERIENCE:

11/91 - Present	Lab Production Manager ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for overseeing production process. Manages Quality Control, Inorganics, Organics and Report Production departments. Coordinates with Sales, Operations and Quality Assurance Managers to accomplish company goals of rapid turnaround times with highest quality.
7/89 - 11/91	Inorganics Manager ICM Laboratories Responsible for managing the operations of the General Chemistry, Trace Metals, and Microbiology laboratories. Supervised Trace Metals department. Coordination of workflow. Troubleshooting of instruments and other technical problems. Preparation of Inorganic CLP diskette

deliverables.

3/88 - 7/89	Laboratory Operations Manager International Technologies Corporation Supervision and management of sample receiving/ sample management, customer service, data review, health and safety, troubleshooting technical problems in the lab.
10/87 - 2/88	Quality Assurance Manager International Technologies Corporation Supervised Quality Control program, including reports to meet ECRA, CLP and NJDEP Tier requirements. Performed audits, wrote and reviewed SOPs.
1/87 - 10/87	Inorganics Laboratory Manager International Technologies Corporation Managed operation of Trace Metals and Wet Chemistry laboratories. Also responsible for upgrading of equipment, writing and implementing SOPs.
5/85 - 1/87	Trace Metals Laboratory Team Leader Environmental Testing and Certification Corporation Coordinated and supervised laboratory personnel and operations. Performed analyses utilizing ICP, flame and graphite furnace atomic absorption. Handled technical problems, methods development, instrument troubleshooting, etc.
3/84 - 5/85	Trace Metals Laboratory Supervisor NYTEST Environmental, Inc. Supervised technicians, developed methods, scheduled analyses and reviewed data. Department performed analyses by atomic absorption utilizing flame, graphite furnace and hydride generation techniques.
3/81 - 3/84	Trace Metals Analyst NYTEST Environmental, Inc. Performed environmental analyses by atomic absorption utilizing flame, graphite furnace and hydride generation techniques.

BIANCA R. BUCKWALTER

EDUCATION:

1986	Boston College, Graduate School of Management Chestnut Hill, MA M.B.A., Concentration in Marketing
1982	St. John's University Queens, NY B.S. Toxicology (Cum Laude)

PROFESSIONAL EXPERIENCE:

1989 - Present	Industrial Corrosion Management, Inc. Sales Manager Responsible for new business development, marketing and systems development of the sales department.
1986 - 1989	Intech BioLabs Territory Manager Responsible for new business development and market penetration. Maintain a high level of customer service.
1984 - 1986	Boston College Marketing Department Marketing Graduate Assistant Managed professors' marketing research projects. Delivered lecture series to students for instruction of computer-based statistics.
1985 - 1986	Small Business Institute, Boston College Business Consultant Worked with entrepreneurs for the detection of business problems. Developed and implemented solutions.
1983 - 1984	Energy Resources Analytical Environmental Chemist Responsible for Contract Laboratory Program samples and paperwork in the Mass Spectroscopy Department.
1980 - 1983	New York Testing Laboratories Analytical Environmental Chemist Conducted many different analyses including volatiles, base neutrals, acids, pesticides and PCB's

ICMQPK

EDUCATION:

1992	Rutgers University New Brunswick, NJ M.S. Environmental Science.
1984	Stockton State College Pomona, NJ B.S. Environmental Science

PROFESSIONAL EXPERIENCE:

8/89 - Present	Quality Assurance Manager ICM Laboratories - Division of Industrial Corrosion Management, Inc. Responsible for the communication of all QA/QC policies and procedures to the laboratory managers. Ensures laboratory compliance with current NJDEPE and USEPA regulations. Coordinates performance evaluation analysis and state certification.
10/88 - 8/89	Quality Control Specialist ICM Laboratories - Division of Industrial Corrosion Management, Inc. Responsible for review of data and laboratory reports for completeness and compliance to all NJDEPE and EPA regulations. Performance of contract compliance screening. Preparation of data deliverables. Oversaw all method and and quality assurance requirements pertaining to gas chromatography. Responsible for CLP Pesticide/PCB data review.
10/87 - 9/88	GC Analyst Intech Biolabs Performed gas and liquid chromatography analyses of pesticides and herbicides on environmental samples utilizing CFR 601, 602, 608 and SW846, 8080 and 8150 methodologies. Review and interpretation of chromatograms and results.
11/85 - 8/87	GC Analyst Environmental Testing and Certification Corp. Performed gas chromatography analyses of pesticides and herbicides on environmental

samples including wastewater, drinking water, and CLP analyses. Responsible for data review of the above analyses.

5/84 - 11/85 General Chemical Analytical Shift Supervisor
Environmental Testing and Certification Corp.

Responsible for the QC review of laboratory data, training new personnel, and production scheduling in the General Chemical Analytical department.

ICMMY

EDUCATION:

1965	River Dell Regional High School Oradell, NJ Diploma
	County College of Morris Randolph, NJ Accounting Courses

PROFESSIONAL EXPERIENCE:

2/93 - Present	Office Manager ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for the management of billing accounts receivable, accounts payable and Human Resource Departments
7/89 - 2/93	Secretarial Manager ICM Laboratories-Division of Industrial Corrosion Management, Inc. Managed secretarial, report production, and billing departments. Coordinated with Lab Production Manager, Quality Assurance and operations to ensure company goals of rapid turnaround times with highest quality.

ICMGTM

EDUCATION:

1991	Emilcott Associates, Inc. - Certificate for completing RCRA Hazardous Waste Training Program
1991	Emilcott Associates, Inc. - Certificate for completing Hazardous Materials Training Program
1990	St. Clares - Riverside Medical Center - Certificate for completing CPR Training
1985	Hewlett Packard - Certificate for completing the Mass Spectrometry Techniques and Interpretation Course
1983	IT Corporation - Certificate for completing the Hazardous Material Incident Response Operations Course
1983	William Paterson College Wayne, NJ B.S. Chemistry

PROFESSIONAL EXPERIENCE:

4/89 - Present

Organics Manager
ICM Laboratories - Division of Industrial Corrosion Management, Inc.

Responsible for management of Organics department and supervision of Extractions and GC departments. Supervision of GC analysts and Extractions technicians. Coordination of work flow. Troubleshooting of instruments and other technical problems. Preparation of organic CLP diskette deliverables.

4/86 - 4/89

GC - GC/MS Supervisor
ICM Laboratories - Division of Industrial Corrosion Management, Inc.

Responsible for supervision of GC & GC/MS analysts. Coordination of work flow. Troubleshooting of instruments and other technical problems. Technical data review for all GC/MS data. Preparation of Organic CLP diskette deliverables. Performed GC/MS analyses and interpretation of Mass Spectra utilizing SW846, EPA Series 500 and 600, and CLP Methodologies.

6/83 - 4/86	Organics Analyst Environmental Testing and Certification Corporation Performed and reviewed volatile and semivolatile environmental analyses by GC/MS and interpreted resulting Mass Spectra. Performed Pesticide/PCB Pesticide/PCB analyses by GC/ED. Performed volatileorganic analyses by GC/FID.
1/82 - 6/83	Organics Analyst International Technologies Corporation Performed and reviewed volatile and semivolatile environmental analyses by GC/MS and interpreted resulting Mass Spectra. Performed Pesticide/PCB analyses by GC/ED. Performed volatile organic analyses by GC/FID.
1/81 - 12/81	Physical Scientist Aid USEPA Performed and reviewed volatile, base neutral and acid fraction environmental analyses by GC/MS and interpreted resulting Mass Spectra. Performed Pesticide/PCB analyses by GC/ED. Performed volatile organic analyses by GC/FID.

ICMGMB

EDUCATION:

1991	Emilcott Associates, Inc. - Certificate for completing RCRA Hazardous Waste Training Program
1991	Emilcott Associates, Inc. - Certificate for completing Hazardous Materials Training Program
1990	St. Clares - Riverside Medical Center - Certificate for completing CPR Training
1989	County College of Morris - Certificate for completing Supervisory Skills Seminar
1986	Stonehill Colleg North Easton, MA B.S. Biology

PROFESSIONAL EXPERIENCE

1/89 - Present	GC/MS Supervisor ICM laboratories - Division of Industrial Corrosion Management, Inc. Supervision of GC/MS analysts. Coordination of work flow. Technical data review for all GC/MS data. Troubleshooting of instruments and other technical problems. Preparation of organic CLP diskette deliverables.
2/87 - 1/89	GC/MS Analyst ICM Laboratories- Division of Industrial Corrosion Management, Inc. Performed and reviewed volatile and semivolatile organic analyses by GC/MS with RTE Data System on environmental samples utilizing SW846, EPA Series 500 and 600, and CLP methodologies. Interpretation of resulting mass spectra. Preparation of standards. Routine instrument maintenance.
8/87 - 2/88	GC Analyst ICM Laboratories - Division of Industrial Corrosion Management, Inc. Performed volatile organic analysis by GC on environmental samples using 500 and 600 series methods. Interpretation of data. Preparation of

standards.

1/87 - 8/87 General Chemistry Analyst
ICM Laboratories - Division of Industrial Corrosion Management, Inc.

Performed general chemistry analyses on environmental samples following Standard Methods, SW846, and EPA procedures. Preparation of standards.

ICMGBB

EDUCATION:

1982	Cook College, Rutgers University New Brunswick, NJ B.S. Biology

PROFESSIONAL EXPERIENCE

9/90- Present	GC/MS Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs and reviews volatile and semi-volatile organic analyses by GC/MS with RTE Data System on environmental samples utilizing SW846, EPA Series 500 and 600, and CLP Methodologies. Interpretation of resulting Mass Spectra. Preparation of standards. Routine instrument maintenance.
9/87 - 9/90	Inorganics Analyst ICM Laboratories - Division of Industrial Corrosion Management, Inc. Performed and reviewed trace metal analyses by ICP, Graphite Furnace, Flame AA and Cold Vapor AA utilizing SW846, EPA and CLP Methodologies. Interpretation of resulting data. Preparation of standards. Routine instrument maintenance.
12/86 - 9/87	General Chemistry Supervisor ICM Laboratories-Division of Industrial Corrosion Management, Inc. Supervision of general chemistry analysts. Coordination of work flow. Technical data review of general chemistry data. Trouble shooting of instruments and other technical problems.
5/86 - 12/86	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.

ICMGGT

EDUCATION:

1993	ICM Laboratories-Certificate for completing GC/MS Interpretation of Electron Ionization Spectra Training Course
1993	ICM Laboratories-Certificate for completing GC/MS Operation-Volatile Training Course
1993	ICM Laboratories-Certificate for completing GC/MS Operation-Semivolatile Training Course
1982	Rutgers University New Brunswick, N.J. BA Chemistry

PROFESSIONAL EXPERIENCE:

6/93 - Present

GC-GC/MS Analyst
ICM Laboratories-Division of Industrial Corrosion Management, Inc.

Performs and reviews volatile and semivolatile organic analyses by GC/MS with RTE Data System on environmental samples utilizing SW846, EPA Series 500 and 600, and CLP methodologies. Performs and reviews analyses on environmental samples for Pesticide, PCB's and Herbicides. Interpretation of resulting mass spectra. Preparation of standards. Routine instrument maintenance.

4/90 - 4/93

GC/MS Chemist
Laboratory Resources

Performed and reviewed base neutral and acid extractable analyses. Interpretation of resulting mass spectra.

11/88 - 3/90

GC Chemist
Laboratory Resources

Performed and reviewed analyses on environmental samples for Pesticide, PCB's and Herbicides.

Interpretation of resulting mass spectra. Analyzed for volatile organics using the Trecor 585 and Tekmar purge and trap instrument.

9/87 - 10/88 Extractions Chemist
Laboratory Resources

Responsible for the preparation of waters, soils, and wastes for analysis by GC and GC/MS. Performed various wet chemistry analyses.

ICMRB

EDUCATION:

1984	State University of New York Oneonta, NY B.S. Biology

PROFESSIONAL EXPERIENCE:

06/95 - Present	Inorganic Lab Manager ICM Laboratories-Division of Industrial Corrosion Management, Inc. Supervision of General Chemistry, Metals, and Microbiology departments. Coordination of work flow. Technical data review of analyses. Troubleshooting of instruments and other technical problems.
10/89 - 06/95	General Chemistry Supervisor ICM Laboratories-Division of Industrial Corrosion Management, Inc. Supervision of General Chemistry analysts. Coordination of work flow. Technical data review for General Chemistry analyses. Troubleshooting of instruments and other technical problems. Department performs full range of General Chemistry analyses including cyanide, phenol, petroleum hydrocarbon, etc. utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. In addition to classical Wet Chemistry techniques, the department also performs TCLP extractions and utilizes TOC analyzer and autoanalyzer.
8/88 - 10/89	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.
6/86 - 6/88	Laboratory Supervisor Pompton Lakes Municipal Utilities Authority Performed the analyses necessary to keep a small water and wastewater laboratory certified by the state. Also performed analyses necessary to control wastewater treatment.

ICMMLM

EDUCATION:

1992	Emilcott Associates, Inc.-Certificate for completing Health and Safety Program
1991	Emilcott Associates, Inc.-Certificate for completing RCRA Hazardous Waste Training Program
1991	Emilcott Associates, Inc.-Certificate for completing Hazardous Materials Training Program
1990	St. Clares-Riverside Medical Center-Certificate for completing CPR Training
1989	ICM Laboratories-Certificate for completing Mercury Atomic Absorption Training Course
1989	ICM Laboratories-Certificate for completing Graphite Furnace Atomic Absorption Training Course
1989	ICM Laboratories-Certificate for completing ICP Training Course
1989	Perkin-Elmer-Certificate for completing Atomic Spectroscopy and Graphite Furnace Atomic Absorption Course
1982	Adelphi University Garden City, NY B.A. Biology

PROFESSIONAL EXPERIENCE:

11/89 - Present

AA/ICP Specialist
ICM Laboratories-Division of Industrial Corrosion Management, Inc.

Supervision of Trace Metals analysts. Coordination of work flow. Performs and reviews Trace Metals analyses by ICP, Graphite Furnace, Flame AA and Cold Vapor AA utilizing SW846, EPA and CLP Methodologies. Preparation of Inorganic CLP

diskette deliverables. Responsible for the operation and maintenance of instruments. Performs sample preparation. (Microwave digestion procedure is not employed).

1/89 - 11/91

Evening Shift Supervisor
ICM Laboratories-Division of Industrial Corrosion Management, Inc.

Responsible for general supervision of laboratory during the evening shift (4pm-midnight). Coordinated work flow, handled problems, shut down facilities at end of work day.

8/83 - 6/88

Teacher
Pope John XXIII High School
Sparta, NJ

Responsiblities included the teaching of biology, chemistry and earth sciences.

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ICMMPC

EDUCATION:

1992 - Present 1987 - 1989	East Stroudsburg University East Stroudsburg, Pennsylvania Major-Biochemistry

PROFESSIONAL EXPERIENCE:

08/95 - Present 10/94 - 12/94	Inorganic Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc.
08/92 - 04/93	Performs and reviews Trace Metal analyses by ICP, Graphite Furance, Flame AA and Cold Vapor AA utilizing SW846, EPA 200.7 and 200 series, and CLP methodologies. Interpretation of resulting data. Preparation of standards. Routine instrument maintenance. Responsible for the operation, maintenance of graphite furnace, flame and cold vapor atomic absorption instruments. Performs sample preparation. (Microwave digestion procedure is not employed).
01/95 - 07/95	General Chemistry Analyst Diversey Corp. Performed and reviewed General Chemistry analyses. Preparation of standards. Routine instrument maintenance.
01/90 - 10/91	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.

ICMMRJ

EDUCATION:

1988	Montclair State College Upper Montclair, NJ B.S. Biology, minor in Chemistry

PROFESSIONAL EXPERIENCE:

4/96 - Present	Metals analyst
8/93 - 2/96	Quality Control Specialist ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for review of data and laboratory reports for completeness and compliance to all NJDEPE and EPA regulations. Performance of contract compliance screening. Preparation of data deliverables.
10/91 - 8/93	Inorganic Leader EI Du Pont Responsible for set up of the metals laboratory, the training of personnel and the operation and maintenance of Graphite Furnace, ICP and Cold Vapor Mercury Analyzer utilizing SW846 methods. Performed quality assurance review on all results obtained by metals lab.
5/91 - 9/91	Metals Team Leader York/IEA Laboratories Responsible for supervision of metals lab. Coordinated production, trained personnel and performed data quality review. Performed anlayses on Graphite Furnace and ICP following SW846 and EPA CLP protocol.
4/89 - 5/91	Inorganic Chemist York/IEA Laboratories Performed environmental metals analyses utilizing SW846 and EPA CLP protocol. Operated Graphite Furnace and ICP instruments. Performed Mercury extraction and analysis, Hexavalent Chromium extraction and analysis, and metals digestion. Reviewed and interpreted resulting data.

ICMGK

EDUCATION:

1974	Bombay University Bombay, India B.S. in Chemistry

PROFESSIONAL EXPERIENCE:

8/95 - Present	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs and reviews General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.
6/91 - 8/95	Inorganics Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs and reviews trace metal analyses by ICP, Graphite Furance, Flame AA and Cold Vapor AA utilizing SW846, EPA 200.7 and 200 series, and CLP methodologies. Interpretation of resulting data Preparation of standards. Routine instrument maintenance
9/88 - 6/91	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.
10/87 - 4/88	Inorganics Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed Trace Metals analyses by Graphite Furnace, Flame AA and Cold Vapor AA utilizing SW846 and EPA Methodologies. Interpretation of resulting data. Preparation of standards. Routine instrument maintenance.
3/87 - 10/87	Extractions Chemist ICM Laboratories-Division of Industrial Corrosion

Management, Inc.

Performed Extractions of environmental samples for the Organic analyses of pesticides, PCB's semi-volatiles and herbicides. Extracted and analyzed for petroleum hydrocarbons on the infrared spectrophotometer.

10/86 - 3/87

Microbiology Analyst
ICM Laboratories-Division of Industrial Corrosion Management, Inc.

Performed Microbiological analyses on environmental samples, testing for total coliform, fecal coliform fecal strep, standard plate count, pseudomonas and enterococci using Standard Methods and EPA

ICMVN

EDUCATION:

1968	Bucharest Polytechnical Institute Bucharest, Romania M.S. - Geology: Concentration in Petroleum and Gas.

PROFESSIONAL EXPERIENCE:

5/89 - Present	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs and reviews General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.
1969 - 1988:	Environmental Engineer/Research Department Institute for Land Reclamation, Studies and Design Bucharest, Romania

ICMJM

EDUCATION:

1962	Eastern School For Physicians Aides Certified Medical Technologist

PROFESSIONAL EXPERIENCE:

3/90-Present	Laboratory Technician ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs microbiological and general analyses on water and waste water.
9/89-3/90	Sample Preparation Technician/ICM Laboratories Responsibilties include the preparation of soil and water samples for analysis in the Metals Laboratory.
1968-1989	Full-time domestic work including geriatric and Child care.

ICMEPB

EDUCATION:

1988	County College of Morris Randolph, NJ A.S. in Biology

PROFESSIONAL EXPERIENCE:

5/90 - Present	Extractions Supervisor ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for supervision of Extractions Chemists. Coordination of work flow. Trouble-shooting of instruments. Performs extractions and concentrations of environmental samples for the Organic analysis of herbicides, pesticides, PCB's, and semi-volitiles utilizing SW846 EPA and CLP methodologies. Extracts and analyzes for petroleum hydrocarbons on the infrared spectophotometer. Preparation of standards and reagents.

ICMQCT

EDUCATION:

1984	University of New Hampshire Durham, N.H. B.S. Animal Science

PROFESSIONAL EXPERIENCE:

11/91 - Present	Quality Control Supervisor ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for the management of Quality Control Specialists. Coordination of workflow and data validation. Performance of contract compliance screening. Preparation of data deliverables.
4/89 - 11/91	Quality Control Specialist ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for review of data and laboratory reports for completeness and compliance to all NJDEPE and EPA regulations. Performance of contract compliance screening. Preparation of data deliverables.
11/87 - 4/89	Client Services/Sample Management Technician ICM Laboratories-Division of Industrial Corrosion Management, Inc. Duties included sample receipt, log-in, preparing and proofing chains of custody. Preparing bottle orders and arranging shipment. Acted as liason between customers and laboratory by providing price quotes, status of projects, regulatory requirements etc.
1/86 - 11/87	Inorganics Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed trace metals analyses by Graphite Furnace, Flame AA, and Cold Vapor AA utilizing SW846 and EPA Methodologies. Interpretation of resulting data. Preparation of Standards. Routine instrument maintenance.

ICMQDB

EDUCATION:

Cook College - Rutgers University
New Brunswick, NJ
B.S. Environmental Science

PROFESSIONAL EXPERIENCE:

8/91 - Present

Quality Control Specialist/Special Analytical Services (SAS) Project Manager
ICM Laboratories - Division of Industrial Corrosion Management, Inc.

Quality Control Specialist
Responsible for review of data and laboratory reports for completeness and compliance to all NJDEPE and EPA regulations. Performance of contract compliance screening. Preparation of data deliverables.

Special Analytical Services Project Manager
Responsible for the review of data reports for completeness and compliance to Special Analytical Services Contract requirements. Also serve as the primary contact and coordinator for SAS work.

6/90 -8/91

Environmental Specialist
Suburban Regional Health Commission

Investigated and evaluated known or potential environmental problems associated with air and noise pollution. Interpret and apply laws and regulations relating to the environment.

ICMKN

EDUCATION:

1980	County College of Morris Randolph, NJ A.S. Biology

PROFESSIONAL EXPERIENCE:

1/90 - Present	Client Services/Sample Management Supervisor ICM Laboratories-Division of Industrial Corrosion Management, Inc. Supervision of Client Services Representatives and Sample Management Technicians. Coordination of work flow. Responsible for all aspects of sample receipt, log-in, full chain of custody documentation and distribution of samples and/or extracts. Oversees sample container preparation, preservation and shipments. Client Services department acts as liason between customers and laboratory.
3/89 - 1/90	Client Services/Sample Management Technician ICM Laboratories-Division of Industrial Corrosion Management, Inc. Duties included sample receipt, log-in, preparing and proofing chains of custody. Preparing bottle orders and arranging shipment. Acted as liason between customers and laboratory by providing price quotes, status of projects, regulatory requirements, etc.
8/88 - 3/89	Microbiology Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed Microbiological analyses on environmental samples, testing for total coliform, fecal coliform fecal strep, standard plate count, psuedomonas and enterococci using Standard Methods and EPA procedures.
3/87 - 3/88	Microbiology Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc.

Performed Microbiological analyses on environmental samples, testing for total coliform, fecal coliform fecal strep, standard plate count, psuedomonas and enterococci using Standard Methods and EPA procedures.

ICMPS

EDUCATION:

1993	East Stroudsburg University East Stroudsburg, PA B.S. Environmental Science
1989	County College of Morris Randolph, NJ Liberal Arts Major

PROFESSIONAL EXPERIENCE:

10/94 - Present	Client Services Representative/Sample Management Technician ICM Laboratories-Division of Industrial Corrosion Management, Inc. Duties included sample receipt, log-in, preparing and proofing chains of custody, and internal sample transfer. Prepared bottle orders and arranged shipment. Acted as liason between customers and laboratory by providing price quotes, status of projects, regulatory requirements, etc.

ICMSJB

EDUCATION:

1990	Completed 40 Hour OSHA Safety Training Course
1963	Morristown High School Morristown, NJ High School Graduate

PROFFESIONAL EXPERIENCE:

1989 - Present	Assistant Sampling Supervisor ICM Laboratories, Division of Industrial Corrosion Management, Inc. Responsibilities include the coordination of sample pick-up and drop-off. Supervises field sampling of monitoring wells, industrial discharges, surface waters, grab samples and potable water samples. Familiar with regulations regarding environmental sampling. Responsible for the Health and Safety training of staff.
1988 - 1989	Sampling Technician Responsible for sampling of water and wastewater samples from various sources for environmental clients.
1985 - 1988	Maintenence Department Support Services Assistant

ICMAC

EDUCATION:

1995	New York University New York, New York Courses toward M.S. degree in Computer Graphic Communication and Technology
1994	Montclair State University Upper Montclair, NJ B.S. Computer Science & Mathematics

PROFESSIONAL EXPERIENCE:

11/95 - Present	Programmer Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for installing, operation, and maintenance of software and programs generating, updating, and quality controlling analytical databases and automated deliverables. Also responsible for upkeep of terminals and printers throughout the company.
1/95 - 11/95	Administrative Directory, Group Sales Dept. NJ Nets NBA Basketball Team End-user system analyst, database programming & management.
9/93 -1/95	Computer Lab Assistant. Montclair State University Assisted with batch compilers, terminal operations and system processes. Installed new network hardware and software.

Section 4

Methodology

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Methodology

The following is a listing of the primary approved methods typically used by ICM Laboratories. Please note that an alternate approved method may substituted.

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Microbiology:		
Total Coliform - Membrane Filter	USEPA Part III Section B	---
Total Coliform - Most Probable Number (MPN)	USEPA Part III Section B	---
Fecal Coliform - Membrane Filter	USEPA Part III Section C.2	---
Fecal Coliform - Most Probable Number (MPN)	USEPA Part III Section C	---
Fecal Streptococci - Membrane Filter	SM17 Method 9230 2C and USEPA Part III Section D	---
Fecal Streptococci - Most Probable Number (MPN)	SM17 Method 9230 2B USEPA Part III Section D	---
General Chemistry:		
Acidity	EPA 305.1	---
Alkalinity	EPA 310.1	---
Ammonia (Distillation)	EPA 350.2	---
Ammonia (Automated)	EPA 350.1	---
BOD 5 Day, 20 Day, and Carbonaceous	SM17 Method 5210 EPA 405.1	---
Bromide	EPA 320.1	---

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Chloride (Automated)	EPA 325.1 EPA 325.2	---
Total Residual Chlorine	EPA 330.5	---
Chemical Oxygen Demand	EPA 410.1 EPA 410.2 EPA 410.3 Hach Method 8000 SM16 Method 508	---
Hexavalent Chromium	SM14 Method 307B	SW846 Method 3060 & 7196
Specific Conductance	EPA 120.1	SW 846 Method 9050
Color	EPA 110.2	---
Corrosivity	SW 846 Part II Characteristics 7.2	SW 846 Part II Characteristics 7.2
Corrosivity Toward Steel (For Liquid Waste Matrix)	---	SW 846 Method 1110
Total Cyanide	USEPA CLP SOW ILMO3.0 SM16 Method 412C Method 335.2 SM17 Method 4500-CN	USEPA CLP SOW ILMO3.0 SM16 Method 412C Method 335.2SM17 Method 4500-CN
Total Cyanide (Solid or Oil Matrix)	SW 846 Method 9010A	SW 846 Method 9010A
Total and Amenable Cyanide	SW 846 Method 9010A	SW 846 Method 9010A
Cyanide Amenable to Chlorination	EPA 335.1	---
Dissolved Oxygen	EPA 360.1 EPA 360.2	---

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Flashpoint/Ignitability	SW 846 Chapter 7 Section 7.1 SW 846 Method 1010 ASTM Method D93-85	SW 846 Chapter 7 Section 7.1 SW 846 Method 1010 ASTM Method D93-85
Fluoride	EPA 340.1 EPA 340.2	---
Total Hardness	EPA 130.2	---
Methylene Blue Active Substances (MBAS)	EPA 425.1 SM17 Method 5540C	---
Nitrate & Nitrite	EPA 353.2	---
Odor	SM16 Method 207	---
Oil & Grease Total Recoverable	EPA 413.1	EPA 413.1
Oil & Grease (For Sludge Matrix)	---	SW 846 Method 9071
Organic Nitrogen	EPA 351.3 EPA 350.1	---
Ortho Phosphate	EPA 365.2	---
Paint Filter Liquids Test	SW 846 Method 9095	SW 846 Method 9095
Petroleum Hydrocarbons Total Recoverable	EPA 418.1	EPA 418.1
pH	EPA 150.1	SW 846 Method 9045
Phenolics Total Recoverable	EPA 420.2 SM17 Method 5530C	EPA 420.2 SM17 Method 5530C
Phenolics	SW 846 Method 9066 and Method 9065	SW 846 Method 9066 and Method 9065
Phosphorus, Total	EPA Method 365.2	---

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Reactivity : Reactive Cyanide Reactive Sulfide	SW 846 Part II Section 7.3 SW 846 Method 9010 and Method 9030 SM17 4500-CN	SW 846 Part II Section 7.3 SW 846 Method 9010 and Method 9030 SM17 4500-CN
Percent Solids	USEPA ILMO3.0	USEPA ILMO3.0
Total Dissolved Solids	USEPA SOW Waters/Soils SM14 Method 208B EPA 160.1	---
Total Solids	EPA 160.3	---
Total Solids and Volatile Solids	---	SM17 Method 2540G
Total Suspended Solids	EPA 160.2	---
Sulfate	EPA 375.4	---
Sulfide	EPA 376.1 SM17 Method 4500-S SW 846 9030	SW 846 9030
Sulfite	SM16 Method 428A	---
Temperature	EPA 170.1 SM17 Method 2550	---
Total Kjeldahl Nitrogen	EPA 351.3 EPA 351.2 SM17 Method 4500-N	---
Total Organic Carbon (TOC)	EPA 415.1	EPA 415.1
Total Organic Halogen (TOX)	SW 846 Method 9020	SW 846 Method 9020 ASTM ST976 1988 Dohrmann TOX Manual Appendix A
Turbidity	EPA 180.1	---

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Elemental Analysis:		
All elements can also be analyzed and reported by USEPA SOW Multi-Media Multi-Concentration Latest Edition		
Aluminum	EPA 200.7	SW 846 Method 6010
Antimony	EPA 200.7	SW 846 Method 6010
Arsenic	EPA 206.2	SW 846 Method 7060
Barium	EPA 200.7	SW 846 Method 6010
Beryllium	EPA 200.7	SW 846 Method 6010
Cadmium	EPA 200.7	SW 846 Method 6010
Calcium	EPA 200.7	SW 846 Method 6010
Chromium	EPA 200.7	SW 846 Method 6010
Cobalt	EPA 200.7	SW 846 Method 6010
Copper	EPA 200.7	SW 846 Method 6010
Iron	EPA 200.7	SW 846 Method 6010
Lead	EPA 239.2	SW 846 Method 6010
Magnesium	EPA 200.7	SW 846 Method 6010
Manganese	EPA 200.7	SW 846 Method 6010
Mercury	EPA 245.1	SW 846 Method 7470

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Molybdenum	EPA 200.7	SW 846 Method 6010
Nickel	EPA 200.7	SW 846 Method 6010
Potassium	EPA 200.7	SW 846 Method 6010
Selenium	EPA 270.2	SW 846 Method 7740
Silver	EPA 200.7	SW 846 Method 6010
Sodium	EPA 200.7	SW 846 Method 6010
Tin	EPA 200.7	SW 846 Method 6010
Thallium	EPA 279.2	SW 846 Method 7841
Titanium	EPA 200.7	SW 846 Method 6010
Vanadium	EPA 200.7	SW 846 Method 6010
Zinc	EPA 200.7	SW 846 Method 6010
Organic Analysis:		
Gas Chromatographic Methods:		
Trihalomethanes	40 CFR Part 141 Method 501.1	---
Volatile Organic Compounds	Methods for the Determination of Organic Compounds in Finished Drinking Water Method 502.2	---
Purgeable Halocarbons	40 CFR Part 136 Method 601	SW 846 Method 8010

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Purgeable Aromatics	40 CFR Part 136 Method 602	SW 846 Method 8020
Non-Halogenated Volatile Organics By Direct Aqueous Injection Petroleum Hydrocarbons GCFID Gasoline and Diesel Range	SW 846 Method 8015	SW 846 Method 8015
Organochlorine Pesticides and PCBs	40 CFR Part 136 Method 608	SW 846 Method 8080
Drinking Water Determination of 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane	Methods for the Determination of Organic Compounds in Finished Drinking Water Method 504	---
Organochlorine Pesticides and PCBs in Drinking Water	Methods for the Determination of Organic Compounds in Finished Drinking Water Method 505	---
Screening for PCBs by Perchlorination	Methods for the Determination of Organic Compounds in Finished Drinking Water Method 508A	---
Chlorinated Herbicides	Methods for the Determination of Organic Compounds in Finished Drinking Water Method 515.1	SW 846 Method 8150
Pesticides/PCBs	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLMO1.0-1.8	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLMO1.0-1.8

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Gas Chromatography/Mass Spectroscopy:		
Purgeable Volatile Organics	USEPA Environmental Monitoring Systems Laboratory (4/88) Method 524.2	---
Purgeable Volatile Organics	40 CFR Part 136 Method 624	SW 846 Method 8240 and Method 8260
Volatile Organics	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLMO1.0-1.8	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLMO1.0-1.8
Extractable Semivolatile Organic Compounds	40 CFR Part 136 Method 625	SW 846 Method 8270
Extractable Semivolatile Organic Compounds	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLMO1.0-1.8	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLMO1.0-1.8
Toxic Characteristic Leaching Procedure	40 CFR Vol 55 No 126, 6/29/90 Appendix II Method 1311	SW 846 Method 1311

The above reference abbreviations represent the following:

1. USEPA = USEPA-600/8-78-017, Part III Appropriate Section

2. SM# = Standard Methods for the Examination of Water and Wastewater, The # indicates the particular Edition

3. EPA = EPA Methods for Chemical Analysis of Water and Waste, March 1983

4. SW 846 = Test Methods for Evaluating Solid Waste, SW-846, 3rd Edition, 1986

5. USEPA CLP:

   A. USEPA CLP SOW for Inorganic Analysis, Multi- Media Concentration, ILM03.0 September 1991 or

   B. USEPA CLP SOW for Organic Analysis, Multi-Media concentration, OLM01.0-1.8 or

   C. USEPA SOW for Water and Soil Characterization in Multi-Media Multi-Concentration Rev. 2.0 November 1990

6. ASTM = American Society for Testing and Materials, 1985

ORGANIC SAMPLE CONTAINER/PRESERVATION/HOLDING TIMES/VOLUME

Parameter	Sample Container	Preservation	Maximum Holding Time	Sample Volume(ml)
VOLATILE ORGANICS:				
Potable Water:				
Trihalo-methanes	G, teflon lined septum	Cool 4 deg C*	14 days	2-40
Halogenated organics	G, teflon lined septum	Cool 4 deg C* 1:1 HCl to pH<2	14 days	2-40
Aromatic Unsaturated Compounds	G, teflon lined septum	Cool 4 deg C** 1:1 HCl to pH<2	14 days	2-40
Organic Compounds	G, teflon lined septum	Cool 4 deg C* 1:1 HCl to pH<2	14 days	4-40
Wastewater:				
Purgeable Halocarbons	G, teflon lined septum	Cool 4 deg C*	14 days	2-40
Purgeable Aromatics	G, teflon lined septum	Cool 4 deg C* 1:1 HCl to pH<2	14 days	2-40
		Cool 4 deg C*	7 days	
Aqueous, Non-Aqueous, and Waste Samples:				
Volatile Organics (Aqueous)	G, teflon lined septum	Cool 4 deg C	14 days	2-40

Acrolein (Aqueous)	G, teflon lined septum	Cool 4 deg C pH adjustment to 4-5 Cool 4 deg C	14 days 3 days	2-40
Acrylonitrile (Aqueous)	G, teflon lined septum	Cool 4 deg C	14 days	2-40
Volatile organics (Soil/Sed. Sludge)	G, teflon liner	Cool 4 deg C	14 days	2-40 or 4 oz amber
Extractable organics (Aqueous)	G, amber teflon liner	Cool 4 deg C	Extraction 7 days Analysis 40 days from extraction	1000
Extractable organics (Soil/ Sed./Sludge)	G, wide mouth with teflon liner	Cool 4 deg C	Extraction 14 days Analysis 40 days from extraction	16 oz
Total Petroleum Hydrocarbons (Aqueous)	G, teflon liner	Cool 4 deg C H_2SO_4 to pH<2	7 days	1000
Total Petroleum Hydrocarbons (Soil/Sed. Sludge)	G, amber teflon liner	Cool 4 deg C	7 days (Gasoline/ Kerosine site) 28 days (Other)	4 oz
EPTOX (organics)	G, teflon liner	Cool 4 deg C	14 days	4 oz

TCLP (Volatile organics)	G, teflon liner	Cool 4 deg C	Extraction 14 days Analysis 14 days from extraction	4 oz
TCLP (Semi-volatiles, Pest., Herb.)	G, teflon liner	Cool 4 deg C	TCLP Extraction 14 days Prep.Extraction 7 days Analysis 40 days from prep. ext.	4-1000 or 16 oz
TCLP (Metals)	G, teflon liner	Cool 4 deg C	TCLP Extraction 180 days(except Mercury) 28 days (Mercury) Analysis 180 days(except Mercury) 28 days (Mercury)	2-1000 or 16 oz

P = Polethylene

G = Glass

* NA2S2O3 should be used in the presence of residual chlorine.

** Ascorbic Acid should be used in the presence of residual chlorine.

INORGANIC CONTAINER/PRESERVATION/HOLDING TIMES/VOLUME

Parameter	Sample Container	Preservation	Maximum Holding Time	Sample Volume(ml)
Acidity	P	Cool 4 deg C	14 days	200
Alkalinity	P	Cool 4 deg C	14 days	200
Ammonia	P	Cool 4 deg C H2SO4 to pH<2	28 days	500
BOD	P	Cool 4 deg C	48 hours	400
Bromide	P	None required	28 days	400
COD	P	Cool 4 deg C H2SO4 to pH<2	28 days	50
Chloride	P	None required	28 days	50
Chlorine, Total Residual	P	None required	Analyze immediately	200
Color	P	Cool 4 deg C	48 hours	100
Chromium, hexavalent	P	Cool 4 deg C	24 hours	100
Cyanide	P	Cool 4 deg C NaOH to pH>12 0.6g ascorbic acid*	14 days**	500
Fluoride	P	None required	28 days	300
pH	P	None required	Analyze immediately	50
Langlier	P	Cool 4 deg C	24 hours	500
Mercury	P	HNO3 to pH<2	28 days	100
Metals, except Chromium, hex. and Mercury	P	HNO3 to pH<2	6 months	100
Nitrate	P	Cool 4 deg C	48 hours	50

Nitrate/ Nitrite	P	Cool 4 deg C H_2SO_4 to pH<2	28 days	50
Nitrite	P	Cool 4 deg C	48 hours	50
Nitrogen, Total Kjeldahl (TKN)	P	Cool 4 deg C H_2SO_4 to pH<2	28 days	100
Nitrogen, Total Organic	P	Cool 4 deg C H_2SO_4 to pH<2	28 days	600
Oil & Grease	G	Cool 4 deg C H_2SO_4 to pH<2	28 days	1000
Organic Carbon, Total (TOC)	P	Cool 4 deg C H_2SO_4 to pH<2	28 days	50
Organic Halides, Total (TOX)	P	Cool 4 deg C H_2SO_4 to pH<2	7 days	250
Orthophosphate	P	Filter immediately Cool 4 deg C	48 hours	100
Oxygen, dissolved	G(BOD bottle)	None required	Analyze immediately	300
Phenols	G	Cool 4 deg C H_2SO_4 to pH<2	28 days	500
Phosphorus, Total	P	Cool 4 deg C H_2SO_4 to pH<2	28 days	100
Reactivity to Cyanide	P	Cool 4 deg C	14 days	50
Reactivity to Sulfide	P	Cool 4 deg C	7 days	50
Solids, Total	P	Cool 4 deg C	7 days	100
Solids, Total Suspended	P	Cool 4 deg C	7 days	250
Solids, Total Dissolved	P	Cool 4 deg C	7 days	250
Solids, Total Volatile	P	Cool 4 deg C	7 days	100

Solids, settleable	P	Cool 4 deg C	48 hours	250
Specific conductance	P	Cool 4 deg C	28 days	100
Sulfate	P	Cool 4 deg C	28 days	50
Sulfide	P	Cool 4 deg C add zinc acetate + NaOH to pH>9	7 days	1000
Sulfite	P	None required	Analyze immediately	100
Surfactants	P	Cool 4 deg C	48 hours	100
Turbidity	P	Cool 4 deg C	48 hours	50

G = Glass

P = Polyethylene

*should only be used in the presence of residual chlorine.

** Maximum holding time is 24 hours when sulfide is present. Optionally all samples may be tested with lead acetate paper before pH adjustments in order to determine if sulfide is present. If sulfide is present, it can be removed by the addition of cadmium nitrate powder until a negative spot test is obtained. The sample is filtered and then NaOH is added to pH 12.

Microbiological Analyses

Coliform, Total	Sterile P	Cool 4 deg C NA2S2O3 if Res. Chlorine	30 hours- Drinking Water 6 hours- all other sources	100
Coliform, Fecal	Sterile P	Cool 4 deg C NA2S2O3 if Res. Chlorine	6 hours	100
Fecal Streptococci	Sterile P	Cool 4 deg C NA2S2O3 if Res. Chlorine	6 hours	100
Standard Plate Count	Sterile P	Cool 4 deg C NA2S2O3 if Res. chlorine	6 hours	100
Pseudomonas Aeruginosa	Sterile P	Cool 4 deg C NA2S2O3 if Res. chlorine	6 hours	100

* "Microbiological Methods for Monitoring the Environment, Water and Waste, 1978", EPA-600/8-78-017, U.S. Environmental Protection Agency.

** Membrane filter technique and/or Most Probable Number method.

Section 5

Quality Assurance

2632 RDC-00637

Quality Assurance Policy and Objectives:

It is the policy of ICM's Management that Quality Assurance is an integral part of all employees' job responsibilities. All employees are expected to follow exactly the quality assurance and quality control procedures set up for their particular position. No changes to these procedures can be made unless they have been authorized by the QA Manager, the company President, and the laboratory Technical Director.

The objective of ICM's Quality Assurance Program is to produce accurate, reproducible, and supportable data to be used for regulatory as well as informational purposes. The various aspects of the program (as outlined in this section) have been implemented to ensure that the data produced is of the highest possible quality.

Quality Assurance Management:

QA Department Organization:

The quality assurance program is directly administered by a Quality Assurance Officer/Manager with assistance from 5 Quality Control Coordinators. They are responsible for data review and to ensure proper QA/QC implementation.

QA/QC Responsibilities and Reporting Relationships:

The QA Officer reports directly to the company president. She is responsible for communication of all QA policies and procedures to the laboratory department managers. The department managers in turn are directly responsible for the Quality Assurance/Quality Control in their respective departments.

QA Document Control Procedures:

All applicable QA/QC documentation is tracked by the Document Control Officer. For a full explanation of these procedures, refer to the section titled Document Control Procedures.

Quality Assurance Program Assessment:

The effectiveness of ICM's Quality Assurance program is evaluated in a variety of ways. ICM's system of internal and external audits provides direct feedback on the program. External audits performed by NJDEPE, EPA, PADER, NYSDOH or individual clients evaluate all aspects of the analytical process from sample log-in and storage, through analysis and method QC, to final data review and report production. Internal audits are periodically conducted by the QA department and the Technical Director. These audits are used to detect and correct any specific problems.

Another system which provides feedback on the QA/QC program is the analysis of blind Performance Evaluation Quality Control Samples. ICM participates in External Performance Evaluation Studies for NJDEPE Drinking Water, Wastewater, and A280s; EPA DMRs and NYSDOH Potable, Non Potable and Solid/Hazardous Categories. On a more frequent basis the QA department administers a program of internal blind QA sample analysis. The results of the analysis of these blind samples helps to evaluate the QA program, the method QC, instrumentation, and the technique of individual analysts.

Finally the QA program is evaluated by the data review process (See Technical and Managerial Review: Data Validation and Data Package Preparation Section). Every data package is thoroughly reviewed prior to submission to the client. The final overall Data package review can detect QA problems from any prior point in the analytical process.

Feedback on QA problems is accomplished using a system of speed memos. As a QA problem is detected the appropriate department manager (and if necessary the technical director) is contacted and a course of corrective action is agreed upon. A speed memo detailing the problem and the proposed corrective action is issued to all affected individuals. The department manager is responsible for implementation of the corrective action and for providing feedback to the QA Manager.

These processes are used to determine if modification of the QA program or structure is needed. Proposed changes are discussed among the company President, the Technical Director, and QA Manager before implementation.

Performance Evaluation Quality Control Samples

Internal:

The Quality Assurance Manager is responsible for administering an In-House blind check sample program. Quality control samples are obtained from the EPA and from a private supplier. Results of these samples are filed with the Quality Assurance Manager. The knowns are then introduced into the system as a typical sample and analyzed as such. The final results are reported to the Quality Assurance Manager and evaluated. This process allows for close monitoring of the accuracy of laboratory analyses on blind samples. If a problem is discovered, the Quality Assurance Manager brings it to the attention of the Company President and Department Manager. With the assistance of the Technical Director, the cause of the problem is determined and appropriate corrective action is taken. Another blind sample is sent through the laboratory to confirm the problem has been resolved.

External:

ICM also participates in the following Performance Evaluation Studies: NJDEPE Drinking Water, NJDEPE Wastewater, NJDEPE A280, EPA DMRs, NYSDOH Potable Water, NYSDOH Non Potable Water and NYSDOH Solid/Hazardous Waste.

Laboratory Audits

Internal:

Periodically the Quality Assurance Manager, along with the Technical Director, conducts internal audits to evaluate the performance of the various departments. The audit involves a thorough laboratory inspection to evaluate the following areas:

- Adherence to all laboratory procedures as specified in applicable New Jersey, Pennsylvania and New York regulations, EPA Contract Laboratory Program protocol, NJDEPE Professional Laboratory Analytical Services requirements and NYSDEC Analytical Services Protocol.
- Verification of methodology
- Adherence to all method QC requirements
- Frequency of dups, spikes, blanks, and QC sample analyses
- Maintenance of documentation in adherence with good laboratory practices
- Verification that laboratory equipment, supplies, and reagents are properly maintained

The findings of the audit are documented and a copy given to the Company President and the Department Manager. Any problems and their prospective resolutions are discussed among the QA Manager, Technical Director, and Department Manager. After an agreed upon time period, it is the responsibility of the QA Manager to ensure that the required corrective action has been implemented. All audit documentation are kept on files by the QA Officer.

External:

Laboratory audits are also conducted by the NJDEPE for both drinking and wastewater certification requirements, Pennsylvania DER for their lab certification program, EPA for discharge permit holders and NYSDOH for Potable, Non Potable and Solid/Hazardous Waste certification.

Quality Control Checks

In order to determine accuracy and precision of laboratory analyses, a system of blank, duplicate, spike, and quality control testing has been established. For every 20 samples or batch of samples (whichever is fewer), one blank, duplicate sample, spiked sample, and external QC sample is analyzed.

The blank must meet QC criteria - no analyte can be detected above the minimum detection limit (except for certain organic analysis which have specific blank requirements). The relative percent difference between duplicates and spike sample recoveries are calculated as follows:

$$RPD = \frac{|\text{Value A} - \text{Value B}|}{\text{Avg. of Value A \& B}} \times 100$$

$$\% \text{ Recovery} = \frac{\text{Spiked sample result} - \text{sample result}}{\text{Amount spike added}} \times 100$$

Monitoring QC Limits

QC data is monitored via Shewhart Quality Control Charts and utilized to identify data trends which may indicate analytical problems.

- Precision:
  The relative percent difference between duplicates (R) and the Shewhart factors are utilized to calculate control limits as follows:
  UCLR (Upper Control Limit) = 3.27 R
  UWLR (Upper Warning Limit*)= 2.51 R
  *UWL corresponds to 95% confidence level.

- Accuracy:
  The average of the recoveries (P) for spikes samples are calculated as well as the standard deviation (Sp). Control limits are then defined as follows:
  UCL (Upper Control Limit) = P + 3Sp
  LCL (Lower Control Limit) = P - 3Sp
  Notes: 1. Although this approach is resistant to variability in true concentrations, somewhat higher Sp values are observed when low level spikes are employed, such as the 5 ug/l spikes recommended by the NJDEP for GC methods for volatile organics in potable water.
  2. Control limits are calculated as P +/- 2 Sp for certain organic parameters when so directed in Federal Register methods.

QA Corrective Action, Reporting Procedures, & Responsibility Designation

It is the responsibility of the Quality Assurance Manager to facilitate communication of all quality assurance related issues. She reports directly to the company president and updates him on the status of laboratory QA practices as well as relating any QA problems which may exist. The QA Manager provides feedback to department managers on the status of general lab practices. This includes notifying the department managers of the results of external and internal PE analyses, external and internal audits, and comments or problems found through the data review process.

The QA Manager discusses any QA problems found with the appropriate department manager (and if necessary, the technical director) and a course of corrective action is determined. A speed memo is issued to all affected individuals detailing the problem and the proposed corrective action. A copy of the speed memo is retained by the QA manager. The department manager provides feedback to the QA manager on the effectiveness of the corrective action.

The control limits are drawn on the Shewhart graph and the RPDs, the spike recoveries, or the QC recoveries are plotted. In applying the control chart, any points beyond the control limits indicate an out-of-control situation. When an out-of-control situation occurs, analyses must be stopped until the problem has been identified and resolved. These charts are also utilized to identify trends which can be checked and resolved before the system goes out of control.

In addition to the Shewhart limits the laboratory uses contract established limits for CLP organics.

SPECIFIC QA/QC REQUIREMENTS

The analyst is responsible for ensuring all work performed meets the QA/QC requirements specified in the NJDEPE contract, NYSDEC Protocol and the applicable method. The QA/QC requirements include, but are not limited to the following. For a more detailed description see the individual methods.

NJDEPE Task II, III: NYSDEC ASP Category A and B and commercial work:

GC/MS(624, 625)

-The GC/MS system is tuned once every 12 hours. The tune must meet criteria before blanks, standards and samples can be run. Any sample injected after the 12 hour period must be reanalyzed.
-For GC/MS analyses the system is calibrated using an internal standard technique and a 12 hour sequence. The instrument is initially calibrated at 5 concentration levels. The calibration is evaluated using a system of calibration check compounds (CCCs) and system performance check compounds (SPCCs). The percent relative standard deviation for the CCCs must be less than 30% for the initial 5 point calibration to be valid. The SPCCs must have a response factor of at least 0.300 (0.250 for Bromoform) for Volatiles and 0.050 for Semivolatiles for the initial calibration.
-A continuing calibration is performed every 12 hours, immediately after the tune. The percent difference of the CCCs must be less than 25% for the continuing calibration. If any of the CCCs exceed this limit then a new initial calibration must be performed. The SPCCs must have a response factor of at least 0.300 (0.250 for Bromoform) for volatiles and 0.050 for Semivolatiles on the continuing calibration.
-Surrogates are added to each blank, sample, spike and standard. Surrogate recoveries must fall within the specified control limits. If surrogates fall outside the control limits they are reanalyzed. If any one blank surrogate is outside the control limits, the laboratory will take corrective action and reanalyze all associated samples.
-Spike and spike duplicates are run with every batch or every group of 20 samples.
-For TCLP analysis, a MS/MSD is analyzed at a frequency of one sample in twenty. Spiking solution contains all TCLP volatile and/or semivolatile analytes. The spiking solution is added to the TCLP extract at method specified levels.
-For Task II- no analytes can be detected above the MDL for the blank. If the blank exceeds this criteria the system and all associated samples are considered "out of control", and will be reanalyzed.
For Task III-no analytes can be detected above the MDL for the blank(except for certain organic analytes which have specific blank requirements).
-Detection limits should achieve the contract or method specific MDL's.

GC/MS(524.2, 525.1)

-The GC/MS system is tuned once every 8 hours. The tune must meet criteria before blanks, standards and samples can be run. Any sample injected after the 8 hour period must be reanalyzed.
-For GC/MS analyses the system is calibrated using an internal standard technique and an 8 hour sequence. The instrument is initially calibrated at 5 concentration levels. For Method 524.2 each analyte and surrogate the RSD must be less than 20% for the initial 5 point calibration to be valid. For Method 525.1 each analyte and surrogate, the RSD must be less than 30% of the initial 5 point calibration to be valid. As an alternative to the RSD meeting the 20%/30% criteria, ICM can generate a second or third order regression calibration curve for quantitation purposes.
-A continuing calibration is performed every 8 hours, immediately after the tune. For Method 524.2 and 525.1, the RF for each analyte and surrogate must be within 30% of the mean value measured in the initial calibration. Alternatively, if a second or third order regression is used, the point from the continuing calibration check for each analyte and surrogate must fall, within the analyst's judgement, on the curve from the initial calibration.
-Surrogates are added to each blank, sample, spike and standard. Surrogate recoveries must fall within the specified control limits. If surrogate fall outside the control limits they are reanalyzed.
-Laboratory fortified blanks are run with every batch or every group of 20 samples.
-For Method 525.1, a laboratory fortified sample matrix is run with every batch or every group of 20 samples.
-A field reagent blank(if supplied by the client) is analyzed with every set of field samples.
-At least quarterly, replicates of laboratory fortified blanks and a quality control sample are analyzed.
-No analytes can be detected above the MDL for the blank.
-Detection limits should achieve the contract or method specific MDL's.

GC-

-For GC analyses the system is calibrated using an external standard technique. The instrument is initially calibrated at five concentration levels. If the relative standard deviation(RSD) of the response factor for any analyte is constant over the calibration range, an average rf may be used for calculation purposes. Otherwise, calculations must be made from the curve. The low point standard is generally 2 times the MDL.
-A continuing calibration is performed daily(every 24 hours). If the response for any parameter varies more than the method allows, the test must be repeated using a fresh calibration standard. If criteria cannot be met a new calibration curve must be generated.

-For PCB only analysis the initial calibration consists of a three to five point curve of Aroclor 1016 and 1260. After the initial calibration a mid-level standard is run for all Aroclors. Every 24 hours and at the end of a sequence a mid-level standard of Aroclor 1016 and 1260 is analyzed. If an Aroclor other than Aroclor 1016 or 1260 is identified, an initial three to five point calibration for the identified Aroclor must be analyzed for confirmation and quantitation.
-The stability of the GC system is monitored by recording the retention times of the surrogate(s). Retention time shift limits vary with surrogate identity and column type.
-QC(or second source) standards are analyzed at a concentration and frequency as specified in the individual method, as are the recovery criteria.
-Surrogates are added to each blank, sample, spike and standard. Surrogate recoveries must fall within the specified control limits.
-For Method 608, spikes and spike duplicates are run at a frequency required by the method. Recovery limits are method specific.
-For NJDEPE Analytical Contract work(Methods 505, 508, 608 and 8080), when pesticides/Aroclors are being analyzed a Aroclor spike(Aroclor 1016 and 1260) is analyzed in addition to the pesticide spike. If samples are only being analyzed for Aroclors, then only an Aroclor spike is required.
-For Methods 505 and 508, Laboratory fortified blanks, laboratory fortified sample matrix and quality control samples are run at concentrations and frequencies specified in the individual methods. Recovery criteria are also method specific.
-For TCLP analysis, a MS/MSD is analyzed at a frequency of one sample in twenty. Spiking solution contains all pesticide compounds except for toxaphene. The spiking solution is added to the TCLP extract, at method specific levels.
-No analytes can be detected above the MDL for the blank. If the blank exceeds the MDL the system is considered "out of control" and the blank and associated samples are reanalyzed.
-Any analytes tentatively identified on a primary GC column must be confirmed by a second analytical technique, dissimilar column or GC/MS.

Metals-

-Atomic Absorption and ICP instruments are calibrated for each analytical run. For graphite furnace and flame atomic absorption, a blank and five calibration standards are run. The ICP is calibrated using a blank and a mixed calibration standard. The agreement between the true value and actual value must be +/-10%.
-Initial Calibration Verification(ICV) is analyzed after the instrument calibration. It must agree +/-10% between the true value and the actual.
-Continuing Calibration Verification(CCV) are run every 10 samples. CCV must be +/-10% of the true value.
-Interference Check Solutions(for ICP only) is run to access the interelement interferences.
-Laboratory Control Sample is analyzed for each analyte and must agree within +/- 25% of the true value. For the NJDEPE Analytical Services Contract, each analyte must agree within +/- 15% of the true value.

-Spike analysis:

a) is done at a frequency of at least 10%. Spike recovery must be within +/-25%(75 - 125%).

b) if the spike recovery is less 40% the sample is diluted and analyzed with another spike.

c) if the sample concentration is less than the MDL, the sample is reported as less than the MDL and not diluted and respiked.

d) if the sample concentration is greater than the linear range the sample is diluted and reanalyzed.

e) For the NJDEPE Analytical Contract, if the spike recovery is less than 40% and if the sample concentration is greater than the MDL, the sample is diluted by a factor of 2 and reanalyzed. If after 2 dilutions the spike recovery is still less than 40%, the data is noted as having an interference problems.

f) if the spike recovery is greater than or equal to 40% and the sample absorbance or concentration is less than or equal to 50% of the spike sample, the sample will be reported as less than the MDL.

g) if sample concentration is less than or equal to 50% of the spike and the spike recovery is between 85-115%, the sample is quantitated directly from the calibration curve.

h) For the NJDEPE Analytical Contract, if the sample concentration is greater than of equal to 50% of the spike and the spike recovery is less than 85% or greater than 115%, the sample must be quantitated by the Method of Standard Addition.

-For TCLP analyses a matrix spike and duplicate is analyzed. TCLP extracts must be analyzed by the Method of Standard Addition, unless a matrix spike is within SW846 acceptable QC limits.

-Duplicate analysis must be within QC limits of +/- 20% or +/- MDL.

-Blanks(preparative, ICB and CCB) are analyzed after the ICV and CCV and must not contain any results greater than the absolute value of the MDL.

-For furnace analyses duplicate injections are required. If duplicate injection readings, for results above the MDL, do not agree within +/- 20% RSD, the sample must be re-analyzed. If the RSD is greater than 20% the individual injection concentration difference between must be less than the MDL.

General Analytical-

-For spectrophotometric tests, standard curves are run at least every 3 months. These curves are checked daily by analyzing a high and a low standard. Acceptance limits are +/- 10% for low range standards and +/- 5% for high range standards.

-For automated analysis, calibrations are made daily using at least five standards and a blank.

-When using titrations to determine concentrations, all titrants are standardized daily.

-The infrared spectrophotometer is calibrated every three months, and checked daily with a mid range standard. The midrange must be within 10% of the true value.

-Blank values must be less than or equal to the MDL.

-Duplicate samples must be run once every 20 samples and be within the QC limits.

-Spike samples must be run once every 20 samples and be within the QC limits of 75-125%.
-External control sample must be run once every 20 samples and be within the 95% C.I.
-For NJDEPE Analytical Contract:
Reactivity-All method performance and QC criteria for the method is followed. Spike recoveries must meet a minimum of 50% recovery limit.
Corrosivity-All method performance and QC criteria for the method is followed. Duplicate samples are analyzed for each analytical batch.
Ignitability-All method performance and QC criteria for the method is followed.

NJDEPE Task IV/CLP:

For Task IV analysis the most current QA/QC requirements and limits specified in the USEPA CLP SOW are adhered to.

GC/MS-
-The GC/MS system is tuned once every 12 hours. The tune must meet criteria before blanks, standards and samples can be run. Any sample injected after the 12 hour period must be reanalyzed.
-For GC/MS analyses the system is calibrated using an internal standard technique and a 12 hour sequence. The instrument is initially calibrated at 5 concentration levels. The calibration must meet the minimum RRF and %RSD criteria.
-A continuing calibration is performed every 12 hours. The percent difference between the initial and continuing curves must be <25%, and also meet the RRF and %RSD criteria.
-Internal standard areas and retention times must be monitored and meet all criteria.
-Spike/spike duplicate are run with every batch or every group of 20 samples.
-Surrogates are added to each blank, sample, spike and standard. Surrogate recoveries must fall within the specified control limits.
-Method blanks, for the NJDEPE contract, for GC/MS volatile analysis must contain less than or equal to three times the Contract Required Quantitation Limit(CRQL) for methylene chloride, acetone and 2-butanone. For semi-volatiles analysis the blank must contain less than three times the CRQL for phthalate esters. For routine, non-contract samples the method blank for volatile and semi-volatile analysis must contain less than of equal to five times the CRQL for the above compounds. For all other compounds, the method blank must contain less than or equal to the CRQL of any TCL analyte. If the method blank exceeds any of these criteria, the contractor must consider the system out of control. Corrective action is taken, and all samples associated with the blank are re-extracted, repurged and/or reanalyzed. Aqueous method blanks are utilized for all matrices.
-Detection limits are the CRQLs as specified by the most recent SOW.

GC-

-Initial calibration sequence consists of 17 standards, a combination of Resolution Checks, Performance Evaluation Mixtures(PEM), Aroclor standards, low, mid and high pesticide standards and blanks, which must meet acceptance criteria before samples can be run.
-Breakdown of DDT and Endrin in the Performance Evaluation Mixtures must be less than 20.0 percent for each compound or 30.0 percent for the combined breakdown.
-Peak resolution must meet QC criteria.
-Continuing calibration, consisting of blanks, PEM and a mid point standard of Mixture A or B, must be run every 12 hours.
-Absolute retention of single and multicomponent analytes and surrogates must be monitored and meet QC criteria.
-Surrogates are calculated for both columns, but QC criteria is only advisory criteria.
-Spike and spike duplicate must be extracted and analyzed with every 20 samples of each matrix. QC criteria is only advisory.
-Method blanks may not contain any targeted compound greater than the CRQL.
-Instrument blanks are analyzed every 12 hours and may not contain any targeted compounds greater than 0.5 times the CRQL.
-Florisil Cartridge Cleanup and Sulfur Removal: Cartridge Performance Check must meet QC criteria: pesticides 80-120% recovery, trichlorophenol in less than 5% and there must be no peaks interfering with the target analytes. All samples, blanks and spikes must be cleaned with florisil cartridges. Samples that require sulfur cleanup must have the method blank cleaned up as well.
-GPC Cleanup: The system is calibrated once every seven days. Calibration is checked daily or before each run and the UV tracing compared to the last calibration tracing. All peaks must be symmetrical. All peaks must exhibit proper resolution, as per QC criteria. For each sample the flow rate, volume of eluate, laboratory room temperature and column pressure must be monitored and meet QC criteria. Blanks can contain no analyte detected at a concentration greater than half the CRQL.

Metals-

-Instrument Calibration is performed prior to each analytical run, at least once per eight hour period.
-Initial Calibration Verification(ICV) is analyzed after instrument calibration. Must agree +/- 10% between the true value and the actual value.
-Initial Calibration Blank(ICB) and Continuing Calibration Blanks(CCB) must not exceed the absolute value of the CRDL.
-Continuing Calibration Verification(CCV) are run every 10 samples. Must agree +/- 10% between the true and actual values.
-Interference Check Samples(ICS) are run for ICP analysis only. They are run to verify interelement and background corrections factors. It is run at least twice per eight hour working shift and must be within the QC criteria of +/-20% of the true value.

-If the absolute value of the concentration of the preparation blank is less than or equal to the CRDL then no correction is made to sample results. If any analyte concentration in the blank is greater than the CRDL the lowest concentration of that analyte in the associated samples must be ten times the blank correction. If this criteria is not met, all samples associated with the blank whose analyte concentration is less than ten times the blank concentration and above the CRDL, must be redigested and reanalyzed.
-Laboratory Control sample is prepared for every batch. It must agree within -/-20% of the true value.
-ICP Serial Dilution is performed on a sample from every group of samples of a similar matrix. It must agree within +/-10% of the original analysis.
-Spike sample analysis is performed on one sample from each group of samples of similar matrix. QC criteria is 75-125%.
-Duplicate sample analysis is performed on sample from each group of samples of a similar matrix. It must meet QC criteria of +/-20%, if the results are equal or greater than 5 times the CRDL or +/- the CRDL if the results are less than five times the CRDL.
-CRI(for ICP analysis) is run at a minimum of twice per eight hour working shift, to verify linearity near the CRDL.
-CRA(for AA analysis) is analyzed only at the beginning of the run to verify linearity near the CRDL.
-Linear Range Analysis(LRA) is for ICP analysis only. Analysis is done quarterly for each element. It must be within 5% of the true value.
-Instrument Detection Limit(IDL) is determined quarterly. IDLs must fall below the CRDLs.
-Furnace analysis requires:
  -All results to fall within the calibration range and to have duplicate injections.
  -When concentrations exceed the CRDL the duplicate injection must meet within 20% RSD or the sample is rerun for a total of 2 injections. If the data still does not meet 20% criteria the data is flagged.
  -The analytical spike is run immediately after the sample and the recovery directly determines how the data should be flagged.
  -Method of standard addition(MSA) must be used if the sample concentration is greater than or equal to 50% of the spike and the spike recovery is less than 85% or greater than 115%.

General Analytical(Cyanide analysis)-

-Instrument calibration is done daily with 1 blank, and three levels of standards,which includes one standard at the CRDL.
-Initial Calibration Verification(ICV) sample is distilled. It is analyzed after the instrument calibration and must be with QC limits of 85-115%.
-Continuing Calibration Verification(CCV) is analyzed every 10 samples or two hours. It must meet QC limits of 85-115%.
-Initial Calibration Blank(ICB) and Continuing Calibration Blank(CCB) values can not exceed the CRDL.

-If the absolute value of the concentration of the preparation blank is less than or equal to the CRDL then no correction is made to sample results. If any analyte concentration in the blank is greater than the CRDL the lowest concentration of that analyte in the associated samples must be 10 times the blank correction. If this criteria is not met, all samples associated with the blank and analyte's concentration is less than 10 times the blank concentration and above the CRDL, must be redigested and reanalyzed.
-Spike sample analysis consisting of one spiked sample is performed on each group of samples of a similar matrix. QC criteria is 75-125%.
-Duplicate sample analysis consisting of one duplicate sample is analyzed for each group of samples of a similar matrix. It must meet QC criteria of +/-20%, if the results are equal of greater than 5 times the CRDL or +/- the CRDL if the results are less than 5 times the CRDL.
-Laboratory Control Sample is performed on soil Cyanide samples only. One laboratory control sample per batch is performed. It must meet control limits of 80-120%.

Data Validation and Review

The Quality Assurance Officer(QAO) oversees the data validation and review process. This process is accomplished through various QA/QC systems which are specified in the QA inspection/correction action section of the SOP. These systems include, but are not limited to: audits, reference material analyses, quality control checks and performance evaluations. The data generated goes through a series of checks for various QA/QC problems and nonconformances. The checks are performed by the analyst, the department supervisor/manager, the QC department and a technical proofer. The system is designed to detect any reporting or calculation errors so they can be addressed prior to data submission.

Data Review Procedure

The following is ICM's standard procedure for analytical data review of NUDEPE Task II, III, IV; NY work and commercial work.

Analyst:

- The analyst is responsible for ensuring that all work performed the specifications and criteria outlined in the method and contract. They are to double check all aspects of their analyses, including instrumental conditions, QA/QC limits, calculations, and compound identification (for Organic analyses).

Department Supervisor/Manager:

- The second data review is performed by the department managers. The manager checks the standards, dilutions, calculations, minimum detection limits, significant figures and QC procedures. They also check the relationship between parameters of a particular sample and between the samples in a specific project.

Data Assembly and Overall Review:

- The third data review is performed by the Quality Control Coordinator. The coordinator reviews the data initially for minimum detection limits, reporting units, holding times and quality assurance data. He/she also assembles the data package and ensures that all required analysis have been performed and property reported and that all required data deliverables, such as the laboratory chronicles, methodologies, nonconformance summary, etc.... are completed and included in the report package.

Final Overall Review

- The fourth data review is performed by a different Quality Control Coordinatator. Their responsibility is to double check the project for completion and to ensure all required deliverables and quality control data is included in the report package. Special emphasis is placed on checking the data deliverables completed by the previous coordinator to ensure they are complete and accurate.

Technical Proofreader(Task II and III):

- The fifth data review is performed following the typing of the project. This review entails not only checking the accuracy of the statistical typing, but also checking that the proper reporting format has been utilized.

Company President:

- The company president's signature on the project verifies that the project is complete and all of the above criteria has been satisfied.

Dept. Mgr._____
QA Mgr. _____

EXTERNAL CHAIN OF CUSTODY PROCEDURES:

A. External chain of custody forms must be used with all samples. For commercial samples, ICM chain of custody is used, (Exhibits B and C). For NJDEPE contract samples, DEPE forms 095 or 096 are used. In addition, other client and state chain of custodies may be used(ie-NY, PA).

B. A sample or sample container is considered to be in custody under the following conditions: 1) It is in the persons' actual possession, 2) It is in the person's view after being in their physical possession, or 3) It was in their possession and then locked in a refrigerator or sealed in a cooler.

C. When sample container coolers are relinquished to field personnel, the person who breaks the sample cooler seal must sign the field chain of custody and Sampling Equipment Custody Record in receipt of the sample containers. Sample containers should be examined by field personnel for breakage or improper preservation. If any breakage or shipping error has occurred, this should be noted on the field chain of custody. The laboratory should be contacted immediately for replacement containers via alternate shuttle.

D. Field Chain of Custody is retained in the field by sampling personnel. This document should stay with the sample coolers at all times.

E. When ICM employees receive samples from sampling personnel in the field, sample receipt procedures should be followed. If samples are received directly from field sampler, coolers will be sealed for transport after receipt by driver. If samples are relinquished to anyone other than field sampler, seals should be used in the interim. ICM drivers will obtain signatures of person who held sealed coolers and then transport coolers to laboratory where seals will be broken by Sample Management Technicians. Whenever custody seals are used, custody seal numbers should be recorded on the Sample Equipment Custody Record.

F. All paperwork, including field chain of custody forms should be checked for completeness and accuracy in the field. If any omissions or errors are noted, field sampling personnel should be questioned at that time. If questions arise that field sampling personnel are unable to answer, samplers should provide name and phone number of the Project Manager.

G. Upon receipt of sample coolers at the laboratory, whether by ICM courier or overnight carrier, coolers are examined for damage or broken custody seals. Condition of sample coolers and seals should be noted on the field chain of custody. If seals and cooler are intact, sample receipt procedures may begin. If seals are not intact or cooler is damaged such that sample integrity is threatened, client must be contacted by sample management or customer service personnel immediately.

H. The Sample Custody Officer is responsible for overseeing the proper external chain of custody procedures are followed.

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ICM LABORATORIES

CHAIN OF CUSTODY REPORT

CLIENT:

ADDRESS:

PHONE:

PROJECT:

PROJ. MGR.:

BILL TO:

SEND REPORT TO:

IN CASE OF QUESTIONS UPON SAMPLE RECEIPT CALL:

PHONE:

DELIVERABLES:

- ☐ REDUCED DELIVERABLES NON CLP FORMAT
- ☐ REDUCED DEL. CLP FORMAT
- ☐ REGULATORY FORMAT
- ☐ FULL DEL. CLP FORMAT
- ☐ NPDES
- ☐ STATE FORMS REQUIRED

TURNAROUND TIME

FAX (PRELIMINARIES) (if required)

HARDCOPY

COOLER TEMP

LABORATORY ID CODE	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	COMPOSITE	SAMPLE MATRIX: GRAB	SOIL	LIQUID	SLUDGE	OTHER	# OF BOTTLES	ANALYSIS												PRESERVATIVES: H_2SO_4	HNO_3	HCL	NAOH	OTHER

SAMPLED BY: DATE: TIME:

RELINQUISHED BY: DATE: TIME:

RECEIVED BY: DATE: TIME:

RELINQUISHED BY: DATE: TIME:

RECEIVED BY: DATE: TIME:

COMMENTS:

COMPOUND LIST

- ( ) PRIORITY POLLUTANT
- ( ) TARGET COMPOUND LIST
- ( ) NJAC 7:14A APP B

CONCENTRATIONS EXPECTED

- ☐ HIGH
- ☐ MEDIUM
- ☐ LOW

IS SAMPLE CHLORINATED? ☐ YES ☐ NO

ICM LABORATORIES — CHAIN OF CUSTODY RECORD

CLIENT: _____

MAILING ADDRESS: _____

PHONE: _____

ADDRESS FROM WHICH SAMPLES WERE TAKEN: _____

ANALYSIS REQUIRED FOR: (Please Check One)

- ☐ INFORMATION ONLY
- ☐ MORTGAGE COMPANY COMPLIANCE
- ☐ HEALTH DEPT COMPLIANCE
- ☐ NJDEPE COMPLIANCE
- ☐ STATE FORMS REQUIRED

PWSID # _____

SAMPLING PERIOD

- ☐ MONTHLY
- ☐ QUARTERLY
- ☐ ANNUALLY
- ☐ OTHER _____

COPY OF RESULTS TO: _____

#SAMPLES/PERIOD _____

(Check box if applies)

SAMPLE CONTAINERS OBTAINED FROM ICM ____ YES ____ NO

SAMPLES COLLECTED BY ICM ____ YES ____ NO

IS SAMPLE CHLORINATED ____ YES ____ NO

☐ IS SAMPLE A LEAD & COPPER SAMPLE (SEE BELOW)

FOR TOTAL COLIFORM SAMPLES:

- ☐ IS THIS A REPEAT SAMPLE
- ☐ IS THIS A ROUTINE SAMPLE
- ☐ IS THIS A CHECK SAMPLE

FOR 502.2 SAMPLES:

IS SAMPLE:

- ☐ RAW ☐ TREATED
- ☐ CHECK SAMPLE

SAMPLERS NAME: _____

SAMPLING & ANALYSIS REQUESTED BY: _____

LABORATORY IDENTIFICATION	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	# OF BOTTLES	T/C	POTABLE PACKAGE	VOLATILE SCREEN	ANALYSES (INCLUDE OTHER ANALYSES)						COMMENTS:

SAMPLES DELIVERED TO ICM BY: _____

DATE: _____

TIME: _____

SAMPLES RECEIVED BY ICM: _____

DATE: _____

TIME: _____

PAID: ☐ CASH ☐ CHECK

LEAD & COPPER SAMPLES: (Please complete following information)

NUMBER OF DISTRIBUTION TAP SAMPLES REQUIRED _____

PLEASE CHECK APPROPRIATE BOX:

LOC TYPE	DESCRIPTION	DIR	LOC TYPE	DESCRIPTION	DIR
☐ A	Lead Service Lines	1	☐ D	Building & Multifamily Residences Containing Lead Pipes or Service Lines	2
☐ B	Single Family Structures with Copper Pipe & Lead Solder Installed after 1982	1	☐ E	Single Family Structures that contain Copper Pipe with Lead Solder Installed before 1983	3
☐ C	Building & Multifamily Residences with Copper Pipes & Lead Solder Installed after 1982	2	☐ F	Other	3

2632 RDC-00659

LABORATORY WATER

The source of ICM's deionized water is a Polymetric System which consists of a single activated carbon filtration cylinder followed by three mixed bed cation/anion exchange Resin cylinders. The carbon cylinder is designed to remove all trace organic contaminants, and the resin cylinders remove all of the inorganic anions and cations. The water produced from this system is 16 megohm-cm or better which exceeds Type I through Type III water quality requirements. The resisitivity is monitored by the system and new tanks are installed when needed.

ICM also has a backup Polymetric System in case the main source shows contamination. If both sources of laboratory water show contamination purchased bottle water will be used. Prior to the purchased bottle water being used the water will have to adhere to all the N.J.A.C. (N.J.A.C. 7:18) requirements and method blank criteria, see Analysis of Laboratory Water in the Preparation and QA/QC Procedures for Laboratory Water section.

ANALYSIS OF LABORATORY WATER

Laboratory deionized water is used as method or preparative blanks for all analysis done in house. The method blank must meet QC criteria-no analyte can be detected above the minimum detection limit (except for certain organic analysis which have specific blank requirements). If analytes are found above the MDL the analysis is rerun. If the analyte is confirmed, the use of the water is discontinued until the source of the contamination is found.

The New Jersey Administrative Code(N.J.A.C. 7:18) requirements for laboratory water are adhered to. These include:
-annual analysis for trace metals(Pb, Cd, Cr, Cu, Ni, Zn) must not be greater than 0.05 mg/l, total metals must be equal to or less than 1.0 mg/l.
-annual analysis for bactericidal properties. The result must be between 0.8-3.0.
-daily analysis for conductance. The conductance is maintained below 2 micromhos/cm at 25 degrees C.
-monthly analysis for pH, chlorine residual and standard plate count. pH must be 5.5-7.5, residual chlorine 0.0 and standard plate count <500 colonies/ml.

It is the responsibility of the Departmental Managers and the Quality Assurance Officer to monitor the laboratory water meets all QC criteria.

PROCEDURE FOR TRACKING TRIP AND FIELD BLANKS

The deionized water used in the preparation of trip and field blanks can be traced back to the laboratory analyzed blank for the day the blanks were prepared.

All trip and field blanks originate from the Sample Login/Receiving Department. They can be traced by using the date the blanks were prepared. The date of preparation is found on the sample equipment record and/or the field chain of custody. This date can then be traced to the laboratory and compared to results of laboratory analyzed blanks.

FIELD QUALITY ASSURANCE AND QUALITY CONTROL

Quality Control and quality assurance(QA/QC) samples are intended to provide control over the collection of environmental measurements and subsequent validation, review, and interpretation of generated analytical data. The following is a breakdown by matrix of blank sample requirments.

1) Non-aqueous matrix

A. Field Blanks-The purpose of this blank is to place a mechanism of control on sample equipment handling, preparation, storage and shipment. The performance of field blanks requires two(2) sets of identical bottles; one set filled with demonstrated analyte free water provided by the laboratory and one set of identical empty bottles with field blank labels. The field blank bottles will correspond to the sample parameters being analyzed.

At the field location, in an area suspected to be contaminated; the water is passed from the full set of bottles through the dedicated or field decontaminated sampling device and into the empty set of bottles.

B. Trip Blanks-No trip blanks are required for non-aqueous samples.

C. Frequency-For sampling events lasting more than one day, field blanks for the non-aqueous matrix should be performed at a rate of 10% of the total number of samples collected throughout the event. For example: If forty samples are to be collected over six days-10% of 40 samples or 4 field blanks should be performed. If a one day sampling event has less than ten samples collected, then one field blank should be done.

2) Aqueous Matrix

A. Field Blanks-Field blanks are performed as per section I.A.

B. Trip Blanks-Trip blanks are used exclusively for volatile organic analysis(aqueous sampling only) and its purpose is to measure possible cross contamination of samples during shipping to and from the site to the lab. The trip blank is never opened and travels with the empty sample bottles to the site and travels with the samples collected back to the laboratory. The trip blank shall not be held on site for more than 2 calendar days.

C. Frequency-The frequency for field blanks for an aqueous sampling event is one per day. Field blanks are not generally required for potable sampling events or when samples are collected into the sample container directly. If during potable sampling, a known source of contamination exists within close proximity of the potable source, then a field blank may be required. The frequency for trip blanks are to be included at a rate of one set per sample shipment.

3) Duplicate Samples

The collection of duplicate samples is to provide evaluation of laboratory performance by comparing analytical results of two samples(one duplicate) from the same sample location.

The frequency of duplicate samples for both the aqueous and non-aqueous matrix is a minimum of 5% of the total number of samples collected or one duplicate sample per twenty collected samples.

When obtaining duplicate samples for a soil matrix, homogenization of the sample is required. This is done by mixing soil together until a consistent physical appearance is achieved. Then the sample is divided in half and the soil container is filled alternately from each half. Homogenization is never performed for soil samples being analyzed for volatile organics due to the loss of volatiles while mixing the sample.

The duplicate samples for the aqueous matrix should be obtained by alternately filling sample containers from the same sampling device for each parameter.

4) QA/QC Handling Time

The field and trip blank samples must travel with sample containers and must arrive on-site within one day of their preparation in the laboratory. Blanks and their associated samples may be held on-site or no longer than two calender days and must arrive back in the laboratory within one day of shipment from the field. Thsi constitutes a maximum of a four(4) day handling time. Blanks and all samples must be maintained a 4° C while stored on-site and during shipment to the laboratory. The only acceptable exception to this handling time is stormwater runoff samples.

5) pH Monitoring of Samples

To monitor and verify sample containers pH status, a small amount of the sample is poured into a clean beaker or the container cap and a pH test paper strip or pH meter is used to verify pH status on a sample. The pH test aliquot is not put back into the sample. Sample preservation kits are available if a sample pH preservative is absent or additional preserve is needed to acheive the required pH.

6) pH Meter and Conductivity Meter Calibration

A. pH meter Calibration

1) Turn power on
2) Rinse pH probe with deionized water
3) Place probe in buffer solution 4
4) Press pH button and the STD button
5) Wait for reading to stabilize at 4.00
6) Rinse pH probe with deionized water
7) Place pH probe in buffer solution 10 and press STD
8) Wait for reading to stabilize at 10.00
9) Rinse pH probe with deionized water
10) Place pH probe in buffer solution 7
11) If reading is approximately 7.00 END and record in logbook

NOTE: Replace buffer solutions if pH reading doesn't match buffer soutions. To prevent undo maintance store pH probe in buffer or deionized water and always rinse pH probe with deionized water after every use.

7) Conductivity Meter Calibration

A. Turn power on

B. Turn switch to Batt+, then Batt-. Meter should read within Batt OK scale.

C. Rinse conductivity probe with deionized water

D. Turn range switch to position XIK.

E. Place probe in 1000 micromhos conductivity standard solution

F. Adjust calibration knob if needed to get meter reading of 1 00 micromhos. If so END.

G. If 1000 micromhos reading cannot be obtained then turn power off

H. Using flat head screwdriver, adjust th zero adjustment screw on the meter so the needle indicates zero.

I. Repeat step A thru G.

NOTE: Always rinse probe with deionized water after every use and store it in deionized water when not in use. Never allow meter to get wet or cold.

8) Field Logbooks

All samplers should have a logbook that is bound with water resistant pages. All information regarding the site and sampling procedures must be documented. Notations should be made with reference to time and date. All information available is recorded in the logbook.

Section 6

Certifications

2632 RDC-00666

Certification Summation

ICM is a New Jersey Department of Environmental Protection and Energy (NJ DEPE Lab ID #14116) certified laboratory. ICM is also a NJDEPE Contract Laboratory (A60084) under the X-26174 contract for Task III (Regulatory) and Task IV (CLP) analysis.

In addition, we are also certified by the following:

1. Pennsylvania Department of Environmental Resources
   Certification Number 68-387

2. Delaware Health and Social Services
   Certification Number NJ-104

3. New York State Department of Health for Potable, Non-Potable Water and Solid Waste analysis.
   Certification Number 11376

4. New York State Department of Health for CLP accreditation.
   Certification Number 11376

5. State of Connecticut, Department of Public Health and Addiction Services.
   Certification Number PH-0160

6. State of Maryland Department of Health and Mental Hygiene Laboratories Administration
   Certification Number 244

ICM has met the qualifications necessary to do EPA Contract Laboratory Program level organics and inorganic analyses. ICM has recently completed a full EPA organics contract and still routinely works on EPA contracts called Special Analytical Services (SAS) Contracts. These contracts are only available to laboratories who are in good standing in the EPA CLP program.

STATE OF NEW JERSEY

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Let's protect our earth

Certifies That

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph NJ 07869

having duly met the requirements of the

Regulations Governing Laboratory Certification
And Standards Of Performance N.J.A.C. 7:18 et. seq.

is hereby approved as a

State Certified Water Laboratory

To perform the analyses as indicated on the Annual Certified Parameter List which must accompany this certificate to be valid

14116
PERMANENT CERTIFICATION NUMBER

July 16, 1982
DATE

COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION

120

2632 RDC-00668

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF QUALITY ASSURANCE
ANNUAL CERTIFIED PARAMETER LIST FOR 1995-1996

INDUSTRIAL CORROSION MGT, INC (14116) IS CERTIFIED TO PERFORM THE ANALYS BELOW UNTIL JUNE 30 1996.

DRINKING WATER LABORATORY CERTIFICATION

MICROBIOLOGY

303 TOT COLI-MEMBRANE FILTER

305 TOT COLI-MPN (10ML/20ML)

309 TOTAL COLIFORM (ONPG-MUG)

315 FECAL COLIFORM (TC TO EC)

321 E. COLI (ONPG-MUG)

LIMITED CHEMISTRY

001 ALKALINITY, TITRIMETRIC

003 CALCIUM, EDTA TITRIMETRIC

004 CONDUCTIVITY

005 ORTHOPHOSPHATE, COLORIMET

008 TEMPERATURE

020 NITRITE, AUTO CD REDUCTIO

034 CYANIDE, SPECTROPHOTO

934 NITRATE, AUTO CD REDUC

935 FLUORIDE-ELECTRODE

936 FLUORIDE-COLOR/PRE DISTIL

LAB
08/

2632 RDC-00669

DRINKING WATER LABORATORY CERTIFICATION

LIMITED CHEMISTRY

944 TURBIDITY

945 CHLORINE RESIDUAL

947 CHLORIDE, HG OR AG NITRAT

948 COLOR, PLATINUM COBALT

949 ABS/LAS METHYLENE BLUE

950 ODOR, CONSISTENT SERIES

951 PH, GLASS ELECTRODE

952 TOT DISS SOLIDS, TOT RES

953 HARDNESS, EDTA

956 SULFATE, GRAVIM OR TURBID

METALS

010 CALCIUM, ICAP

017 ALUMINUM, ICAP

022 SILICA (ICP)

025 ANTIMONY, GRAPH FURNACE

030 NICKEL, ICAP

031 THALLIUM, GRAPH FURNACE

036 BERYLLIUM, ICAP

912 HG,MANUAL COLD VAPOR

914 AS, GRAPHITE FURNACE

916 CD, GRAPHITE FURNACE

DRINKING WATER LABORATORY CERTIFICATION

METALS

918 PB, GRAPHITE FURNACE

920 SE, GRAPHITE FURNACE

921 AG, GRAPHITE FURNACE

954 NA, ATOMIC ABSORPTION

961 BARIUM, ICAP

962 CADMIUM, ICAP

963 CHROMIUM, ICAP

965 SILVER, ICAP

966 COPPER, ICAP

967 IRON, ICAP

968 MANGANESE, ICAP

969 ZINC, ICAP

ORGANICS

502.2 VOC (PT/GC)

524.2 VOC (PT/GC-MS)

WATER POLLUTION LABORATORY CERTIFICATION

MICROBIOLOGY

74054 FECAL STREPTOCOCCI

74055 FECAL COLIFORM

74056 TOTAL COLIFORM

74057 ENTEROCOCCI

WATER POLLUTION LABORATORY CERTIFICATION

MICROBIOLOGY

74058 HETEROTROPHIC PLATE COUNT

74059 PSEUDOMONAS AERUGINOSA

LIMITED CHEMISTRY

00010 TEMPERATURE

00076 TURBIDITY

00080 COLOR

00095 SPECIFIC CONDUCTANCE

00299 DISS OXYGEN-ELECTRODE

00300 DISS OXYGEN-WINKLER

00310 BOD(5/20 DAY)

00320 CARBONACEOUS BOD(5/20DAY)

00340 COD

00400 HYDROGEN ION-PH

00410 ALKALINITY

00436 ACIDITY

00500 TOT SOLIDS

00505 TOT VOLATILE SOLIDS

00530 SUSP SOLIDS

00545 SETT SOLIDS-VOLUMETRIC

00556 OIL AND GREASE

00605 ORGANIC NITROGEN

WATER POLLUTION LABORATORY CERTIFICATION

LIMITED CHEMISTRY

00610 AMMONIA NITROGEN

00615 NITRITE

00625 TOT KJELDAHL NITROGEN

00630 NITRATE

00650 PHOSPHORUS, TOT AS PO4

00660 ORTHOPHOSPHATE AS PO4

00665 PHOSPHORUS, TOT AS P

00671 ORTHOPHOSPHATE AS P

00680 ORGANIC CARBON, TOTAL

00681 ORGANIC CARBON, DISSOLVED

00720 CYANIDE, TOTAL

00722 CYANIDE, AMEN TO CHLOR

00740 SULFITE

00745 SULFIDE

00900 HARDNESS

00940 CHLORIDE

00945 SULFATE

00951 FLUORIDE, TOTAL

00955 SILICA

01032 CR HEX

32730 PHENOLS

38260 SURFACTANTS

WATER POLLUTION LABORATORY CERTIFICATION

LIMITED CHEMISTRY

50060 CHLORINE RESIDUAL

70300 TOT DISS SOLIDS

METALS

00915 CALCIUM (ICAP)

00925 MAGNESIUM (ICAP)

00929 SODIUM (ICAP)

00935 POTASSIUM (ICAP)

00956 SILICA (ICAP)

01000 ARSENIC (ICAP)

01002 ARSENIC (AA/GF)

01005 BARIUM (ICAP)

01010 BERYLLIUM (ICAP)

01020 BORON (ICAP)

01025 CADMIUM (ICAP)

01030 CHROMIUM (ICAP)

01035 COBALT (ICAP)

01040 COPPER (ICAP)

01045 IRON (ICAP)

01049 LEAD (ICAP)

01051 LEAD (AA/GF)

01055 MANGANESE (ICAP)

WATER POLLUTION LABORATORY CERTIFICATION

METALS

01057 THALLIUM (ICAP)

01059 THALLIUM (AA/GF)

01060 MOLYBDENUM (ICAP)

01065 NICKEL (ICAP)

01075 SILVER (ICAP)

01085 VANADIUM (ICAP)

01090 ZINC (ICAP)

01095 ANTIMONY (ICAP)

01097 ANTIMONY (AA/GF)

01102 TIN (AA/GF)

01105 ALUMINUM (ICAP)

01145 SELENIUM (ICAP)

01147 SELENIUM (AA/GF)

71900 MERCURY (COLD VAPOR)

ORGANICS

601 PURGEABLE HALOCARBONS(GC)

602 PURGEABLE AROMATICS (GC)

608 PESTICIDES & PCBS (GC)

624 PURGEABLES (GC/MS)

625 B/N, ACIDS & PEST (GC/MS)

THIS LIST MUST BE CONSPICUOUSLY DISPLAYED WITH THE PERMANENT CERTIFICATE AT THE LABORATORY

2632 RDC-00675

State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection
Office of Quality Assurance
CN424
Trenton, NJ 08625-0424
Tel (609) 292-3950
Fax (609) 777-1774

Robert C. Shinn, Jr.
Commissioner

August 1, 1996

14116 INDUSTRIAL CORROSION MGT,INC
1152 ROUTE 10
RANDOLPH NJ 07869
ATTN: RICHARD LEVINE

Dear Laboratory Manager:

On July 1, 1996, the N.J.A.C. 7:18, Regulations Governing the Certification of Laboratories and Environmental Measurements became effective. The mailing of the 1996/1997 renewal applications and fee invoices have been delayed. Therefore, a new annual parameter list was not issued to replace the list which expired June 30, 1996.

Enclosed is a copy of your current laboratory certification status. This document will serve as a temporary annual parameter list. The temporary annual parameter list will be valid until an updated list is issued or June 30, 1997.

The Office of Quality Assurance (OQA) is currently revising the application and printing copies of the new regulations. Once this is complete, OQA will mail the application package to your laboratory. Upon receipt of the application please review it carefully, complete the necessary sections and return it to our office. Based on the information from the application an invoice will be generated and mailed to you. Once our office receives payment from your laboratory an annual certified parameter list will be issued.

Please direct all correspondence and inquiries to me at (609) 633-6752, or by letter to this Office at the letterhead address.

Sincerely,

Michael D. DiBalsi
Supervising Environmental Specialist
Office of Quality Assurance

Enclosure

127-1

New Jersey is an Equal Opportunity Employer

CERTSUM DATABASE

7/31/96 TEMPORARY ANNUAL PARAMETER LIST

CERTIFICATION ID 14116 EPA NJ
LAB NAME INDUSTRIAL CORROSION MGT,INC
ADDRESS 1152 ROUTE 10
CITY RANDOLPH STATE NJ ZIP 07869
MANAGER RICHARD LEVINE
PHONE 201-584-0330 LOT/BLOCK FAX:

A.DRINKING WATER CERTIFIC: C

I. MICROBIOLOGY(DW): C
C 303,T.c(mf) C 309,T.c(ONPG) C 321,E.c(ONPG)
C 305,T.c(ft) C 315,F.c(TC-->EC) 323,T.c(Colisure)
307,T.c(PA) 317,E.c(EC+MUG) 325,E.c(Colisure)
319,E.c(NA+MUG)

II. LIMITED CHEMISTRY(DW): C
C 935,F,"Electrode"
C 936,F,"Distill_Color"
937,F,"Auto_Aliz_F_Blue"
938,F,"Modified_Auto"
940,F,"Zr_Erio_Cyanide"
939,F,"Auto_Electrode"
931,F,"Ion Chrom"
932,Nitrate,"Cd_Red"
933,Nitrate,"Auto_Hydr"
C 934,Nitrate,"Auto_Cd_Red"
919,Nitrate,"Electrode"
957,Nitrate,"Ion Chrom"
926,As,"Ag_DEDT_Carb"
C 947,Cl,"Hg_Ag_NO3"
958,Cl,"Ion Chrom"
C 946,Cl,"Potentiometric"
C 945,Chlorine Residual
C 953,Hardness
C 951,pH,"Glass Electrode"
955,Sodium
C 956,Sulfate
959,Sulfate,"Ion Chrom"
C 952,Total Dissolv Solids
C 944,Turbidity
927,Copper
928,Iron
929,Manganese
930,Zinc
C 948,Color,"Pt_Co"
C 950,Odor,"Const_Series"
C 949,ABS/LAS,"Methylene Bl"

III. METALS(DW): C
910,As."Hyd.Gen"
C 914,As,"GF"
C 960,As,"ICP"
901,Ba,"AA"
915,Ba,"GF"
C 961,Ba,"ICP"
907,Cd,"AA"C.E.
C 916,Cd,"GF"
C 962,Cd,"ICAP"
908,Cr,"AA,C.E.
917,Cr,"GF"
C 963,Cr,"ICP"
909,Pb,"AA,C.E.
C 918,Pb,"GF"
C 912,Hg,"MCV"
913,Hg,"ACV"
911,Se,"Hyd.Gen
C 920,Se,"GF"
902,Ag,"AA"
C 921,Ag,"GF"
C 965,Ag,"ICP"
903,Cu,"AA"
922,Cu,"GF"
C 966,Cu,"ICP"
904,Fe,"AA"
923,Fe,"GF"
C 967,Fe,"ICP"
905,Mn,"AA C.E."
924,Mn,"GF"
C 968,Mn,"ICP"
C 934,Na,"AA"
906,Zn,"AA"
925,Zn,"GF"
C 969,Zn,"ICP"
C 970,Na,"ICP"

III.(a),Metals(Pb&Cu Rules & 7/30/92 & Proposed'93 Rules)C
C 009,Ca"AA"
C 010,Ca"ICP"
011,Cu"PltFur
012,Cu"ICP/MS
C 013,Pb"PltFur
014,Pb"ICP/MS
015,Al"GF"
016,Al"AA"
C 017,Al"ICP"
019,Al"ICP/MS
C 022,SiO2"ICP"
024,Sb "Hydr."
C 025,Sb "GF"
026,Be "GF"
027,Be "ICP/MS"
028,Ni "AA"
029,Ni "GF"
C 030,Ni "ICP"
C 031,Tl "GF"
032,Tl "ICP/MS"
047,Hg "ICP/MS"
C036,Be,"ICP"
037,Sb,"ICP/MS"
038,As,"ICP/MS"
039,Ba,"ICP/MS"
040,Cd,"ICP/MS"
041,Cr,"ICP/MS"
042,Mn,"ICP/MS"
043,Ni,"ICP/MS"
044,Se,"ICP/MS"
045,Ag,"ICP/MS"
046,Zn,"ICP/MS"

II(a).Limited Chem(Pb&Cu Rules & 7/30/92 Rules)C
C 001,Alk. "Titr"
002,Alk."E-Titr"
C 003,Ca,"Titr"
C 004,Conductiv."
C 005,o-P(P)Un/Col
006,o-P(P)"Auto Col"C
007,SiO2
C 008,Temperature
018,Asbestos"TEM"
019,NO2"Spectrophot"C
C 020,NO2,Auto-R
021,NO2,Cd-Red
023,NO2,"IC"
C 033,SO4,"Color
C 034,CN,"Spect"
035,o-P(P),"IC"

IV. ORGANICS(DW):C
501.1, TOTAL THM'S
501.2, TOTAL THM'S
502.1, VOC P&T GC(Pack)
C 502.2 VOC P&T GC(Capil)
502.2T THM's only
503.1 VOAC,PT/Arom.
504 DBE &DB3CP"GC"
505 OrganoHal Pest/PCB
505P OrganClPest"EMLT"
506 Adipat/Phthal(PID)
507 N/P-Pest. "GC"
508 Cl-Pest."GC"
508A PCB's-Confimation
508P OrganoCl Pests"EMLT"
515.1 Chl.Herbs."GC"
515.1H Regul.Herbs/PCP(2,4-D;Silvex;Dalapon)
524.1 VOC's-GC/MS(Packed)
C 524.2 VOC's-GC/MS(Capillary)
525.1 PAH/PEST"GC/MS"
531.1 Carbamates(HPLC)
547 Glyphosate(HPLC)
548 Endothall(GC/ECD)
549 Diquat (HPLC)
550 PAH,(HPLC)liq/liq
550.1 PAH (HPLC)SPE
551 Disinfection Biproducts
551T (Trihalomethanes only)
552.1 Haloacetic acid/Dalapon
555 Chlorinated Acids
1613 2,3,7,8 TCDD(Dioxin)

V. Radiological(DW)
401 Gross alpha
402 Gross beta
403 Sr-89
404 Sr-90
405 Ra-226
406-Ra-228
407 Ra-Tot
408 H3
409 U
410 Cs-134
411 Cs-137
412 I-131
414 Co-60
415 Ru-106
416 Zn-65
417 K
418 Pu-239
419 Ba-133

VI. Radon(DW):
413 Radon

Legend:
C(Certified) A(Applied) S(Suspended)
c(Certified by Capillary Column GC)

127-2

7/31/96 TEMPORARY ANNUAL PARAMETER LIST

CERTIFICATION ID 14116 EPA NJ
LAB NAME INDUSTRIAL CORROSION MGT,INC
ADDRESS 1152 ROUTE 10
CITY RANDOLPH STATE NJ ZIP 07869
MANAGER RICHARD LEVINE
PHONE 201-584-0330

B. WATER POLLUTION CERTIFICATION: C

I. MICROBIOLOGY(WP): C

C 74055 F.Coli	C 74054 F.Strep	C 74058 Heterotro Pl
C 74056 T.Coli	C 74057 Enterococci	C 74059 Pseucomonas aerug.

II. LIMITED CHEMISTRY(WP): C

C 00436 Acid	C 00500 TS	C 00660 oP,PO4	01042 Cu,T	C 00955 SiO2	01105 Al,T
C 00410 Alkal	C 70300 TDS	C 00671 oP,P	01045 Fe,T		00929 Na,T
C 00610 NH4-N	C 00530 SS	C 00630 NO3	01051 Pb,T		01002 As,T
C 00310 BCD5/20C	00545 SS,V	C 00615 NO2	00927 Mg,T		01012 Be,T
C 00340 COD	00546 SS,G	C 00556 Oil&Gr	01055 Mn,T		01022 B, T
C 00940 Cl	C 00505 TVolS	C 00680 OrC,T	01067 Ni,T		01027 Cd,T
C 50060 Cl2,R	C 00095 SCond	C 00681 OrC,D	00937 K, T		00916 Ca,T
C 00080 Color	C 00945 SO4	C 00605 OrN			01032 Cr,VI
C 00720 CN, T	C 00745 S--				01034 Cr,T
C 00722 CN,Cl2	C 00740 SO3				
C 00300 DO,WIN	C 38260 Surf				
C 00299 DO,El	C 00010 Temp				
C 00951 F,TOT	C 00076 Turb				
C 00900 Hardn	C 32730 Phen				
C 00400 H+,pH	C 00650 P,PO4				
C 00625 TKN	C 00665 P,P				

III. METALS(WP): C

01106 Al,AA/GF	C 01035 Co,ICAP	01210 Pd,AA/GF		
C 01105 Al,ICAP	01042 Cu,AA/GF	01171 Pt,AA/GF		
C 01097 Sb,AA/GF	C 01040 Cu,ICAP	28201 Rh,AA/GF		
C 01095 Sb,ICAP	71910 Au,AA/GF	27901 Ru,AA/GF		
C 01002 As,AA/GF	01046 Fe,AA/GF	C 01147 Se,AA/GF		
C 01000 As,ICAP	C 01045 Fe,ICAP	C 01145 Se,ICAP		
01007 Ba,AA/GF	C 01051 Pb,AA/GF	01077 Ag,AA/GF		
C 01005 Ba,ICAP	C 01049 Pb,ICAP	C 01075 Ag,ICAP		
01012 Be,AA/GF	00937 K,AA	00930 Na,AA		
C 01010 Be,ICAP	C 00935 K,ICAP	C 00929 Na,ICAP		
C 01020 B,ICP	00927 Mg,AA	C 00956 SiO2,ICAP		
01027 Cd,AA/GF	C 00925 Mg,ICAP	C 01059 Tl,AA/GF		
C 01025 Cd,ICAP	01056 Mn,AA	C 01057 Tl,ICAP		
00916 Ca,AA	C 01055 Mn,ICAP	C 01102 Sn,AA/GF		
C 00915 Ca,ICAP	C 71900 Hg,CV	01152 Ti,AA/GF		
01032 CrVI,AA	01062 Mo,AA/GF	01087 V,AA/GF	C 01104 Sn, ICP	
01034 Cr,AA/GF	C 01060 Mo,ICAP	C 01085 V,ICAP		
C 01030 Cr,ICAP	01067 Ni,AA/GF	01092 Zn,AA/GF		
01037 Co,AA/GF	C 01065 Ni,ICAP	C 01090 Zn,ICAP		

IV. ORGANICS(WP): C

C 601 Purgeable Halocarbon, P&T/GC/HECD
C 602 Purgeable Aromatics,P&T/GC/PID
604 Phenols
C 608 Pesticides & PCB's
C 608P Organochlorine Pesticides: Aldrin/Dieldrin/ DDD/DDE/DDT/Heptachlor/Chlordane
608PB PCB's only
610 PAH's
612 Chlorinated Hydrocarbons,Extr.w GC/ECD
c 624 Purgeables,P&T w GC/MS
c 625 B/N, Acids, Pesticides, Extr. w. GC/MS

V. BIOASSAY(WP):

C 00320 CBOD (5 & 20 DAY)
99004 Acute Toxicity

VI. Radon(WP):

82303 Radon

C. AIR

I. Radon/Radon Progeny

451,Ra,"Charcoal Cannister"
452,Ra,"Alpha-Track"
453,Ra,"Pump_Carbon_Grab"
454,Ra,"RPISU"
455,Ra,"Charcoal_Liquid_Scintillation"

Continuous Monitoring

00401 CONT pH
00011 CONT Temperature
50061 CONT Cl2 Residual
00091 CONT Conductivity

Legend: C (Certified); A (Applied); S (Suspended)
c (Certified by Capillary Column GC)

127-3

Pennsylvania Department of Environmental Protection

P. O. Box 1467
Harrisburg, Pennsylvania 17105-1467
November 1, 1996

(717) 783-7150
FAX# (717) 783-1502

Bureau of Laboratories

Certified Mail Z 398 777 959

Richard Levine, Laboratory Director
Industrial Corrosion Management
1152 Route 10
Randolph, NJ, 07869

RE: Laboratory Certification Status
DEP# 68-387, EPA# NJ00104, WS037

Dear Mr. Levine:

Recently, a set of chemical Performance Evaluation samples were sent to you for analysis through EPA's Quality Assurance Program. The results of your analyses, the true values, and acceptance limits are provided on the attached data report. Based on this report, your current status in the Laboratory Certification Program in Pennsylvania is as shown below:

Category of Analysis	Certification Status
TM2, CN, C, VOC1*	Classified as "Certified" Information on approved methods, data reporting instructions, and a laboratory identification number, if applicable, will be forwarded.
	Classified as "Provisionally Certified" You must follow the procedures in Appendix A of the "Critical Elements of Chemistry" and/or correct the deviations listed on your laboratory's on-site report in order to be upgraded to "Certified".
	Classified as "Not Certified" No drinking water analysis data will be accepted by the Department or its Designee in the category listed until satisfactory Performance Evaluation results have been achieved.

An Equal Opportunity/Affirmative Action Employer

http://www.dep.state.pa.us

Printed on Recycled Paper

Other Comments:

* VOC: by Method 524.2 is satisfactory.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, P.O. Box 8457, Harrisburg, PA 17105-8457, (717) 787-3483. TDD users may contact the Board through the Pennsylvania Relay Service (800) 654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedures may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at (717) 787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

If you have any questions on your laboratory's status, contact Mr. Edward Maser.

Sincerely,

Ted Lyter

P. Ted Lyter, Chief
Laboratory Certification
Department of Environmental Protection

DELAWARE HEALTH
AND SOCIAL SERVICES

DIVISION OF PUBLIC HEALTH

CERTIFICATE OF APPROVAL FOR DRINKING WATER ANALYSIS

issued to

Industrial Corrosion Management, Inc.

located at

1152 Route 10

Randalph, New Jersey 07869

is granted approval for recopricity enforcement purposes under
the Safe Drinking Water Act
for the following parameters

FULL CERTIFICATION:

Total Coliform Membrane Filter, Total Coliform Multiple Tube, MMO-MUG, E. coli (EC Medium & MUG), Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc, Nitrate, Nitrite, Fluoride, VOC-1, VOC-3, VOC-4, TDS, Calcium, pH units, Alkalinity, Sodium, Sulfate, Cyanide

PROVISIONAL CERTIFICATION:

Certificate Number: NJ104

Date of Issue: June 10, 1996

Expiration Date: June 30, 1997

Mahadeo P. Verma, PhD, MPH, ICLD
DIRECTOR OF LABORATORIES

Edward G. Hallock
PROGRAM MANAGER
OFFICE OF DRINKING WATER

NEW YORK STATE DEPARTMENT OF HEALTH

BARBARA A. DEBUONO, M.D., M.P.H. Commissioner

Expires 12:01 AM April 1, 199
ISSUED April 1, 1996
REVISED July 24, 1996

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11376
Director: MR. RICHARD LEVINE
Lab Name: INDUSTRIAL CORROSION MGMT
Address : 1152 ROUTE 10
RANDOLPH NJ 07869-1896

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES NON POTABLE WATER

All approved subcategories and/or analytes are listed below:

Chlor. Hydrocarbon Pesticides :
- 4,4'-DDD
- 4,4'-DDE
- 4,4'-DDT
- alpha-BHC
- Aldrin
- beta-BHC
- Chlordane Total
- delta-BHC
- Dieldrin
- Endrin aldehyde
- Endrin
- Endosulfan I
- Endosulfan II
- Endosulfan sulfate
- Heptachlor
- Heptachlor epoxide
- Lindane
- Methoxychlor
- Toxaphene

Wastewater Miscellaneous :
- Cyanide, Total
- Phenols
- Oil & Grease Total Recoverable
- Hydrogen Ion (pH)
- Specific Conductance
- Surfactant (MBAS)
- Temperature
- Organic Carbon, Total

Chlorophenoxy Acid Pesticides (ALL)
Haloethers (ALL)
Nitroaromatics and Isophorone (ALL)
Polychlorinated Biphenyls (ALL)
Purgeable Aromatics (ALL)
TCLP Additional Compounds (ALL)

Mineral :
- Alkalinity
- Chloride
- Fluoride, Total
- Sulfate (as SO4)
- Hardness, Total

Acrolein and Acrylonitrile (ALL)
Wastewater Bacteriology (ALL)
Benzidines (ALL)
Chlorinated Hydrocarbons (ALL)
Wastewater Metals I (ALL)
Nitrosoamines (ALL)
Phthalate Esters (ALL)
Purgeable Halocarbons (ALL)

Nutrient :
- Nitrite (as N)
- Nitrate (as N)
- Orthophosphate (as P)
- Phosphorus, Total

Wastewater Metals III :
- Cobalt, Total
- Molybdenum, Total
- Thallium, Total

Demand (ALL)
Wastewater Metals II (ALL)
Polynuclear Aromatics (ALL)
Priority Pollutant Phenols (ALL)
Residue (ALL)

Serial No.: 033119

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown.
Must be conspicuously posted. Valid certificate has a red serial number.

DOH-3317 (3/95)

NEW YORK STATE DEPARTMENT OF HEALTH

BARBARA A. DEBUONO, M.D., M.P.H. Commissioner

Expires 12:01 AM April 1, 19
ISSUED April 1, 1996
REVISED July 24, 1996

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11376
Director: MR. RICHARD LEVINE
Lab Name: INDUSTRIAL CORROSION MGMT
Address : 1152 ROUTE 10
RANDOLPH NJ 07869-1896

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/ POTABLE WATER

All approved subcategories and/or analytes are listed below:

Volatile Aromatics (ALL)

Volatile Halocarbons (ALL)

Serial No.: 033120

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown.
Must be conspicuously posted. Valid certificate has a red serial number.

DOH-3317 (3/95)

NEW YORK STATE DEPARTMENT OF HEALTH

BARBARA A. DEBUONO, M.D., M.P.H. Commissioner

Expires 12:01 AM April 1, 199
ISSUED April 1, 1996
REVISED July 24, 1996

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11376
Director: MR. RICHARD LEVINE
Lab Name: INDUSTRIAL CORROSION MGMT
Address : 1152 ROUTE 10
RANDOLPH NJ 07869-1896

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/SOLID AND HAZARDOUS WASTE

All approved subcategories and/or analytes are listed below:

Characteristic Testing :
- Corrosivity
- Ignitability
- Reactivity
- TCLP
- EP Toxicity

Miscellaneous :
- Cyanide, Total
- Hydrogen Ion (pH)

Metals II (ALL)
Polychlorinated Biphenyls (ALL)
Purgeable Aromatics (ALL)
Acrolein and Acrylonitrile (ALL)
Chlor. Hydrocarbon Pesticides (ALL)
Haloethers (ALL)
Nitroaromatics Isophorone (ALL)
Phthalate Esters (ALL)
Purgeable Halocarbons (ALL)
Chlorophenoxy Acid Pesticides (ALL)
Chlorinated Hydrocarbons (ALL)
Metals I (ALL)
Polynuclear Arom. Hydrocarbon (ALL)
Priority Pollutant Phenols (ALL)

Serial No.: 033121

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown.
Must be conspicuously posted. Valid certificate has a red serial number.

DOH-3317 (3/95)

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NEW YORK STATE DEPARTMENT OF HEALTH

BARBARA A. DEBUONO, M.D., M.P.H. Commissioner

Expires 12:01 AM April 1, 19
ISSUED April 1, 1996
REVISED July 24, 1996

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11376
Director: MR. RICHARD LEVINE
Lab Name: INDUSTRIAL CORROSION MGMT
Address : 1152 ROUTE 10
RANDOLPH NJ 07869-1896

is hereby APPROVED as an Environmental Laboratory for the category

CONTRACT LABORATORY PROTOCOL (CLP)

All approved subcategories and/or analytes are listed below:

CLP Inorganics | CLP PCB/Pesticides | CLP Semi-Volatile Organics | CLP Volatile Organics

Serial No.: 033122

Wadsworth Center

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Must be conspicuously posted. Valid certificate has a red serial number.

DOH-3317 (3/95)

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STATE OF NEW YORK
DEPARTMENT OF HEALTH

Wadsworth Center The Governor Nelson A. Rockefeller Empire State Plaza P.O. Box 509 Albany, New York 12201-0509

Barbara A. DeBuono, M.D., M.P.H.
Commissioner

Karen Schimke
Executive Deputy Commissioner

June 26, 1996

Dear Laboratory Director:

Please note that your 1995-96 Certificate(s) of Approval, originally extended to June 30, 1996 has/have been further extended to July 31, 1996. This action has been necessitated by the lack of an approved New York State budget.

Enclosed please find your current 1996-97 ELAP fee statement. Upon receipt of at least one quarter of the annual amount due, your 1996-97 Certificate(s) of Approval will be issued.

Verification of your laboratory's approved ELAP status is available by calling the Program Office at (518) 485-5570.

Sincerely,

Joyce Joslin
Administrative Aide
Environmental Laboratory
Approval Program

Enc.

State of Connecticut, Department of Public Health

APPROVED ENVIRONMENTAL LABORATORY

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS, OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

INDUSTRIAL CORROSION MANAGEMENT, INC.

LOCATED AT 1152 ROUTE 10 IN RANDOLPH, NJ 07869 AND

REGISTERED IN THE NAME OF RICHARD S. LEVINE

THIS CERTIFICATE IS ISSUED IN THE NAME OF RICHARD S. LEVINE WHO HAS BEEN DESIGNATED BY THE REGISTRANT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS: POTABLE WATER, WASTEWATER AND/OR TRADE WASTE, SOIL

Examination For:

Bacteria
Inorganic Chemicals
Organic Chemicals

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

THIS CERTIFICATE EXPIRES March 31 19 98 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH.

DATED AT HARTFORD, CONNECTICUT, THIS 30th DAY OF May, 19 96

NO. PH-0160
OL 181B REV 1-96

Paul Schur
DIRECTOR, DIVISION OF ENVIRONMENTAL HEALTH

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2632 RDC-00687

Rec'd 7/23/96

CONNECTICUT STATE DEPARTMENT OF HEALTH

LABORATORY DIVISION

WEDNESDAY JULY 17, 1996 9:13 AM

REGISTRATION DATE 04/01

PH0160 INDUSTRIAL CORROSION MANAGEMENT, INC 1152 ROUTE 10 RANDOLPH, NJ 07869
REGISTRANT RICHARD S. LEVINE DIRECTOR RICHARD S. LEVINE
CO-DIRECTOR
MEDICARE NUMBER- INTERSTATE NUMBER-

TEST 200 POTABLE WATER
TEST 201 WASTEWATER AND/OR TRADE WASTE
TEST 203 SOIL
TEST 211 MICROBIOLOGY
TEST 212 TOTAL COLIFORM-MEMBRANE FILTER
TEST 213 TOTAL COLIFORM-MULTIPLE TUBE FERMENTATION
TEST 214 FECAL COLIFORM-MEMBRANE FILTER
TEST 215 FECAL COLIFORM-MULTIPLE TUBE FERMENTATION
TEST 216 FECAL STREPTOCOCCUS-MEMBRANE FILTER
TEST 217 FECAL STREPTOCOCCUS-MULTIPLE TUBE FERMENTATION
TEST 218 STANDARD PLATE COUNT
TEST 224 MMO-MUG TEST
TEST 229 ENTEROCOCCI- MF
TEST 230 CHEMISTRY
TEST 231 INORGANIC CHEMICALS
TEST 232 PHYSICAL EXAMS
TEST 233 COLOR
TEST 234 ODOR
TEST 235 TURBIDITY
TEST 236 PH
TEST 237 CONDUCTIVITY
TEST 238 TEMPERATURE
TEST 239 MINERALS
TEST 240 ACIDITY
TEST 241 ALKALINITY
TEST 242 HARDNESS
TEST 243 SULFATE
TEST 244 SULFIDE
TEST 245 SULFITE
TEST 246 BROMIDE
TEST 247 CHLORIDE
TEST 248 FLUORIDE
TEST 249 CHLORINE
TEST 250 NUTRIENTS
TEST 251 AMMONIA
TEST 252 KJELDAHL NITROGEN
TEST 253 ORGANIC NITROGEN
TEST 254 NITRATE
TEST 255 NITRITE
TEST 256 ORTHO-PHOSPHATE

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TEST 257	TOTAL PHOSPHORUS
TEST 258	MISCELLANEOUS
TEST 259	TOTAL SOLIDS
TEST 260	TOTAL DISSOLVED SOLIDS
TEST 261	TOTAL VOLATILE SOLIDS
TEST 262	TOTAL SUSPENDED SOLIDS
TEST 263	CYANIDE
TEST 264	IGNITABILITY
TEST 265	SURFACTANTS
TEST 266	DEMAND
TEST 267	BOD
TEST 268	COD
TEST 269	TOC
TEST 270	METALS
TEST 271	ALUMINUM
TEST 272	ANTIMONY
TEST 273	ARSENIC
TEST 274	BARIUM
TEST 275	BERYLLIUM
TEST 276	BORON
TEST 277	CADMIUM
TEST 278	CHROMIUM TOTAL
TEST 279	CHROMIUM VI
TEST 280	COBALT
TEST 281	COPPER
TEST 282	IRON
TEST 283	LEAD
TEST 285	MAGNESIUM
TEST 286	MANGANESE
TEST 287	MERCURY
TEST 288	MOLYBEDNUM
TEST 289	NICKEL
TEST 290	POTASSIUM
TEST 291	SELENIUM
TEST 292	SILVER
TEST 293	SODIUM
TEST 294	THALLIUM
TEST 295	TIN
TEST 296	TITANIUM
TEST 297	VANADIUM
TEST 298	ZINC
TEST 311	ORGANIC CHEMICALS
TEST 312	PURGEABLE HALOCARBONS
TEST 313	PURGEABLE AROMATICS
TEST 314	PESTICIDES
TEST 315	HERBICIDES
TEST 316	PCB
TEST 317	PCB IN OIL
TEST 319	ACROLEIN AND ACRYLONITRILE
TEST 320	PHENOLS
TEST 321	BENZIDINES
TEST 322	PHTHALATE ESTERS
TEST 323	NITROSAMINES
TEST 324	NITROAROMATICS AND ISOPHORONE
TEST 325	POLYNUCLEAR AROMATIC HYDROCARBONS

TEST 326	HALOETHERS
TEST 327	CHLORINATED HYDROCARBONS
TEST 329	BASE/NEUTRALS AND ACIDS
TEST 331	OIL AND GREASE
TEST 332	GROSS HYDROCARBONS (TPH)

№ 455

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION

Certifies That

INDUSTRIAL CORROSION MANAGEMENT, INC
1152 Route 10, Randolph, New Jersey 07869

having duly met the requirements of the

Regulations Governing Laboratory Certification
And Standards Of Performance In Accordance With
The Annotated Code of Maryland,
is hereby approved as a

State Certified Water Quality Laboratory

To perform the analyses indicated on the Annual Certified Parameter List,
which must accompany this certificate.

Approved Analyses: **Metals 1,2; Inorganic 1,2,3,5; VOC 1**

Certification # 244

Date Issued October 29, 1996

Expiration Date September 30, 1997
(Not Transferable)

J. Mehsen Joseph
Director, Laboratories Administration

This certification is subject to unannounced laboratory inspections

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2632 RDC-00691

Section 7

Services

2632 RDC-00692

Services

ICM Laboratories strives to meet the needs of our clients. Our professionals work diligently to provide high quality data and manage analytical projects to meet all client specifications.

Highlights of the services we offer are as follows:

Rush Analysis

ICM realizes that emergencies can arise and analytical information is required as fast as possible. We have established systems within in the laboratory to be able to accommodate samples which require expedited turnaround times. ICM routinely analyzes parameters such as Petroleum Hydrocarbons and Volatiles in 24 hours.

Sample Shuttles

Logistics play an important role for a laboratory. Samples must arrive within a certain time frame in order to meet various regulatory agency requirements. ICM provides sample pick-up and delivery service to aid our clients within a 175 mile radius. We employ overnight carrier services for distances greater than 175 miles.

Sample pick-up service typically requires a 24 hour notice to be scheduled. We do, however, accommodate clients that have emergency situations and require sample transportation immediately, as best as possible.

ICM drivers are trained in sample handling and custody procedures. They have also been trained in sampling and can perform tests such as pH, temperature, conductivity, dissolved oxygen, and residual chlorine.

ICM provides sample containers and laboratory de-ionized water to our clients. Sample container glassware is purchased from I-Chem and is certified clean. Our laboratory de-ionized water is a Polymetric System and produces 16 megohm-cm or better. This exceeds Type I through Type III water quality requirements.

Sampling

Field sampling services are available for the collection of ground water samples. We routinely sample monitoring wells, industrial discharges, surface waters, and potable water. All our field samplers are certified in accordance with OSHA regulations.

Sales & Client Services

Our sales and client service staff are our main point of contact with our clients. Our representatives are knowledgeable about environmental testing procedures and regulations and must be able to communicate information to and from our clients.

Client Services set up the analytical programs for each client and communicate specific project requirements to the laboratory via an IBM mainframe computer. Client Services coordinate the sample shuttle service and are available to give project status on the telephone.

Our Sales staff have technical backgrounds and are a useful resource to our client. They are able to answer questions regarding common laboratory technical issues. The sales staff meet with our clients to work out project information and relay the information to the laboratory.

Bulletin Board Program

In response to our client's request, ICM has developed a Bulletin Board Program that will notify a client of a permit or action level exceedence. Our Bulletin Board System could be utilized by any client that wishes to be notified if their results exceed a certain threshold level. This system works quite simply. At the onset of a project, the client would discuss with either the Sales or Client Service representative the action or permit levels for particular project. The ICM representative will then set the program up for the client in the IBM AS/400 Mainframe System.

As the analysts enter their results for the samples, they are made aware of the threshold levels. If any of the results exceed the levels indicated by the client, the information is immediately entered into the Bulletin Board System.

The Bulletin Board entries are then received by the appropriate Client Service Representative. This individual verbally notifies the client of the sample excursion. Immediately following verbal notification, the representative will send a written notification of the excursion via fax.

Immediate notification of exceeded permit limits or threshold levels can save thousands of dollars. You now have opportunity to resample to bring your monthly averages down or quickly act on a site when necessary.

Computer Data Management

1. Computer System

ICM maintains an IBM AS400 Model E20 computer system which supports 250 devices (terminals, printers) and has 32 megabytes of RAM and 3 gigabit of storage. The AS400 is infinitely expandable.

The IBM system provides in house sample tracking, analytical calculations, reporting, laboratory Standard Operating Procedures, as well as ordering of supplies, equipment inventory, accounting, billing, and payroll. All software is developed by ICM. We have two programmers/operators available full time to make changes and modifications as necessary. Any modification to the software are thoroughly checked by the laboratory and QA personnel before they are placed on line.

2. Back-ups

All data on the IBM is backed up daily (including weekends). Two separate back-up copies are maintained and rotated every other day. Back-up is performed and secured by the two computer programmer/operators. One copy of the back-up always remains off premise. Recovery can be made easily from the back-ups. In cases where recovery has been required, the back-up was able to restore the system within hours without any data or software loss.

3. Security

ICM utilizes the security system that IBM has created for the AS400. Access to the system is restricted by programming that IBM developed and ICM maintains. Only the two programmers have access to the source code and data files. Individual users can only perform their assigned tasks on the system. The user is given a security classification and must remain within the classification's level of clearance.

The area that houses the computer system hardware is always restricted and locked.

4. Electronic Data Transfer

Computer technology has come a long way in the past years. Information can now be transferred instantaneously and decisions can be made quickly. ICM has always believed in the efficiency created through computerization and automation.

As a service to our clients, ICM does offer electronic data transfer. The AS400 permits external communication via mode, TCP/IP and other protocols. Initially, ICM would meet with the client and discuss the format which they would like their data presented. ICM would then develop the format and ask the client to review it for approval.

Once the format is developed, we would implement the program into the laboratory information management system. As the work comes into the laboratory, all information developed for the client would be linked by account and project number.

As for the formats that ICM offers, we generally set up our clients in Lotus, FoxPro, or Quatro Pro. Currently our clients mostly request spreadsheet summary tables for their electronic data. However, some have requested database setups such as FoxPro.

Although we mostly offer Lotus, ICM is very flexible and will work hard to meet our client's needs. ICM's computer programmers will speak with our client's computer people and set up a system that would best meet the client's needs.

Reporting

Several levels of reporting packages are offered based on the levels of quality assurance and deliverables required. Deliverables offered are those required by the State of New Jersey, New York, and Pennsylvania. ICM is flexible and can customize a report to meet another state or client requirements.

The following is a summation of the report packages offered. For a more detailed accounting of the individual contents of each package please review the Appendix section of this document. A report will be generated per chain of custody received, unless otherwise specified by the client.

1. Full Laboratory Data Deliverables--US EPA CLP Methods

   US EPA Statement of Work forms are used to report the data. This report package offers a high level of quality assurance data. Specific US EPA CLP methods are utilized to perform the analysis. ICM utilizes the organics and inorganics most current Multi-Media, Multi-Concentration Statement of Work.

2. Full Laboratory Data Deliverables--Non-USEPA CLP Methods

This package is commonly termed "Regulatory Format". Similar to the CLP package, Regulatory Format offers a high level of quality assurance. Typically, this package is solely required in New Jersey. Methods utilized for this deliverable are from SW-846 and 40 CFR 136, 141 and 142. New Jersey State forms are used to report the data.

3. Reduced Laboratory Data Deliverables--USEPA CLP Methods

ICM has termed this package "CLP II". Samples for this deliverable would be run according to USEPA CLP methods, however the report package would not include the comprehensive quality assurance deliverables the first option offered. CLP result forms would still be used in this package.

4. Reduced Laboratory Data Deliverables--Non-USEPA CLP Methods

This is the most commonly requested deliverable package. ICM calls this deliverable package Reduced Deliverables II. Methodologies utilized for this deliverable would be SW-846, 40 CFR 136, 141, and 142, as well as Standard Methods etc. ICM delivers the data for this report on its own forms. Reduced Deliverables II is typically used for site remediation.

5. Reduced Laboratory Data Deliverables--NPDES

In the past this package has been called "Tier II". The deliverables are taken from the Division of Hazardous Waste Management Remedial Investigation Guidance Document. ICM reporting forms are used and methods utilized are the same as for the Reduced Deliverables II package. ICM calls this package "Reduced Deliverables I.

6. NYSDEC ASP Category A

All methods and reporting criteria are packaged in accordance with NYSDEC ASP. This package has a minimal leve of quality assurance criteria. ICM reporting forms are used for the data.

7. NYS ASP Category B

All methods and reporting criteria are packaged in accordance with NYSDEC ASP. The level of quality assurance criteria is extensive in this package. ICM reporting forms are used in this package.

8. NYS DEC CLP Package

All methods and reporting criteria are packaged in accordance with NYS DEC. The level of quality assurance is similar to USEPA CLP full deliverables. CLP forms are used to report the data.

9. Standard Report

The standard report is our basic package. This report includes a field chain of custody, sample results, and surrogate recoveries for organic analysis.

Billing

The billing department prepares all invoices based on quotations prepared for the client from the sales department. Clients are billed on a per sample per chain of custody basis. Therefore, if a client has sent 10 samples on one day and another 20 on the next, the 10 samples will be billed separately from the 20.

Appendix I

2632 RDC-00699

APPENDIX

FULL INORGANICS
COMPLETE SDG FILE (CSF)
INVENTORY SHEET

Lab Name: _____ City/State: _____

Case No. _____ SDG No. _____ SDG Nos. to Follow: _____ _____ _____

SAS No. _____ Contract No. _____ SDW No. _____

All documents delivered in the Complete SDG File must be original documents where possible. (Reference Exhibit B, Section II F and Section III U)

	Page Nos.		(Please Check:)	
	From	To	Lab	Region
1. Inventory Sheet (DC-2) (Do not number)				
2. Cover Page	___	___	___	___
3. Inorganic Analysis Data Sheet (Form I-IN)	___	___	___	___
4. Initial & Continuing Calibration Verification (Form IIA-IN)	___	___	___	___
5. CRDL Standards For AA and ICP (Form IIB-IN)	___	___	___	___
6. Blanks (Form III-IN)	___	___	___	___
7. ICP Interference Check Sample (Form IV-IN)	___	___	___	___
8. Spike Sample Recovery (Form VA-IN)	___	___	___	___
9. Post Digest Spike Sample Recovery (Form VB-IN)	___	___	___	___
10. Duplicates (Form VI-IN)	___	___	___	___
11. Laboratory Control Sample (Form VII-IN)	___	___	___	___
12. Standard Addition Results (Form VIII-IN)	___	___	___	___
13. ICP Serial Dilutions (Form IX-IN)	___	___	___	___
14. Instrument Detection Limits (Form X-IN)	___	___	___	___
15. ICP Interelement Correction Factors (Form XIA-IN)	___	___	___	___
16. ICP Interelement Correction Factors (Form XIB-IN)	___	___	___	___
17. ICP Linear Ranges (Form XII-IN)	___	___	___	___
18. Preparation Log (Form XIII-IN)	___	___	___	___
19. Analysis Run Log (Form XIV-IN)	___	___	___	___
20. ICP Raw Data	___	___	___	___
21. Furnace AA Raw Data	___	___	___	___
22. Mercury Raw Data	___	___	___	___

Form DC-2 ILM03.0

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	Page Nos. From	Page Nos. To	(Please Check:) Lab	(Please Check:) Region
23. Cyanide Raw Data	___	___	___	___
24. Preparation Logs Raw Data	___	___	___	___
25. Percent Solids Determination Log	___	___	___	___
26. Traffic Report	___	___	___	___
27. EPA Shipping/Receiving Documents				
Airbill (No. of Shipments ____)	___	___	___	___
Chain-of-Custody Records	___	___	___	___
Sample Tags	___	___	___	___
Sample Log-In Sheet (Lab & DCl)	___	___	___	___
SDG Cover Sheet	___	___	___	___
28. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
29. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
30. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records _____	___	___	___	___
Analysis Records _____	___	___	___	___
Description _____	___	___	___	___
31. Other Records (describe or list)				
Telephone Communication Log	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___

32. Comments:

_____

_____

Completed by (CLP Lab):

_____ (Signature) _____ (Print Name & Title) _____ (Date)

Audited by (EPA):

_____ (Signature) _____ (Print Name & Title) _____ (Date)

Form DC-2 (continued) ILM03.0

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME _____
CITY/STATE _____

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

CONTRACT NO. _____
SOW NO. _____

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II and SECTION III.)

	PAGE NOs FROM	TO	CHECK LAB	EPA
Inventory Sheet (Form DC-2) (Do not number)	___	___	___	___
SDG Case Narrative	___	___	___	___
SDG Cover Sheet/Traffic Report	___	___	___	___
Volatiles Data				
a. QC Summary				
System Monitoring Compound Summary (Form II VOA)	___	___	___	___
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	___	___	___	___
Method Blank Summary (Form IV VOA)	___	___	___	___
GC/MS Instrument Performance Check (Form V VOA)	___	___	___	___
Internal Standard Area and RT Summary (Form VIII VOA)	___	___	___	___
b. Sample Data	___	___		
TCL Results - (Form I VOA)			___	___
Tentatively Identified Compounds (Form I VOA-TIC)			___	___
Reconstructed total ion chromatograms (RIC) for each sample			___	___
For each sample:				
Raw spectra and background-subtracted mass spectra of target compounds identified			___	___
Quantitation reports			___	___
Mass spectra of all reported TICs with three best library matches			___	___
c. Standards Data (All Instruments)	___	___		
Initial Calibration Data (Form VI VOA)			___	___
RICs and Quan Reports for all Standards			___	___
Continuing Calibration Data (Form VII VOA)			___	___
RICs and Quantitation Reports for all Standards			___	___
d. Raw QC Data				
BFB	___	___	___	___
Blank Data	___	___	___	___
Matrix Spike/Matrix Spike Duplicate Data	___	___	___	___

FORM DC-2-1

CLM01.7

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	TO	CHECK LAB	EPA
Semivolatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	___	___	___	___
MS/MSD Summary (Form III SV)	___	___	___	___
Method Blank Summary (Form IV SV)	___	___	___	___
GC/MS Instrument Performance Check (Form V SV)	___	___	___	___
Internal Standard Area and RT Summary (Form VIII SV)	___	___	___	___
b. Sample Data	___	___		
TCL Results (Form I SV-1, SV-2)				
Tentatively Identified Compounds (Form I SV-TIC)			___	___
Reconstructed total ion chromatograms (RIC) for each sample			___	___
For each sample:				
Raw spectra and background-subtracted mass spectra of target compounds			___	___
Quantitation reports			___	___
Mass spectra of TICs with three best library matches			___	___
GPC chromatograms (if GPC performed)			___	___
c. Standards Data (All Instruments)	___	___		
Initial Calibration Data (Form VI SV-1, SV-2)			___	___
RICs and Quan Reports for all Standards			___	___
Continuing Calibration Data (Form VII SV-1, SV-2)			___	___
RICs and Quantitation Reports for all Standards			___	___
Semivolatile GPC Calibration Data-UV detector traces			___	___
d. Raw QC Data				
DFTPP	___	___	___	___
Blank Data	___	___	___	___
Matrix Spike/Matrix Spike Duplicate Data	___	___	___	___
Pesticides				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II PEST)	___	___	___	___
MS/MSD Duplicate Summary (Form III PEST)	___	___	___	___
Method Blank Summary (Form IV PEST)	___	___	___	___

FORM DC-2-2

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	TO	CHECK LAB	EPA
Pesticides (cont.)				
b. Sample Data	___	___		
TCL Results - Organic Analysis Data Sheet (Form I PEST)			___	___
Chromatograms (Primary Column)			___	___
Chromatograms from second GC column confirmation			___	___
GC Integration raport or data system printout			___	___
Manual work sheets			___	___
For pesticides/Aroclors confirmed by GC/MS, copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			___	___
c. Standards Data	___	___		
Initial Calibration of Single Component Analytes (Form VI PEST-1 and PEST-2)			___	___
Initial Calibration of Multicomponent Analytes (Form VI PEST-3)			___	___
Analyte Resolution Summary (Form VI PEST-4)			___	___
Calibration Verification Summary (Form VII PEST-1)			___	___
Calibration Verification Summary (Form VII PEST-2)			___	___
Analytical Sequence (Form VIII PEST)			___	___
Florisil Cartridge Check (Form IX PEST-1)			___	___
Pesticide GPC Calibration (Form IX PEST-2)			___	___
Pesticide Identification Summary for Single Component Analytes (Form X PEST-1)			___	___
Pesticide Identification Summary for Multicomponent Analytes (Form X PEST-2)			___	___
Chromatograms and data system printouts A printout of retention times and corresponding peak areas or peak heights			___	___
Pesticide GPC calibration data - UV detector traces			___	___
d. Raw QC Data				
Blank Data	___	___	___	___
Matrix Spike/Matrix Spike Duplicate Data	___	___	___	___

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____
SAS NO. _____

	PAGE NOs FROM	TO	CHECK LAB	EPA
Miscellaneous Data				
Original preparation and analysis forms or copies of preparation and analysis logbook pages				
Internal sample and sample extract transfer chain-of-custody records				
Screening records				
All instrument output, including strip charts from screening activities (describe or list)				
EPA Shipping/Receiving Documents				
Airbills (No. of shipments ___)				
Chain-of-Custody Records				
Sample Tags				
Sample Log-In Sheet (Lab & DCI)				
Miscellaneous Shipping/Receiving Records (describe or list)				
Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
3. **Other Records** (describe or list)				
Telephone Communication Log				

4. Comments: _____

Completed by: _____ (Signature) _____ (Printed Name/Title) _____ (Date)
(CLP Lab)

Audited by: _____ (Signature) _____ (Printed Name/Title) _____ (Date)
(EPA)

FORM DC-2-4

Appendix II

2632 RDC-00706

APPENDIX

ORDER OF DATA DELIVERABLES FOR NJDEPE REGULATORY FORMAT

Title Page

Table of Contents

Chain of Custody
- External (Field C-of-C)
- Internal

Methodologies

Data Summary Package
- Nonconformance Summary

- GC/MS Volatiles
  - Quality Control Data
    - Tune summary
    - Surrogate recovery summary
    - Method blank summary
    - MS/MSD summary
    - Internal standard summary
    - Calibration summary
  - Sample Data Package
    - Sample results and MDLs
    - Sample chromatograms
    - Quantitation reports
    - Mass spectra
    - Library searches
  - Standards Data Package
    - Initial calibration data
    - Continuing calibration data
    - Chromatograms, quantitation reports, spectra of stds.
  - Raw QC Data package
    - BFB spectra and mass listing
    - Method blank chromatogram, quantitation reports and mass spectra
    - MS/MSD chromatograms, quantitation reports and mass spectra
    - Copy of Instrument Run Log

- GC/MS Extractables
  - Quality Control Data
    - Tune summary
    - Surrogate recovery summary
    - Method blank summary
    - MS/MSD summary
    - Internal standard summary
    - Calibration

- -Sample Data Package
  - Sample results and MDLs
  - Sample chromatograms
  - Quantitation reports
  - Mass spectra
  - Library searches
- -Standards Data Package
  - Initial calibration data
  - Continuing calibration data
  - Chromatograms, quantitation reports, spectra of stds.
- -Raw QC Data Package
  - DFTPP spectra and mass listing
  - Method blank chromatogram, quantitation reports and mass spectra
  - MS/MSD chromatograms, quantitation reports and mass spectra
  - Copy of Instrument Run Log
- -Extraction Logs
- -GPC Analysis
  - U.V. traces for all initial calibrations
  - Weekly calibrations
  - Daily calibrations
  - Blanks
  - Verify that:
    - -all peaks are identified
    - -% resolution calculations

- -GC Analysis
  - -Quality Control Data
    - Surrogate recovery summary
    - Method blank summary
    - MS/MSD summary
    - Calibration summary
  - -Sample Data Package
    - Sample results and MDLs
    - Sample chromatograms
    - Quantitation reports
    - Confirmatory chromatogram
    - Confirmatory quantitation report
  - -Standards Data Package
    - Initial calibration data
    - Continuing calibration data
    - Chromatograms, quantitation reports, spectra of stds.
    - Calibration data for confirmation columns
  - -Raw QC Data Package
    - Method blank chromatogram, quantitation report
    - MS/MSD chromatogram
    - Copy of Instrument Run Log
  - -Extraction Logs
  - -GPC Analysis
    - U.V. traces for all initial calibrations
    - Weekly calibrations
    - Daily calibrations
    - Blanks
    - Verify that:
      - -all peaks are identified
      - -% resolution calculations

- Metals
  - Quality Control Data
    - Method blank summary
    - MS summary
    - Duplicate summary
    - Standard addition reports(if applicable)
    - Serial dilution summary(ICP)
    - Laboratory control sample
    - Interference check sample
    - Calibration summary
  - Sample Data Package
    - Sample results and MDLs
    - Quantitation reports
  - Standards Data Package
    - Initial calibration data
    - Continuing calibration data
    - Quantitation reports
    - ICAP interference table
  - Raw QC Data Package
    - Reagent blank data
    - MS data printout
    - Duplicate data printout
    - Standard addition data(if applicable)
    - Serial dilution data(ICP)
    - Laboratory control sample data
    - Copy of Instrument Run Log

- General Analytical
  - Quality Control Data
    - Reagent blank summary
    - Duplicate summary
    - MS results(if applicable)
    - Calibration summary
  - Sample Data Package
    - Sample results and MDLs
    - Quantitation reports
  - Standards Data Package
    - Initial calibration data
    - Continuing calibration data(if applicable)
    - Quantitation reports
  - Raw QC Data Package
    - Reagent blank data
    - MS data printout
    - Duplicate data printout

- TCLP
  - Quality Control Data
    - Method blank summary
    - TCLP blank summary
  - Sample Data Package
    - Sample results summary

Appendix III

2632 RDC-00710

APPENDIX

ORDER OF DATA DELIVERABLES FOR REDUCED DELIVERABLES II

Title/Cover Page

Chain of Custody
External Chain of Custody
Internal Chain of Custody

Methodology Review

Laboratory Chronicles

Conformance/Non-conformance Summary

Analytical Results(in numerical order) Each Lab number is in the following order:

- -GC/MS Volatile Results, plus report(if requested), worksheet, chromatogram, spectra
- -GC/MS Semivolatile Results, plus report(if requested), worksheet chromatogram, spectra
- -GC Results, chromatogram/s
- -Metals Results
- -General Chemistry Results
- -Petroleum Hydrocarbon Results

All analytical result pages for organic analyses will contain the following information: date sample received, date sample extracted, data sample analyzed, sample weight/volume, sample moisture content, dilution factor, GC column, list of analytes, method detection limit, practical quantitation limit and detected analyte concentrations.

Analytical result pages for inorganic analyses will contain the following information: sample identification number, sample matrix, date sample received, date sample analyzed, sample moisture content, dilution factor, list of target analytes and detected analyte concentrations and method detection limits.

Quality Assurance data (in the same order as the Lab Reports)
For GC/MS Analyses(Volatiles, Semivolatiles):

- -Tuning Results Summary
- -Method Blank Results Summary
- -Calibration Summary
- -Surrogate Recovery Summary
- -Matrix Spike/Matrix Spike Duplicate Results Summary
- -Internal Standard Summary

For GC Analyses:
-Method Blank Results Summary
-Standards Summary
-Surrogate Recovery Summary
-Matrix Spike/Matrix Spike Duplicate Results Summary
-Retention Time Shift Summary(if applicable)

For Metals Analyses:
-Blank Results Summary
-Calibration Summary
-ICP Interference Check Sample Results Summary
-Spike Sample Results Summary
-Duplicate Sample Results Summary
-Laboratory Control Sample Results Summary
-Serial Dilution Summary

For General Chemistry Analyses:
-Blank Results Summary
-Spike Sample Results Summary
-Duplicate Sample Results Summary

For Petroleum Hydrocarbon Analyses:
-Blank Results Summary
-Spike Sample Results Summary
-Duplicate Sample Results Summary
-IR spectra for standards, blanks and samples

Appendix IV

2632 RDC-00713

APPENDIX

ORDER OF DATA DELIVERABLES FOR REDUCED DELIVERABLES I

Title Page

Table of Contents

Data Summary

Laboratory/Client Cross Reference Page

Deliverables Checklist

Field Chain of Custody

Analysis Request

Laboratory Chronicles

Conformance/Nonconformance Summary

Methodology Summaries (in the same order as Lab Reports)

Analytical Results(in numerical order)-Each Lab number is in the following order:

- -VOA results, plus report(if requested), quant report, chromatogram, spectra
- -AF results, plus report(if requested), quant report, chromatogram, spectra
- -BN results, plus report(if requested), quant report, chromatogram, spectra
- -Pest/PCB results, chromatogram
- -Metals
- -Pet. Hydro
- -General Analytical

(All analytical result sheets will contain the results, Method Detection Limit and blank results)

Quality Assurance data (in the same order as the Lab Reports)

For GC/MS analyses (VOAs, ABNs):

- -Non-targeted peaks for the blank (if samples required plus peaks)
- -Blank quant report, chromatogram, spectra
- -Surrogate summary sheet
- -Spike/Spike Duplicate summary sheet
- -Tune sheets
- -Initial and Continuing Calibration sheets

For Pest/PCBs analyses:
- Blank chromatogram
- Surrogate summary sheet
- Retention time shift-with initial and continuing calibration dates (if required by the method)
- Spike/Spike Duplicate summary sheet
- Chromatogram of standard(if there is a hit in the sample)

Metals analyses:
- Duplicate summary sheet
- Spike recovery summary sheet

Petroleum Hydrocarbon and General Analytical analyses:
- Spike recovery summary sheet
- Duplicate summary sheet

NYSDEC ASP Category A

1. SDG Narrative:
   -containing laboratory name, SDG number, samples in SDG and a description of any problems encountered(manual edits). The SDG shall also include the standard verbatim used for CLP packages, with the Laboratory Managers signature.

2. Contract Lab Sample Information Sheets(CLSIS)

3. NYSDEC Data Package Summary Forms

4. Chain-of-Custody Forms(both external and internal)

5. Sample Data
   a. GC/MS Volatile Data
      Result Page (Form I-VOA)
      Tenatively Identified Compounds (Form I-VOA-TICs)
   b. GC/MS Semivolatile Data
      Result Page (Form I-SV-1 SV-2)
      Tenatively Identified Compounds (Form I-SV-TICs)
   c. Pesticide/PCB Data
      Result Page (Form I-PEST)
   d. GC Organic Data
      Result Page
   e. Inorganic Data
      Result Page (Form I-IN)
   f. Toxicity Characteristic Leaching Procedure(TCLP) Data
      Result Page (Form I-TCLP)

Appendix VI

2632 RDC-00717

NYSDEC ASP Category B

1. SDG Narrative
   -shall include Laboratory name, Case number, Sample Delivery Group(SDG), sample numbers in SDG, Contract number, and any problems encountered(including an explanation for all flagged edits-manual edits-on quantitation lists). The SDG shall also include the standard verbatim used for CLP packages, with the Laboratory Manager signature.

2. Contract Lab Sample Information Sheets(CLSIS)

3. NYSDEC Data Package Summary Forms

4. Chain of Custody Forms
   -both external and internal chain-of-custodies for each sample

5. GC/MS Volatiles Data
   a. QC Summary
      (1) System Monitoring Compound Summary(Form II-VOA)
      (2) Matrix Spike/Matrix Spike Duplicate Summary(Form III-VOA)
      (3) QC Check Sample/Standard
      (4) Method Blank Summary(Form IV-VOA)
      (5) GC/MS Instrument Performance Check(Form V-VOA)
      (6) Instrument Detection Limits

   b. Sample Data
      (1) Organic Analysis Data Sheet(Form I-VOA)
      (2) Tentatively Identified Compounds(Form I-VOA-TIC)
      (3) Reconstructed Total Ion Chromatograms(RIC) for each sample
      (4) Quantitation reports
      (5) Spectra of all compounds identified in the sample

   c. Standards Data
      (1) Initial Calibration Data(Form VI-VOA)
          Initial stds. RICs and quantitation reports
      (2) Continuing Calibration Data (Form VII-VOA)
          Continuing stds. RICs and quantitation reports

   d. Raw QC Data
      (1) BFB for each 12 hour period
          Bar graph spectrum
          Mass listing
          RIC
      (2) Blank Data
          Results (Form I-VOA)
          Tentatively Identified Compounds (Form-I-VOA-TIC)
          RIC and quantitation report
          Spectra for all compounds identified in the sample
      (3) Matrix Spike Blank Data
          Results (Form I-VOA)
          RIC and quantitation report

(4) Matrix Spike Data
Results (Form I-VOA)
RIC and quantitation report
(5) Matrix Spike Duplicate Data
Results (Form I-CLP-VOA)
RIC and quantitation report
(6) QC Check Sample/Standard
Results (Form I-VOA)
RIC and quantitation report

e. Copy of Calculations

f. Copy of Extraction Logs

6. GC/MS Semivolatiles Data

a. QC Summary
(1) Surrogate Percent Recovery Summary (Form II-SV)
(2) Matrix Spike/Matrix Spike Duplicate Summary (Form III-SV)
(3) QC Check Sample/Standard
(4) Method Blank Summary (Form IV-SV)
(5) GC/MS Instrument Performance Check (Form V-SV)
(6) Internal Standard Area and RT Summary (Form VIII-SV)
(7) Instrument Detection Limits

b. Sample Data
(1) Organic Analysis Data Sheet (Form I-SV-1,SV-2)
(2) Tentatively Identified Compounds (Form I-SV-TIC)
(3) RICs for each sample
(4) Quantitation reports
(5) Spectra of all compounds identified in the sample
(6) GPC chromatograms(if applicable)

c. Standards Data
(1) Initial Calibration Data (Form VI-SV-1, SV-2)
Initial stds RICs and quantitation reports
(2) Continuing Calibration Data (Form VII-SV-1, SV-2)
Continuing stds RICs and quantitation reports
(3) Internal Standard Area Summary (Form VIII-SV-1, SV-2)
(4) GPC Calibration Data

d. Raw QC Data
(1) DFTPP for each 12 hour period
Bar graph spectrum
Mass listing
RIC
(2) Blank Data
Results (Form I-SV-1, SV-2)
TIC (Form I-SV-TIC)
RIC and quantitation report
Spectra for all compounds identified in the sample

(3) Matrix Spike Blank Data
Results (Form I-SV-1, SV-2)
RIC and quantitation report
Spectra for all compounds identified in the sample
(4) Matrix Spike Data
Results (Form I-SV-1, SV-2)
RIC and quantitation report
(5) Matrix Spike Duplicate Data
Results (Form I-SV-1, SV-2)
RIC and quantitation report
(6) QC Check Sample/Standard Results (FORM I-SV, SV-2)
RIC and quantitation report

e. Copy of Calculations

f. Copy of Extraction Logs

7. GC/ECD Pesticide/Aroclor Data
a. QC Summary
(1) Surrogate Percent Recovery Summary (Form II-PEST)
(2) Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank Summary (Form III-PEST)
(3) QC Check Sample/Standard Recovery
(4) Method Blank Summary (Form IV-PEST)
(5) Instrument Detection Limits

b. Sample Data
(1) Organic Analysis Data Sheet (Form I-PEST)
(2) Copies of pesticide chromatograms(first and second GC column)
(3) UV traces from GPC, if applicable
(4) GC/MS confirmation, if applicable

c. Standards Data
(1) Initial Calibration of Single Component Analytes (Form VI-PEST-1 and PEST-2)
(2) Initial Calibration of Multicomponent Analytes (Form VI-PEST-3)
(3) Analyte Resolution Summary (Form VI-PEST-4)
(4) Calibration Verification Summary (Form VII-PEST-1)
(5) Calibration Verification Summary (Form VII-PEST-2)
(6) Analytical Sequence (Form VIII-PEST)
(7) Florisil Cartridge Check (Form IX-PEST-1)
(8) Pesticide GPC Calibration (Form IX-PEST-2), if applicable
(9) Pesticide Identification Summary for Single Component Analytes (Form X-PEST-1)
(10) Pesticide Identification Summary for Multicomponent Analytes (Form X-PEST-2)
(11) Chromatograms and data system printouts for all standards
(12) Pesticide GPC Calibration Data

d. Raw QC Data
   (1) Blank Data
       Results (Form I-PEST)
       Chromatogram and data system printout
   (2) Matrix Spike Data
       Results (Form I-PEST)
       Chromatogram and data system printout
   (3) Matrix Spike Duplicate Data
       Results (Form I-PEST)
       Chromatogram and data system printout
   (4) Matrix Spike Blank Data
       Results (Form I-PEST)
       Chromatogram and data system printout
   (5) QC Check Sample/Standard
       Results (Form I-PEST)
       Chromatogram and data system printout

e. Copy of Calculations

f. Copy of Extraction Logs

8. GC Organic Data
   a. QC Summary
      (1) Surrogate Percent Recovery Summary (Form II-GC)
      (2) Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank Summary (Form III-GC)
      (3) QC Check Sample/Standard Results (Form I-PEST)
          Chromatograms and data system printouts
      (4) Method Blank Summary (Form IV-GC)
      (5) Instrument Detection Limits

   b. Sample Data
      (1) Organic Analysis Data Sheet (Form I-GC)
      (2) Copies of chromatograms and data system printouts for first and second columns
      (3) GPC chromatograms, if applicable

   c. Standards Data
      (1) Initial Calibration Data
      (2) Continuing Calibration Data
      (3) QC Check Sample/Standard
      (4) Standard chromatograms and data system printouts for all standards

   d. Raw QC Data
      (1) Blank Data
          Results
          Chromatogram and data system printout
      (2) Matrix Spike Data
          Results
          Chromatogram and data system printout

(3) Matrix Spike Duplicate Data
Results
Chromatogram and data system printout
(4) QC Check Sample/Standard
Results
Chromatogram and data system printout

e. Copy of Calculations

f. Copy of Extraction Log

9. Inorganic Data
a. Inorganic Analysis Data Sheet (Form I-IN)

b. Quality Control Data
(1) Initial and Continuing Calibration Verification {Form II-IN (Part 1)}
(2) CRDL Standard for AA and Linear Range Analysis for ICP {Form II-IN (Part 2)}
(3) Blanks (Form III-IN)
(4) ICP Interference Check Sample (Form IV-IN)
(5) Spike Sample Recovery {Form V-IN (Part 1)}
(6) Post Digest Spike Sample Recovery {Form V-IN (Part 2)}
(7) Duplicates (Form VI-IN)
(8) Quality Control Sample (Form VII-IN)
(9) Standard Addition Results (Form VIII-IN)
(10) ICP Serial Dilutions (Form IX-IN)
(11) Holding Times (Form X-IN)

c. Verification of Instrument Parameters
(1) Instrument Detection Limits (Quarterly) (Form XI-IN)
(2) ICP Interelement Correction Factors (Annually) {Form XII-IN (Part 1)}
(3) ICP Interelement Correction Factors (Annually) {Form XII-IN (Part 2)}
(4) ICP Linear Ranges (Quarterly) (Form XIII-IN)

d. Raw Data
-must contain all instrument readouts including: standards, duplicates, sample results, including those readouts that may fall below the IDL.

e. Digestion Logs

10. Wet-Chemical Data
    a. Result Sheet

    b. Quality Control Data
        (1) Initial and Continuing Calibration Verification
        (2) CRQL Standard for Wet-Chemical Analysis
        (3) Blanks
        (4) Spike Sample Recovery
        (5) Post Digest Sample Recovery
        (6) Duplicates
        (7) Laboratory Control Sample
        (8) Holding Times

    c. Raw Data
        -shall include all instrument readouts used to obtain sample results, standards and duplicates.

    d. Digestion and Distillation Logs

11. Toxicity Characteristic Leaching Procedure(TCLP) Data

    a. Results (Form I-TCLP)

    b. TCLP Inorganic Quality Control Data
        (1) Initial and Continuing Calibration Verification {Form II-IN (Part 1)}
        (2) CRDL Standard for AA and Linear Range Analysis for ICP {Form II-IN (Part 2)}
        (3) Blanks (Form III-IN)
        (4) ICP Interference Check Sample (Form IV-IN)
        (5) Spike Sample Recovery {Form V-IN (Part 1)}
        (6) Post Digest Spike Sample Recovery {Form V-IN (Part 2)}
        (7) Duplicates (Form VI-IN)
        (8) Quality Control Sample (Form VII-IN)
        (9) Standard Addition Results (Form VIII-IN)
        (10) ICP Serial Dilutions (Form IX-IN)
        (11) Holding Times (Form X-IN)

    c. Verification of Instrument Parameters
        (1) Instrument Detection Limits (Quarterly) (Form XI-IN)
        (2) ICP Interelement Correction Factors (Annually) {Form XII-IN (Part 1)}
        (3) ICP Interelement Correction Factors (Annually) {Form XII-IN (Part 2)}
        (4) ICP Linear Ranges (Quarterly) (Form XIII-IN)

    d. Raw Data

    e. Digestion Logs

APPENDIX

INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME _____ CITY/STATE _____
CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____
CONTRACT NO. _____ ASP DATE _____

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II AND III.)

		PAGE NOS. FROM	TO	CHECK LAB	NYSDEC
1.	Inventory Sheet (Form DC-2) (Do not number)	___	___	___	___
2.	Cover Page	___	___	___	___
3.	Inorganic Analysis Data Sheet (FORM I - IN)	___	___	___	___
4.	Initial & Continuing Calibration Verification (FORM IIA - IN)	___	___	___	___
5.	CRDL Standards For AA and ICP (FORM IIB - IN)	___	___	___	___
6.	Blanks (FORM III - IN)	___	___	___	___
7.	ICP Interference Check Sample (FORM IV - IN)	___	___	___	___
8.	Spike Sample Recovery (FORM VA - IN)	___	___	___	___
9.	Post Digest Spike Sample Recovery (FORM VB - IN)	___	___	___	___
10.	Duplicates (FORM VI - IN)	___	___	___	___
11.	Laboratory Control Sample (FORM VII - IN)	___	___	___	___
12.	Standard Addition Results (FORM VIII - IN)	___	___	___	___
13.	ICP Serial Dilutions (FORM IX - IN)	___	___	___	___
14.	Instrument Detection Limits (FORM X - IN)	___	___	___	___
15.	ICP Interelement Correction Factors (FORM XIA - IN)	___	___	___	___
16.	ICP Interference Correction Factors (FORM XIB - IN)	___	___	___	___
17.	ICP Linear Ranges (FORM XII - IN)	___	___	___	___
18.	Preparation Log (FORM XIII - IN)	___	___	___	___
19.	Analysis Run Log (FORM XIV - IN)	___	___	___	___
20.	ICP Raw Data	___	___	___	___
21.	Furnace AA Raw Data	___	___	___	___
22.	Mercury Raw Data	___	___	___	___

FORM DC-2-IN-1

INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____

	PAGE NOS: FROM	TO	CHECK LAB	NYSDEC
23. Cyanide Raw Data				
24. Preparation Logs Raw Data				
25. Percent Solids Determination Log				
26. Contract Lab Sample Information Sheet (CLSIS)				
27. NYSDEC Shipping/Receiving Documents				
Airbill (No. of Shipments ____)				
Chain-of-custody Records				
Sample Tags				
Sample Log-in Sheet (Lab & DC1)				
SDG Cover Sheet				
28. Misc Shipping/Receiving Records (list all individual records)				
Telephone Logs				
_____				
_____				
29. Internal Lab Sample Transfer Records & Transfer Sheets (describe or list)				
_____				
_____				
30. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records _____				
Analysis Records _____				
Description _____				
31. Other Records (describe or list)				
Telephone Communications Log				
_____				
_____				

32. Comments:

_____

_____

Completed by (CLP Lab)

_____ (Signature) _____ (Print Name & Title) _____ (Date

Audited by (NYSDEC)

_____ (Signature) _____ (Print Name & Title) _____ (Date

FORM DC-2-IN-2

APPENDIX

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME _____ CITY/STATE _____
CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____
CONTRACT NO. _____ ASP DATE _____

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II AND III.)

	PAGE NOS. FROM	PAGE NOS. TO	CHECK LAB	CHECK NYSDEC
1. Inventory Sheet (Form DC-2) (Do not number)	___	___	___	___
2. SDG Case Narrative	___	___	___	___
3. Contract Lab Sample Information Sheet (CLSIS)	___	___	___	___
4. Volatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II-CLP-VOA)	___	___	___	___
Lab Control Sample Recovery (Form III-CLP-VOA	___	___	___	___
Method Blank Summary (Form IV-CLP-VOA)	___	___	___	___
Tuning and Mass Calibration (Form V-CLP-VOA)	___	___	___	___
b. Sample Data				
TCL Results (Form I-CLP-VOA)	___	___	___	___
Tentatively Identified Compounds (Form I-CLP-VOA-TIC)			___	___
Reconstructed total ion chromatograms (RIC) for each sample			___	___
For each sample: Raw spectra and background-subtracted mass spectra of target compounds identified			___	___
Mass spectra of all reported TICs with three best library matches			___	___
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI-CLP-VOA)	___	___	___	___
RICs and Quant Reports for all Standards	___	___	___	___
Continuing Calibration (Form VII-CLP-VOA)	___	___	___	___
RICs and Quant Reports for all Standards	___	___	___	___
Internal Standard Area and RT Summary (Form VIII-CLP-VOA)	___	___	___	___
d. QC Data				
BFB	___	___	___	___
Blank Data	___	___	___	___
Matrix Spike Blank Data	___	___	___	___
Matrix Spike Data	___	___	___	___
Matrix Spike Duplicate Data	___	___	___	___
5. Semivolatiles Data				
a. QC Summary	___	___	___	___
Surrogate Percent Recovery Summary (Form II-CLP-SV)	___	___	___	___
MS/MSD Summary (Form III-CLP-SV)	___	___	___	___
Method Blank Summary (Form IV-CLP-SV)	___	___	___	___
Tuning and Mass Calibration (Form V-CLP-SV)	___	___	___	___

FORM DC-2-ORG-1

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____

	PAGE NOS. FROM	PAGE NOS. TO	CHECK LAB	CHECK NYSDEC
5. Semivolatiles Data (cont.)				
b. Sample Data				
TCL Results (Form I-CLP-SV)	___	___	___	___
Tentatively Identified Compounds (Form I-CLP-SV-TIC)			___	___
Reconstructed total ion chromatograms (RIC) for each sample			___	___
For each sample:				
Raw spectra and background-subtracted mass spectra of target compounds identified			___	___
Mass spectra of all reported TICs with three best library matches			___	___
GPC chromatograms (if GPC performed)			___	___
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI-CLP-SV)	___	___	___	___
RICs and Quant Reports for all Standards	___	___	___	___
Continuing Calibration (Form VII-CLP-SV)	___	___	___	___
RICs and Quant Reports for all Standards	___	___	___	___
Internal Standard Area and RT Summary (Form VIIIB-CLP-SV and Form VIIIC-CLP-SV)	___	___	___	___
d. QC Data				
DFTPP	___	___	___	___
Blank Data	___	___	___	___
Matrix Spike Blank Data	___	___	___	___
Matrix Spike Data	___	___	___	___
Matrix Spike Duplicate Data	___	___	___	___
6. Pesticides				
a. QC Summary	___	___	___	___
Surrogate Percent Recovery Summary (Form II-CLP-PEST)	___	___	___	___
MS/MSD Summary (Form III-CLP-PEST)	___	___	___	___
Method Blank Summary (Form IV-CLP-PEST)	___	___	___	___
b. Sample Data				
TCL Results (Form I-CLP-PEST)	___	___	___	___
Chromatograms (Primary Column)			___	___
Chromatograms from second GC column confirmation			___	___
GC Integration report or data system printout and calibration plots			___	___
Manual work sheets			___	___
UV traces from GPC (if available)			___	___
For pesticides/Aroclors confirmed by GC/MS, copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			___	___

FORM DC-2-ORG-2

APPENDIX

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____

	PAGE NOS. FROM	TO	CHECK LAB	NYSDEC
6. Pesticides Data (cont.)				
c. Standards Data				
Pesticides Evaluation Standards Summary (Form VIII-CLP-PEST-1)	___	___	___	___
Pesticides Evaluation Standards Summary (Form VIII-CLP-PEST-2)	___	___	___	___
Pesticides/Aroclor Standards Summary (Form IX-CLP-PEST)	___	___	___	___
Pesticides/Aroclor Identification (Form X-CLP-PEST)	___	___	___	___
Standard chromatograms and data system printout for all Standards	___	___	___	___
For pesticides/Aroclors confirmed by GC/MS, copies of spectra for standards used.	___	___	___	___
d. QC Data				
Blank Data	___	___	___	___
Matrix Spike Blank Data	___	___	___	___
Matrix Spike Data	___	___	___	___
Matrix Spike Duplicate Data	___	___	___	___
7. Miscellaneous Data				
Original preparation and analysis forms or copies of preparation and analysis logbook pages	___	___	___	___
Internal sample and sample extract transfer chain-of-custody records	___	___	___	___
Screening records	___	___	___	___
All instrument output, including strip charts from screening activities (describe or list)	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
8. NYSDEC Shipping/Receiving Documents				
Airbills (No. of shipments ____)	___	___	___	___
Chain-of-Custody Records	___	___	___	___
Sample Tags	___	___	___	___
Sample Log-In Sheet (Lab & DC-1)	___	___	___	___
SDG Cover Sheet	___	___	___	___
Miscellaneous Shipping/Receiving Records (describe or list)				
_____	___	___	___	___
_____	___	___	___	___

FORM DC-2-ORG-3

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____

	PAGE NOS. FROM	TO	CHECK LAB	NYSDEC
6. Internal Lab Sample Transfer Records and Traffic Sheet (describe or list)				
_____	___	___	___	___
_____	___	___	___	___
10. Other Records (describe or list)				
Telephone Communication Log				
_____	___	___	___	___
_____	___	___	___	___

11. Comments: _____

Completed by: _____ _____ _____
(CLP Lab) (Signature) (Printed Name/Title) (Date)

Audited by: _____ _____ _____
(NYSDEC) (Signature) (Printed Name/Title) (Date)

FORM DC-2-ORG-4

APPENDIX F

QUALIFICATIONS OF KEY PERSONNEL

Richard Parrish, P.G.

6 Florida Avenue
Commack, New York 11725
(516) 543-8822

Highlights of Qualifications

- Proven success in implementing productivity-enhancement programs
- Excellent personnel and financial management skills and experience
- Strong practical and theoretical foundation in improving engineering and production methods
- Solid experience working with government regulatory agencies

Professional Experience

Impact Environmental, Kings Park, New York — 1989-Present
Senior Geologist

Supervised geologists, industrial engineers, environmental biologists and computer analysts to develop and implement sampling and analysis operations, quality assurance programs and performance measurement systems. Managed all aspects of corporate finance and budgeting (one million dollar gross per year). Performed staffing analysis, computer systems analysis, computer simulation programming.

Served as supervisor and contract manager on over three hundred petrochemical spill sites throughout New York State, representing both generators and government agencies. Provided contract and sub-contract services to Fortune-500 companies including: Pepsicola Bottling Co. (Pespsico), Coca-Cola Bottling Co., Texaco (Star Enterprises), Burger King Corp., AT&T, Laidlaw, Blockbuster Video, Gencor and Reith-Rieley Construction Co. Provided contract and sub-contract services to regional financial institutions including: European American Bank, The Dime Savings Bank, Key Bank of New York, Fleet Bank, State Bank of Long Island, Long Island Commercial Bank. Shawmut, Roslyn Savings Bank, Home Federal Savings and Sterling Commercial Capital.

Pioneered the solid waste recycling industry. Major projects included the first beneficial use determinations (BUD) issued in the State of New York and the State of Indiana for the utilization of non-hazardous petroleum hydrocarbon contaminated soils as an asphalt aggregate. Said projects included designing, installing, permitting and testing pollution control apparatus (thermal oxidizers). Authored twelve BUD petitions for various other solid waste related projects in New York State. Developed new process for the recycling of petroleum hydrocarbon contaminated soils in the State of New York. Process was approved by the New York State Department of Environmental Conservation in November 1995.

Supervised RI/FS work plans development for Grove Cleaners and select sites within the New Cassel Industrial Park, Inactive Hazardous Waste Disposal Site.

Achievements

- Certified Professional Geologist, Tennessee Department of Commerce, 1994.
- Senior Project Manager for the Mt. Hope Soil Recycling Facility, Calverton, NY.
- Senior Project Manager for the Prima Soil Recycling Facility, Holtsville, NY.
- Senior Project Manager for the Rason Soil Recycling Facility, Cedarhurst, NY.
- Senior Project Manager for the ART Soil Recycling Facility, Indianapolis, IN.
- Recipient of the Long Island Association Young Entrepreneur of the Year, 1992.
- Recipient of Hofstra University School of Business Achievement Award, 1992.

Town of Smithtown, Department of Environmental Protection,
Smithtown, New York 1985-1988

Investigator/Aide

Incident response supervisor for town hazardous material spill unit. Enforced the town health and safety codes. Assisted Suffolk County Health Department in enforcing sanitary codes. Investigated and prepared detailed reports of violations of the New York State Environmental Conservation Laws for submission to State Conservation Officers. Worked on various marine habitat/population surveys. Supervised all town sampling and analysis programs. Trained town employees on OSHA issues including the Written Hazard Communication Laws and "Right to Know" legislation.

Achievements

- Coauthored the Town of Smithtown Underground Storage Tank Management Program.
- Senior Project Manager for the State funded Nissequogue River Pollution Study.
- Senior Project Manager, Town of Smithtown Landfill Worker Safety and Hazardous Material Exposure Reduction Program; received an award for meritorious achievement.
- Lead Agent for a joint investigation between the Town of Smithtown and the Suffolk County District Attorneys Office to prosecute Chemtronics Corporation of Hauppauge.
- Senior Project Manager, Town of Smithtown Beach Water Quality Management Plan; included the sampling of beach waters in Smithtown by town officials and analysis by the county forensic laboratory for fecal coliform

Education

Masters in Waste Management - SUNY Stony Brook, Candidate (1996)
Bachelors of Arts - Earth and Space Science - SUNY Stony Brook, 1989
Waste Management Certificate Program, Waste Management Institute, CED, 1994

Training

United State Environmental Protection Agency, Office of Remedial and Emergency Response, forth hour training for Hazardous Materials Response for First Responders, Rochester, New York, 1988.

United State Environmental Protection Agency, Office of Remedial and Emergency Response, twenty-four hour training for Sampling for Hazardous Materials, Princeton, New Jersey, 1989.

New York State Law Enforcement Seminar, Stony Brook, New York, 1989.

Organizations

Member of the New York State Department of Environmental Conservation's Citizens Advisory Committee for Inactive Hazardous Material Waste Disposal Sites, 1989

National Wellwater Association, 1992

Member of the National Association of Environmental Professionals, 1992

National Asphalt Manufacturers Association, 1993

Long Island Association, 1990

Long Island Venture Group, 1992

Environmental Assessment Association, 1994

George Wright
8 Cliftwood Drive
Huntington, NY 11743
Office: 516-269-8800
E-mail: g_wright@pipeline.com

Professional: Experience:

Impact Environmental, Kings Park, NY — 1998 to Present
Environmental Services Manager

Serve as environmental manager for the firm's air quality division that provides services for air permitting, stack emissions testing and protocol preparation, emissions reduction credit studies, nuisance abatement plans, and mobile source air quality analyses. Provide technical assistance for Phase I and Phase II site assessments, Health and Safety Plans and proposals.

Metrocommute, Inc., New York, NY — 1997 to 1998
Director of Environmental Services

Performed air quality modeling and noise analyses for mobile and stationary sources. Assisted in traffic field studies and measured ambient noise levels. Prepared environmental impact statements and Phase I site assessments for development projects throughout the city.

NYC Dept. of Environmental Protection, Corona, NY — 1995 to 1997
Environmental Scientist

Reviewed submitted air quality modeling and noise analyses for mobile and stationary sources. Performed air quality modeling and noise analyses for development projects throughout the city. Assisted in traffic field studies and measured ambient noise levels. Developed screening procedures for mobile sources. Assisted in the preparation of Phase I and Phase II site assessments for DEP projects.

Department of City Planning, New York, NY — 1993 to 1995
Environmental Specialist

Conducted and reviewed air quality dispersion analyses for mobile and stationary sources for development and zoning projects in the city. Performed traffic, air quality, and noise field studies throughout the five boroughs. Assisted in the development of screening procedures for air quality and hazardous materials for department zoning initiatives.

Gibbs and Hill, Inc., New York, NY 1991 to 1993
Environmental Scientist

Performed air quality dispersion modeling to predict air pollutant impacts for stationary and mobile sources. Prepared and reviewed Phase I site assessments at several sites in Long Island. Conducted well sampling for PCBs at the Pennsylvania and Fountain Avenue landfills in Canarsie, Brooklyn. Assisted in the preparation of job proposals for work in the New York, New Jersey and Connecticut.

New Jersey Department of Agriculture, Verona, NJ 1987 to 1991
Environmental Scientist

Assisted in the review and implementation of soil erosion plans for three northern New Jersey counties. Developed computer programs for channel flow, rip-rap sizing, sediment basin design, and soil erosion. Attended local town planning meetings and provided testimony for various projects. Taught environmental science to grade schools and high schools.

Enviroplan, Inc., Roseland, NJ 1984 to 1987
Air Quality Scientist

Performed air quality dispersion modeling to predict air pollutant impacts for stationary and mobile sources. Assisted in the preparation of model inputs and the analysis of model output data in accordance with USEPA procedures.

Education

Master of Science, Meteorology, Rutgers University (1993)
Bachelor of Science, Meteorology, Rutgers University (1984)

Training

Occupational Safety and Health Administration (OSHA), 40-Hour HAZWOPER Training Course

Organizations

Member of the American Meteorological Society, Boston, MA

Member of the Air and Waste Management Association, Pittsburgh, PA

Member of the National Weather Association, Montgomery, AL

Keith M. Franzen
27 Winston Road. Centereach. New York. 11720 • (516) 732-2842

EDUCATION:

Bachelors of Engineering Degree, Mechanical Engineering, December 1993
State University of New York at Stony Brook

Bachelors of Science Degree, Construction Management, December 1991
Utica College of Syracuse University
Dean's Honor List - Spring 1991

Professional Engineer Candidate - Part A Satisfied

EMPLOYMENT:

Impact Environmental, Kings Park, New York
Engineering Geologist [May 1993 - Present]
Employed to perform geological engineering and design engineering tasks for Phase I and II Environmental Site Assessments and Corrective Action Plans. Responsible for scheduling projects, the preparation of reports and supervision of field personnel. Managed the design and construction of various hazardous substance containment structures.

Employment Highlights

- Project Manager for the Suffolk County Health Department Remedial Investigation Project conducted at the New York Institute of Technology Central Islip Campus. Involved defining the periphery of contamination originating from eight abandoned waste water lagoons.
- Project Manager for the New York State Department of Transportation Farragut Service Station Corrective Action Plan. Integral in the design and execution of an Investigation Report to determine the nature and extent of site contamination. Participated in the installation and operation of a groundwater pump and treat system to mitigate a dissolved product plume. Project value $200,000.
- Project Manager for over fifty active New York State Department of Environmental Conservation spill sites. Projects have included all phases of Corrective Action Plan stipulations between clients and the State of New York. Average project value $25,000.

Franzen Construction, Centereach, New York
Owner [August 1990 - May 1994]
Self-employed construction contractor. Performed design work, construction and evaluations of structural integrity of wood frame structures. Contracted for residential home improvements requiring carpentry, mason, plumbing and electrical skills.

TRAINING:

Geoprobe Operating Seminar, Kejr Engineering, Salina Kansas - Trained in the operation of the *Geoprobe* Model 8L Hydraulic Probing System. Interface with both standard and macro-bore assemblies. Member of the *Geoprobe* 100 Plus Club.

Knowledgeable in both Macintosh and IBM - compatible operating systems: System Software: MacDraw, MacWrite, Claris CAD, Claris Works, Excel, Surfer, Autocad R12, Harvard Graphics and Quattro Pro.

James Mulvey
108 Florida Avenue
Commack, New York 11725
(516) 864-3582

EDUCATION

Bachelor of Arts Degree
State University of New York at Stony Brook
Major: *Earth and Space Science, concentration in Environmental Geology.*

Associates Degree
Suffolk Community College
School of Business
Major: *Business Administration*

EXPERIENCE

Geologist
Impact Environmental, Kings Park, New York
March 1991 to Present
Design of over fifty sampling and remediation projects. Responsible for all pre-project safety studies and for project scheduling. Coordinated sample preservation, transport and test parameters with various regional commercial laboratories. Implemented over three hundred sampling plans for soil and groundwater remedial investigations / feasibility studies. Performed in excess of one hundred multimedia subsurface sampling plans utilizing a Geoprobe operating system.

Town of Smithtown
Department of Environmental Protection, Smithtown, New York
March 1989 to August 1990
Responsible for collection of data for research projects involving benthic organism (*Mercenaria*) population and growth rates in Stony Brook Harbor, the Nissequogue River and Smithtown Bay. Assisted Town Bay Constables with various marine navigation projects.

TRAINING

Geoprobe Operating Seminar, Kejr Engineering, Salina Kansas - Trained in the operation of the *Geoprobe* Model 8L Hydraulic Probing System. Interface with both standard and macro-bore assemblies. Member of the *Geoprobe* 100 Plus Club.

Foxboro Organic Vapor Analyzer Seminar, KVA Engineering, Boston Massachusetts - Trained in the theory and operation of flame ionization detection equipment. Emphasis on portable analyzers, gas and data acquisitors.

Knowledgeable in both Macintosh and IBM-compatible operating systems: System Software; MacDraw, MacPaint, MacWrite, Claris CAD, Claris Works, Excel and Lotus.

United States Environmental Protection Agency, Office of Emergency and Remedial Response, Edison, New Jersey. Hazardous Materials Response for First Responders (165.15). Forty hour OSHA health and safety training.

Kristin Erin Scroope
7 East Gate Drive
Mount Sinai, Long Island, New York 11766
Phone #: (516) 331-1426 E-mail: kscroope@msn.com
URL: http://www.angelfire.com/ny/kscroope

Education

August, 1993 - December, 1998

State University of New York at Stony Brook, Stony Brook, New York

Bachelor of Engineering Degree:

Major in Engineering Science

Includes study in areas of materials science, mechanical engineering and electrical engineering.

Specialization in environmental engineering

Coursework includes:

- Air Pollution and It's Control
- Coastal Oceanography
- Engineering Geology and Coastal Process
- Energy, Environment & People: Environmental Product Comparison
- Environmental Concerns and Solutions
- Environmental Instrumental Analysis Laboratory
- Geoscience and Global Concerns
- Groundwater Hydrology
- Long Island Sound: Science and Use

Laboratory Skills

Spring, 1996

Environmental Instrumental Analysis Laboratory Course,
Marine Sciences Research Center, SUNY at Stony Brook

- Hands-on laboratory experience in testing water samples using UV Spectroscopy, Fluorescence, Flame Atomic Absorption Spectrometry & Graphite Furnace Atomic Absorption Spectrometry.
- Apply statistics and linear regression in sample analysis
- Prepare standards for testing, perform acid digestions, and filter samples to remove any particles or sediments in suspension or solution.

January, 1996

Suffolk County Environmental Health Laboratory,
Hauppauge, New York
Internship

- Observe various instrumental analysis techniques for testing water samples, such as Mass Spectrometry, Atomic Absorption Spectrometry and Fluorescence.
- Assist in preparation of standards for testing procedures, prepare and label containers for samples, and record lab data and results on spreadsheets.

APPENDIX G

VAPOR MONITORING SHEET

VAPOR MONITORING SHEET

DATE	TIME	READING	COMMENTS

FOCUSED REMEDIAL INVESTIGATION
Work Plan

APPENDICES

To Be Conducted At:

Site Code # 1-30-043S
299 Main Street
Westbury, New York

Client:

2632 Realty Development Corp.
1025 Old Country Road
Westbury, New York

User:

New York State Department of Environmental Conservation
Bureau of Eastern Remedial Action
Division of Environmental Remediation
50 Wolf Road
Albany, New York

Dated:

September 18, 1998

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FOCUSED REMEDIAL INVESTIGATION
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Albany, New York

Dated:

September 18, 1998

APPENDIX A

SITE SURVEY FORM

SURVEY FORM

Date: _____
Time: _____
Inspector: _____

Age of Building & Present Use	
Previous Use of Building	
Type of Sewer System (sewer or sanitary)	
Type of Heat (oil, natural gas, or electric)	
Storage Tanks (location, capacity, consumption)	
Additional Material Use & Storage	
Wastes Entering, Generated On, or Leaving Site	
Past Spill Incidents (location, contaminants)	
Asbestos Survey	
Location of Tanks	
Location of Floor Drains	
Location of Dry Wells	

APPENDIX B

GEOPROBE SYSTEM INFORMATION

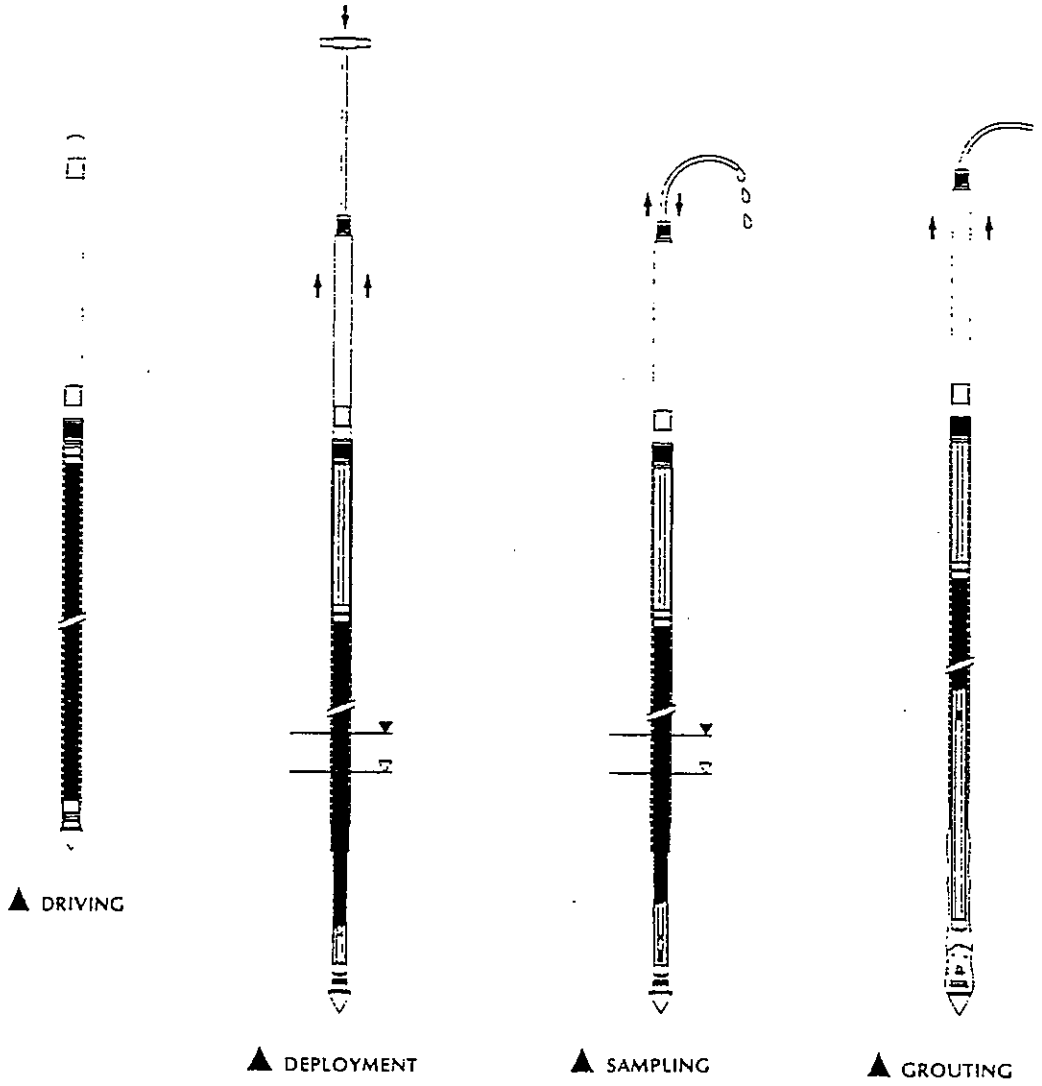
GEOPROBE SCREEN POINT 15 GROUNDWATER SAMPLER

STANDARD OPERATING PROCEDURE

Technical Bulletin No. 95-1500

PREPARED: October. 1995

REVISED: September. 1997



GEOPROBE SCREEN POINT 15 GROUNDWATER SAMPLER

Geoprobe® Systems

A DIVISION OF KEJR ENGINEERING

Geoprobe® is a Registered Trademark of Kejr Engineering, Inc., Salina, Kansas Screen Point 15 Groundwater Sampler manufactured under U.S. Patent 5,612,498

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1.0 OBJECTIVE

The objective of this procedure is to drive a sealed stainless steel or PVC screen to depth, deploy the screen, obtain a representative water sample from the screen interval, and grout the probe hole during abandonment. The Screen Point 15 Groundwater Sampler enables the operator to conduct abandonment grouting that meets American Society for Testing and Materials (ASTM) Method D 5299 requirements for decommissioning wells and borings for environmental activities (ASTM 1993).

2.0 BACKGROUND

2.1 Definitions

Geoprobe®: A brand name of high quality, hydraulically powered machines that utilize both static force and percussion to advance sampling and logging tools into the subsurface. The Geoprobe brand name refers to both machines and tools manufactured by Geoprobe Systems, Salina, Kansas. Geoprobe tools are used to perform soil core and soil gas sampling, groundwater sampling, soil conductivity and contaminant logging, grouting, and materials injection.

Screen Point 15 Groundwater Sampler: A direct push device consisting of a PVC or stainless steel screen that is driven to depth within a sealed, steel sheath and then deployed for the collection of representative groundwater samples. The assembled Screen Point 15 Sampler is 52 inches (1321 mm) long with an OD of 1.5 inches (38 mm). Upon deployment, up to 41 inches (1041 mm) of screen can be exposed to the formation.

Casing Puller: An assembly which makes it possible to retract the sampler string with extension rods protruding from the top of the probe rods. For units originally equipped with the GH40 Soil Probing Hammer, a Casing Pull Kit is available as part number GW4600K. Units originally equipped with the SK58 hammer, or retrofitted with the GH40 hammer require a different casing pull kit. Contact Geoprobe Systems for specific information.

Rod Grip Pull System: An attachment mounted on the GH40 Soil Probing Hammer which makes it possible to retract the sampler string with extension rods protruding from the top of the probe rods. The rod grip pull system utilizes hammer support brackets which greatly enhance probe unit durability. This system is therefore preferred over the Casing Pull Kit. The Rod Grip Pull System for use with 1.0- and 1.25-inch probe rods is available as GH1250K.

2.2 Discussion

In this procedure, the assembled Screen Point 15 Groundwater Sampler (Fig. 2.1A) is threaded onto the leading end of a Geoprobe probe rod and driven into the subsurface with a Geoprobe soil probing machine. Additional probe rods are subsequently added and driven until the desired sampling interval is reached. While the sampler is driven to depth, O-ring seals at the drive head and expendable drive point provide a watertight system. This system eliminates the threat of formation fluids entering the screen before deployment and assures sample integrity.

2632 RDC-00747

Once at the desired sampling interval, extension rods are sent downhole until the leading rod contacts the bottom of the sampler screen. The tool string is then retracted approximately 44 inches (1118 mm) while the screen is held in place with the extension rods (Fig. 2.1B). As the tool string is retracted, the expendable point is released from the sampler sheath. An O-ring on the screen head maintains the seal at the top of the screen. As a result, any liquid entering the sampler during screen deployment must first pass through the screen. The tool string and sheath may be retracted the full length of the screen or as little as a few inches if a small sampling interval is desired.

The Screen Point 15 Sampler utilizes either a stainless steel screen with a standard slot size of 0.004 inches (0.10 mm) or a PVC screen with a standard slot size of 0.010 inches (0.25mm). Both screen have an exposed length of 41 inches (1041 mm). Alternate slot sizes and lengths may be custom ordered. Contact Geoprobe Systems for available options. The screens are constructed such that a check valve or mini-bailer can be inserted into the screen cavity. This makes direct sampling possible from anywhere within the saturated zone. A removable plug in the lower end of the screens allows the user to grout as the sampler is extracted for further use.

Groundwater samples can be obtained in a number of ways. The most common method utilizes polyethylene or Teflon® tubing and a Tubing Bottom Check Valve (GW42). The check valve (with check ball) is attached to one end of the tubing and inserted down the casing until it is immersed in groundwater. Water is pumped through the tubing and to the ground surface by oscillating the tubing up and down. If oscillating the tubing is undesirable (such as when sampling for volatiles analysis), lower the check valve and tubing to the bottom of the sampler without the check ball. Then drop the check ball into the tubing from the ground surface. The ball will seat in the check valve and trap the sample in the tubing. Collect the sample by withdrawing and draining the tubing.

An alternative means of collecting groundwater samples is to attach a peristaltic or vacuum pump to the tubing. This method is limited in that water can be pumped to the surface from a maximum depth of approximately 26 feet (8 m). Another technique for groundwater sampling is to use a stainless steel Mini-Bailer Assembly (GW41). The mini-bailer is lowered down the inside of the casing below the water level where it fills with water and is then retrieved from the casing.

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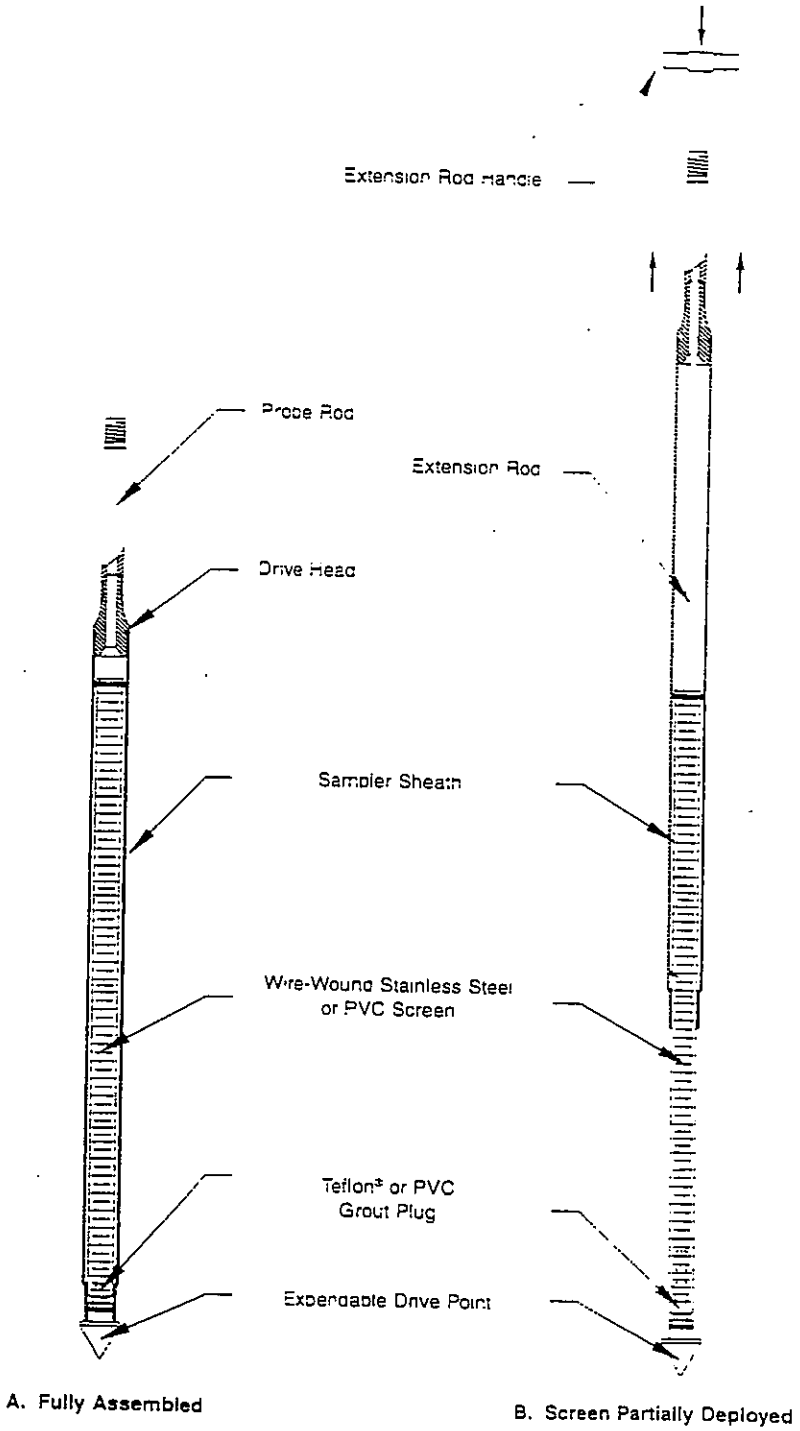

FIGURE 2.1
Screen Point 15 Groundwater Sampler

3.0 REQUIRED EQUIPMENT

The following equipment is required to successfully recover representative groundwater samples with the Geoprobe Screen Point 15 Groundwater Sampler and probing system. See Figure 3.1 for Screen Point 15 parts identification.

Screen Point 15 Groundwater Sampler Parts	Quantity	Part Number
O-ring Service Kit, 1.0-inch rods (100 of each O-ring)	-1-	GW1504K
O-ring Service Kit, 1.25-inch rods (100 of each O-ring)	-1-	GW1505K
Sampler Sheath	-1-	GW1510*
Drive Head, 0.625-inch bore, 1.25-inch rods (optional)	-1-	GW1512
Drive Head, 0.5-inch bore, 1.25-inch rods	-1-	GW1513
Drive Head, 1.0-inch rods	-1-	GW1515
Screen, Wire-Wound Stainless Steel, 4-Slot	-1-	GW1520*
Screen, PVC, 10-Slot (optional)	-1-	GW1530
Screen Push Adapter	-1-	GW1535*
Grout Plug Push Adapter	-1-	GW1540*
Grout Nozzle	-1-	GW1545
Grout Plugs, Teflon® (Pkg. of 25)	-1-	GW1550K
Grout Plugs, PVC (Pkg. of 25)	-1-	GW1551K*
Expendable Drive Points, Steel (Pkg. of 25)	-1-	GW1555K*
Expendable Drive Points, Aluminum (Pkg. of 25) (optional)	-1-	GW1555ALK
Screen Point 15 Groundwater Sampler Kit for 1.0-inch rods		GW1500K
Includes (*) items plus:		
O-ring Service Kit, 1.0-inch rods (100 or each O-ring)	-1-	GW1504K
Drive Head, 1.0-inch rods	-1-	GW1515
Screen Point 15 Groundwater Sampler Kit for 1.25-inch rods		GW1512K
Includes (*) items plus:		
O-ring Service Kit, 1.25-inch rods (100 or each O-ring)	-1-	GW1505K
Drive Head, 1.25-inch rods	-1-	GW1513

Geoprobe Tools	Quantity	Part Number
Drive Cap, 1.25-inch probe rods**	-1-	AT1200
Slotted Pull Cap, 1.25-inch probe rods (optional)**	-1-	AT1203
Pull Cap, 1.25-inch probe rods**	-1-	AT1204
Probe Rod, 1.25-inch x 48-inch***	Variable	AT1248
O-rings for 1.25-inch Probe Rods (Pkg. of 25)	Variable	AT1250R
Extension Rod, 36-inch (optional)	Variable	AT67
Extension Rod, 48-inch	Variable	AT671
Extension Rod, 1-meter (optional)	Variable	AT675
Extension Rod Coupler	Variable	AT68
Extension Rod Handle	-1-	AT69
Extension Rod Jig	-1-	AT690
Quick Link Extension Rod Connectors (Optional)	Variable	AT694K
Casing Pull Kit (for GH-40 hammer)	-1-	GW4600K
Rod Grip Pull System (may be used in place of GW4600K)	-1-	GH1250K

**Accessories for 1.0-inch OD probe rods are also available from Geoprobe Systems.
***Geoprobe 1.0-inch and 1.25-inch OD probe rods are available in lengths of 36-, 48-, and 60 inches, as well as 1 meter.

Additional Tools	Quantity
Adjustable Wrench	-1-
Pipe Wrenches	-2-

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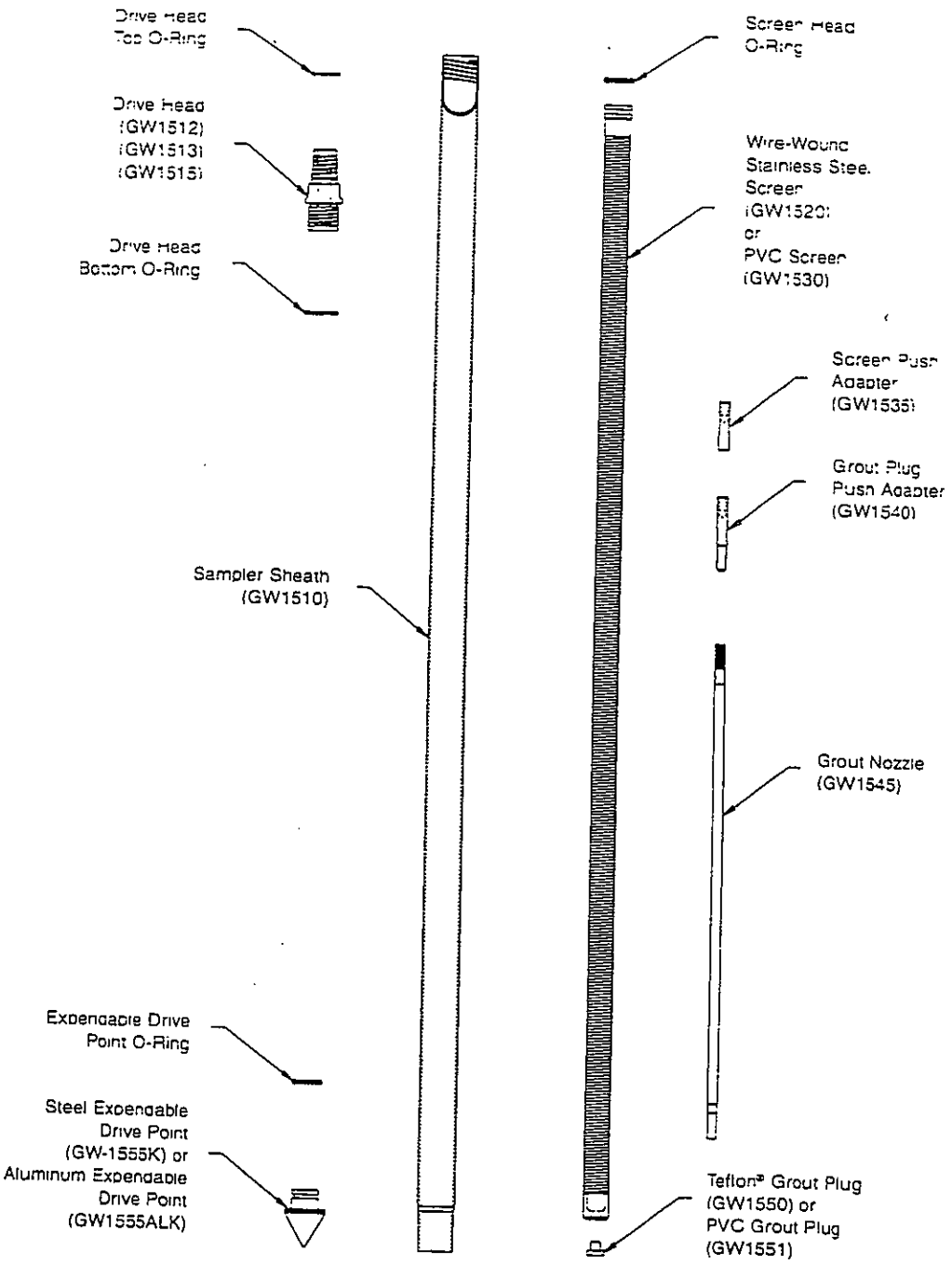

FIGURE 3.1
Screen Point 15 Groundwater Sampler Parts

4.0 OPERATION

4.1 Basic Operation

The Screen Point 15 Groundwater Sampler utilizes a stainless steel or PVC screen which is encased in an alloy steel sampler sheath. An expendable drive point is placed in the lower end of the sheath while a drive head is attached to the top. O-rings on the drive head and expendable point provide a watertight sheath which keeps contaminants out of the system as the sampler is driven to depth. Once the desired sampling interval is reached, extension rods equipped with a screen push adapter are inserted down the inside diameter of the probe rod string. The tool string is then retracted approximately 44 inches (1118 mm) while the screen is held in place with the extension rods. At this point the system is ready for groundwater sampling. When sampling is complete, a removable plug in the bottom of the screen allows for grouting below the sampler as the tool string is retrieved.

4.2 Decontamination

In order to collect representative groundwater samples, all Screen Point 15 parts must be thoroughly cleaned before and after each use. Scrub all metal parts using a stiff, long-bristle brush and a nonphosphate soap solution. Steam cleaning may be substituted for hand-washing if available. Rinse with distilled water and allow to air-dry before assembly.

4.3 Sampler Assembly (Fig. 4.1)

Part numbers are listed for a standard sampler using 1.25-inch x 48-inch probe rods. Refer to Page 6 for screen, grout plug, drive head, extension rod, and probe rod alternatives.

1. Install an O-ring on a steel expendable drive point (GW1555K). Firmly seat the expendable point in the necked end of a sampler sheath (GW1510).

2. Place a PVC grout plug (GW1551) in the lower end of a wire-wound stainless steel screen (GW1520). Install an O-ring in the groove on the upper end of the screen. Slide the screen inside of the sampler sheath with the grout plug toward the bottom of the sampler. Ensure that the expendable point was not displaced by the screen.

3. Install a bottom O-ring on a drive head (GW1513). Thread the drive head onto the sampler sheath. Attach a drive cap (AT1200) to the top of the drive head. Ensure that the threads engage completely. Tighten with an adjustable wrench if necessary.

4. Sampler assembly is complete.

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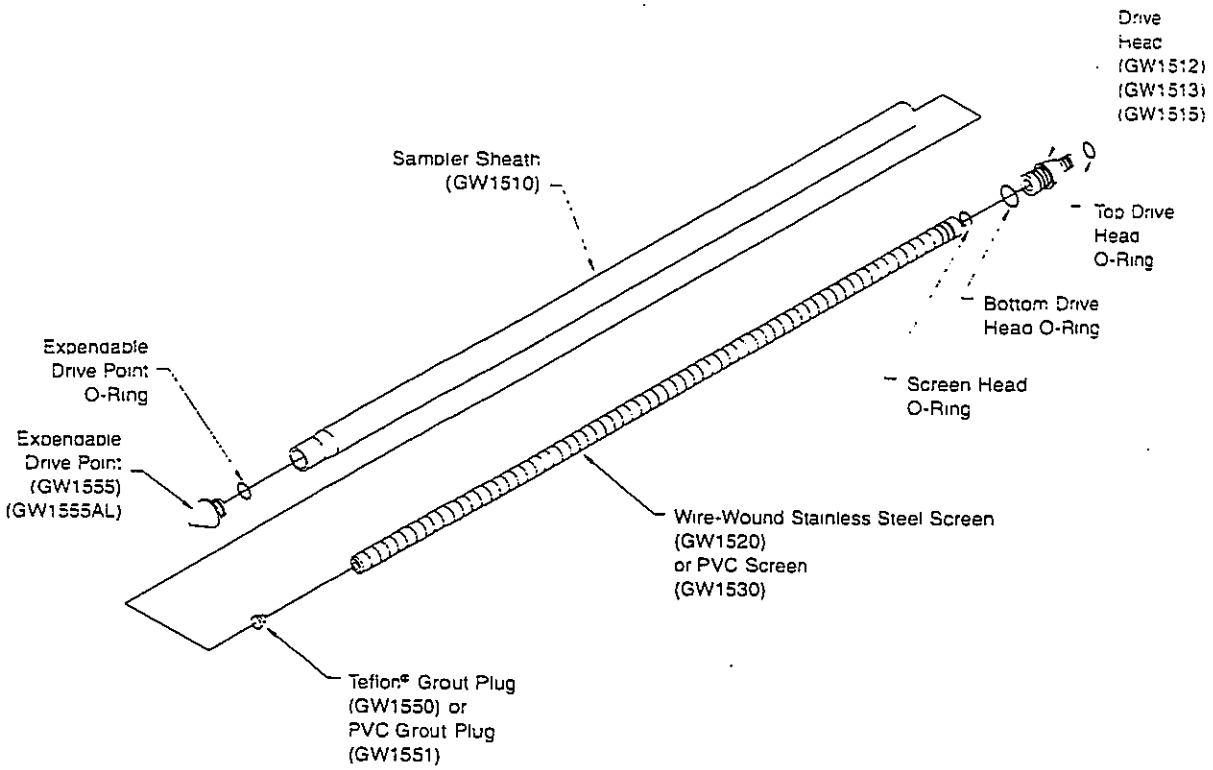

FIGURE 4.1
Screen Point 15 Groundwater Sampler Assembly

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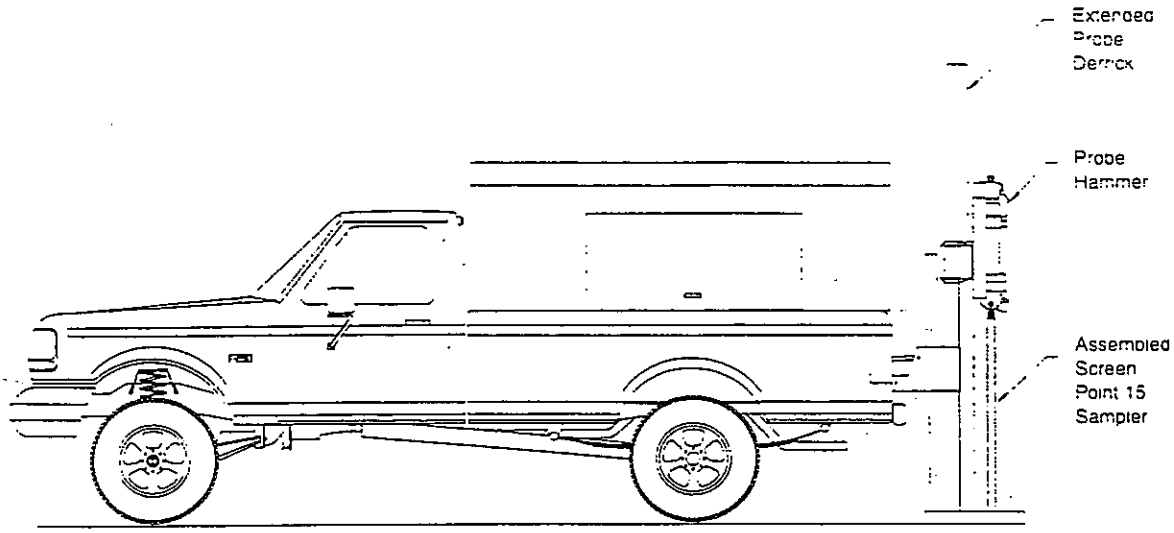

FIGURE 4.2
Screen Point 15 Groundwater Sampler in Driving Position

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4.4 Driving the Screen Point 15 Sampler

To provide adequate room for screen deployment with the casing puller assembly, the probe derrick should be extended a little over halfway out of the carrier vehicle before driving the Screen Point 15 Sampler

1. Begin by placing the assembled sampler (Fig. 2.1) in the driving position beneath the hammer on the extended probe derrick (Fig. 4.2).

2. Drive the sampler with throttle control at slow speed for the first 1 or 2 feet to ensure that the sampler is driving straight. Switch the throttle control to fast speed for the remainder of the probe stroke.

3. Completely raise the hammer assembly. Remove the drive cap and place an O-ring in the top groove of the drive head. Distilled water may be used to lubricate the O-ring if needed. Add a 1.25-inch x 48-inch probe rod (AT1248) and reattach the drive cap to the rod string. Drive the sampler the entire length of the new rod with the throttle control at fast speed.

4. Repeat Step 3 until the desired sampling interval is reached. Approximately 12 inches (305 mm) of the last probe rod must extend above the ground surface to allow attachment of the puller assembly. A 12-inch (305 mm) rod may be added if the tool string is over-driven.

5. Remove the drive cap and retract the probe derrick away from the tool string.

4.5 Screen Deployment

1. Thread the screen push adapter (GW1535, Fig. 4.3) on an extension rod (AT67, AT671, or AT675). Attach a coupler (AT68) to the other end of the extension rod. Lower the extension rod inside of the probe rod taking care not to drop it down the tool string. An extension rod jig (AT690, Fig. 4.3) may be used to hold the rods.

2. Add extensions until the adapter contacts the bottom of the screen. To speed up this step, extension rod Quick Links (AT694K, Fig. 4.3) are recommended.

3. Maneuver the probe assembly into position for pulling.

   Note: In this section, "Puller" refers to either the Casing Pull Kit (GW4600K) or Rod Grip Pull System (GH1250K). The operator may choose which option to use. Refer to Figures 4.4 and 4.5 for puller configurations.

4. Ensure that at least 48 inches (1219 mm) of extension rod protrudes from the probe rod. Thread an extension rod handle (AT-69, Fig. 4.3) on the top extension.

5. Retract probe rods and sampler sheath while physically holding the screen in place with the extension rods (Fig. 4.5B). A slight knock with the extension rod string will help to dislodge the expendable point and start the screen moving inside the sheath. Raise the hammer and pull bracket assembly about 44 inches (1118 cm). At this point the screen head will contact the necked portion of the sampler sheath (Fig. 4.5C.) and the extension rods will rise with the probe rods. The screen is now deployed. Use care when deploying a PVC screen so as not to break the screen when it contacts the bottom of the sampler sheath.

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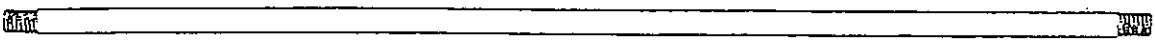
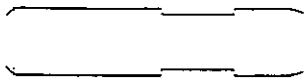
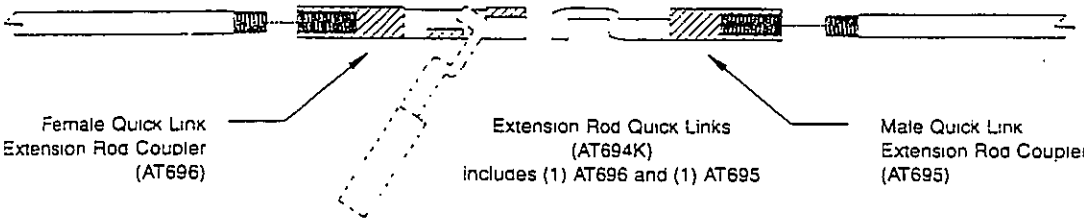


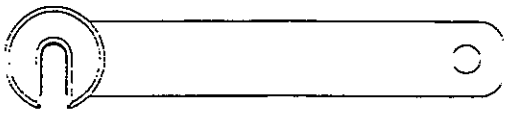
Extension Rod, 36-inch (AT67), 48-inch (AT671), or 1-meter (AT675)

Grout Plug Push Adapter
(GW1540)

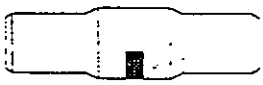


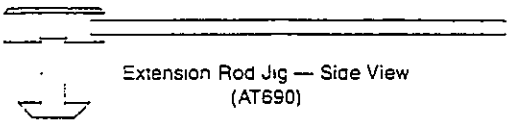
Screen Push Adapter
(GW1535)





Extension Rod Jig — Top View
(AT690)





Extension Rod Jig — Side View
(AT690)

Extension Rod Handle
(AT69)

FIGURE 4.3
Geoprobe Extension Rods and Accessories

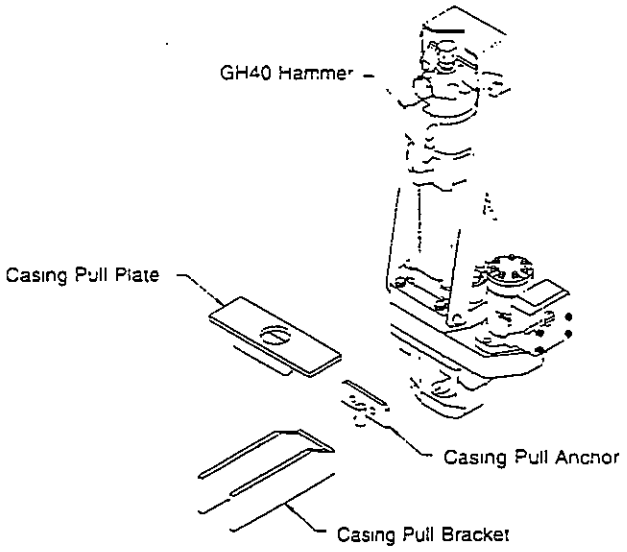


FIGURE 4.4
Casing Puller Assembly for Units Originally Equipped With The GH-40 Hammer

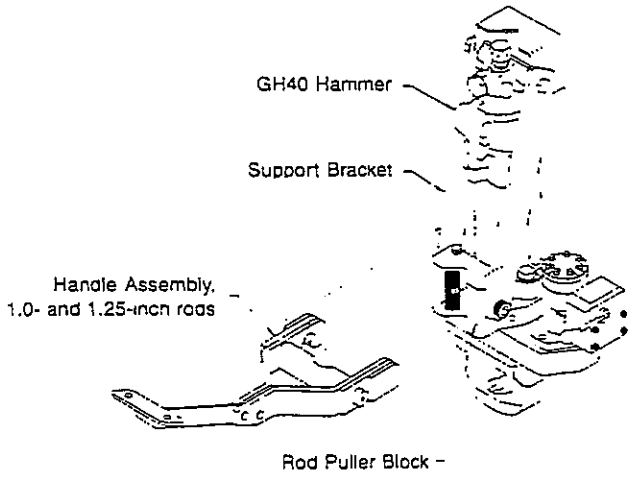


FIGURE 4.5
Rod Grip Pull System for Units Equipped With The GH-40 Hammer

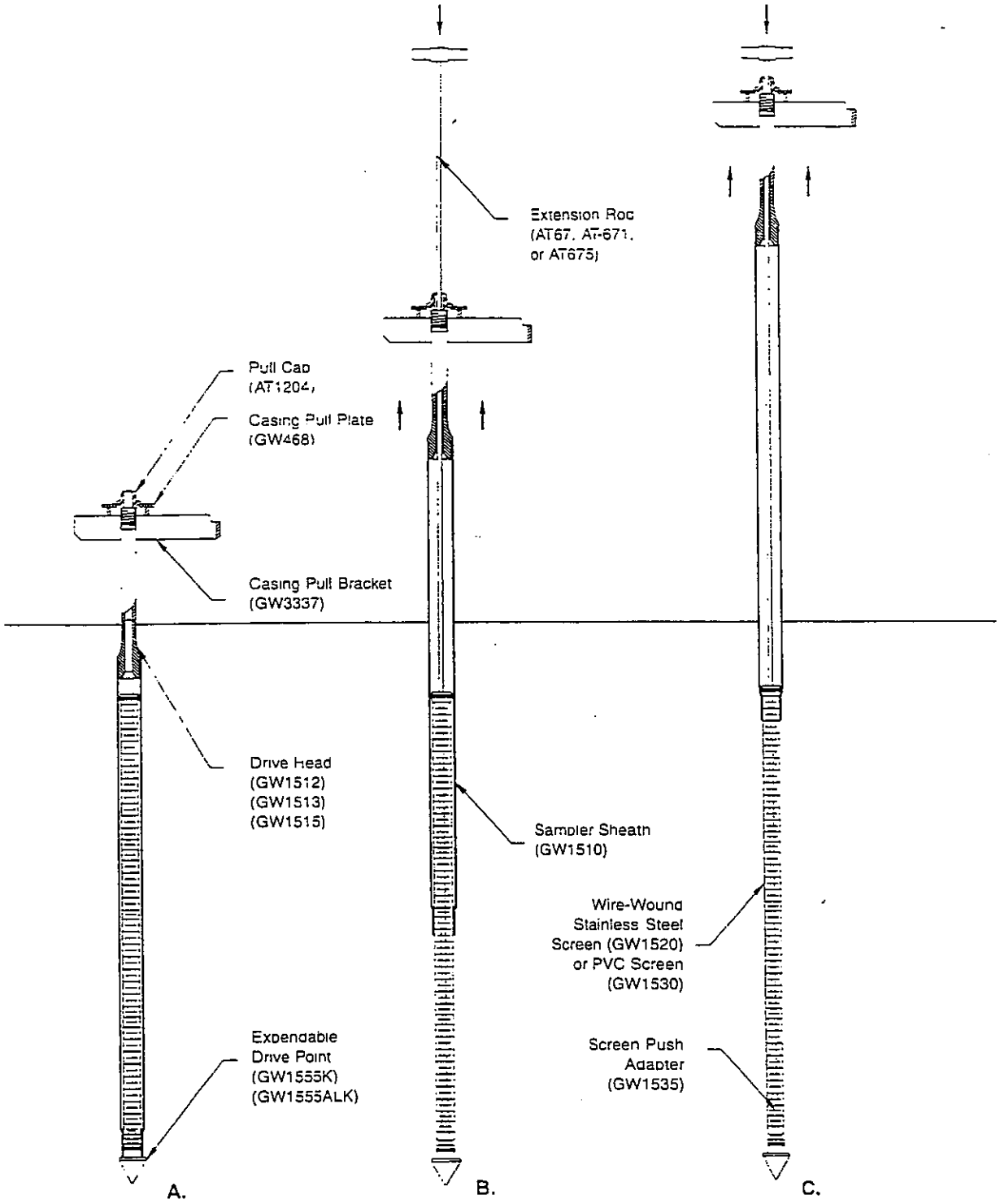


FIGURE 4.6
Screen Deployment Using a Casing Pull Kit

6. Lower the hammer assembly and retract the probe derrick. Remove the top extension rod and handle, pull cap, and top probe rod. Finally, extract all extension rods.

7. Groundwater samples can now be collected with a mini-bailer, peristaltic or vacuum pump, tubing bottom check valve assembly, or other acceptable small diameter sampling device.

8. When inserting the tubing down the rod string to collect a sample, ensure that the tubing enters the screen interval. The tubing will sometimes catch on the edge of the funnel opening of the screen head. An up-and-down motion combined with rotation helps move the tubing past the lip and into the screen.

4.6 Abandonment Grouting

The Screen Point 15 Sampler can meet ASTM D 5299 requirements for abandoning environmental wells or borings when grouting is conducted properly. A removable grout plug makes it possible to deploy tubing through the bottom of the screen. A GS500 or GS1000 Grout Machine is then used to pump grout into the open probe hole as the sampler is withdrawn. The following procedure is presented as an example only and should be modified to satisfy local abandonment grouting regulations.

1. Maneuver the probe assembly into position for pulling. Attach the puller to the top probe rod. Raise the tool string approximately 4 to 6 inches (102 to 152 cm) to allow removal of the grout plug.

   Note: A Slotted Pull Cap (AT1203) is needed if utilizing the Casing Pull Kit (GW4600K). This allows connection of the pull cap to the tool string with poly tubing extending from the top of the probe rod.

2. Thread the grout plug push adapter (GW1540, Fig. 4.3) onto an extension rod. Insert the adapter and extension rod inside the probe rod string. Add extensions until the adapter contacts the grout plug at the bottom of the screen. When the extension rods are slightly raised and lowered, a relatively soft rebound should be felt as the adapter contacts the grout plug. This is especially true when using a PVC screen.

3. Place a mark on the extension rod even with the top of the probe rod. Apply downward pressure on the extension rods and push the grout plug out of the screen. The mark placed on the extension rod should now be below the top of the probe rod. Remove all extension rods.

   Note: When working with a stainless steel screen, it may be necessary to raise and quickly lower the extension rods to jar the grout plug free. When the plug is successfully removed, a metal-on-metal sensation may be noted as the extension rods are gently "bounced" within the probe rods.

4. A grout nozzle (GW1545) is now connected to polyethylene tubing and inserted into the probe rods and down through the bottom of the screen (Fig. 4.7). It may be necessary to pump a small amount of clean water through the tubing during deployment to jet out sediments that settled in the bottom of the screen. Resistance will sometimes be felt as the grout nozzle passes through the drive head. Once again, rotate the tubing while moving it up-and-down to ensure that the nozzle has reached the bottom of the screen and is not hung up on the drive head.

   Note: All probe rods remain strung on the tubing as the tool string is pulled. Provide extra tubing length to allow sufficient room to lay the rods on the ground as they are removed. An additional 20 feet is generally enough.

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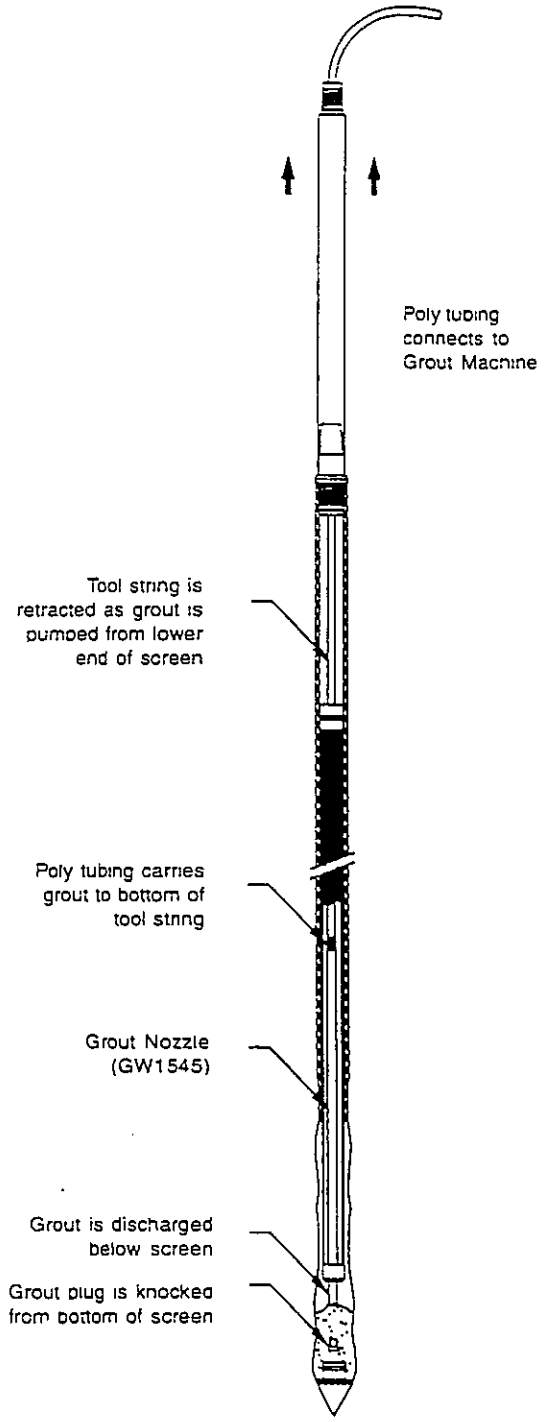

FIGURE 4.7
Grouting Through The Screen Point 15 Groundwater Sampler

Note: You may use the same poly tubing to grout the hole as was used to collect the groundwater sample. After sampling, completely lower the tubing to the bottom of the screen. Place a mark on the tubing even with the top of the rod string. Remove the tubing. Make a second mark on the tubing one grout nozzle length below the first mark. Now attach the nozzle to the leading end of the tubing and lower it to the bottom of the screen. The second mark on the tubing will be just below the top of the probe rods when the grout nozzle is fully deployed.

5. Position the probe assembly for pulling, taking care not to pinch or bind the tubing. Operate the grout pump while pulling the first rod. Coordinate pumping and pulling rates so that grout fills the void left by the sampler. Remove the split pull cap and unscrew the probe rod. Slide the rod over the tubing and place it on the ground near the end of the tubing to leave room for the remaining probe rods.

6. Repeat Step 5 until the sampler is retrieved. Do not bend or kink the tubing when pulling and laying out the probe rods. Sharp bends create weak spots in the tubing which may burst when pumping grout. Remember to operate the grout pump only when pulling the rod string. The probe hole is thus filled with grout from the bottom up as the rods are extracted.

7. Promptly clean all probe rods and sampler parts before the grout sets up and clogs the equipment.

4.7 Retrieving the Screen Point 15 Sampler

If grouting is not required, the Screen Point 15 sampler can be retrieved by pulling the probe rods as with most other Geoprobe sampling applications. The Rod Grip Pull System (GH1250K) should be used for this process as it allows the operator to remove rods without releasing the tool string. This keeps rods from falling to the bottom of the probe hole. If a rod grip pull system is not available, utilize a standard Pull Cap (AT1204). The process of retrieving the sampler with a standard pull cap is given below.

1. Position the probe derrick and hammer assembly over the tool string. Thread a pull cap (AT1204) onto the top probe rod.

2. Lower the hammer latch over the pull cap and retract the tool string one probe rod length.

3. Remove the pull cap and top probe rod and repeat Step 2 until the sampler sheath is at the ground surface.

4. Physically pull the sampler sheath and screen out of the ground taking care not to bend the screen on the way out. The Screen Point 15 Groundwater Sampler is now retrieved and ready to decontaminate for further use.

2632 RDC-00761

5.0 REFERENCES

American Society for Testing and Materials (ASTM). 1993. ASTM 5299 Standard Guide for Decommissioning of Groundwater Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities: *1993 Annual Book of ASTM Standards, Vol. 04-08*. Philadelphia, PA.

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2632 RDC-00762

GEOPROBE MACRO-CORE® SOIL SAMPLER

STANDARD OPERATING PROCEDURE

Technical Bulletin No. 95-8500

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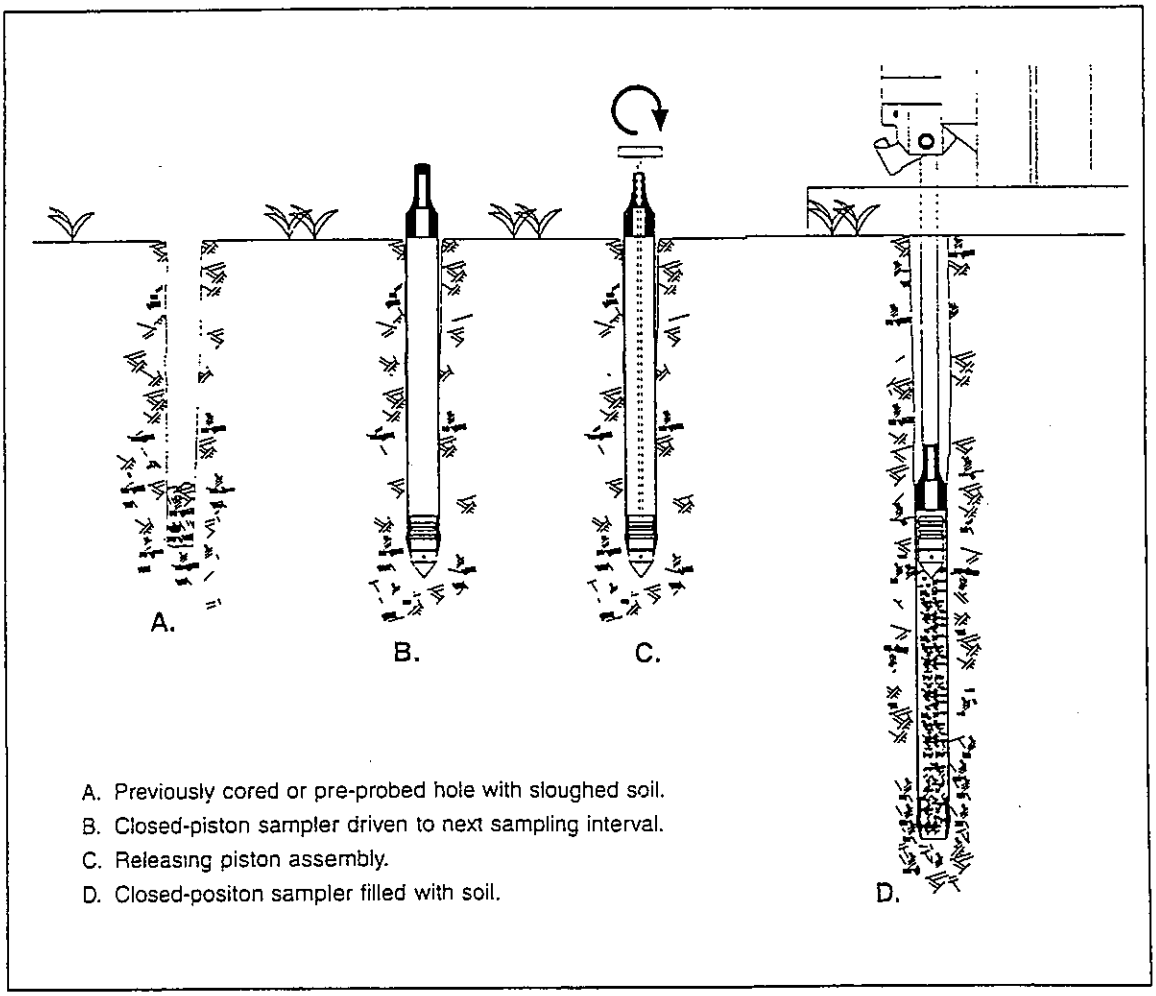

SAMPLING WITH THE MACRO-CORE® CLOSED-PISTON SOIL SAMPLER

Geoprobe® Systems

A DIVISION OF KEJR ENGINEERING

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Kejr Engineering, Inc., Salina, Kansas

Macro-Core® is a Registered Trademark of
Kejr Engineering, Inc., Salina, Kansas

Macro-Core® Soil Sampler manufactured
under US Patent 5,606,139.

Macro-Core® Closed-Piston Drive Point
manufactured under US Patent 5,542,481

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1.0 OBJECTIVE

The objective of this procedure is to collect a representative soil sample at depth and recover it for visual inspection and/or chemical analysis.

2.0 BACKGROUND

2.1 Definitions

Geoprobe®*: A brand name of high quality, hydraulically-powered machines that utilize both static force and percussion to advance sampling and logging tools into the subsurface.
* *Geoprobe® is a registered trademark of Kejr Engineering, Inc., Salina, Kansas*

Macro-Core® Soil Sampler*: A solid barrel, direct push device for collecting continuous core samples of unconsolidated materials at depth. Although other lengths are available, the standard Macro-Core® Sampler has an assembled length of approximately 52 inches (1321 mm) with an outside diameter (OD) of 2.2 inches (56 mm). Collected samples measure up to 1300 ml in volume in the form of a 1.5-inch x 45-inch (38 mm x 1143 mm) core contained inside a removable liner. The Macro-Core® Sampler may be used for open-tube as well as closed-piston sampling.
* *Macro-Core® is a registered trademark of Kejr Engineering, Inc., Salina, Kansas*

Liner: A 1.75-inch OD x 46-inch long (44 mm x 1168 mm) removable/replaceable, thin-walled tube inserted inside the Macro-Core® sample tube for the purpose of containing and storing soil samples. Liner materials include stainless steel, Teflon®, PVC, and PETG.

2.2 Discussion

In this procedure, the assembled Macro-Core Soil Sampler is attached to the leading end of a Geoprobe probe rod and driven into the subsurface using a Geoprobe soil probing machine. Additional probe rods are connected in succession to advance the sampler to depth. The Macro-Core Sampler may be used as an open-tube or closed-piston sampler.

The simplest and most common use of the Macro-Core Sampler is as an open-tube sampler (Fig. 2.1A). In this method, coring starts at the ground surface with an open-ended sampler. From the ground surface, the Macro-Core Sampler is advanced one sampling interval and then retrieved from the hole with the first soil core. In stable soils, the open-tube sampler is inserted back down the same hole to obtain the next core. Geoprobe operators have reported coring to depths exceeding 30 feet (9 m) with this method.

In unstable soils which tend to collapse into the core hole, the Macro-Core Sampler can be equipped with a piston assembly (Fig. 2.1B). This assembly actually locks into the cutting shoe and prevents soil from entering the sampler as it is advanced to the bottom of an existing hole.

The Macro-Core Closed-Piston Sampler is not designed to be driven through undisturbed soil. Soil is first removed to sampling depth with an open-tube sampler, or a pilot hole may be made with a Macro-Core Pre-Probe. A Macro-Core Piston Assembly is then installed and the sampler is inserted or driven back down the same hole. When the leading end of the sampler reaches the top of the next sampling interval, the piston is unlocked using extension rods inserted down the inside of the probe rods.

Once the piston is relieved, the tool string is simply driven another sampling interval. Soil entering the sampler pushes the piston assembly to the top of the sample liner where it is retrieved upon removal of the liner and soil core.

Loose soils will sometimes fall out of the Macro-Core Sampler as it is retrieved from depth. The Macro-Core Core Catcher (Fig. 2.1) was designed to alleviate this problem. Excellent results are obtained when the core catcher (sometimes called a basket retainer) is used with saturated sands and other non-cohesive soils. A core catcher is not necessary when sampling tight soils and may actually inhibit sample recovery. Constructed of PVC, the core catcher may be used with PVC, PETG, Teflon®, and stainless steel liners.

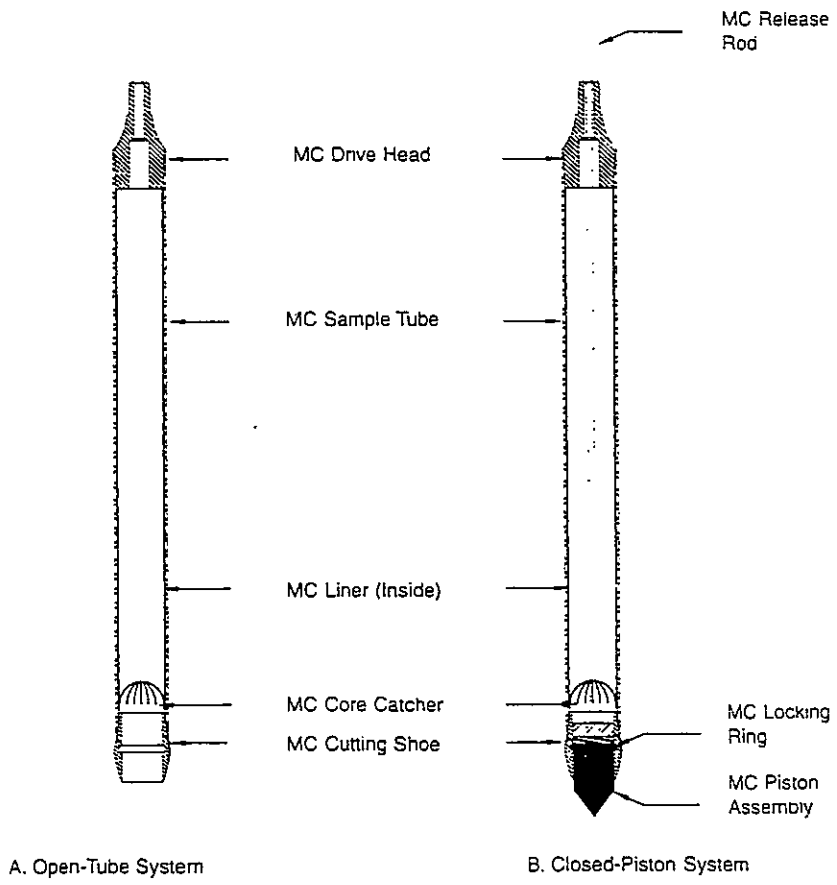

FIGURE 2.1
Macro-Core® Soil Sampler Assemblies

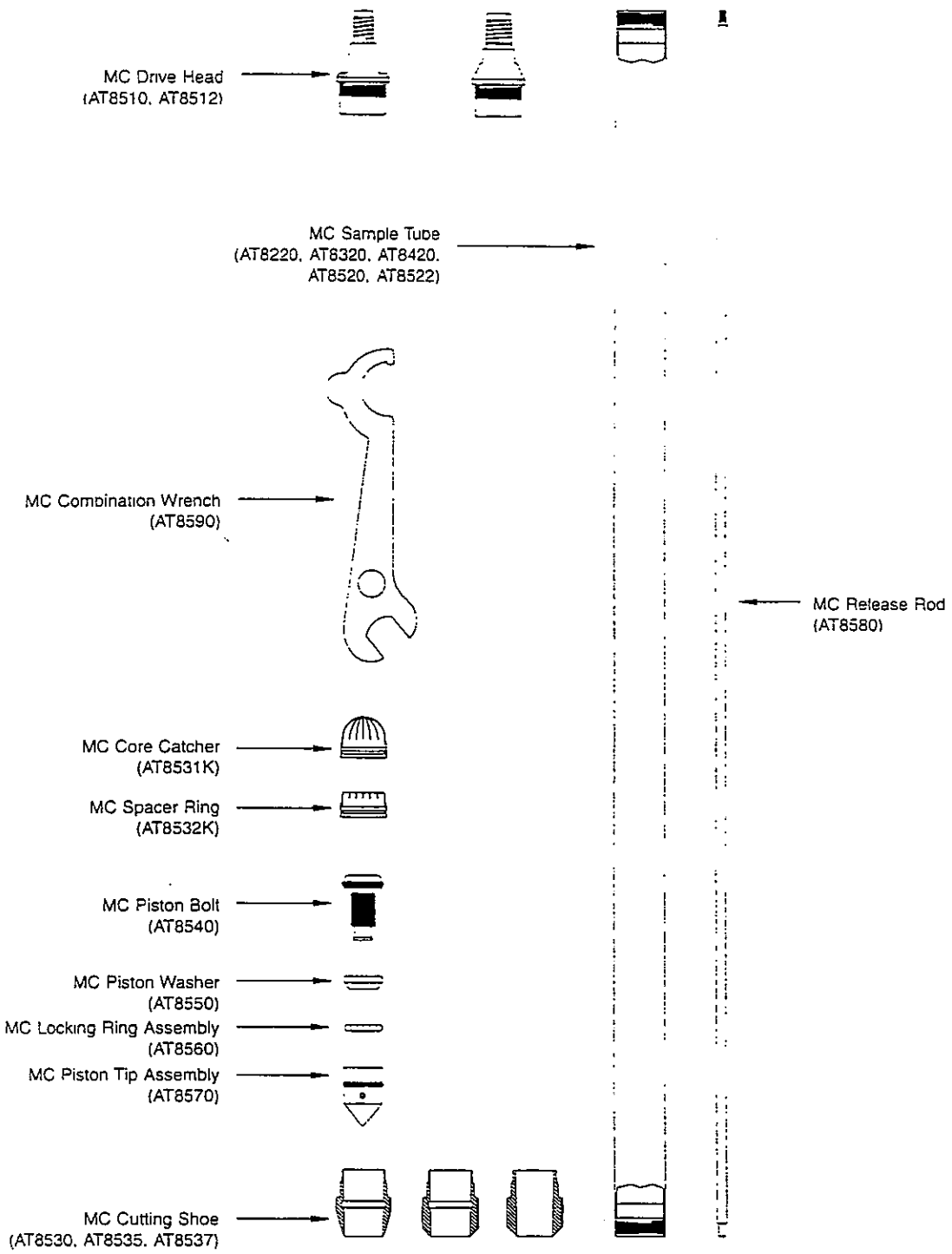

FIGURE 3.1
Macro-Core® Soil Sampler Parts

3.0 REQUIRED EQUIPMENT

The following equipment is used to recover samples using the Geoprobe Macro-Core Soil Sampler and probing system. Although many options are available (sampler length, liner material, etc.), the basic sampler configuration does not change. Refer to Figure 3.1 (previous page) to view the major components of the Macro-Core sampler.

MACRO-CORE SAMPLER PARTS	PART NUMBER
MC Drive Head, for use with 1.0-inch probe rods	AT8510
MC Drive Head, for use with 1.25-inch probe rods	AT8512
MC Sample Tube, 24-inch, unplated	AT8220
MC Sample Tube, 36-inch, unplated	AT8320
MC Sample Tube, 1-meter, unplated	AT8420
MC Sample Tube, 48-inch, Ni-plated	AT8520
MC Sample Tube, 48-inch, unplated	AT8522
MC Cutting Shoe, standard	AT8530
MC Cutting Shoe, heavy-duty	AT8535
MC Cutting Shoe, 0.125 inches undersized	AT8537
MC Combination Wrench	AT8590
Nylon Brush for MC Sample Tubes	BU700

MACRO-CORE PISTON PARTS	PART NUMBER
MC Closed-Piston Kit*	AT8501K
MC Piston Assembly*	AT8505
MC Piston Bolt	AT8540
MC Piston Washer	AT8550
MC Locking Ring Assembly	AT8560
MC Locking Ring Springs (pkg. of 10)	AT8561K
MC Locking Ring Pins (pkg. of 12)	AT8562
MC Piston Tip Assembly	AT8570
MC Piston O-rings (pkg. of 25)	AT8570R
MC Piston Tip Cup Point Set Screws (pkg. of 10)	AT8571
MC Piston Tip Half-Dog Set Screws (pkg. of 10)	AT8572
MC Piston Release Rod	AT8580

MACRO-CORE LINERS AND ACCESSORIES	PART NUMBER
MC Stainless Steel Liner Assembly, 48-inch	AT7235
MC Teflon® Liner Assembly, 48-inch	AT724
MC PETG Liner, thin-wall, 48-inch, (box of 66)	AT725K
MC Vinyl End Caps (66 pair)	AT726K
MC Heavy-Duty PETG Liner Assembly, 48-inch (box of 66)	AT825K
MC PVC Liner Assembly, clear, 24-inch (box of 66)	AT922K
MC PVC Liner Assembly, clear, 36-inch (box of 66)	AT923K
MC PVC Liner Assembly, clear, 1-meter (box of 66)	AT924K
MC PVC Liner Assembly, clear, 48-inch (box of 66)	AT925K
MC Liner Cutter Kit*	AT8000K
MC Liner Cutting Tool	AT8010
MC Liner Cutter Holder	AT8020
MC Liner Cutter Blades (pkg. of 5)	AT8030
MC Liner Circular Cutting Tool	AT8050
MC Core Catchers (pkg. of 25)	AT8531K
MC Spacer Rings (pkg. of 25)	AT8532K

*See Page 7 for component listing.

GEOPROBE TOOLS**	PART NUMBER
Drive Cap. for use with 1.25-inch probe rods	AT1200
Pull Cap. for use with 1.25-inch probe rods	AT1204
Probe Rod. 1.25 inches x 36 inches	AT1236
Probe Rod. 1.25 inches x 1 meter	AT1239
Probe Rod. 1.25 inches x 48 inches	AT1248
Probe Rod. 1.25 inches x 60 inches	AT1260
MC Pre-Probe. 2-inch OD	AT1247
MC Pre-Probe. 2.5-inch OD	AT1242
MC Pre-Probe. 3-inch OD	AT1252
Extension Rod. 36-inch	AT67
Extension Rod. 48-inch	AT671
Extension Rod. 1-meter	AT675
Extension Rod Coupler	AT68
Extension Rod Handle	AT69
Extension Rod Quick Links	AT694K
Machine Vise	FA300

ADDITIONAL TOOLS

Allen Wrench. 1/8 inch
Pipe Wrenches (2)

Three items in the parts listing on Pages 6 were identified with an asterick (*). A listing of the components of each item is given below.

MACRO-CORE KIT / COMPONENT	QUANTITY	PART NUMBER
MC Liner Cutter Kit		AT8000K
MC Liner Cutting Tool	-1-	AT8010
MC Liner Cutter Holder	-1-	AT8020
MC Liner Cutter Blades (pkg. of 5)	-1-	AT8030
MC Closed-Piston Kit		AT8501K
MC Locking Ring Springs (pkg. of 10)	-1-	AT8561K
MC Cutting Shoe. standard	-1-	AT8530
MC Piston Assembly	-1-	AT8505
MC Piston Assembly		AT8505
MC Piston Bolt	-1-	AT8540
MC Piston Washer	-1-	AT8550
MC Locking Ring Assembly	-1-	AT8560
MC Piston Tip Assembly	-1-	AT8570

**Geoprobe tools and accessories are also available for use with 1.0-inch OD (outside diameter) probe-rods.

4.0 OPERATION

Size and material options have resulted in an extensive list of Macro-Core part numbers. To simplify the instructions presented in this document, part numbers are listed in the illustrations only. Refer to Pages 6 and 7 for a complete parts listing.

4.1 Decontamination

Before and after each use, thoroughly clean all parts of the soil sampling system according to project requirements. A new, clean liner is recommended for each use if using PETG, PVC, or Teflon® liners.

Stainless Steel Liners from Geoprobe Systems are cleaned at the factory with an agitated detergent bath at a temperature of approximately 180 degrees F. After rinsing with 180-degree tap water, the liner is air dried, wrapped in PVC outer cladding, and capped with vinyl end caps.

Thoroughly clean the sampler before assembly, not only to remove contaminants but also to ensure correct operation. Dirty threads complicate assembly and may lead to sampler failure. Sand is particularly troublesome as it can bind liners in the sample tube resulting in wasted time and lost samples.

4.2 Field Blank

It is suggested that a field blank be taken on a representative sample liner prior to starting a project and at regular intervals during extended projects. Liners can become contaminated in storage. A field blank will prove that the liners do not carry contaminates which can be transferred to soil samples. The following information is offered as an example method which may be used to take a field blank. Make the appropriate modifications for the specific analytes of interest to the investigation.

Example Procedure:

REQUIRED EQUIPMENT

MC Liner ..... (1)
MC Vinyl End Caps ..... (2)
Distilled Water ..... (100 ml)
VOA Vial (or other appropriate sample container) ..... (1)

1. Place a vinyl end cap on one end of the liner.
2. Pour 100 milliliters of distilled water (or other suitable extracting fluid) into the liner.
3. Place a vinyl end cap on the open end of the liner.
4. From the vertical position, repeatedly invert the liner so that the distilled water contacts the entire inner surface. Repeat this step for one minute.
5. Remove one end cap from the liner, empty contents into an appropriate sample container, and cap the container.
6. Perform analysis on the extract water for the analytes of interest to the investigation.

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4.3 Open-Tube Sampler Assembly

1a. **With MC Core Catcher.** Place the open end of an MC Core Catcher over the threaded end of an MC Cutting Shoe as shown in Figure 4.1. Apply pressure to the core catcher until it snaps into the machined groove on the cutting shoe.

NOTE: AT725K (thin-wall PETG) liners have a swedged end which is generally slipped directly over the groove in the cutting shoe (Fig. 4.2). To use a core catcher with these liners, cut approximately 3/8 inches (10 mm) of material from the swedged end of the liner and proceed to Step 2.

1b. **Without MC Core Catcher.** Push the base of an MC Spacer Ring onto the threaded end of a cutting shoe until it snaps into place (Fig. 4.3).

NOTE: With the exception of AT-725K (thin-wall PETG) liners, all liners must utilize either a spacer ring or core catcher. PETG liners have a swedged end which slides directly over the end of the cutting shoe. Attach the liner to the cutting shoe (Fig. 4.2) before proceeding to Step 2.

2. Thread the cutting shoe into one end of an MC Sample Tube (Fig. 4.4). Tighten until the end of the sample tube contacts the machined shoulder of the cutting shoe.

3. Insert the appropriate liner into the sample tube (Figure 4.4). (The liner is all ready installed if using thin-wall PETG liners (AT725K) without a core catcher).

4. Connect an MC Drive Head to the top of the sample tube (Fig. 4.4) and securely tighten with the MC Combination Wrench (Fig. 4.5). Ensure that the end of the sample tube contacts the machined shoulder of the drive head.

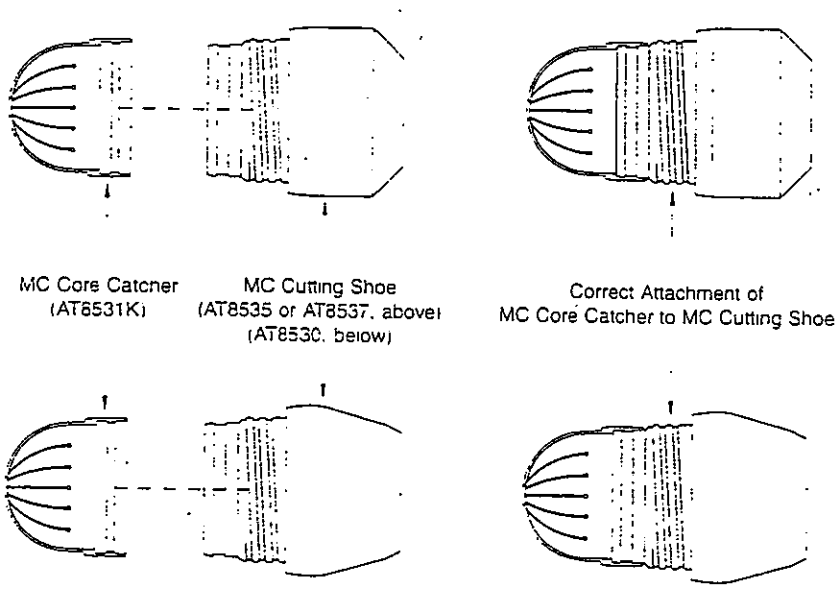

FIGURE 4.1
Macro-Core® Core Catcher Attachment

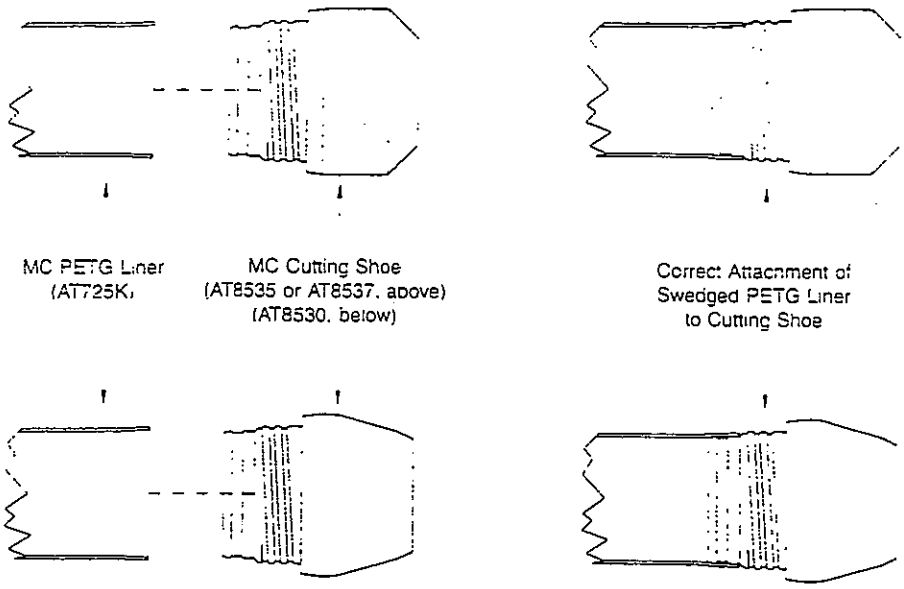

FIGURE 4.2
Macro-Core® PETG Liner Attachment

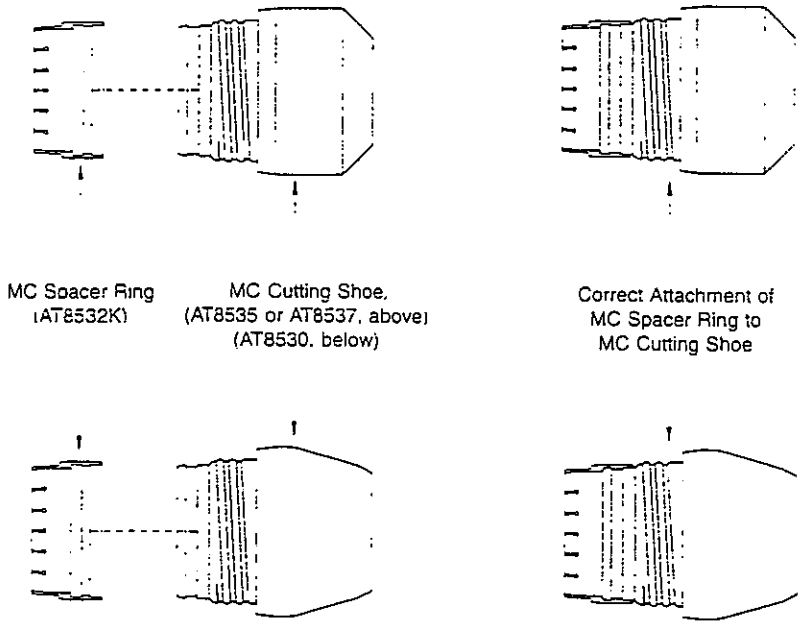

FIGURE 4.3
Macro-Core® Spacer Ring Attachment

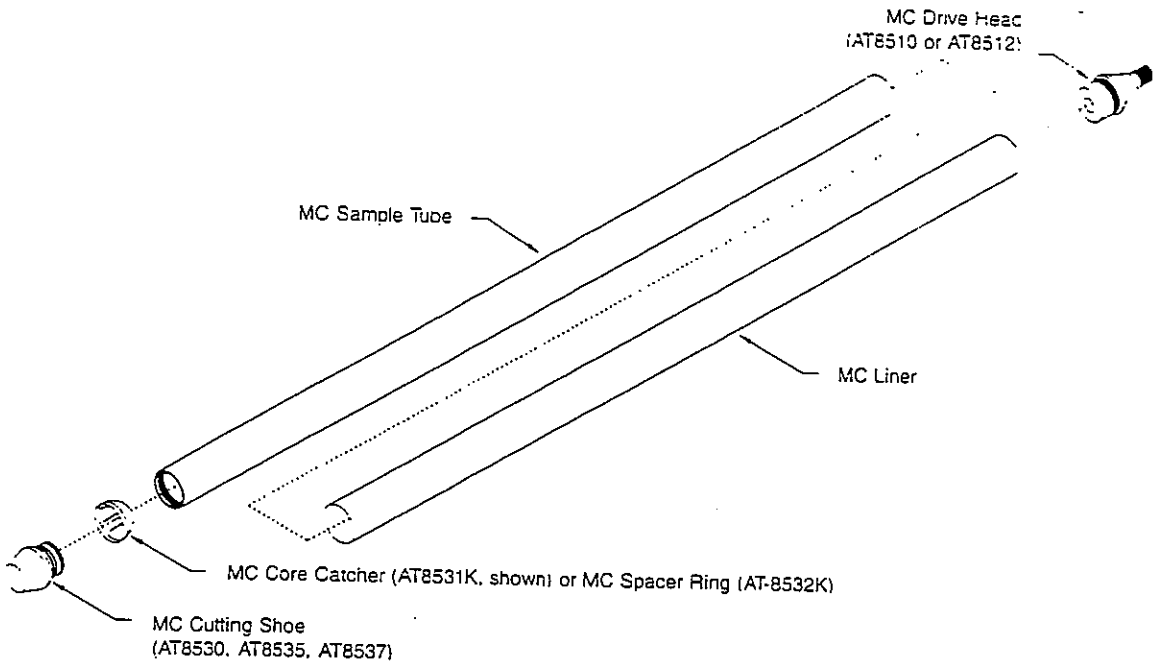

FIGURE 4.4
Macro-Core® Open-Tube Sampler Assembly

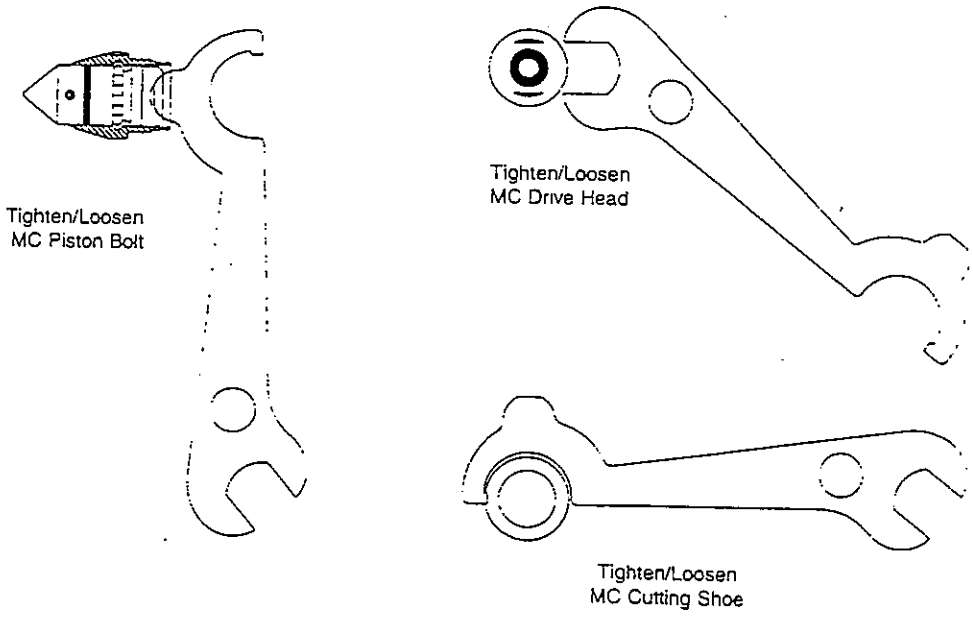

FIGURE 4.5
Macro-Core® Combination Wrench Applications

4.4 Closed-Piston Sampler Assembly (Fig. 4.6)

1. Install an O-ring in the machined groove on the piston bolt head (A) and piston tip (B).

2. Place a piston washer on a piston bolt with the radius side away from bolt head.

3. Position a locking ring on the piston bolt and thread the bolt into the piston tip.

   NOTE: Piston bolt and tip are left-hand threaded.

4. Screw the piston bolt down tight and install a half-dog set screw in the hole on the side of the piston tip. With a 1/8-inch allen wrench, tighten the set screw until it contacts the stem of the piston bolt, then back it out one-quarter turn.

5. Back the piston bolt out until the set screw hits the bottom shoulder on the bolt (approximately four full turns). The bolt must be tight against the set screw to prohibit the set screw from turning while completing Step 6.

6. Lock the half-dog set screw into place by installing a cup point set screw in the same hole. The cup point set screw should be tight but the piston bolt should remain free to turn approximately four full turns.

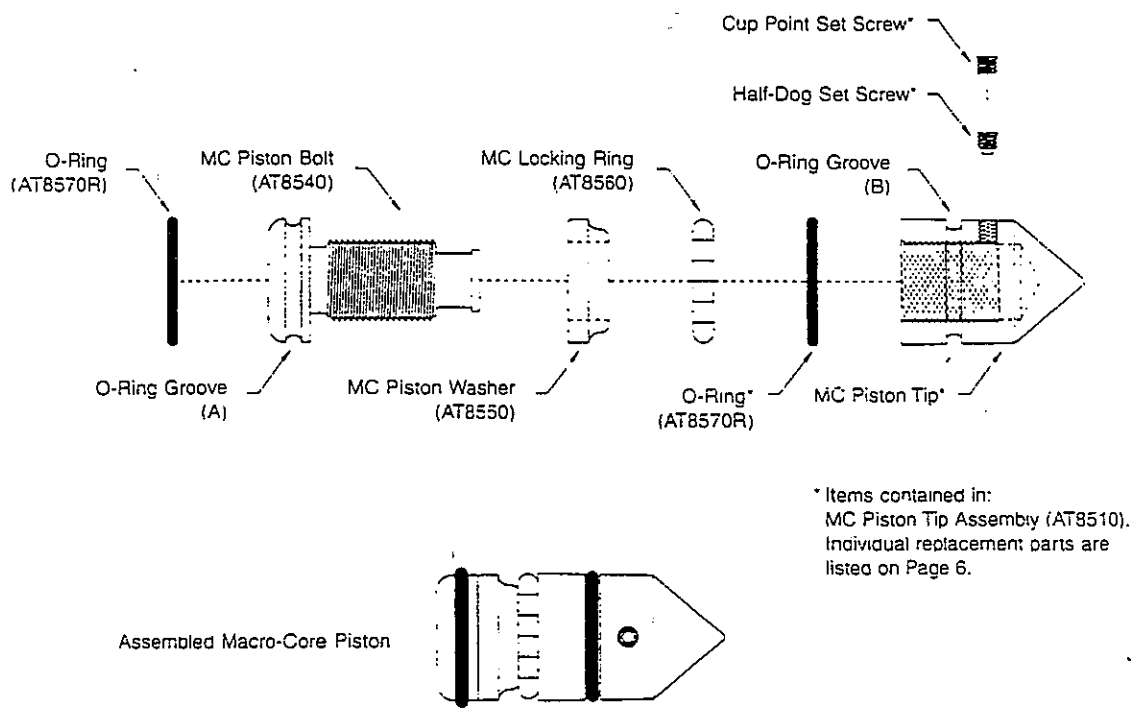

FIGURE 4.6
Macro-Core® Piston Assembly (AT8505)

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NOTE: The top of the cup point set screw must not protrude from the piston tip. File or grind the set screw flush with the side of the tip if necessary. The piston assembly is ready to install in the cutting shoe.

7. Slide an assembled piston into a cutting shoe. The piston should be placed so that one half of the set screw (located on the side of the tip) protrudes from under the edge of the cutting shoe (Fig. 4.7).

8. Tighten the piston bolt (left-hand threads) using the combination wrench (Fig 4.8).

9a. **With MC Core Catcher.** Place the open end of a core catcher over the threaded end of a cutting shoe (Fig. 4.9). Apply pressure to the core catcher until it snaps into the machined groove on the cutting shoe.

NOTE: AT725K (thin-wall PETG) liners have a swedged end which is generally slipped directly over the groove in the cutting shoe (Fig. 4.10). To use a core catcher with these liners, simply cut approximately 3/8 inches (10 mm) of material from the swedged end of the liner and continue to Step 10.

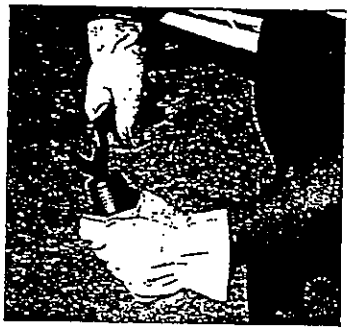

Figure 4.8. Using MC Combination Wrench to tighten MC Piston Bolt inside MC Cutting Shoe.

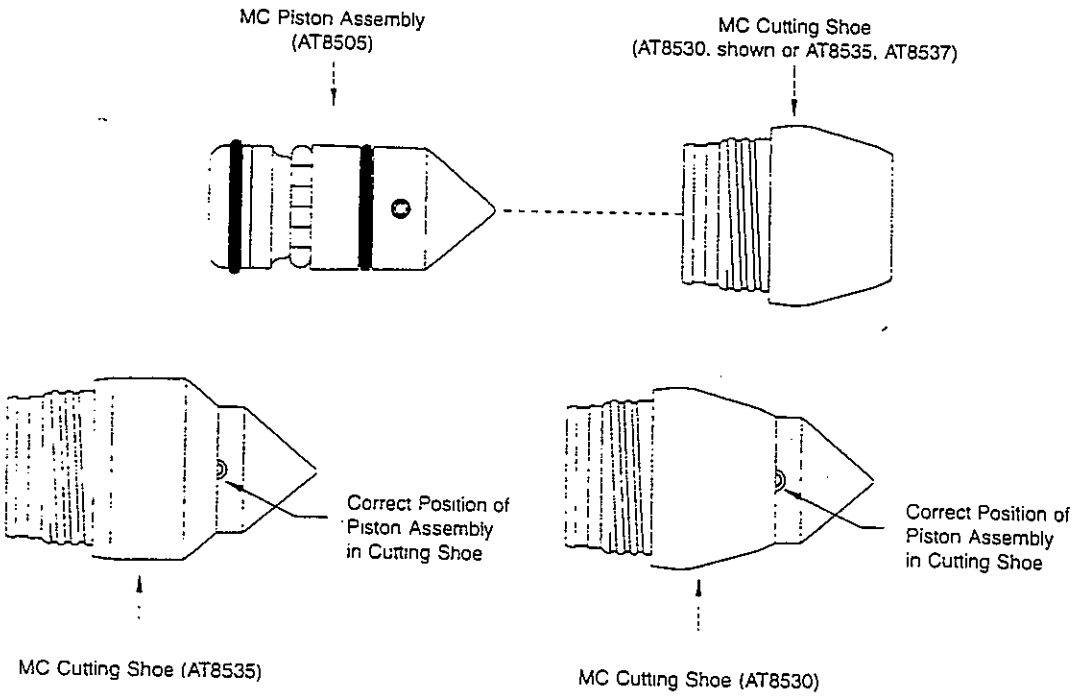

FIGURE 4.7
Installation of Macro-Core® Piston Assembly into Cutting Shoe

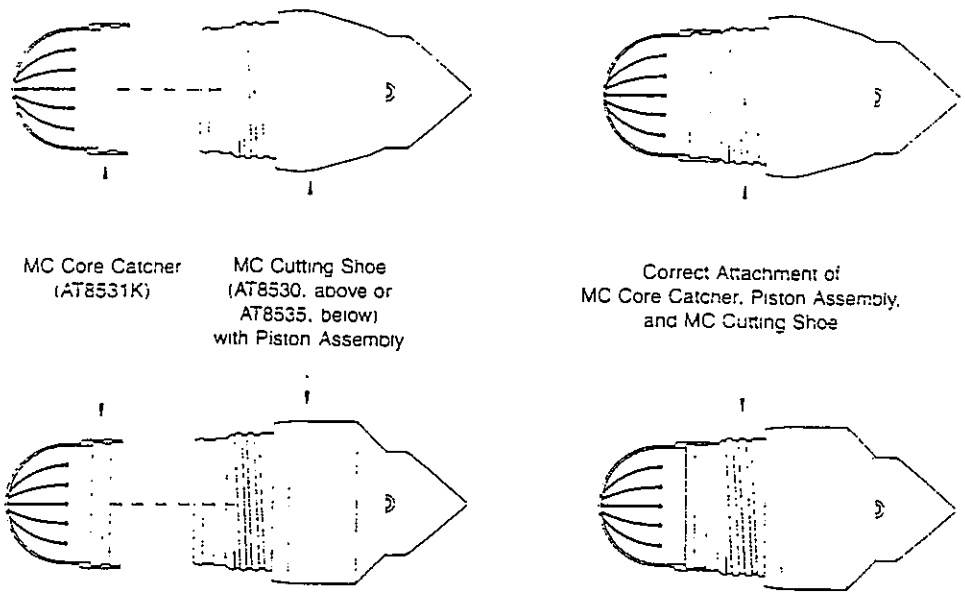

FIGURE 4.9
Macro-Core® Core Catcher Attachment with Piston Assembly

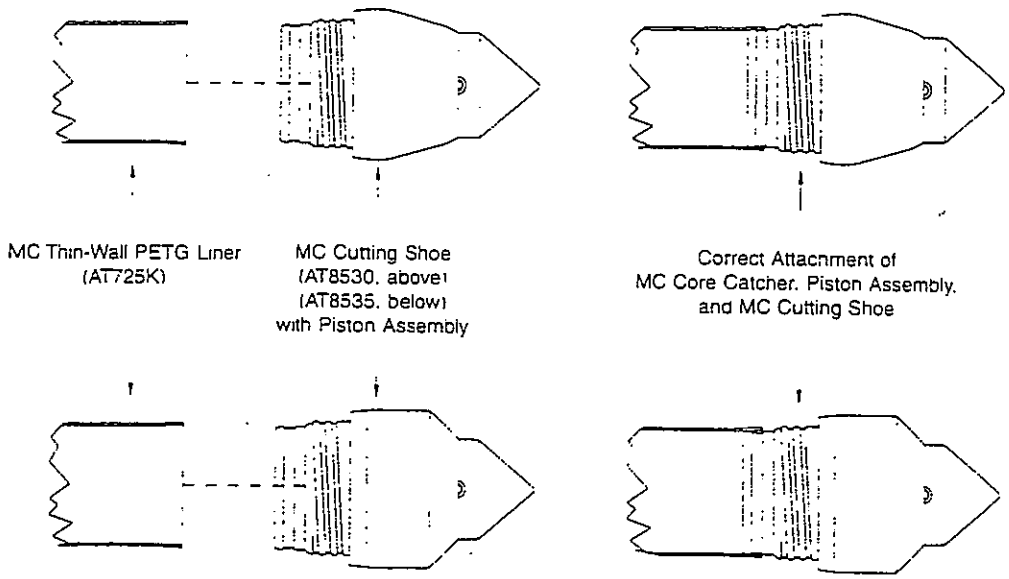

FIGURE 4.10
Macro-Core® Thin-Wall PETG Liner Attachment with Piston Assembly

9b. **Without Core Catcher.** Push the base of an MC Spacer Ring onto the threaded end of a cutting shoe until it snaps into place (Fig. 4.11).

NOTE: With the exception of AT725K (thin-wall PETG) liners, all liners must utilize either a spacer ring or core catcher. PETG liners have a swedged end which slides directly over the end of the cutting shoe. When using PETG liners, attach the liner to the cutting shoe (Fig. 4.10) before proceeding to Step 10.

10. Thread the cutting shoe into one end of an MC Sample Tube (Fig. 4.12). Tighten until the end of the sample tube contacts the machined shoulder of the cutting shoe.

11. Insert the appropriate liner into the sample tube (Fig. 4.12). (The liner is all ready installed if using PETG liners without a core catcher.)

12. Connect a drive head to the top of the sample tube (Fig. 4.12) and securely tighten with the combination wrench (Fig. 4.5) until the end of the sample tube contacts the machined shoulder of the drive head.

4.5 Pilot Hole

A pilot hole prevents excessive sampler wear in tough soils and saves time when a discrete soil core is desired. The pilot hole is created by driving a 2.0-, 2.5-, or 3.0-inch MC Pre-Probe (see page 6 for part numbers) to the top of the sampling interval. Soil surfaces containing gravel, asphalt, hard sands, or rubble should be pre-probed to reduce wear on the cutting shoe and to avoid damage to the sampler. To save time when collecting a discrete soil core, pre-probe to the sampling interval rather than coring to depth with the sampler.

4.6 Open-Tube Sampling

The Macro-Core Open-Tube Sampler is used to gather continuous soil cores from the surface to depths exceeding 30 feet. A representative soil sample is obtained by driving the sampler one sampling interval from ground surface into undisturbed soil. Upon retrieving the sampler, the liner and soil core are removed. The sampler is then properly decontaminated, reassembled with a new liner, and inserted back down the same hole to take the next soil core.

The Macro-Core Cutting Shoe is tapered to minimize the amount of soil scraped from the core walls when inserting the sampler back down an existing hole. In spite of this, non-cohesive soils will often collapse to the bottom of the hole. This slough material then enters the sampler as the next soil core is collected, resulting in a non-representative sample. A Closed-Piston Macro-Core Sampler is required under such conditions. Instructions for sampling with the Open-Tube Macro-Core Sampler follow.

1. Attach a drive cap to the sampler drive head of an assembled Open-Tube Macro-Core Sampler (Section 4.3).

2. Install a hammer anvil and anvil retainer cap assembly. Raise the hammer latch while driving the Macro-Core Sampler to avoid contact with the drive head.

3. Raise the hammer assembly to its highest position by fully extending the probe cylinder. If using a 48-inch or 1-meter sample tube with a Geoprobe Model 4200, 4220, or 420U Probe Unit, raise the machine-foot to allow sufficient room to position the sampler below the hammer.

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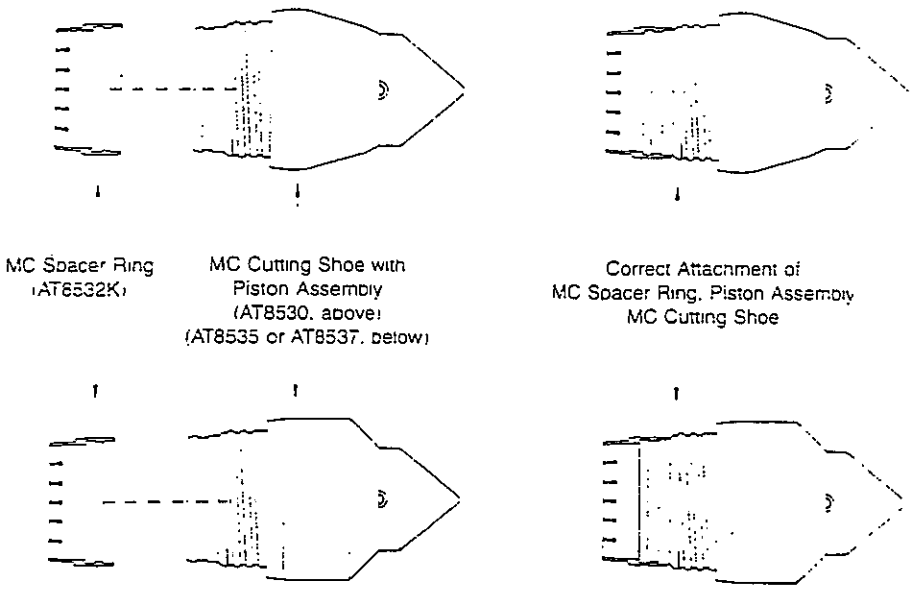

FIGURE 4.11
Macro-Core® Spacer Ring Attachment With Piston Assembly

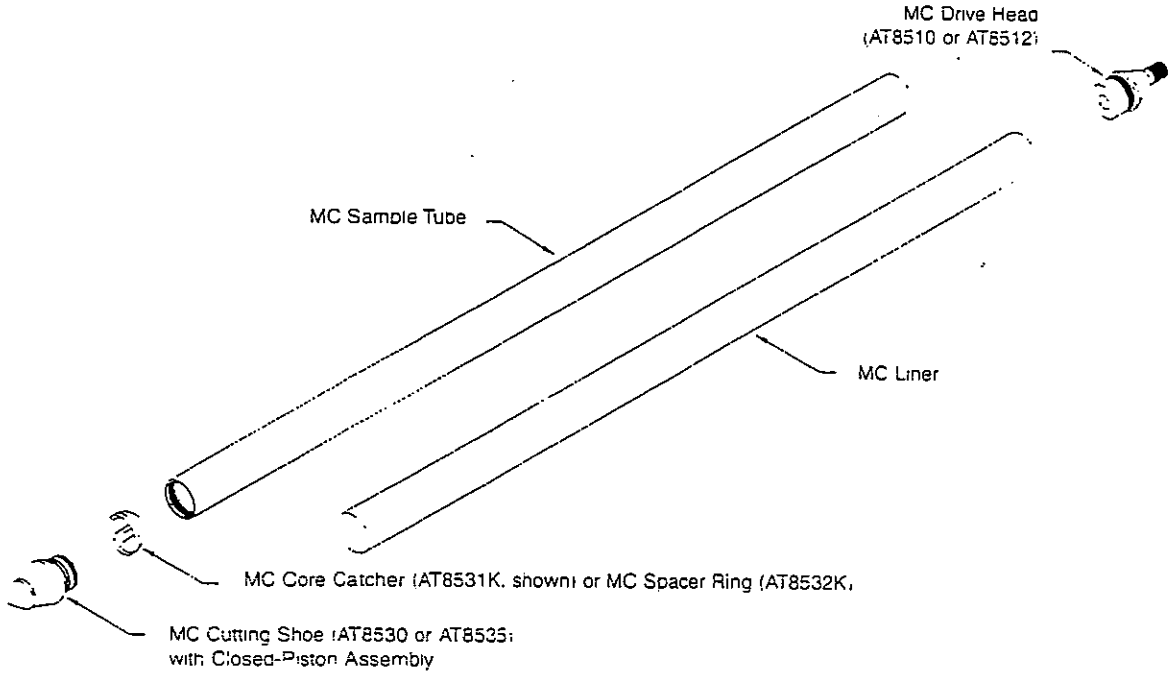

FIGURE 4.12
Macro-Core® Closed-Piston Sampler Assembly

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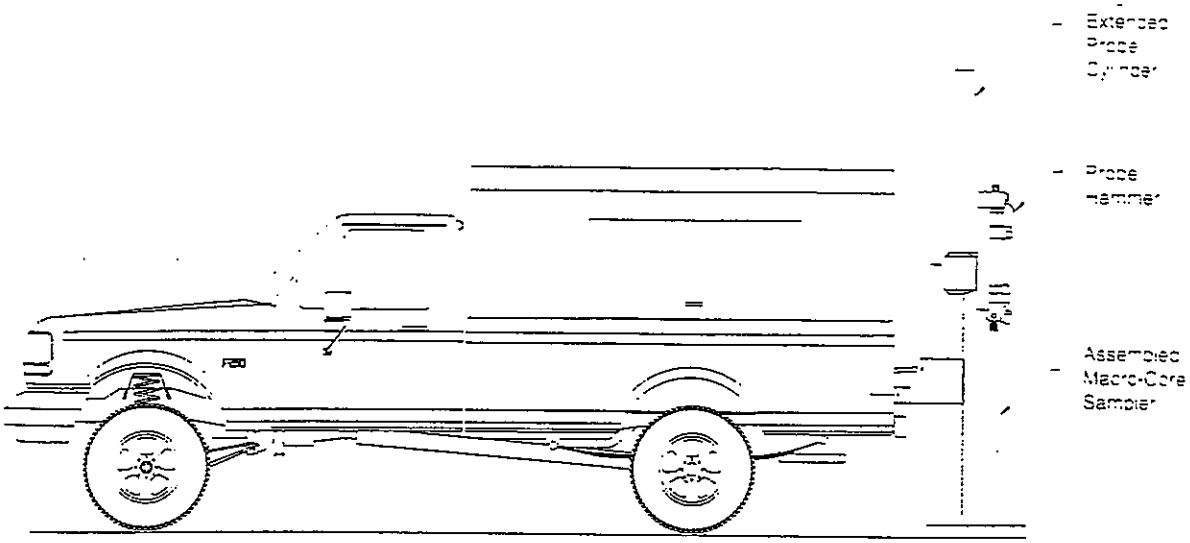

FIGURE 4.13
Macro-Core® Soil Sampler in Driving Position

4. Place the sampler in the driving position (Fig. 4.13). The sampler should always be positioned parallel to the derrick axis.

5. If using a 48-inch or 1-meter sampler tube with a Geoprobe Model 4200, 4220, or 420U Probe Machine, begin applying downward force on the sampler by lowering the machine foot. When the foot contacts the ground surface, apply downward force with the probe cylinder control only. All other Geoprobe units may start initially with the probe cylinder control.

   GEOPROBE TIP: **Activate the hammer whenever collecting soil. Hammering forces soil into the sample tube and increases recovery.**

6. Drive the sampler until the drive head reaches the ground surface (Fig. 4.14A).

***CAUTION**

Some soil conditions may warrant using an MC Pre-Probe before attempting to collect a soil core. Damage may occur if the sampler is driven into rock or any other impenetrable layer.

7. To sample at consecutive intervals, push a sampler down the previously opened hole (Fig. 4.14B) until the top of the next sampling interval is reached (Fig. 4.14C). Drive the tool string another sampling interval to fill the sampler with soil (Fig. 4.14D). An open-tube sampler may be used for consecutive sampling or, if soil slough is expected, a closed-piston sampler is available.

***CAUTION**

All parts must be completely threaded together before being driven. Driving an improperly assembled sampler will result in component damage.

8. Retrieve the sampler as described in Section 4.8: Sampler Retrieval.

4.7 Closed-Piston Sampling

It is often difficult to collect representative soil cores from significant depths with an open-tube sampler due to soil slough. Because of this, the Macro-Core sampler can be equipped with a piston which locks into the cutting shoe. This allows the sealed sampler to pass through the slough material and be opened at the appropriate sampling interval.

NOTE: The closed piston system is meant to be inserted through previously opened holes. It is not designed to be driven from the surface through undisturbed materials.

The MC Closed-Piston System can be used only with AT8500 series Macro-Core tools. The AT8500 series replaces the AT720 series Macro-Core tools.

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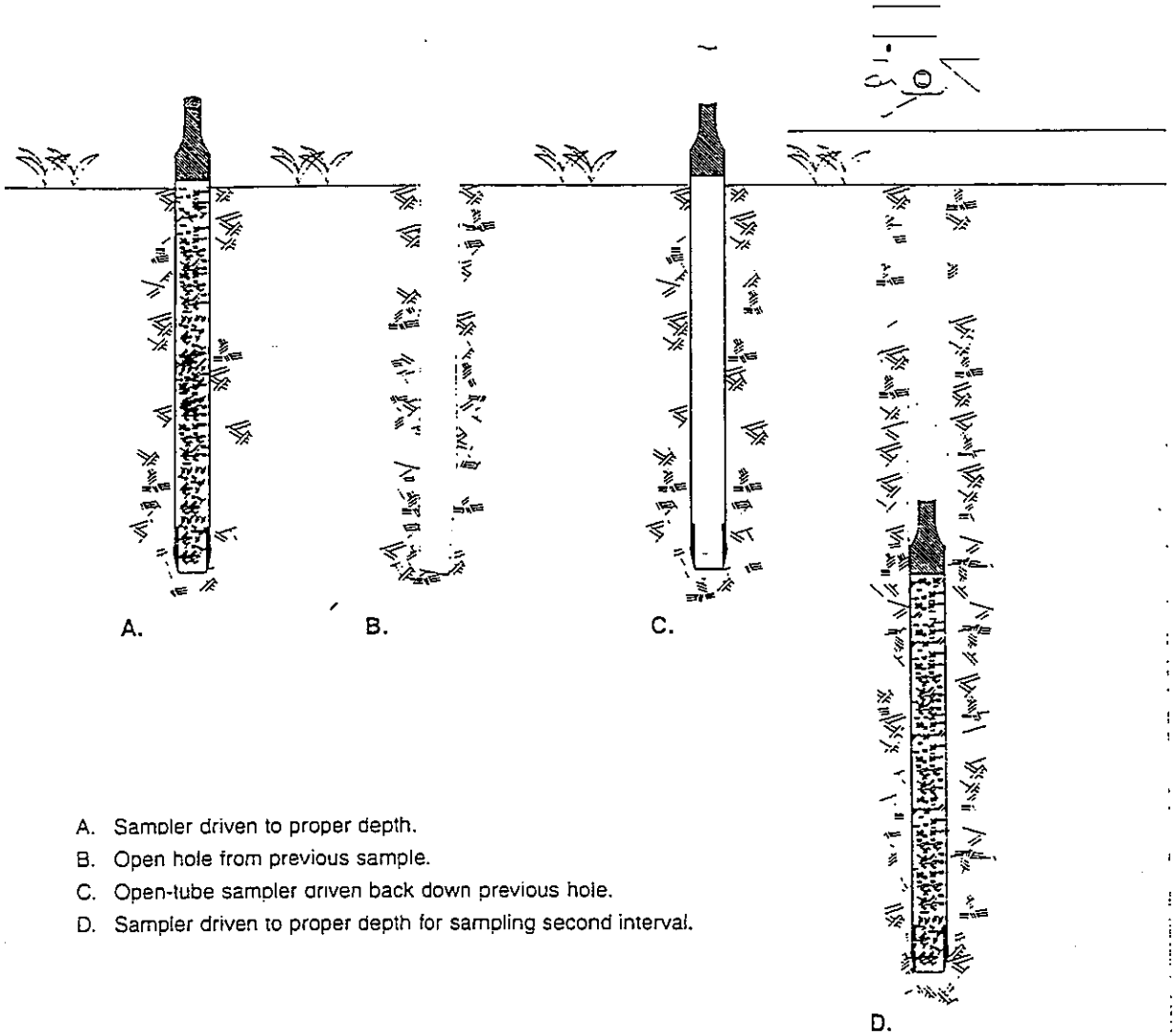

A. Sampler driven to proper depth.
B. Open hole from previous sample.
C. Open-tube sampler driven back down previous hole.
D. Sampler driven to proper depth for sampling second interval.

FIGURE 4.14
Phases of Macro-Core® Open-Tube Soil Sampling

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1. Attach a drive cap to the drive head of an assembled Closed-Piston Macro-Core Sampler (Section 4.4).

2. Install a hammer anvil and anvil retainer cap assembly. Raise the hammer latch while driving the sampler to avoid contact with the drive head.

3. Raise the hammer assembly to its highest position by fully extending the probe cylinder. If using a 48-inch or 1-meter sample tube with a Geoprobe Model 4200, 4220, or 420U Probe Unit, raise the machine foot to allow sufficient room to place the sampler below the hammer.

4. Place the sampler tip in the **previously opened hole** (Fig. 4.15A). Lower the probe until the hammer anvil contacts the sampler drive head.

5. If using a 48-inch or 1-meter sample tube with a Geoprobe Model 4200, 4220, or 420U Probe Machine, begin applying downward force on the sampler by lowering the machine foot. When the foot contacts the ground surface, apply downward force with the probe cylinder control only. All other Geoprobe units may start initially with the probe cylinder control.

6. Drive the sampler until it reaches the desired sampling interval (Fig. 4.15B). Add probe rods as needed.

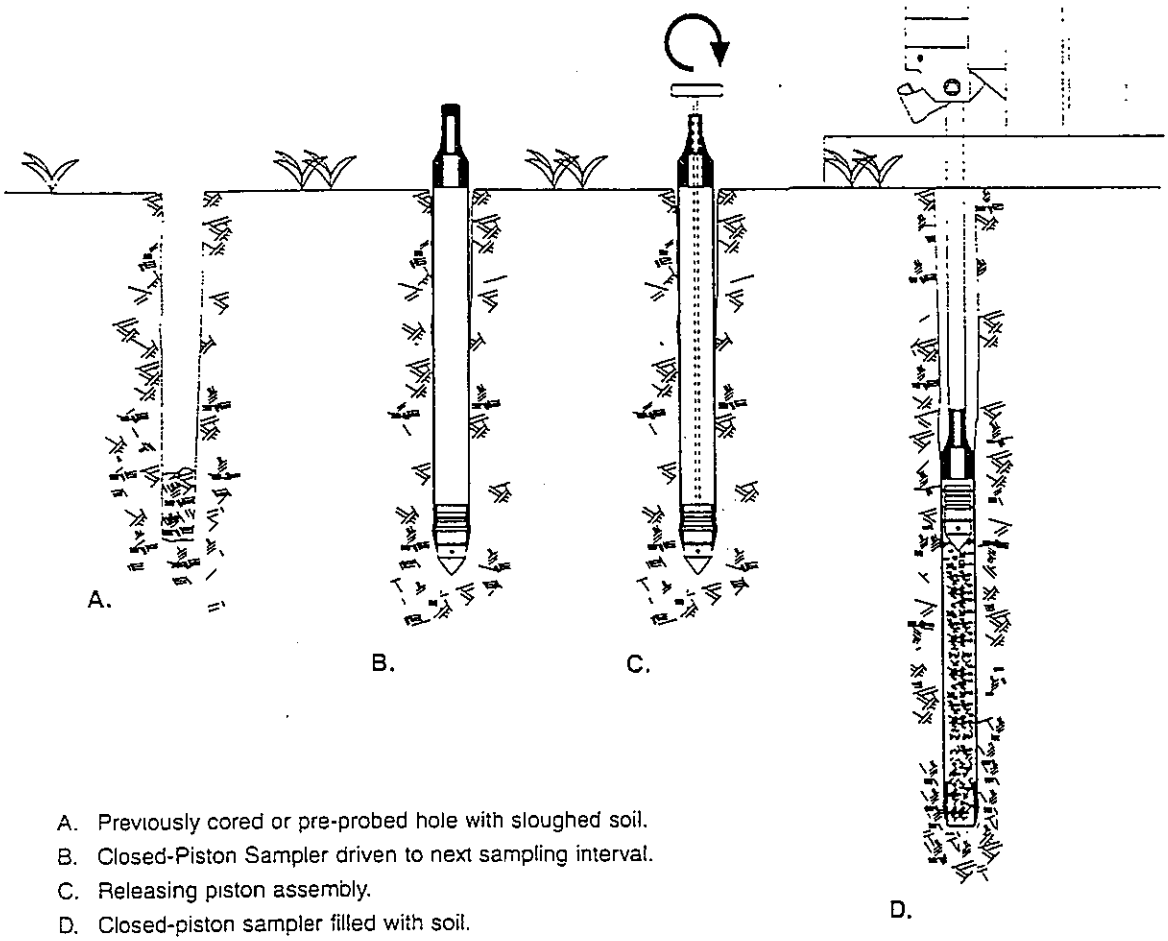
***CAUTION**

Care should be taken when driving the Macro-Core Sampler down a previously opened hole. Low side friction may allow the sampler and probe rods to drop down the hole. To prevent equipment loss, attach a pipe wrench to the top of the rod string when advancing or retrieving the sampler.

7. Move the probe unit away from the top of the probe rods to allow room for work.

8. Remove the drive cap and insert an MC Piston Release Rod (Fig. 3.1) down the inside of the probe rods (Fig. 4.16). (Refer to Fig. 4.19 for identification of extension rod accessories.) Hold onto the release rod and attach an Extension Rod Coupler or Extension Rod Quick Links. Attach an Extension Rod to the release rod (Fig. 4.17) and lower the jointed rods down hole. Continue adding extensions until the release rod contacts the bottom of the sampler. The operator may opt to use the Extension Rod Jig to hold the down-hole extension rods while adding additional rods.

9. Attach an Extension Rod Handle to the top extension rod and slowly rotate the handle clockwise (Fig. 4.15C and 4.18). The release rod will drop into the groove in the piston bolt (Fig. 4.20). The operator should feel the extension rods move slightly as the release rod falls into the groove. Rotate the handle clockwise approximately four complete revolutions. Resistance to rotation is generally noted at this point. If the rods continue to rotate, however, do not continue for more than four complete revolutions. The piston assembly is now released and will be pushed to the top of the sampler as the liner is filled with soil (Fig. 4.15D).



A. Previously cored or pre-probed hole with sloughed soil.
B. Closed-Piston Sampler driven to next sampling interval.
C. Releasing piston assembly.
D. Closed-piston sampler filled with soil.

FIGURE 4.15
Phases of Macro-Core® Closed-Piston Soil Sampling

Figure 4.16. MC Release Rod is inserted down inside of the probe rods.

Figure 4.17. Extension Rods are attached to the MC Piston Release Rod using Extension Rod Quick Links.

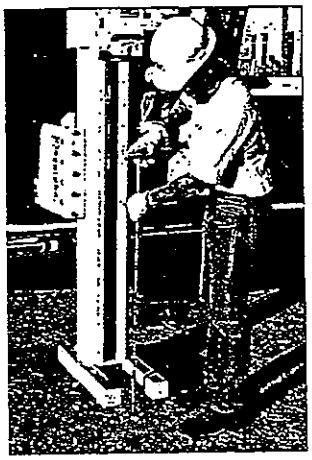


Figure 4.18. Extension Rods are rotated clockwise to release the MC Piston assembly.

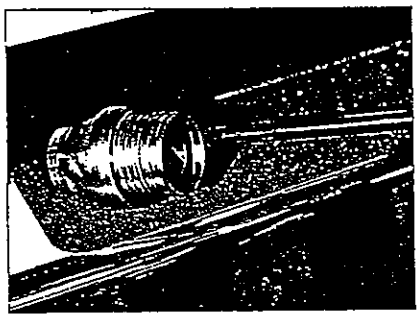


Figure 4.20. MC Release Rod fits into groove in MC Piston Bolt Head.

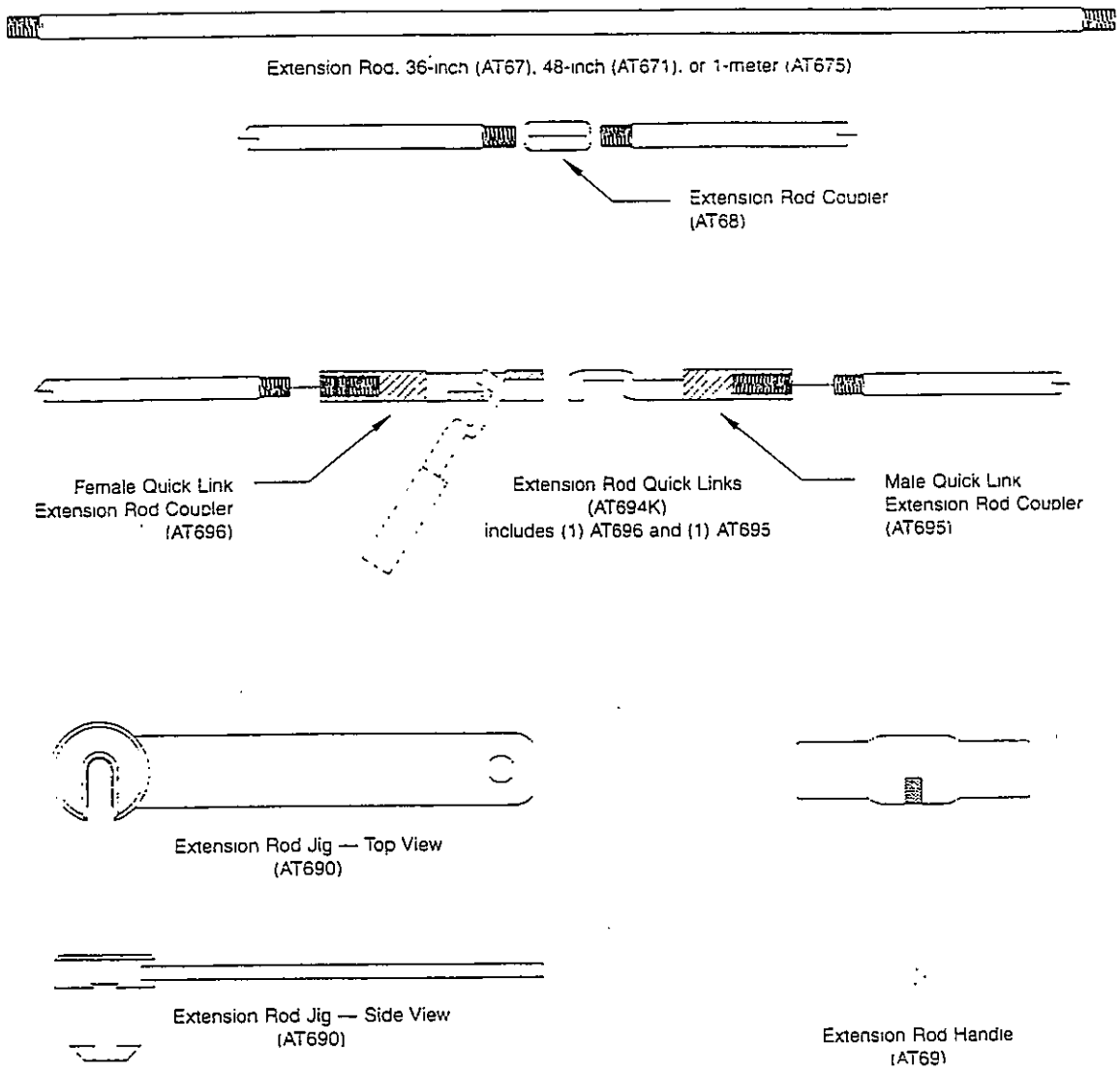


FIGURE 4.19
Geoprobe Extension Rods and Accessories

10. Remove the release rod and extension rods. The piston assembly will not be attached to the end of the extension rod but will remain inside the sample tube.

11. Add a probe rod to the tool string, attach the drive cap, and reposition the probe unit. Drive the tool string another sampling interval to fill the liner with soil. Do not over-drive the sampler.

GEOPROBE TIP: **Activate the hammer whenever collecting soil. Hammering forces soil into the sampler tube and increases recovery.**

4.8 Sampler Retrieval

1. Attach a pull cap to the top probe rod. Close the hammer latch over the pull cap and pull the tool string up one rod length by actuating the PROBE control lever.

2. Remove the rod and repeat Step 1 until the sampler drive head is just above the ground surface. Probe rods are sometimes difficult to loosen by hand. Use pipe wrenches to free tight threads.

***CAUTION**

Care should be taken when retrieving the Macro-Core sampler. Low side friction may allow the sampler and probe rods to drop down the hole. Attach a pipe wrench to the top of the rod string to prevent equipment loss.

3. Attach the pull cap to the sampler drive head (Fig. 4.21). Pull the sampler out of the ground (Fig. 4.22) by raising the PROBE control lever. If using a 48-inch or 1-meter sample tube with a Geoprobe Model 4200, 420U, or 4220 Probe Machine, the probe cylinder will fully extend before the sampler is completely free. Attempt to raise the sampler by actuating the FOOT control.

***CAUTION**

The rear of the carrier vehicle may be pulled downward as the foot cylinder is activated if the sampler is lodged tightly in the ground. Damage to the unit base frame may occur under such circumstances.

If the sampler cannot be retrieved without excessive resistance, follow these steps:

1. Lower the FOOT control and disengage the hammer latch from the pull cap.

2. Raise the probe foot at least 12 inches (305 mm) above the ground surface. Stack several boards or place timber blocks under the foot to act as a foot extension.

3. Lower the hammer assembly and close the hammer latch over the sampler pull cap.

4. Use the PROBE control to lift the sampler completely out of the ground.

4.9 Soil Core Recovery

The soil sample is easily removed from the Macro-Core Sampler by unscrewing the cutting shoe and pulling out the liner. A few sharp taps on the cutting shoe will often loosen the threads sufficiently to allow removal by hand. If needed, the exterior of the cutting shoe features a notch for attaching the combination wrench to loosen tight threads (Fig. 4.23). With the cutting shoe removed (Fig. 4.24), simply pull the liner and soil core from the sample tube (Fig. 4.25).

If the closed-piston sampler is used, the piston assembly is now retrieved from the end of the liner (Fig. 4.26). Secure the soil sample by placing a vinyl end cap on each end of the liner.

Undisturbed soil samples can be obtained from Teflon®, PVC, and PETG liners by splitting the liner. Geoprobe offers two tools for cutting sample liners. The MC Liner Cutter Kit (AT8000K) is used to make longitudinal cuts in the liner and includes a tool that holds the liner for cutting. The MC Liner Circular Cutting Tool (AT8050) is used to segment the liner by cutting around the outside circumference of the liner. Refer to Figures 4.27 and 4.28 for more information on liner cutting.

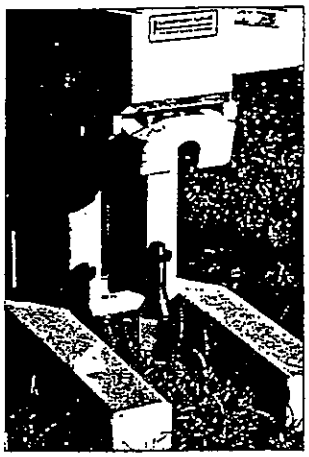


Figure 4.21. Pull Cap attached to MC Drive Head.

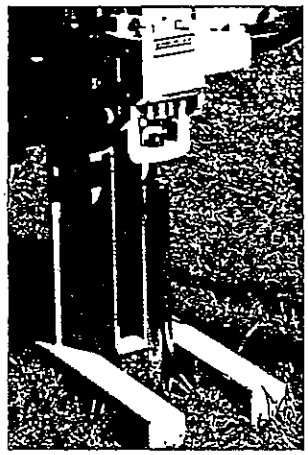


Figure 4.22. MC Soil Sampler is pulled with Geoprobe unit.

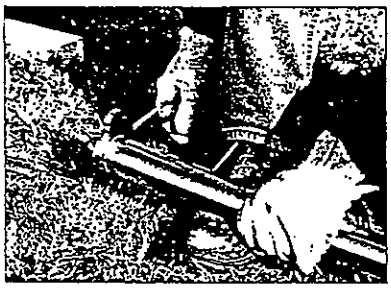


Figure 4.23. Loosening the MC Cutting Shoe with the MC Combination Wrench.

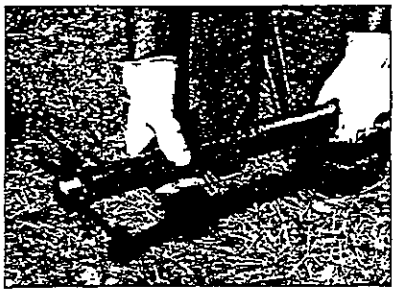


Figure 4.24. Removing MC Cutting Shoe and liner from MC Sampler Tube.

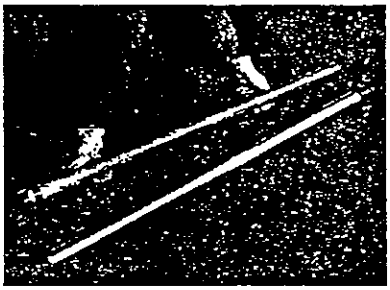


Figure 4.25. Macro-Core liner filled with soil core.

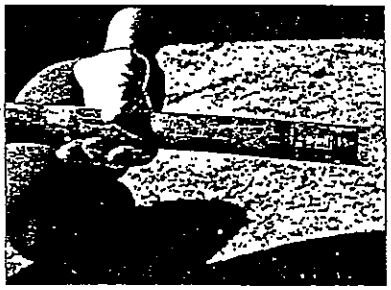


Figure 4.26. MC Piston assembly is retrieved from liner at the top of the soil core.

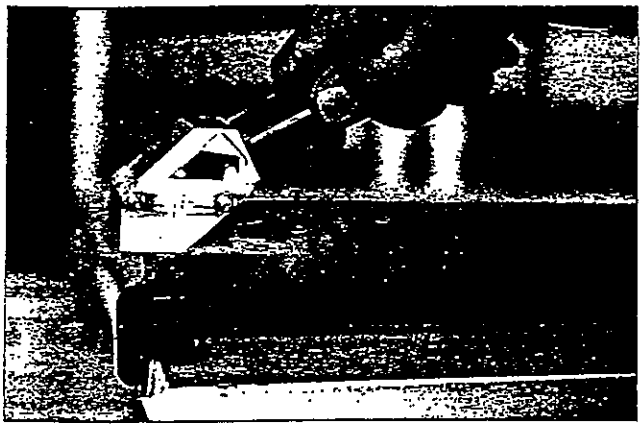


Figure 4.27. MC Liner Cutter (AT8000K) makes a quick, safe cut through even the toughest of liner materials.

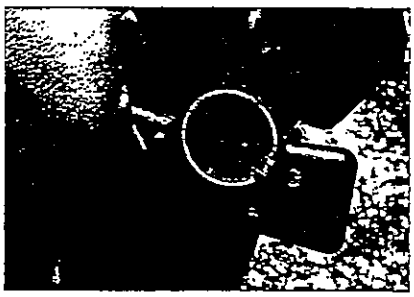


Figure 4.28. MC Circular Cutting Tool (AT8050) cuts around the outside of the filled MC liner.

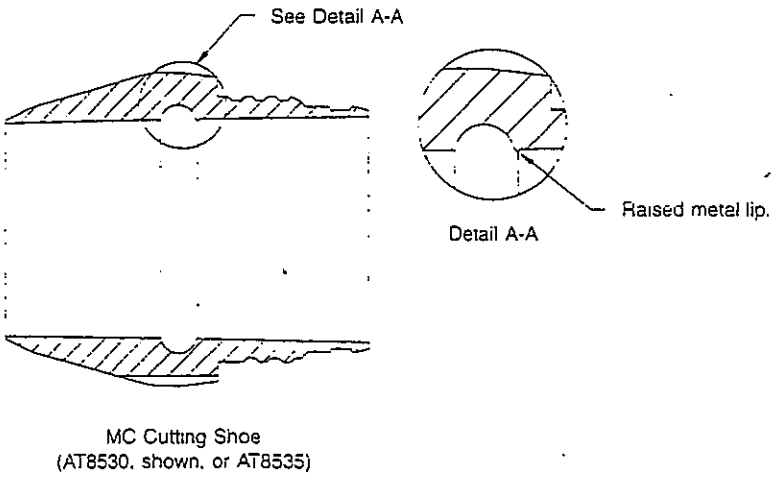


FIGURE 4.29
Macro-Core® Cutting Shoe with Mushroomed Locking Ring Groove

4.10 Macro-Core Closed-Piston Operating Tips

The Macro-Core piston assembly requires proper maintenance to ensure reliable operation. The following tips will increase the effectiveness of closed-piston sampling:

1. Cleanliness is the most important factor affecting piston operation. Ensure piston bolt threads and locking ring are free of soil particles and corrosion before each use. Completely thread and unthread the piston bolt to verify operation. Disassemble the piston tip and wash the individual parts using clean water and a Nylon Brush for MC Sample Tubes (BU700) if necessary. Allow parts to dry before assembling if piston is to be stored before use. Disassemble used pistons before storing to prevent piston bolt corrosion.

2. Never store a cutting shoe with the piston installed. Install the piston assembly immediately before sampling.

3. Lubricate piston assembly with distilled water before installing in the cutting shoe.

4. Once the assembly is fully seated in the cutting shoe, tighten the piston bolt with an oscillating movement; thread the bolt in 90 degrees then back 45 degrees. When the end of thread travel is reached, work the last 30 degrees of travel back and forth several times. Tightening the piston bolt in this manner allows the metal pins of the locking ring to correctly align in the cutting shoe.

5. Do not lock the piston bolt 100 percent counterclockwise. Fully tighten the bolt and then loosen approximately 10 degrees.

6. When releasing the piston downhole, only turn the piston bolt 4 clockwise revolutions.

7. Clean the piston assembly with distilled water and a nylon brush between samples. It is not necessary to completely disassemble the piston at this time. Pay particular attention to the locking ring and ensure that all sand and grit is removed from between the metal lock pins.

8. Locking rings are expensive but can be restrung on new springs. If a locking ring breaks, save the pieces for reuse. (Refer to Page 6 for replacement parts). To restring a locking ring, follow these simple steps:

   a. There is a small loop at each end of a new locking ring spring. Make sure one loop is bent perpendicular to the other. One loop should also be completely closed while the other is slightly open.

   b. Attach a clamp as close to the open end as possible (without contacting the loop) to hold the spring. Fisherman fly-tying pliers work well for this procedure. Take care not to damage the spring by applying too much pressure.

   c. String 12 locking ring pins (macaroni-shaped metal pieces) on the closed end, stretching the spring as necessary. Be careful not to overstretch and damage the spring.

   d. Hook the open end of the spring through the closed end and bend the loop closed.

   e. Remove the clamp and gently stretch the locking ring several times to ensure that the loops will not open.

9. A locking ring groove is machined into the cutting shoe. Over time, the edges of this groove may begin to mushroom from use (Fig. 4.29). The raised metal lip formed by the mushroomed groove may cause the locking ring (and subsequently the piston) to bind in the cutting shoe. Remove the raised metal with a file or die grinder

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4.11 Tips to Maximize Sampling Productivity

The following suggestions are based on the collective experiences of Geoprobe operators:

1. Organize your truck or van to maximize efficiency. Assign storage areas to all tools and equipment for easy location. Store samplers, extension rods, and liners in racks. Above all, minimize the number of items lying loose in the back of the vehicle.

2. Take three or four samplers to the field. This allows the collection of several samples before stopping to clean and decontaminate the equipment. A system is sometimes used where one individual operates the probe while another marks the soil cores and decontaminates the used samplers.

3. A machine vise is a real plus. With the sampler held in a vise, the operator has both hands free to remove the cutting shoe (Fig. 4.30), drive head, and sample liner (Fig. 4.31). Cleanup is also easier with both hands free. Geoprobe offers an optional Machine Vise (FA300) which mounts directly on the probe derrick (Fig. 4.32).

4. Extension Rod Quick Links (Fig. 4.33) are the best choice among connectors. These are real time savers. The quickest and easiest method for deploying extension rods is to assemble sections of up to three rods with threaded connnectors. Each section is then connected with Quick Links. Up to three rods can be inserted or removed from the probe string at once, greatly reducing deployment time.

5. When releasing the piston assembly, a pair of locking pliers may be used to turn the extension rods. The locking pliers will be quicker and easier to install than the extension rod handle in some situations.

6. Organize your worksite. The best way to maximize sampling efficiency is to practice with the sampler and identify a comfortable setup. Lay out all tools and equipment before probing. An example layout is shown in Figure 4.34.

   A collapsible table or stand is handy to hold decontaminated sampler tubes and liners. Equipment may also be protected from contamination by placing it on a sheet of plastic on the ground.

   Keep probe rods separate by identifying a location for "new" rods as well as a "put down pile." Initially drive the sampler with a new rod. As the rod is removed during sampler retrieval, place it in the put down pile for reuse. Drive the sampler to the top of the next sampling interval by using all of the rods in the put down pile. A new rod (located in a separate pile) is added and the string is driven to collect the next soil core. Once again, each probe rod is removed and placed in the put down pile as the sampler is retrieved. The cycle is repeated until all of the soil cores are recovered. This method eliminates the need to count rods while driving the sampler.

7. Cleanup is very important from the standpoint of operation as well as decontamination. Remove all dirt and grit from the threads of the drive head, cutting shoe, and sample tube with a nylon brush (BU700). Without sufficient cleaning, the cutting shoe and drive head will not thread completely onto the sample tube. The threads may be damaged if the sampler is driven in this condition.

   Ensure that all soil is removed from inside the sample tube. Sand particles are especially troublesome as they can bind liners in the sampler. Full liners are difficult to remove under such conditions. In extreme cases the soil sample must be removed from the liner before it can be freed from the sample tube.

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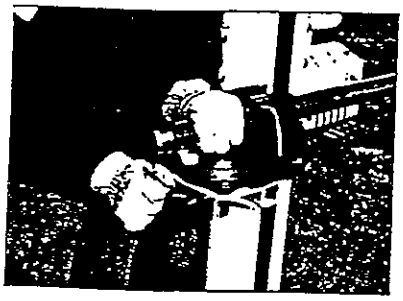

Figure 4.30. Removing MC Cutting Shoe with filled sampler tube held in Machine Vise.

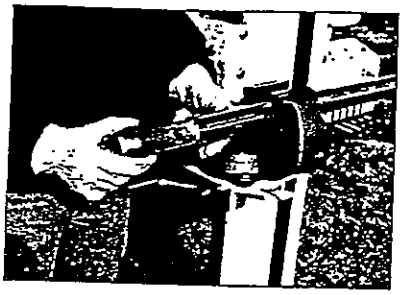

Figure 4.31. Removing filled liner with sampler tube held in Machine Vise.

Figure 4.33. Machine Vise mounted directly on Geoprobe unit.

Figure 4.33. Using Extension Rod Quick Links to connect Extension Rods.

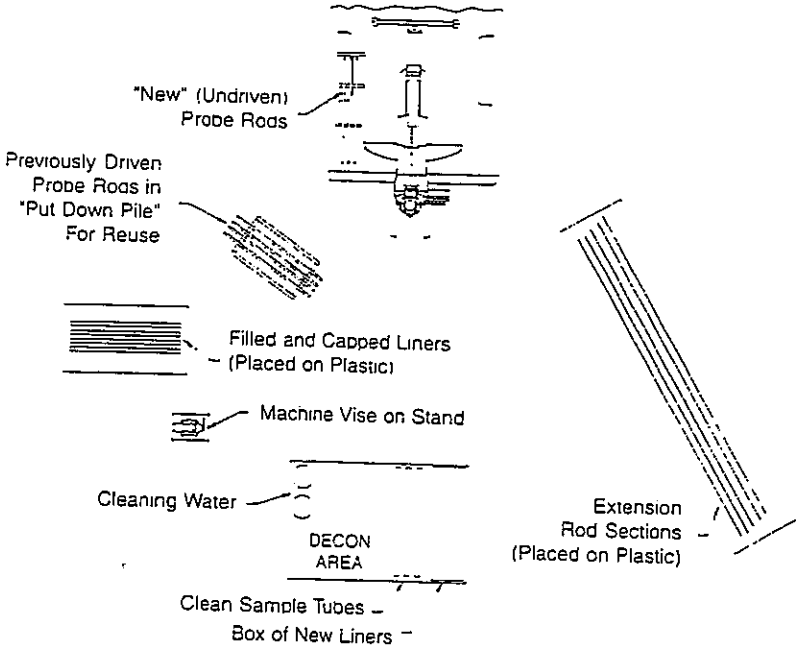

FIGURE 4.34
Equipment Layout Example to Maximize Sampling Productivity.

8. The piston assembly may remain lodged in the cutting shoe when disassembling by hand, even though the piston bolt is completely loosened. This is because the locking ring and piston washer do not release from the groove in the cutting shoe as the piston bolt unthreads out of the tip. Hammering on the piston tip will have no effect because you are, in essence, forcing the tip tighter against the locking ring. To dislodge the piston, turn the assembly over and tap the top of the cutting shoe on a solid object. If the assembly still does not release, tap on the piston bolt with a hammer (taking care not to damage the release rod slot). This will jar the piston tip and bolt enough to release the locking ring from the groove in the cutting shoe.

*** CAUTION**

Do not push the piston assembly out of the cutting shoe by placing your hands on the piston tip. The cutting shoe is sharp and may cause injury when the assembly suddenly comes free. It is best to place the tip against a solid object, grasp the cutting shoe, and push the shoe over the assembly.

9. Although available for use with two sizes of probe rods, 1.25-inch OD rods are recommended for the Macro-Core Sampler. The larger rod diameter limits downhole deflection of the tool string and ultimately provides a more durable system. A new thread design also makes the 1.25-inch rods quicker and easier to thread together than previous 1-inch probe rods.

10. The Heavy-Duty MC Cutting Shoe (AT8535) is machined with more material at the critical wear areas. It can be used in place of the Standard MC Cutting Shoe (AT8530) and is designed to lengthen service life under tough probing conditions.

    Expansive clays and coarse sands can "grab" and collapse liners as the sample tube is filled with soil. A 1/8-inch Undersized MC Cutting Shoe (AT8537) will help alleviate this problem. The smaller diameter core (1.375 inches) allows expanding clays and coarse sands to travel up the sample liner without binding. The piston assembly can not be used with this cutting shoe.

11. Maximize the thread life of the sample tube by varying the ends in which the drive head and cutting shoe are installed. The dynamic forces developed while driving the sampler are such that the threads at the drive head wear more quickly than at the cutting shoe. Regularly switching ends will maintain relatively even wear on the sample tube.

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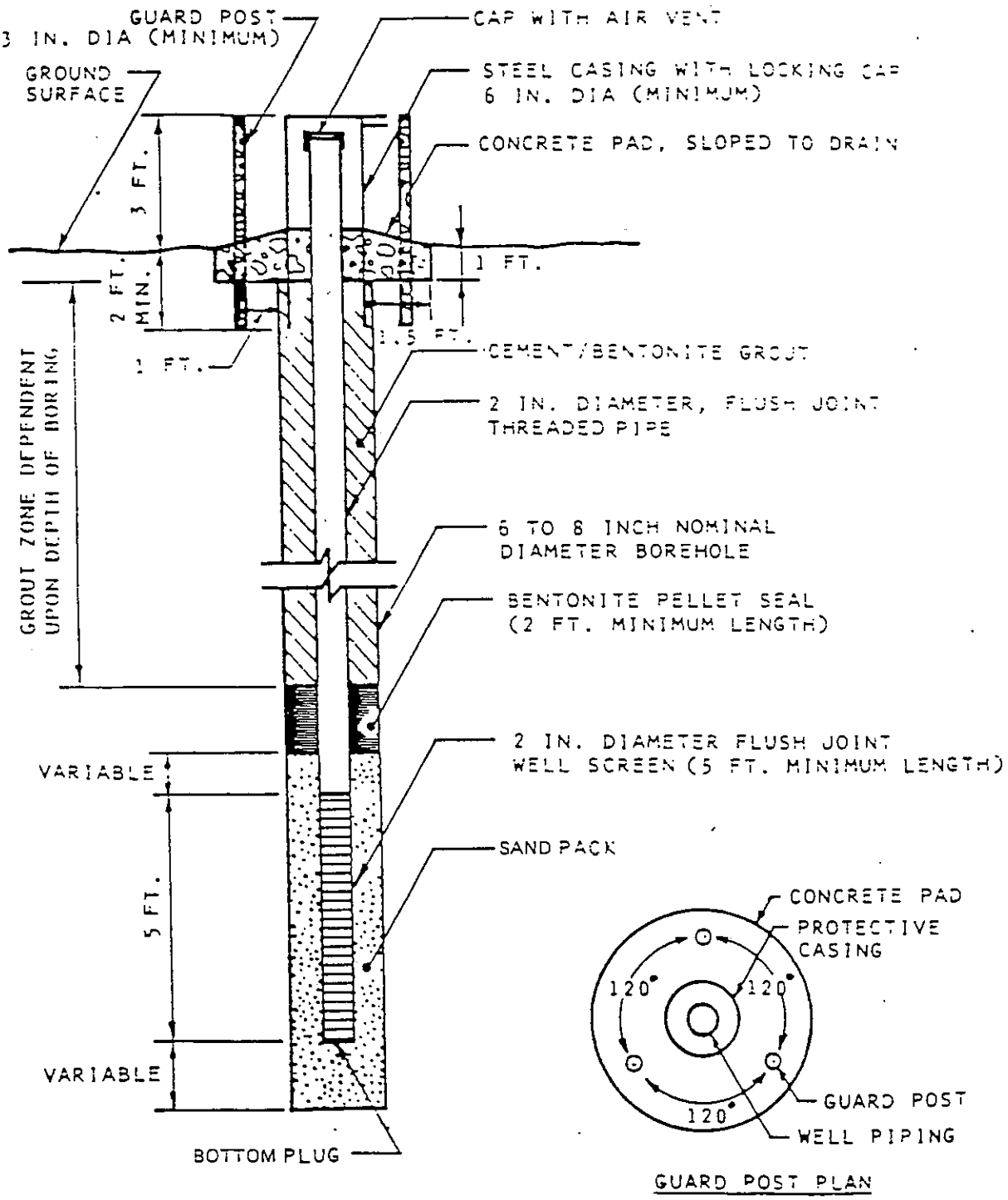
APPENDIX C

WELL CONSTRUCTION DIAGRAMS

TYPICAL MONITORING WELL INSTALLATION



Taken from USEPA "A Compendium of Superfund Field Operation Methods", 1987

APPENDIX D

WELL LOG SHEET

Blank Well Log Sheet

WELL LOG SHEET

WELL NO.	PROJECT NO.	PROJECT NAME:
LOCATION:	GEOLOGIST:	
DRILLING DATE:	DRILLING CONTRACTOR:	
DRILLING METHOD:	DRILLER:	INSTALLATION DATE:
WATER LEVEL BEFORE INSTALLATION:	WATER LEVEL AFTER INSTALLATION:	
DEVELOPMENT METHOD:	GROUND ELEVATION:	

LITHOLOGY		CONSTRUCTION DETAILS	
DESCRIPTION	SYMBOL	DESCRIPTION	DEPTH

APPENDIX E

ICM LABS STATEMENT OF QUALIFICATIONS

Statement of Qualifications

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Industrial Corrosion Management
ICM Laboratories

General Information

ICM Laboratories has developed this manual to allow the reader to assess our technical and operational capabilities. We will describe our facilities and instrumentation, organizational structure which includes key staff, certifications, quality assurance program and methodologies we employ.

Company History

Industrial Corrosion Management, Inc. (ICM Laboratories) is an independent laboratory providing high quality analytical services to companies across the United States. Our primary business focuses on analyses for compliance with any regulatory issues regarding soil, water, oil, or hazardous waste.

Initially, ICM Laboratories was created to offer very rapid analysis and interpretation of air conditioning fluids such as Lithium Bromide, oils and refrigerants. Large central heating and air conditioning units are very sensitive to the chemical condition of these operating fluids. If they are not properly balanced or treated, numerous corrosion problems arise.

However, until ICM was created in 1974, normal turn around times for these analyses approached several weeks, and all the while the equipment performed inefficiently.

ICM changed this concept. We provided rapid analysis of air conditioning solutions in a time frame which permitted servicemen to solve critical problems in the field. The business grew and gradually served hundreds of organizations across the United States.

ICM entered the field of environmental testing in 1978. At that time, the certification of laboratories for environmental testing was just beginning. We were initially certified for the bacteriological, limited chemical and inorganic sections. In 1980, we were certified for the organic analyses. ICM now has approximately 16 years experience in the environmental analytical testing industry.

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Corporate Philosophy

With environmental pressures mounting in the United States, it is important to be able to find a laboratory that is not only quality driven, but also timely and cooperative. ICM's philosophy mandates that we generate high quality data in a timely fashion that is complemented with a high level of service. Many laboratories have the certifications necessary to conduct analytical testing. ICM believes it is the quality and the service which a laboratory offers that distinguish it from another.

Geographical Area Serviced

ICM services clients throughout the United States. The majority of our clients are located in the Middle Atlantic states. ICM utilizes overnight carrier services such as Federal Express, for projects that are located outside our local area. This practice enables us to service clients with sample containers throughout the United States.

US EPA and NJ DEPE Contract Laboratory Program

Experience with analytical protocol is critical to ensure that a project is completed properly and will withstand strict government scrutiny.

ICM Laboratories has had a great deal of experience in the US EPA Contract Laboratory Program. We were awarded our first contract in 1986. We have also been awarded a contract for the US EPA Contract Laboratory Program Special Analytical Services (SAS) Division work. These contracts are only available to laboratories who are in good standing in the US EPA CLP program.

The US EPA SAS contracts can also be far more demanding than the routine contract work. For example, the SAS division may require that you submit a CLP hardcopy report for 165 semivolatile soils within a 15 day period. ICM accomplished this task successfully. This request compels a lab to pull resources together and react quickly.

As you may know, the New Jersey Department of Environmental Protection and Energy also has a contract laboratory program. NJ DEPE awarded ICM a contract in 1993. Approximately 40

laboratories completed for these contracts and only a small number of laboratories were given awards.

ICM's contract includes Task IV, New Jersey's State Superfund Program as well as Task III, analysis of non-aqueous/alternative wastewater sample analysis.

Section 2

Facilities and Instrumentation

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Facilities and Instrumentation

ICM Laboratories is located at 1152 Route 10 in Randolph, New Jersey. We are approximately four miles from Route 80 and Route 46.

ICM currently occupies 21,500 square feet of industrial building space including laboratories, offices, conference rooms, refrigerated storage, and field equipment storage. This area is divided into the following:

A. Laboratory Space	9,000 square feet
B. Office Space	8,500 square feet
C. Storage Space	4,000 square feet

Each individual laboratory has its own ventilation system. Separate systems are advantageous because the laboratory minimizes contamination from various chemicals utilized in each laboratory.

A central station burglar system with a 24 hour per day, 7 day per week, surveillance system secures all laboratory, office, and storage space. The security system utilizes a combination of keys and passwords. Passwords are only given to those with security clearance and are periodically modified.

All visitors are required to sign the visitors log, located at the main entrance. Sign in is required for security and health and safety purposes in case of an emergency.

ICM Laboratories

West Bay	P		16
Stock Room/ Shipping & Receiving	O	Support Services Office Field Sampling Office Sampler preparation	15
	N	File Box Storage	14
	M		13
	L		12
General Chemistry Office	K		11
General Chemistry Lab	J		10
General Chemistry Lab	I	Accounting/Personnel Computer/Operations	9

BREEZEWAY

(Metals) Inorganics Lab	H	Executive Office Area	8
(Metals) Inorganics Lab	G	Sample Log-in	7
Extractions Lab	F	Customer Service Break Room	6
Extractions/Gas Cylinder Storage	E	Sales Manager's Office QA Manager's Office Lab Coordinator's Office	5
	D		4
Organics Lab	C	Secretarial Department	3
Organics Lab	B	Quality Assurance Department / File Box Storage	2
Microbiology Lab	A	GC - GC/MS Office	1

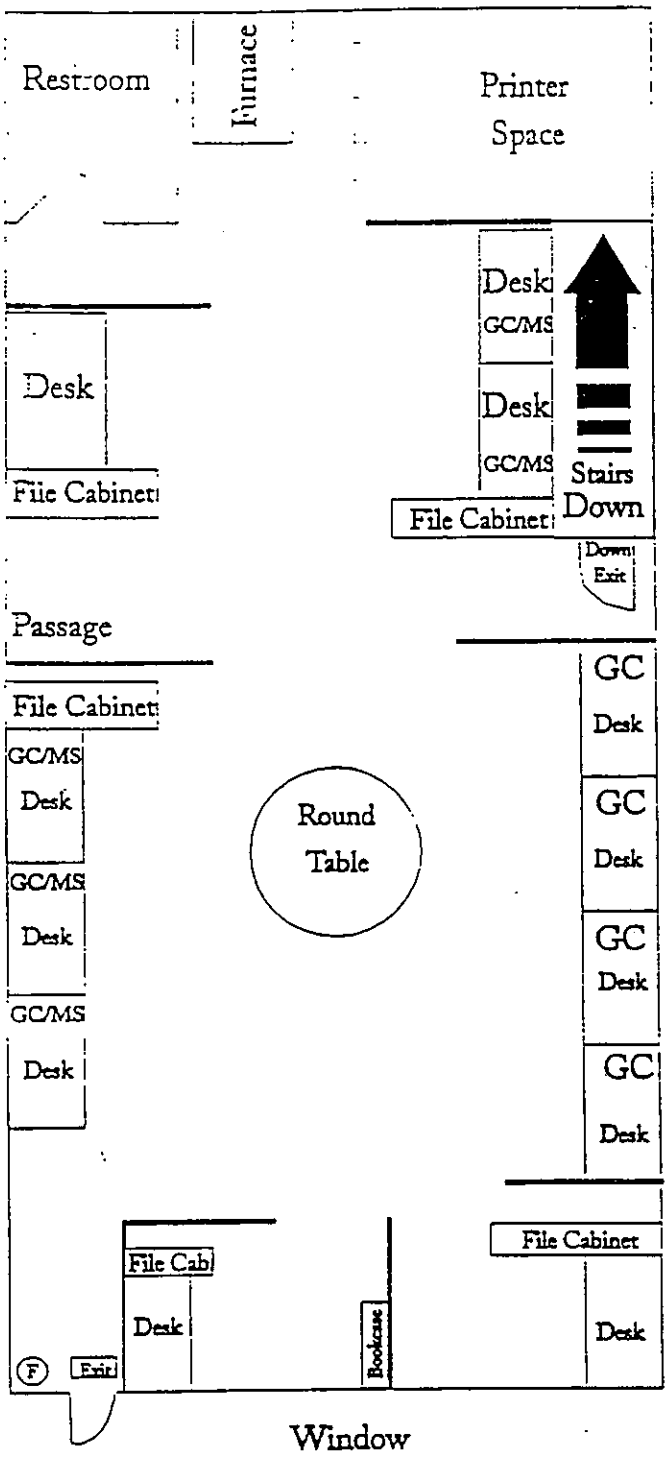
Lower Level

Upper Level

Bay 1

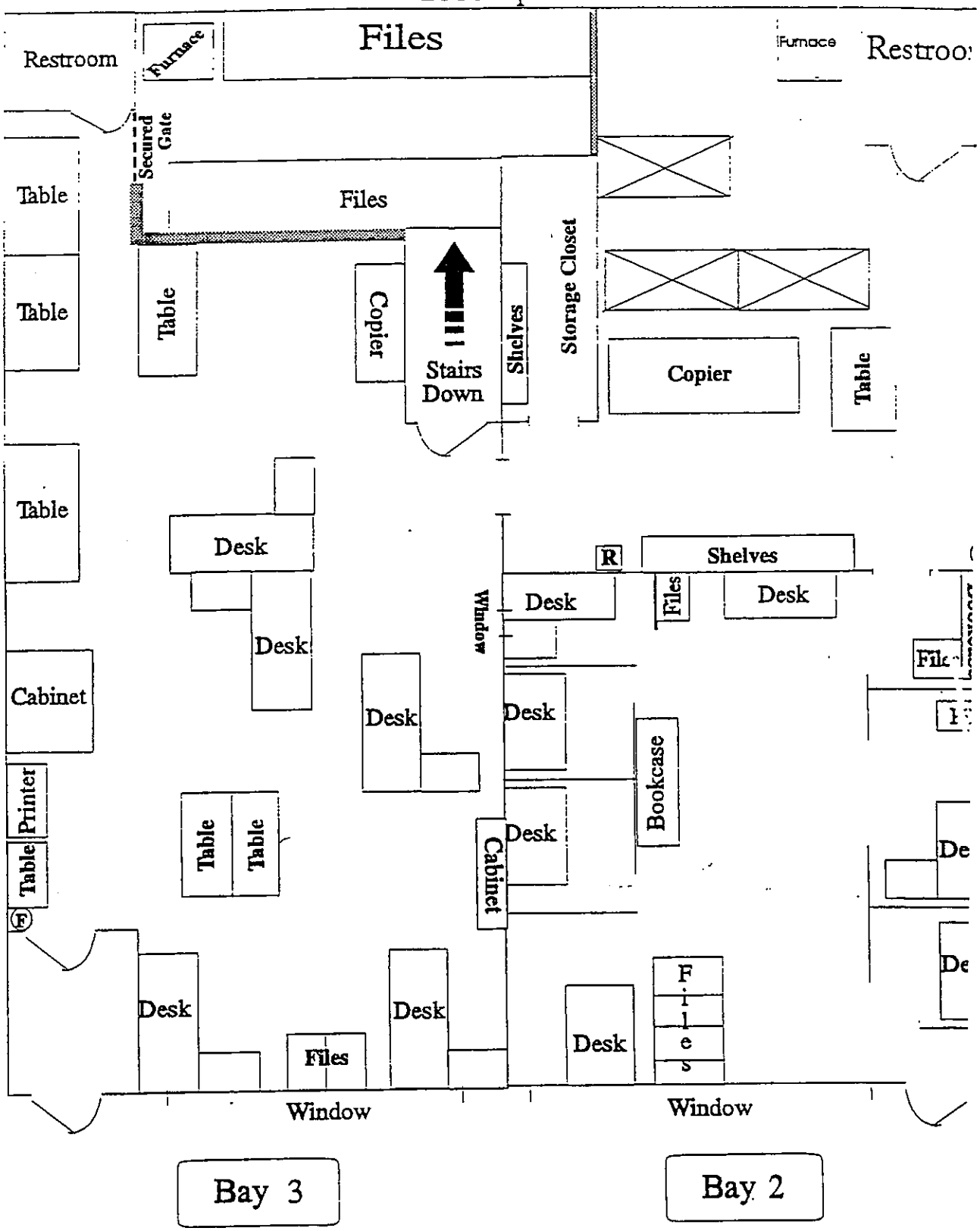
GC/MS Office

1,000 sq. ft.



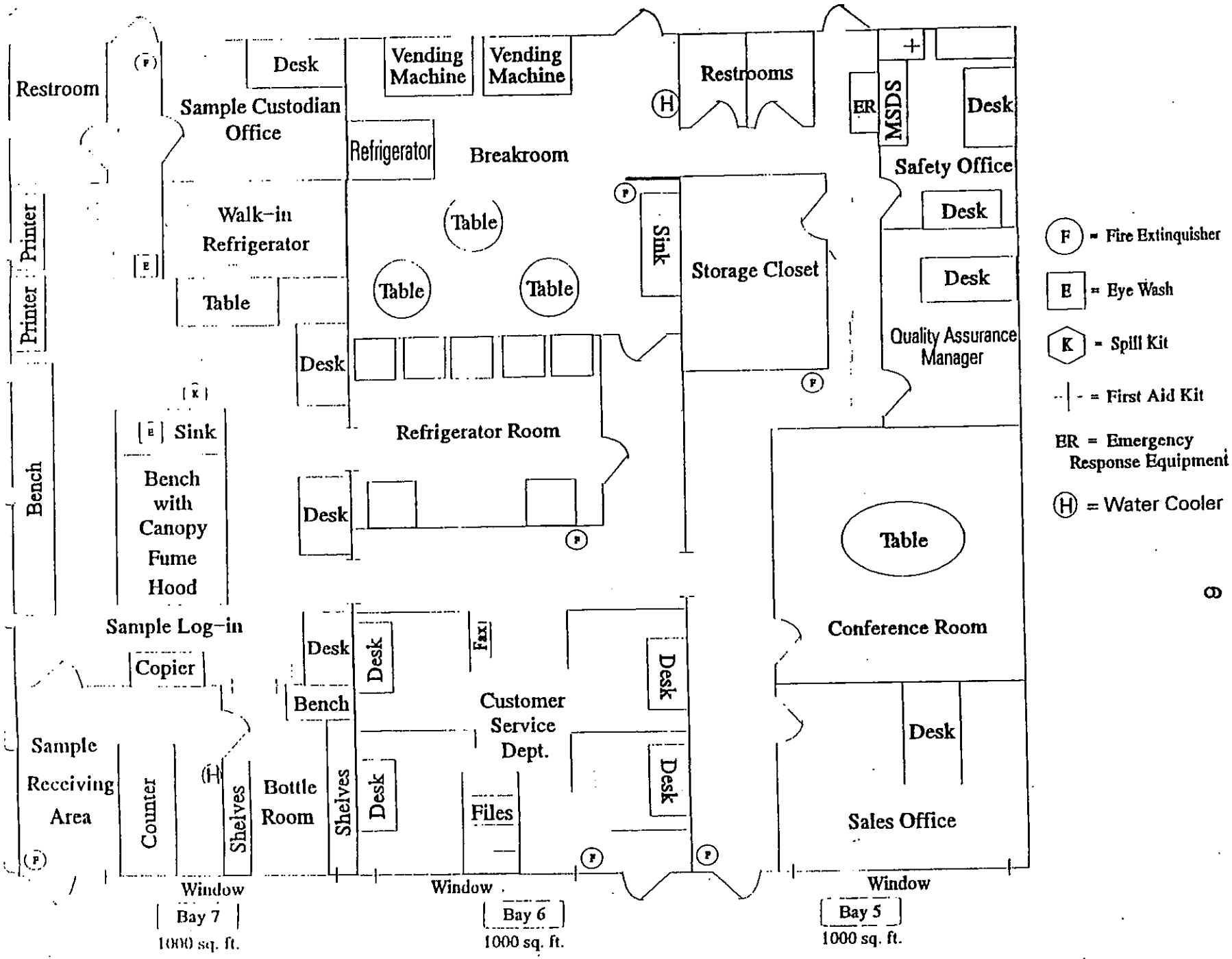
F = Fire Extinguisher

2000 sq. ft.



F = Fire Extinguisher

R = Refrigerator



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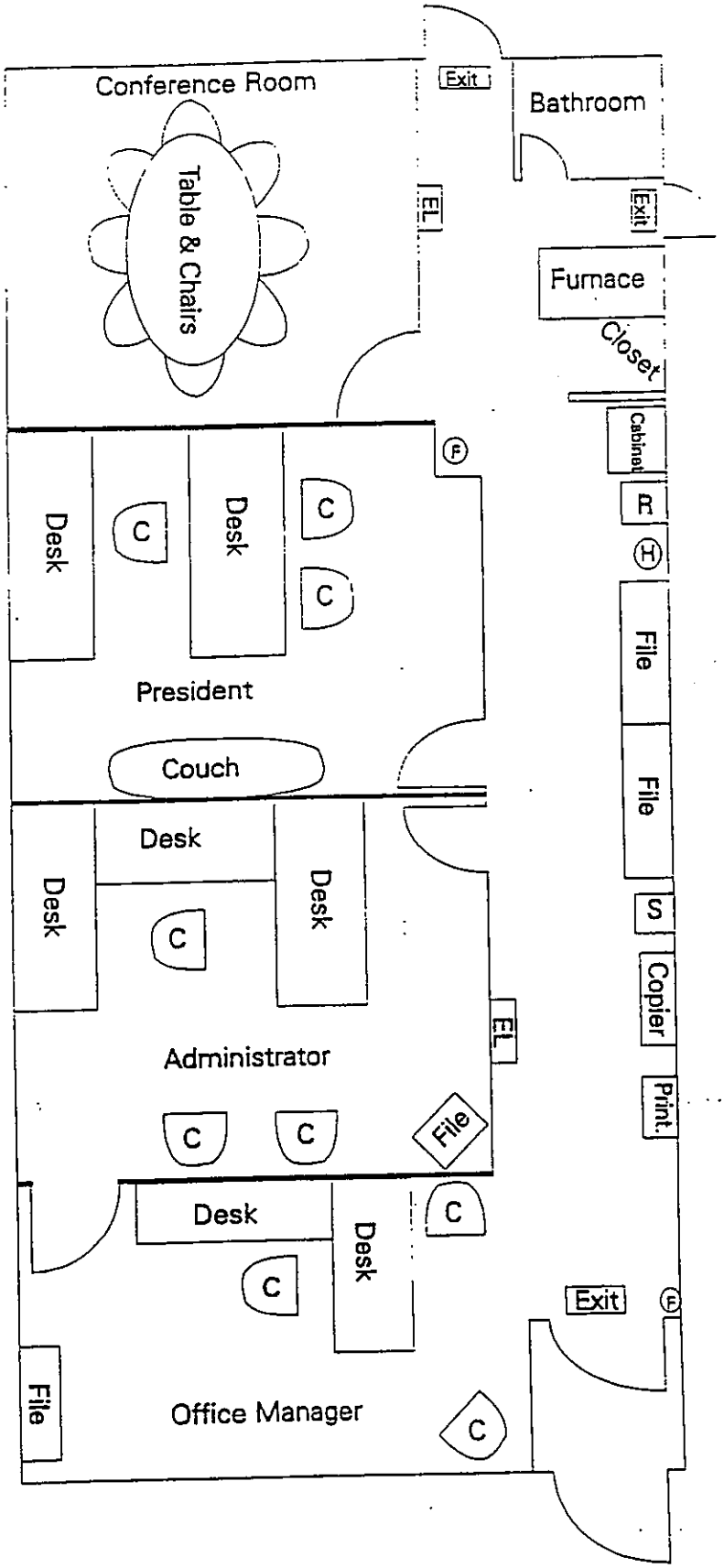
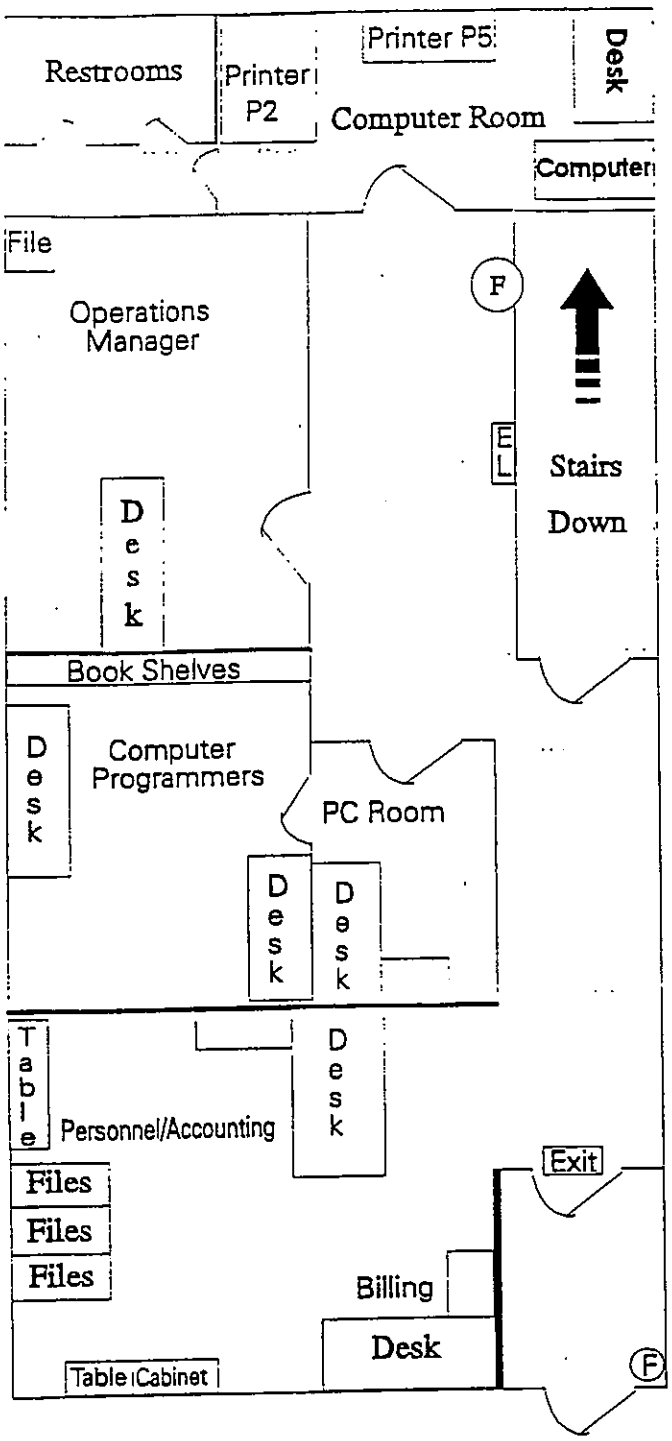


Bay 8

Executive Office Area

- (F) = Fire Extinquishe
- (H) = Water Cooler
- EL = Emergency Ligh
- S = Shredder
- C = Chair
- R = Refrigerator



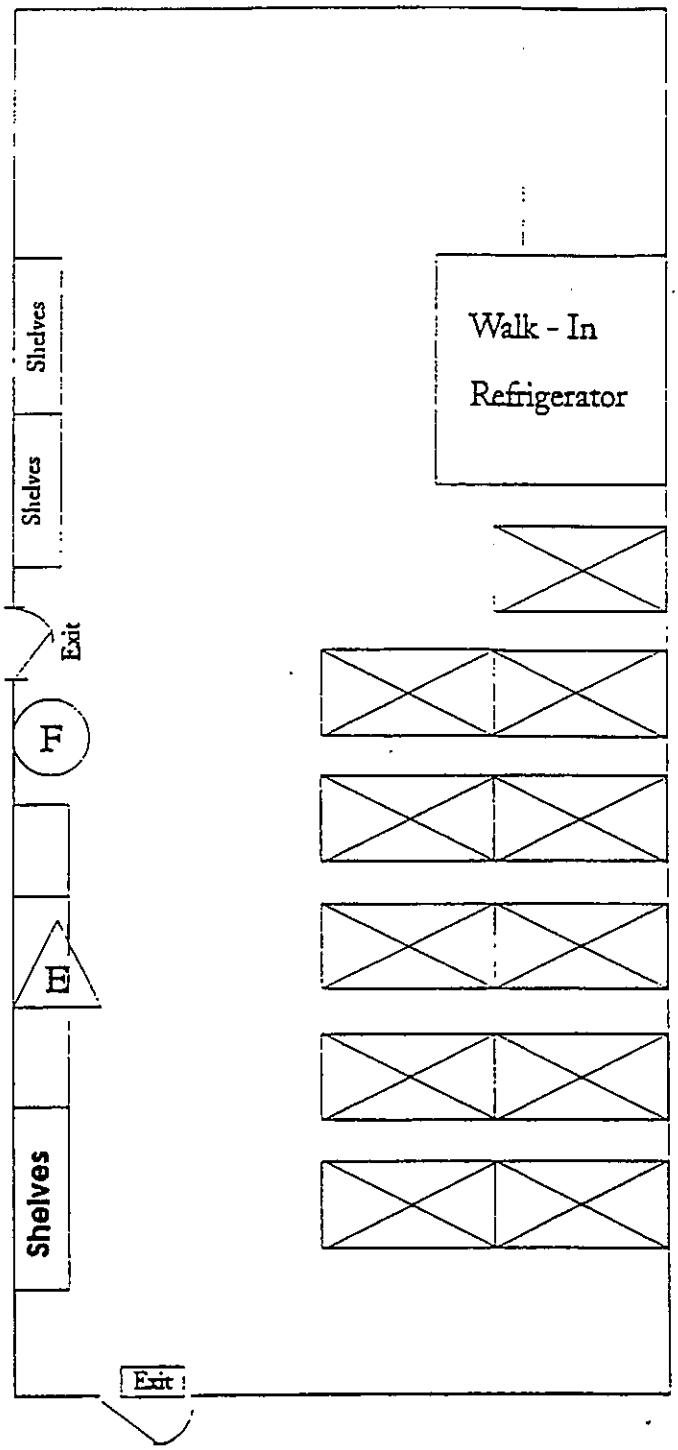
Bay 9

Accounting/Personnel Computer/Operations

1000 sq. feet

F = Fire Extinguisher

EL = Emergency Light



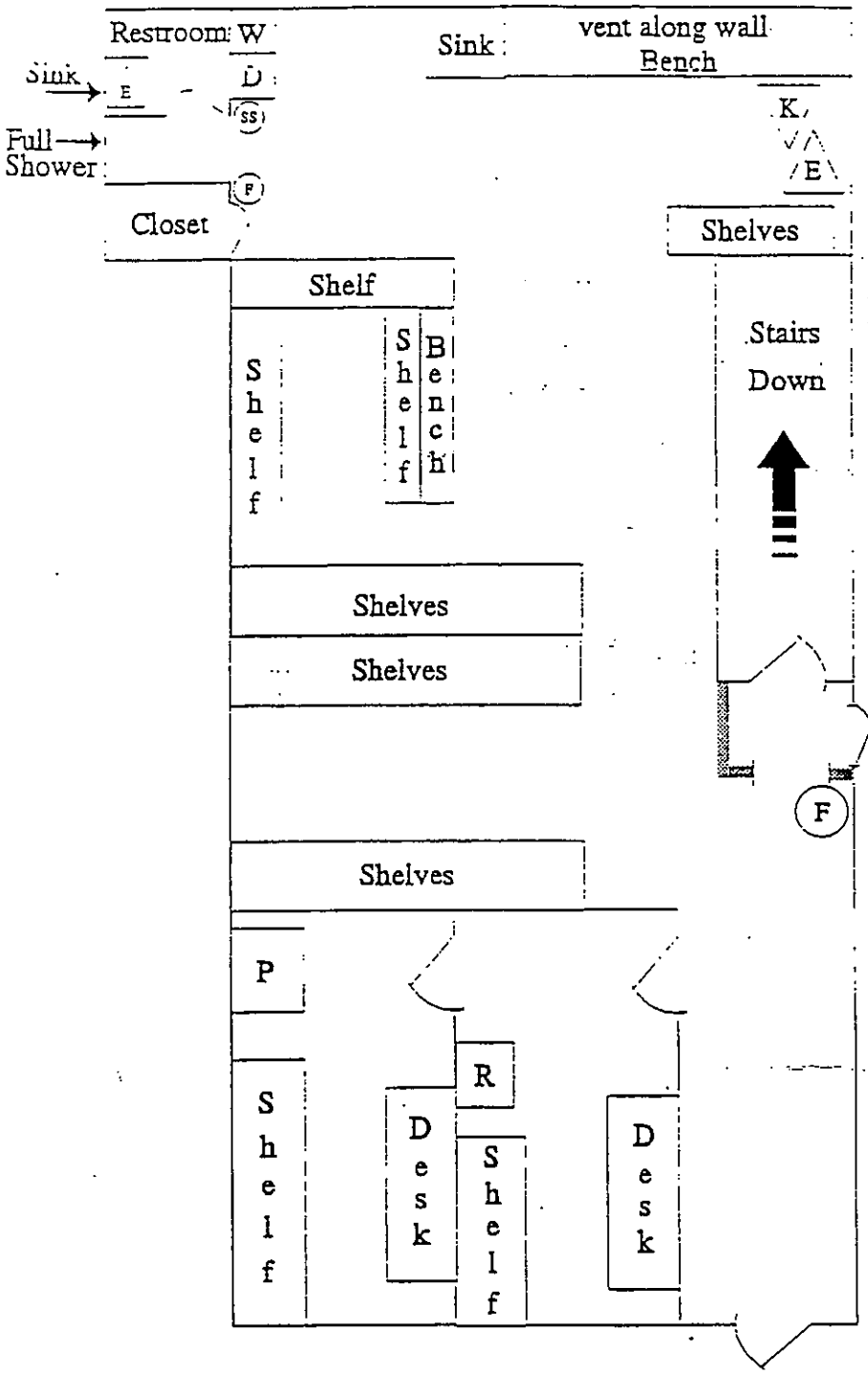
Bay 14

File Box Racks &
Storage Bay

1,000 sq. ft.

F = Fire Extinguisher

E = Emergency Light



Bay 15

Sampling Department
and
Bottle Preparation Area

1,000 sq. ft.

F = Fire Extinguisher

E = Eye Wash

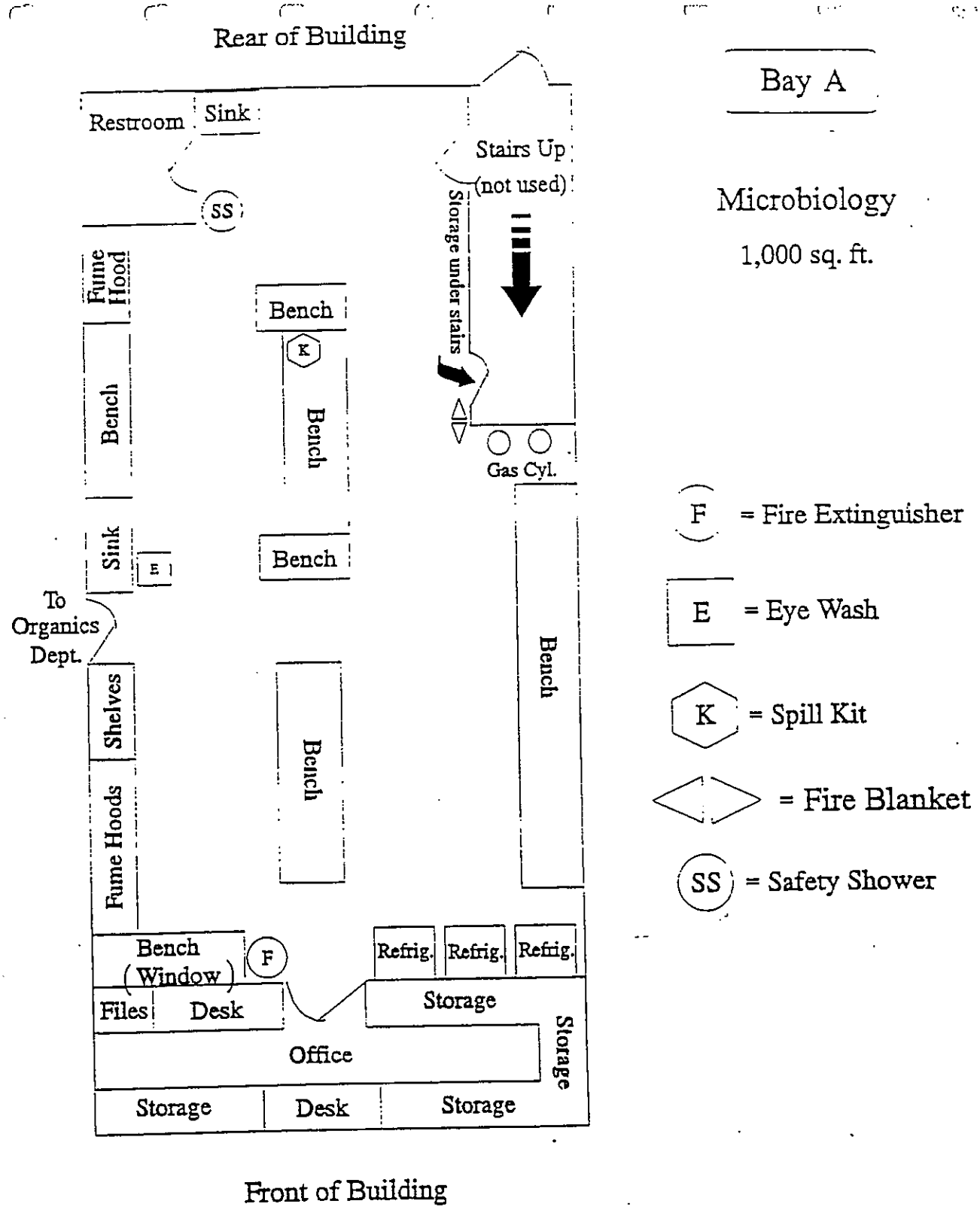
K = Spill Kit

R = Refrigerator

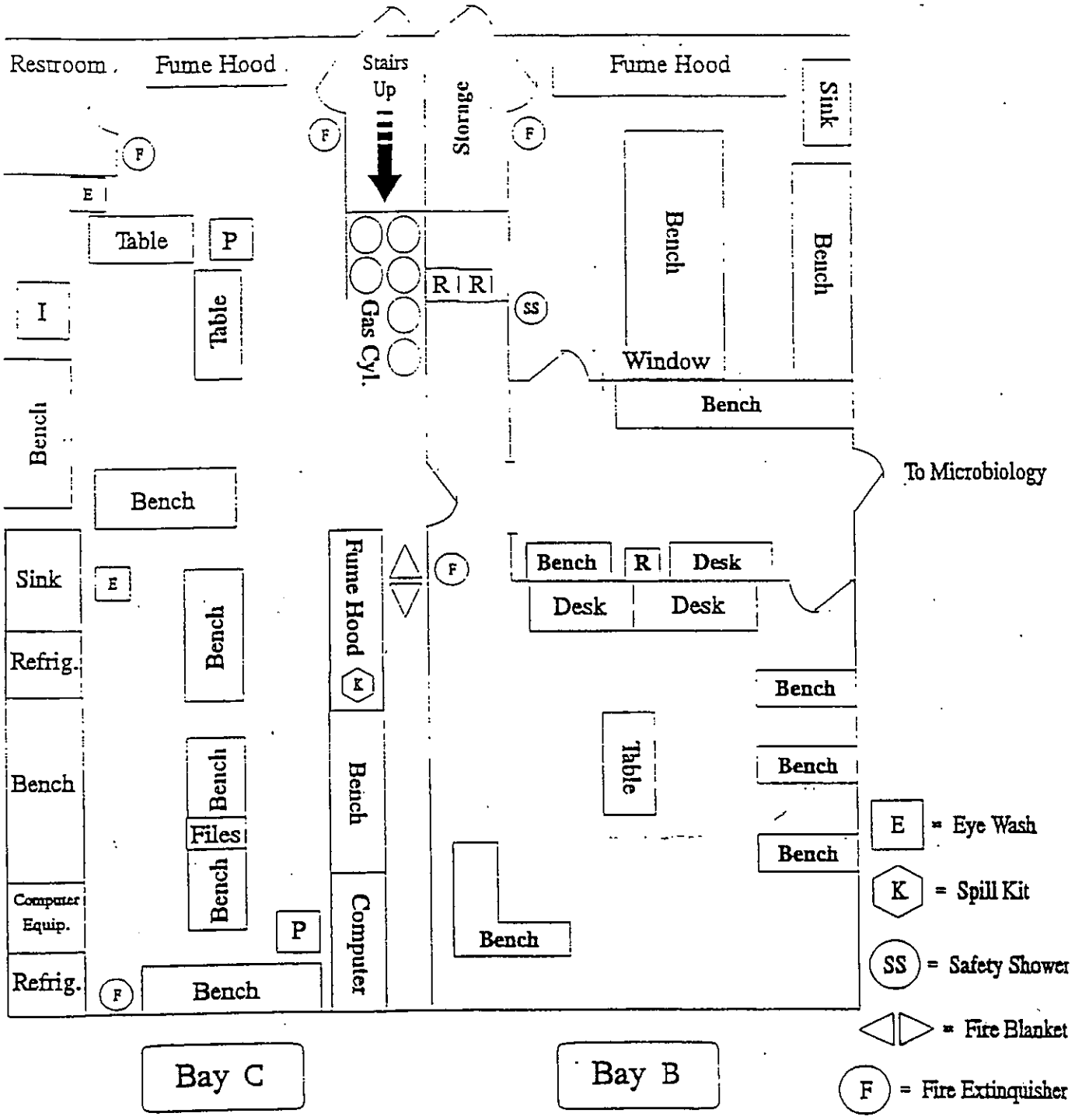
P = Printer

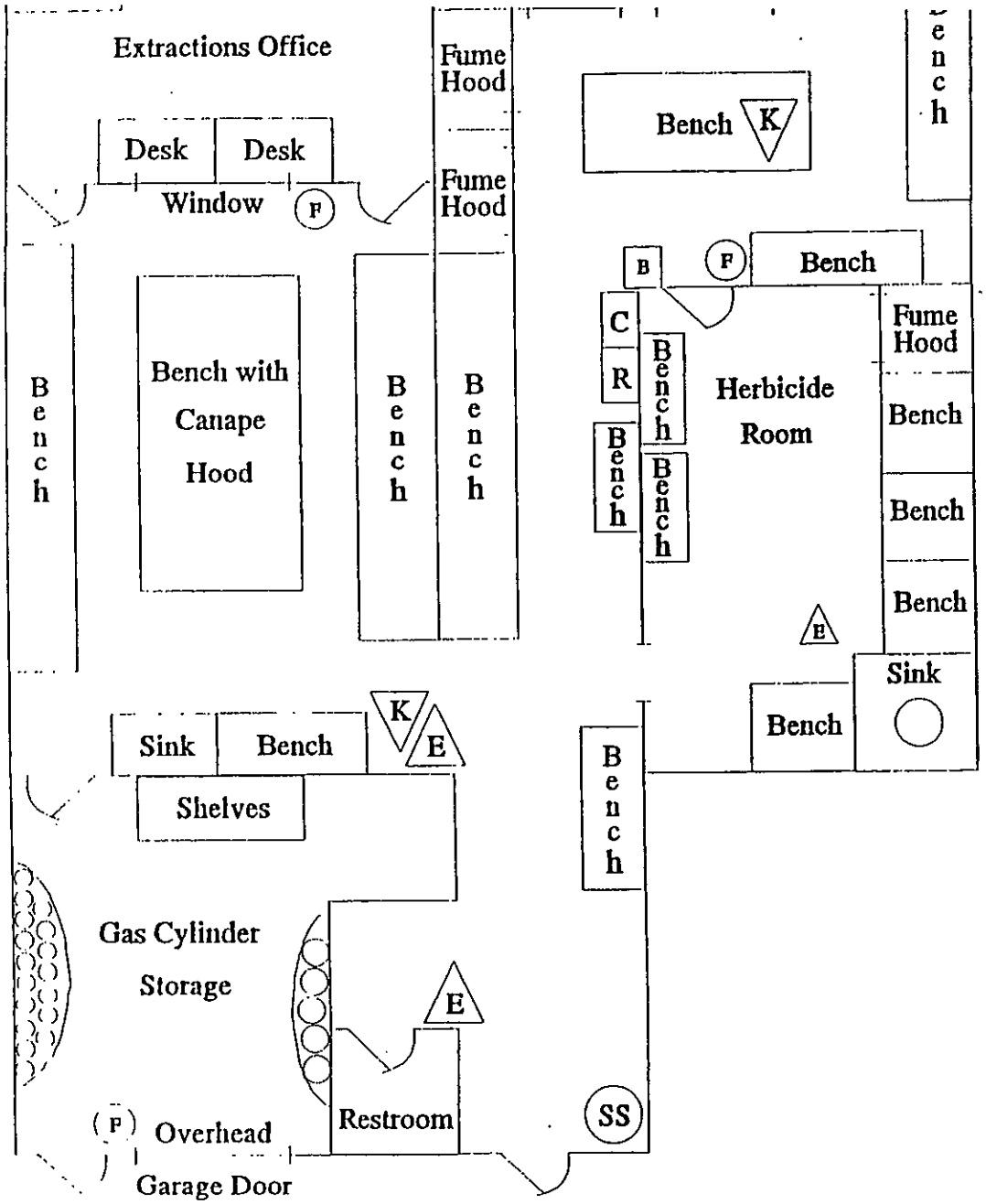
W = Washing Machine

D = Dryer


Rear of Building
Bay A
Microbiology
1,000 sq. ft.
Restroom
Sink
SS
Stairs Up
(not used)
Storage under stairs
Fume Hood
Bench
Bench
K
Bench
Gas Cyl.
Sink
E
Bench
To Organics Dept.
Shelves
Bench
Bench
Fume Hoods
Bench
Window
F
Refrig.
Refrig.
Refrig.
Files
Desk
Storage
Office
Storage
Storage
Desk
Storage
Front of Building
F = Fire Extinguisher
E = Eye Wash
K = Spill Kit
= Fire Blanket
SS = Safety Shower

Organics Department
2000 sq. ft.





Extractions Laboratory
1650 sq. ft.

E = Eye Wash

F = Fire Extinguisher

K = Spill Kit

B = Fire Blanket

SS = Safety Shower

R = Refrigerator

C = Cabinet

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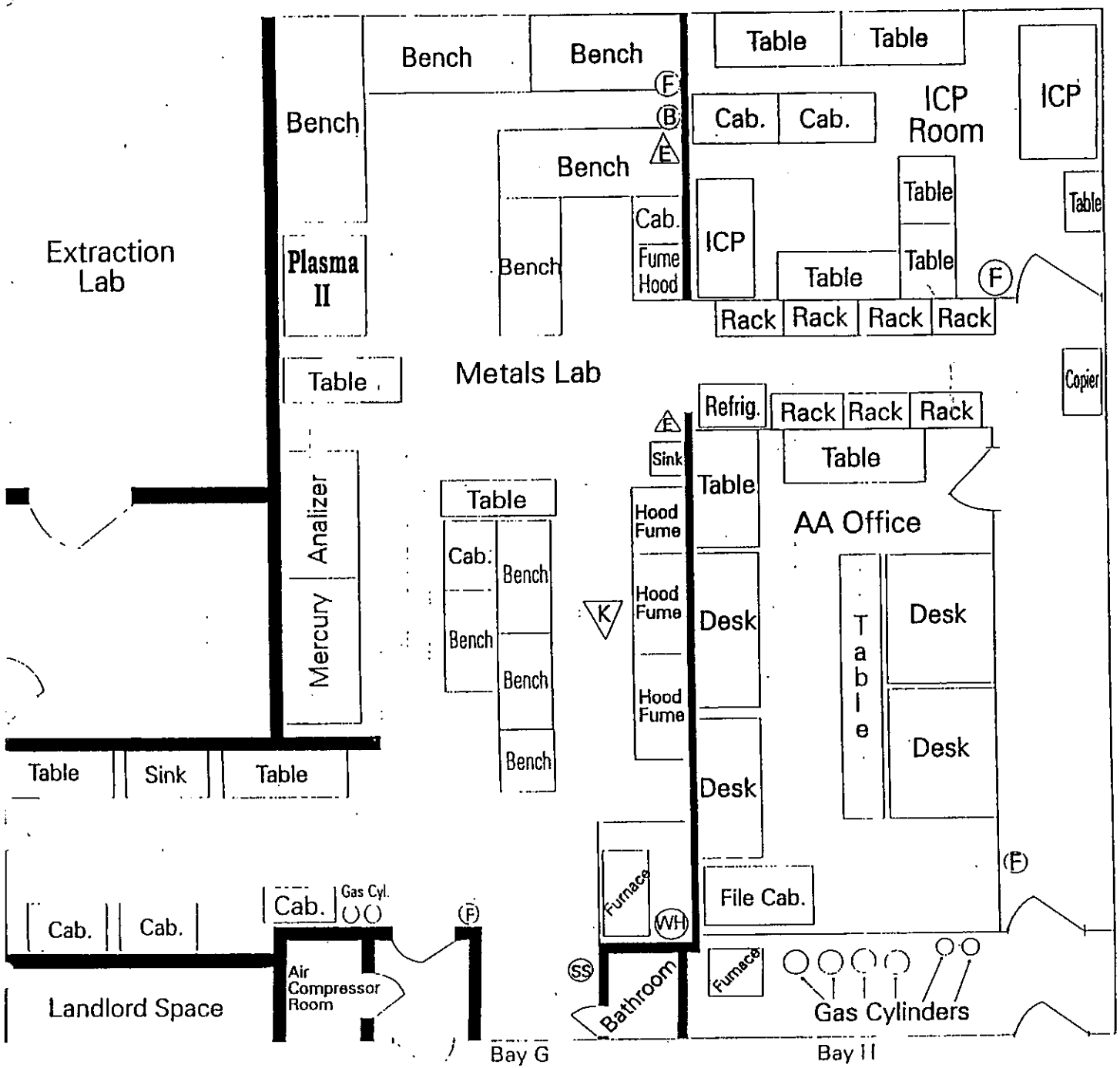
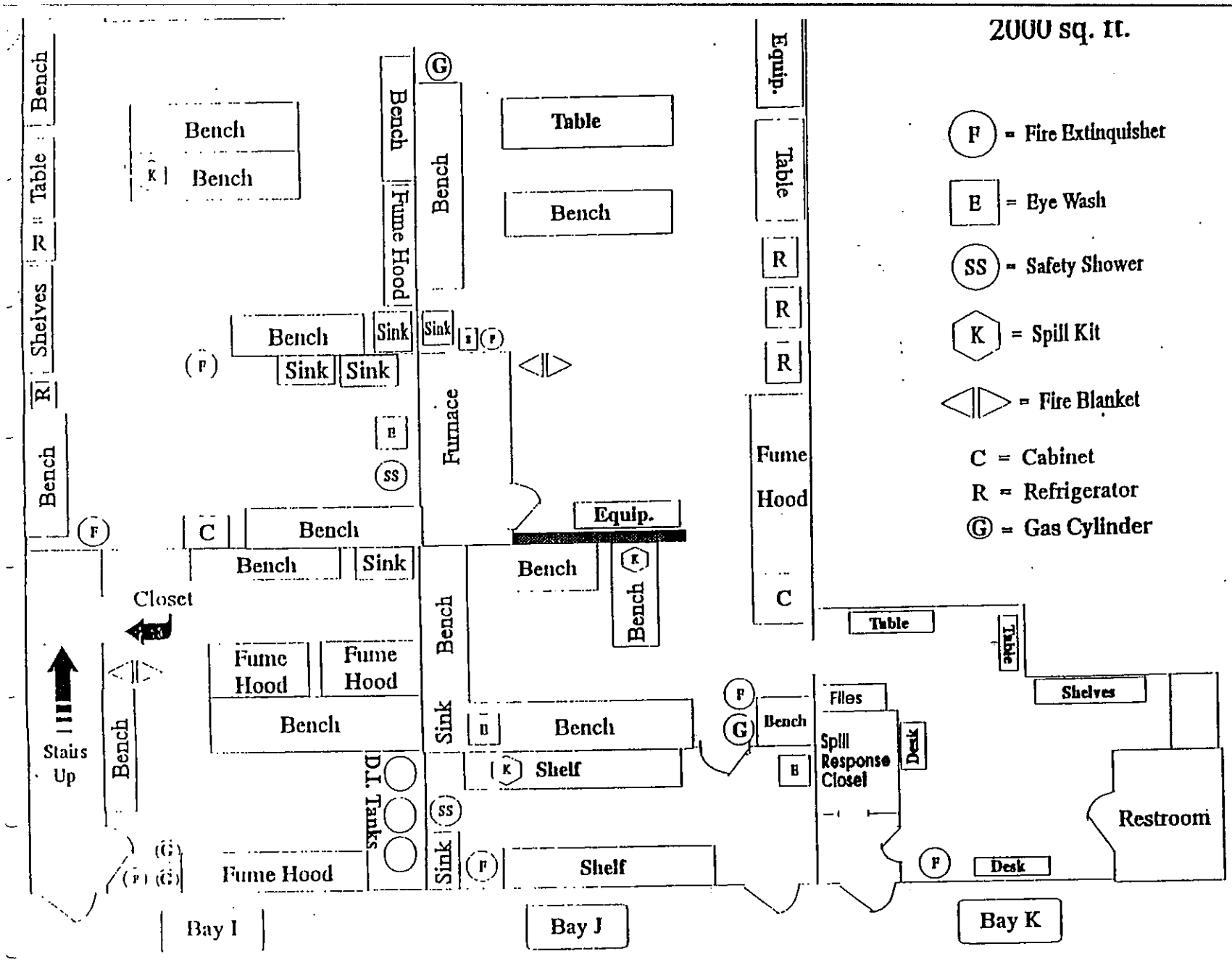


2632 RDC-00817



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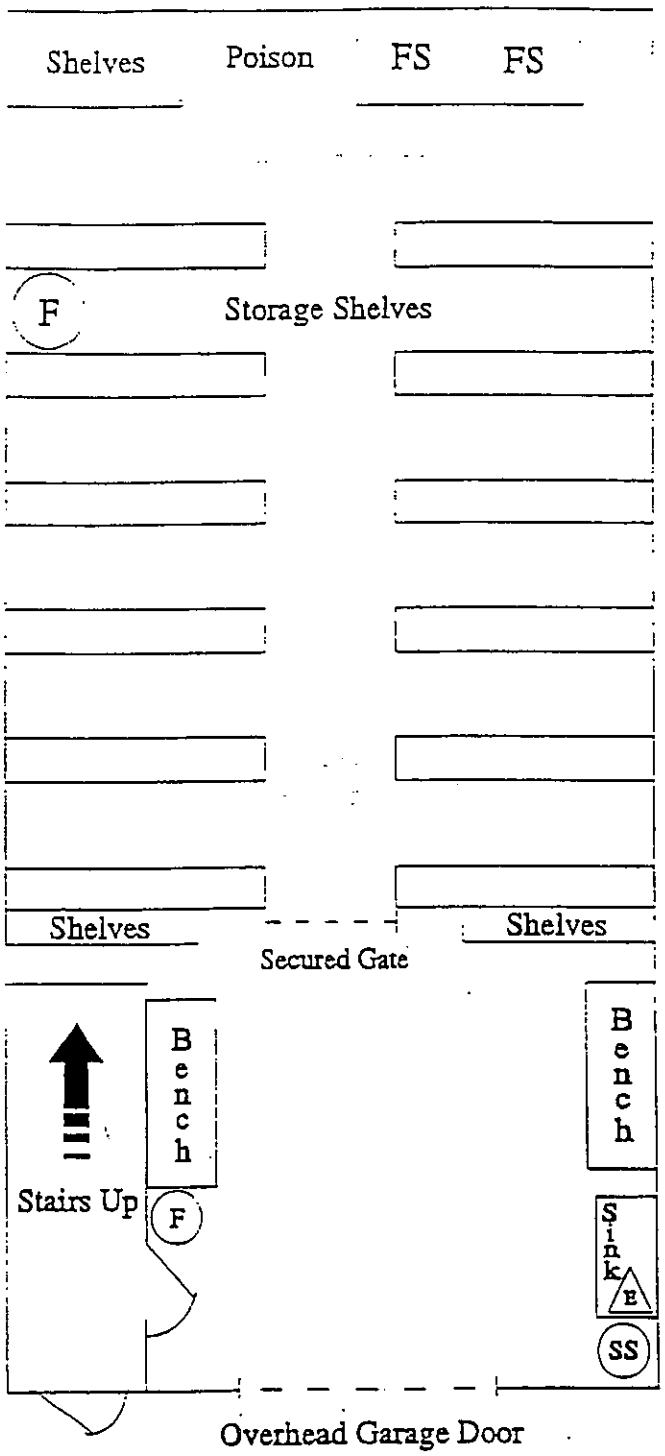


Bay O

Shipping and Receiving

1,000 sq. ft.

F = Fire Extinguisher

E = Eye Wash

K = Spill Kit

SS = Safety Shower

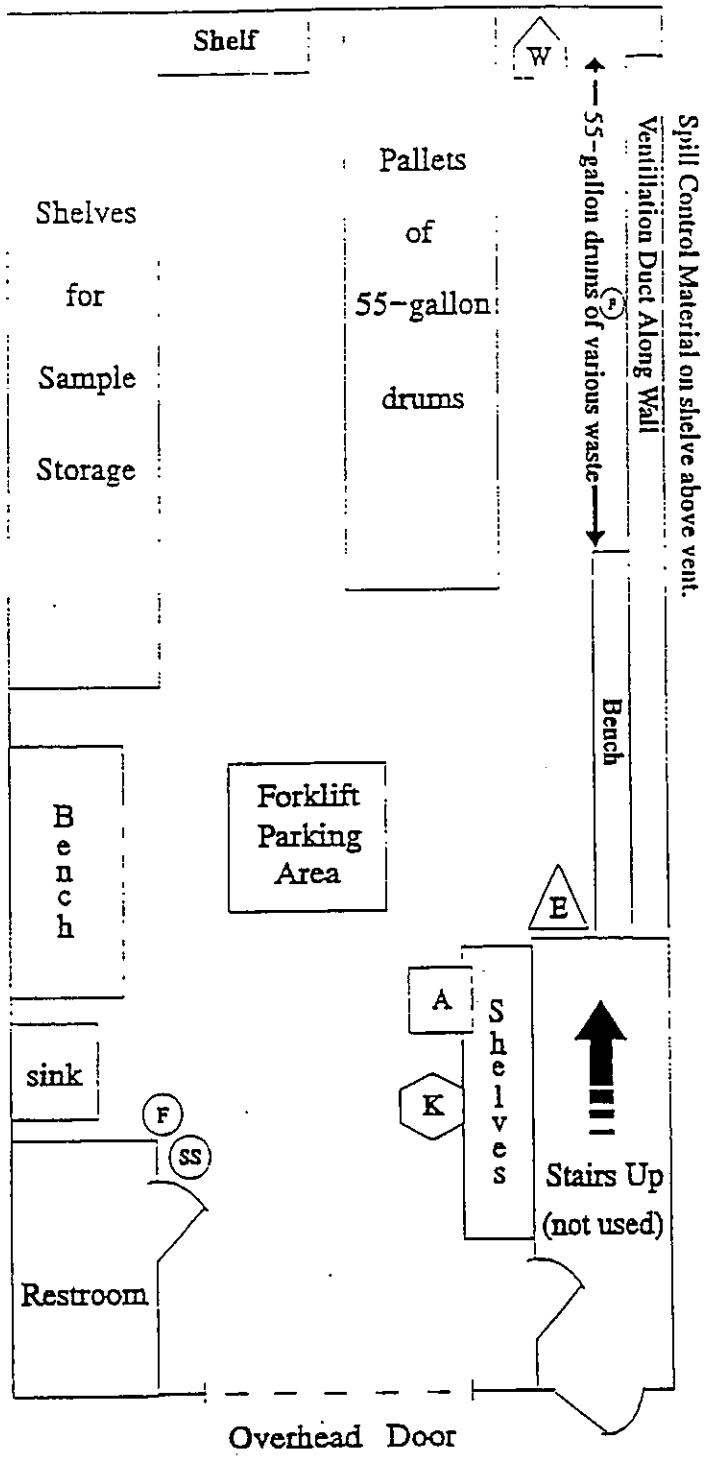
FS = Flammable Storage Cabinets

Bay P

West Bay

Waste accumulation
and
Sample Storage

1,000 sq. ft.



F = Fire Extinguisher

E = Eye Wash

K = Spill Kit

SS = Safety Shower

A = Air Line Respirator

W = Water Valve and Hc

Instrumentation

Facility Description

1. Computer Systems

Manufacturer	Number of Units
IBM System AS400 E20 with 23 megabytes RAM and 3 gigabytes storage. Supports 250 devices (terminals, printers). Presently, eleven printers are supported along with 50 workstation terminals.	1

2. Gas Chromatography/Mass Spectroscopy:

Manufacturer	Number of Units
A. Hewlett Packard GC/MS Model 5995C with an RTE-6 data system.	1
1. Auxiliary Equipment: Tekmar Auto Model 7000	1
B. Two Hewlett Packard GC/MS Model 5970B MSD with an RTE-6 data system and five 5970B's with a third HP1000 computer using RTE-A.	7
1. Auxiliary Equipment:	
Hewlett Packard Sampler Model 7673	3
Tekmar 2000/2016 automatic purge and trap configured for both packed and capillary columns.	2
Tekmar 3000/2016 Combination	2
Gateway 2000 personal computers interfaced with the RTE data systems	3

3. Gas Chromatography:

Manufacturer	Number of Units
A. Tracor GC Model 565 with a Hall detector and PID detector.	1
1. Auxiliary Equipment:	
Hewlett Packard Integrators Model 3392A and 3396A	2
Tekmar Purge and Trap LSC-2 and Model ALS Samplers	1
B. Tremetrics GC Model 9000 with Hall and PID detector. Capability for packed and capillary columns.	1
1. Auxiliary Equipment:	
Tekmar Purge and Trap LSC-2 and ALS sampler, Model 2000/2016	1
C. Tremetrics Model 9001 with a Hall and FID detector, having packed and capillary column capabilities.	1
1. Auxiliary Equipment:	
Hewlett Packard Automatic Sampler Model 7673 auto sampler	1
D. Hewlett Packard GC Model 5840 with a FID and EC detector.	1
1. Auxiliary Equipment:	
Hewlett Packard Integrator	1
Hewlett Packard Automatic Sampler Model 7672A	1
E. Hewlett Packard GC Model 5890 with dual EC detectors and capillary column capability	3

1. Auxiliary Equipment:

Hewlett Packard Automatic Sampler Model 7673A	1
One GC is interfaced to a RTEA 900 Computer for data reduction using the Aquarius software.	1
Two GCs are interfaced to a 386DX PC for data reduction and storage using Lab Quest Software.	1

All Tracor and Tremetric GCs are interfaced with a 386DX computer for data reduction using Lab Quest Software.

4. Atomic Absorption/Emission Spectrophotometry

Manufacturer	Number of Units
A. Perkin-Elmer Plasma II Inductively Coupled Argon Plasma Spectrophotometer, dual channel sequential instrument	1
1. Auxiliary Equipment:	
Autosampling device	1
Model 7700 computer	1
B. Perkin-Elmer Atomic Absorption Spectrophotometer Model 5100 with a Zeeman graphite furnace	3
2. Auxiliary Equipment:	
Automatic sampler Model AS60	3
Gateway 2000 Personal Computer	3
C. Perkin-Elmer Atomic Absorption Spectrophotometer Model 2380	1
D. Thermal Jarrel Ash Simultaneous Inductively Coupled Plasma Spectrometer Model 61E	1
1. Auxiliary Equipment:	
IBM PC	1

5. Organic Sample Preparation Apparatus

Manufacturer	Number of Units
A. Heat Systems-Ultrasonics, Inc. Sonicator Model W-380 475 Watts with pulsing capability	3
B. ABC Laboratory GPC Autoprep, Model 1002B and Model 1000 from Analytical Bio-Chemistry Laboratories, Inc.	2
1. Auxiliary Equipment:	
UVD-1 UV Detector	1
SCR-1 Strip Chart Recorder	1
C. Organomation N-Evap Analytical Evaporator, Model 112	1
D. Boekel Steam Baths	3
E. Analytical Testing & Consulting Services Inc. Zero Head Space Extraction Vessel, Model C102	8
F. Labline Orbital Shakers	3
G. IEC Centrifuge	1
H. Labline Multiunit Extraction Heater	3
I. Lindberg Muffle Furnace	4

6. **Miscellaneous Instrumentation**

Manufacturer	Number of Units
A. Lachat Quik Chem Automated 4 Channel Ion Analyzer	1
B. O.I. Corporation TOC Analyzer Model 524C	1
C. Dohrmann TOX Analyzer Model DX20	1
D. Mitsubishi TOX Analyzer 10 Sigma	1
E. Perkin-Elmer Infrared Spectrophotometer Model 710B	1

F. Perkin-Elmer Infrared Spectrophotometer Model 1600 Series FTIR 1

G. Milton Roy Spectrophotometer Model 20D 1

H. Milton Roy Spectrophotometer Model 21D 1

7. Vehicle Fleet

Our vehicle fleet allows ICM to service clients in New Jersey, New York, and Pennsylvania. In addition to sample pick-up, we offer field sampling services for ground water. All our field samplers have 40 Hour OSHA training and are fully versed in proper sampling and custody procedures.

In addition to the above listed instrumentation and apparatus, ICM Laboratories maintains a full array of standard laboratory equipment such as pH meters, analytical balances, and glassware. We also have ampul refrigeration for maintaining samples at proper temperature.

To ensure continuation of operations, ICM has strategically placed back-up power sources in case of a power outage.

Instrument Preventative Maintenance

A maintenance and repair log book is kept for each instrument. Regularly scheduled maintenance, instrument repairs, and/or any instrument problems are recorded, dated, and initialed. The following are the maintenance schedules for the major instrumentation:

1. Hewlett Packard Gas Chromatography/Mass Spectroscopy:

   Monthly:

   A. Dust around instrument and instrument surfaces to reduce airborne particles.
   B. Check all fans and clean to remove dust from filter.
   C. Remove Syringe, clean, reinstall or replace (SVs).
   D. Remove all glassware and acid wash (VOAs).

   Semi-Annually:

   A. Replace roughing pump oil.
   B. Replace aux pump oil (VOAs).
   C. Replace forline trap absorbent.
   D. Lubricate turbo pump.
   E. Methanol rinse Tekmar (VOAs).

   Annually:

   A. Renew chemical filter.
   B. Clean injection port.
   C. Clean jet separator.

   As Needed:

   A. Clean source.
   B. Change column.
   C. Change trap.

2. **Tracor/Tremetric Gas Chromatographs:**

   Monthly:

   A. Replace hydrocarbon trap.

Semi-Annually:

A. Replace resin and n-propanol (Hall).

As Needed:

A. Maintain n-propanol reservoir (Hall).
B. Clean PID lamp window or replace lamp (when sensitivity is lost).
C. Detach and thoroughly clean purging vessels and inspect Teflon ferrules (replace if necessary).
D. Replace trap and condition new trap at 180°C overnight (when trap produces poor bromoform sensitivities or a pressure drop in excess of 3 psi).
E. Replace column and condition new column overnight (when peak tailing, poor resolution, or a pressure in excess of 60 psi is required to obtain 40 ml/min carrier flow occur).

3. **Hewlett Packard Gas Chromatographs:**

Daily:

A. Change septums.

Monthly:

A. Dust around instrument and instrument surfaces to reduce airborne particles.
B. Check all fans and clean to remove dust from the filter.
C. Remove all rinse bottles, clean and/or replace.
D. Remove syringe, clean and/or replace.

Semi-Annually:

A. Renew chemical filter
B. Clean injection ports
C. Perform wipe test for radiation at detector entrance fitting, detector housing, and detector exit.

As Needed:

A. Clean inlet inserts or liners.
B. Replace glasswool at head of column and clean with methanol.
C. Replace a small portion of column packing.
D. Condition columns.
E. Replace column and condition new column overnight when peak tailing, poor resolution, column bleed, or retention time shifts occur.

4. **Mettler Balances:**

With Each Use:

A. Check level indicator bubble.

Daily:

A. Check 2 S-weights
B. Clean pan, pan brake, and floor of chamber.

Monthly:

A. Clean housing, weighing chamber, and mirrors.
B. Check 5 S-weights.

Annually:

A. Serviced by Mettler.

5. **pH Meters:**

Daily:

A. Calibrated daily or prior to use with 3 buffer solutions, pH 4, 7, and 10.
B. At the end of each day the pH bulbs are capped with filling solution.
C. Airhole is closed to prevent evaporation and crystallization of filling solution.

Weekly:

A. Filling solution replaced.

6. **Spectrophotometers:**

Daily:

A. Clean instrument thoroughly.

Monthly:

A. Performance tested with standard (to insure photometric accuracy, linearity, and precision). This is done every month.
B. Lamps and mirrors checked and cleaned (more frequently if drifting or difficulty zeroing).

Semi-Annually:

A. Serviced by Bausch & Lomb (or more frequently if needed).

7. **Infrared Spectrophotometer:**

Daily:

A. Clean cells.
B. Polystyrene Test Spectrum checked.
C. Balance adjustment.

As Needed:

A. Oil pen carriage.

8. **TOC Analyzer:**

Daily:

A. Replace all drying tubes.
B. Clean and grease the cutter plunger.
C. Clean glass barrel.

Monthly:

A. Clean flow measuring meters.

As Needed:

A. Replace ascarite (when it turns whitish-gray).
B. Adjustment of infrared optical balance.

9. **Perkin-Elmer Plasma II ICP:**

Weekly:

A. Check water cooling system and replace filter cartridge if plugged.
B. Inspect torch, glassware and aerosol injection tube for traces of deposits or signs of melting.
C. Check pump tubing and replace as flat spots develop; check pump roller to insure that there are no binding spots which might affect precision.
D. Keep autosampler carousel clean and spill-free.
E. Clean and check nebulizer and spray chambers.

Periodically:

A. Clean plasma torch assembly.
B. Check purge window and clean if necessary.

10. **Perkin-Elmer Graphite Furnace AA Model 5100:**

Daily:

A. Wipe contact rings before each new tube.
B. Check contact rings for wear.
C. Condition new tube.
D. Clean quartz window with methanol.
E. Clean workhead surface.
F. Keep autosampler carousel clean and spill-free.

Periodically:

A. Clean graphite contact cylinder.
B. Check sampling capillary regularly and replace if damaged or deteriorating.
C. Inspect pump assembly and tighten any loosening parts.
D. Check optics and carefully remove any dust.

11. **Perkin-Elmer AA Model 2380:**

Daily:

A. Clean burner head and mixing chamber.
B. Empty drain bottle and check water trap in tubing.
C. Keep instrument and recorder clean and spill-free.

Periodically:

A. Check optics and carefully remove any dust.
B. Clean absorption cell (cold vapor).
C. Acid-clean dispersion frit (cold vapor).

12. **Thermo-Jarrell Ash ICAP 61E:**

Daily:

A. Inspect torch glassware and aerosol injection tube for traces of deposits or signs of melting.
B. Check pump tubing and replace as flat spots develop. Check all pump tubing connections for leaks or clogs.
C. Visually check spray chamber for proper nebulizer operation.

Periodically:

A. Clean and check nebulizer and spray chamber.
B. Lubricate slider rods of autosampler with a light machine oil.
C. Remove cooling fan filters on back of instrument and vacuum clean.
D. Perform white light and dark current test.

13. Instrument Service Contractors:

In addition to the preventative maintenance performed by ICM, the following contractors perform essential maintenance and repairs:

A. Milton Roy for the Spectrophotometers
B. Perkin-Elmer for the Atomic Absorption, Plasma II ICP, and Infrared Spectrophotometer
C. Thermo-Jarrell Ash for the ICAP 61E
D. Compco Analytical & Hewlett Packard for GC and GC/MS
E. IBM for the computers
F. Tekmar for the purge and trap samplers
G. Tracor for the Tracor GC
H. O.I. Corporation for the TOC Analyzer
I. Mettler for the analytical balances
J. Lachat for the autoanalyzer

14. Laboratory Reagents and Supplies:

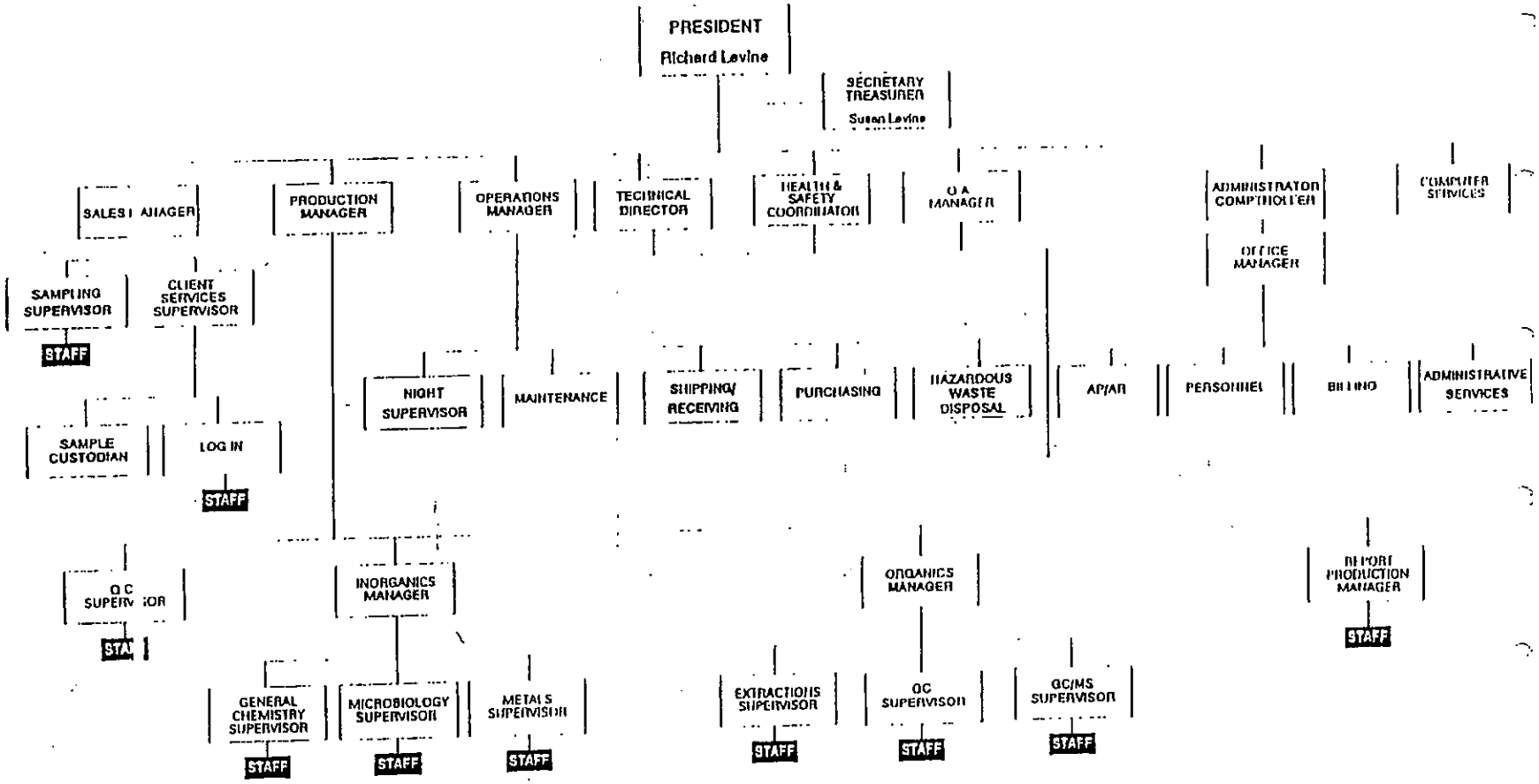
All reagents and supplies are purchased from reputable suppliers such as Fisher Scientific, VWR Scientific, and Supelco. All chemicals and glassware are of the highest possible quality for proper application. The Production Support area maintains a stockroom of appropriate supplies. All chemicals are dated upon receipt and opening. The oldest chemicals are used first and any chemical which reach their expiration date are properly discarded.

Section 3

Organizational Structure

2632 RDC-00832

ICM LABORATORIES ORGANIZATIONAL CHART



Training

ICM ensures that all new employees go through a training period. Training includes an introduction to ICM company policies and philosophy, QA/QC practices, safety, and waste disposal. In addition to general policies, each employee is trained in the tasks they are hired to perform.

A variety of individuals are involved in a new employee's training. Individuals include the Safety Coordinator, Quality Assurance Officer, and the department supervisor.

The training period varies depending upon the experience and technical position of the new employee. The typical span of time is one to six months.

When the initial training is completed regarding company policies and safety practices, the department supervisor assumes the training responsibility. During this time, the trainee is introduced to the reference tools needed to perform his duties, tools such as our Standard Operating Procedures. The supervisor works with the new analyst as he/she is performing the analysis. The trainee is encouraged to ask questions and to take notes concerning the analysis.

Gradually, the trainee becomes more experienced with the methodologies and is able to work independently from the supervisor. It is the supervisor's responsibility to determine the time in which the employee can work independently.

All ICM supervisors and managers periodically monitor their employees to ensure that the analysts are performing the methodologies in accordance with ICM Standard Operating Procedures and QA/QC policies. In addition, blind samples are sent through the laboratory to further ensure all methods are working properly.

RICHARD LEVINE

EDUCATION:

1973	University of Illinois Urbana, IL PhD Candidate
1971	University of Illinois Urbana, IL MS Physical Chemistry
1968	Carnegie Mellon University Pittsburgh, PA BS Chemistry

PROFESSIONAL EXPERIENCE:

2/74 - Present

Lab Director
ICM Laboratories - Division of Industrial Corrosion Management, Inc.

Supervising overall operation of ICM Laboratories - work flow, personnel, and finances. Performing long range planning. Since 1982, duties include Computer Systems Software Manager and Programmer. Migrated IBM System 23 to IBM 36, and now to AS400. Developed highly sophisticated environmental LIMS software utilized for data management, generation of deliverables, computerized accounting and purchasing, etc. Supervises programmers working throughout the company.

8/73 - 2/74

Senior Research Chemist
Drew Chemical
Boonton, NJ

Formulation of products, chemical analyses, and reports for water treatment.

6/71 - 8/73

Chemist
University of Illinois - Physical Plant
Urbana, IL

Responsible for all chemically related aspects of corrosion control in water treatment and performing related chemical analyses. Developed rapid analytical techniques for Lithium Bromide analysis in steam absorption refrigeration systems.

9/68 - 6/71	Lecturer, Teacher Graduate Fellow University of Illinois - Dept. of Chemistry Urbana, IL Taught course in undergraduate chemistry and graduate courses in Quantum Mechanics.
1/66 - 9/68	Assistant Research Chemist Gulf Oil Company Pittsburgh, PA Heterogeneous catalysis for petroleum products. Performing analyses using Gas Chromatograph and Gas Chromatograph/Mass Spectrometer. Also construction and maintenance of GC/MS units.

PUBLICATIONS:

Various in the fields of Corrosion Analysis and Control, Water Treatment, Chemical Systems, and Environmental Problems

AWARDS:

Who's Who - 1979 thru Present
Finalist - Inc. Magazine
Entrepreneur of The Year 1991

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SUSAN LEVINE

EDUCATION:

1969	University of Pittsburgh Pittsburgh, PA B.S. Psychology

PROFESSIONAL EXPERIENCE:

1974 - Present	Secretary/Treasurer ICM Laboratories-Division of Industrial Corrosion Mangaement, Inc. Duties include comptroller, administrator, managing financial and administrative aspects of company.

ELIZABETH PRICE

EDUCATION:

1978	New Jersey Institute of Technology Newark, NJ Doctoral Candidate, Graduate courses in Environmental Engineering and Chemistry
1975	New Jersey Institute of Technology Newark, NJ M.S. Environmental Engineering
1961	Seton Hall University South Orange, NJ 20 Graduate Credits in Chemistry
1956	Duke University Durham, NC B.S. Chemistry

PROFESSIONAL EXPERIENCE:

1984 - Present	Technical Director ICM Laboratories - Division of Industrial Corrosion Management, Inc. Technical Supervision for Organic, Inorganic, and General Chemical analyses of water, wastewater, soils, hazardous waste, etc. Data review of all GC results. Review and interpretation of chromatograms for Pesticide/PCB and Volatile Organics GC analyses. Method research and development. Supervision and/or analysis of Pesticide/PCB fraction of EPA-CLP samples.
1979 - Present	Adjunct Professor New Jersey Institute of Technology Adjunct Professor for "Environmental Chemistry", "Environmental Microbiology", and "Water and Wastewater Analysis".
1978 - 1984	Director-Environmental Laboratory Civil and Environmental Eng. Dept-NJ Institute of Technology. Conducted and supervised funded research and studies and developed and maintained the laboratory's competence in current test procedures

including A.A. - Graphite furnace and GC/MS (Gas Chromatograph/Mass Spectrometer) methods.

1976 - 1984 Consultant for various water quality studies and surveys including those for Lake Hopatcong Regional Planning Board, Johns-Manville Development Corp., Lake Shawnee Club, S.B. Thomas, Inc., and Lakeland Laboratories.

1971 - 1978 Director
Lakeland Laboratories
Supervised all technical aspects of the environmental laboratory operation, including compliance with EPA and State quality assurance guidelines for laboratory certification.

1976 Adjunct Professor
Middlesex County College
Adjunct Professor in "Environmental Science".

1956 - 1961 Chemist
Pacquin-Leeming Division of Chas. Pfizer
Worked on the development of analytical methods for combinations of ingredients in pharmaceutical preparations in accordance with N.F. and U.S.P. guidelines.

PUBLICATIONS:

"Sewage Treatment Plants Combat Odor Problems" Water & Sewage Works, October 1978. This article was a winner of the Annual O & M Award.

"Trace Organics by GC/MS," chapter in Pollution Control Handbook, P. Cheremisinoff, Ed., Ann Arbor Science, 1981.

"Airless Digestion Aired" Water & Sewage Works, April 1980

Biogas Production and Utilization, Ann Arbor Science, 1981

"Methods of Biogas Generation and Comparisons" Lecture Books, International Symposium-Workshop on Renewable Sources, Mar. 18-22, 1983, Lahore, Pakistan. E. Price was invited lecturer, session, & workshop chairman.

"The Microbiology of Anaerobic Digestion" and "Biogas Generation", two chapters in Biotechnology Handbook, Cheremisinoff and Ouellette, Ed., Butterworth/Ann Arbor Sci., 1984.

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ICMMC

EDUCATION:

1991	Emilcott Associates, Inc. - Certificate for completing RCRA Hazardous Waste Training Program.
1991	Emilcott Associates, Inc. - Certificate for completing Hazardous Materials Training Program
1990	St. Clares - Riverside Medical Center - Certificate for completing CPR Training
1986	Spectra - Certificate for completing Atomic Absorption Course
1984	Nassua Community College Garden City, NJ Non-matriculated, Computer Science
1982	Perkin-Elmer - Certificate for completing Atomic Spectroscopy and Plasma Emission Course
1980	Southeastern Massachusetts University North Dartmouth, MA B.S. Marine Biology

PROFESSIONAL EXPERIENCE:

11/91 - Present	Lab Production Manager ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for overseeing production process. Manages Quality Control, Inorganics, Organics and Report Production departments. Coordinates with Sales, Operations and Quality Assurance Managers to accomplish company goals of rapid turnaround times with highest quality.
7/89 - 11/91	Inorganics Manager ICM Laboratories Responsible for managing the operations of the General Chemistry, Trace Metals, and Microbiology laboratories. Supervised Trace Metals department. Coordination of workflow. Troubleshooting of instruments and other technical problems. Preparation of Inorganic CLP diskette

deliverables.

3/88 - 7/89	Laboratory Operations Manager International Technologies Corporation Supervision and management of sample receiving/ sample management, customer service, data review, health and safety, troubleshooting technical problems in the lab.
10/87 - 2/88	Quality Assurance Manager International Technologies Corporation Supervised Quality Control program, including reports to meet ECRA, CLP and NJDEP Tier requirements. Performed audits, wrote and reviewed SOPs.
1/87 - 10/87	Inorganics Laboratory Manager International Technologies Corporation Managed operation of Trace Metals and Wet Chemistry laboratories. Also responsible for upgrading of equipment, writing and implementing SOPs.
5/85 - 1/87	Trace Metals Laboratory Team Leader Environmental Testing and Certification Corporation Coordinated and supervised laboratory personnel and operations. Performed analyses utilizing ICP, flame and graphite furnace atomic absorption. Handled technical problems, methods development, instrument troubleshooting, etc.
3/84 - 5/85	Trace Metals Laboratory Supervisor NYTEST Environmental, Inc. Supervised technicians, developed methods, scheduled analyses and reviewed data. Department performed analyses by atomic absorption utilizing flame, graphite furnace and hydride generation techniques.
3/81 - 3/84	Trace Metals Analyst NYTEST Environmental, Inc. Performed environmental analyses by atomic absorption utilizing flame, graphite furnace and hydride generation techniques.

BIANCA R. BUCKWALTER

EDUCATION:

1986	Boston College, Graduate School of Management Chestnut Hill, MA M.B.A., Concentration in Marketing
1982	St. John's University Queens, NY B.S. Toxicology (Cum Laude)

PROFESSIONAL EXPERIENCE:

1989 - Present	Industrial Corrosion Management, Inc. Sales Manager Responsible for new business development, marketing and systems development of the sales department.
1986 - 1989	Intech BioLabs Territory Manager Responsible for new business development and market penetration. Maintain a high level of customer service.
1984 - 1986	Boston College Marketing Department Marketing Graduate Assistant Managed professors' marketing research projects. Delivered lecture series to students for instruction of computer-based statistics.
1985 - 1986	Small Business Institute, Boston College Business Consultant Worked with entrepreneurs for the detection of business problems. Developed and implemented solutions.
1983 - 1984	Energy Resources Analytical Environmental Chemist Responsible for Contract Laboratory Program samples and paperwork in the Mass Spectroscopy Department.
1980 - 1983	New York Testing Laboratories Analytical Environmental Chemist Conducted many different analyses including volatiles, base neutrals, acids, pesticides and PCB's

ICMQPK

EDUCATION:

1992	Rutgers University New Brunswick, NJ M.S. Environmental Science.
1984	Stockton State College Pomona, NJ B.S. Environmental Science

PROFESSIONAL EXPERIENCE:

8/89 - Present	Quality Assurance Manager ICM Laboratories - Division of Industrial Corrosion Management, Inc. Responsible for the communication of all QA/QC policies and procedures to the laboratory managers. Ensures laboratory compliance with current NJDEPE and USEPA regulations. Coordinates performance evaluation analysis and state certification.
10/88 - 8/89	Quality Control Specialist ICM Laboratories - Division of Industrial Corrosion Management, Inc. Responsible for review of data and laboratory reports for completeness and compliance to all NJDEPE and EPA regulations. Performance of contract compliance screening. Preparation of data deliverables. Oversaw all method and and quality assurance requirements pertaining to gas chromatography. Responsible for CLP Pesticide/PCB data review.
10/87 - 9/88	GC Analyst Intech Biolabs Performed gas and liquid chromatography analyses of pesticides and herbicides on environmental samples utilizing CFR 601, 602, 608 and SW846, 8080 and 8150 methodologies. Review and interpretation of chromatograms and results.
11/85 - 8/87	GC Analyst Environmental Testing and Certification Corp. Performed gas chromatography analyses of pesticides and herbicides on environmental

samples including wastewater, drinking water, and CLP analyses. Responsible for data review of the above analyses.

5/84 - 11/85 General Chemical Analytical Shift Supervisor
Environmental Testing and Certification Corp.

Responsible for the QC review of laboratory data, training new personnel, and production scheduling in the General Chemical Analytical department.

ICMMY

EDUCATION:

1965	River Dell Regional High School Oradell, NJ Diploma
	County College of Morris Randolph, NJ Accounting Courses

PROFESSIONAL EXPERIENCE:

2/93 - Present	Office Manager ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for the management of billing accounts receivable, accounts payable and Human Resource Departments
7/89 - 2/93	Secretarial Manager ICM Laboratories-Division of Industrial Corrosion Management, Inc. Managed secretarial, report production, and billing departments. Coordinated with Lab Production Manager, Quality Assurance and operations to ensure company goals of rapid turnaround times with highest quality.

ICMGTM

EDUCATION:

1991	Emilcott Associates, Inc. - Certificate for completing RCRA Hazardous Waste Training Program
1991	Emilcott Associates, Inc. - Certificate for completing Hazardous Materials Training Program
1990	St. Clares - Riverside Medical Center - Certificate for completing CPR Training
1985	Hewlett Packard - Certificate for completing the Mass Spectrometry Techniques and Interpretation Course
1983	IT Corporation - Certificate for completing the Hazardous Material Incident Response Operations Course
1983	William Paterson College Wayne, NJ B.S. Chemistry

PROFESSIONAL EXPERIENCE:

4/89 - Present	Organics Manager ICM Laboratories - Division of Industrial Corrosion Management, Inc. Responsible for management of Organics department and supervision of Extractions and GC departments. Supervision of GC analysts and Extractions technicians. Coordination of work flow. Trouble-shooting of instruments and other technical problems. Preparation of organic CLP diskette deliverables.
4/86 - 4/89	GC - GC/MS Supervisor ICM Laboratories - Division of Industrial Corrosion Management, Inc. Responsible for supervision of GC & GC/MS analysts. Coordination of work flow. Troubleshooting of instruments and other technical problems. Technical data review for all GC/MS data. Preparation of Organic CLP diskette deliverables. Performed GC/MS analyses and interpretation of Mass Spectra utilizing SW846, EPA Series 500 and 600, and CLP Methodologies.

6/83 - 4/86	Organics Analyst Environmental Testing and Certification Corporation Performed and reviewed volatile and semivolatile environmental analyses by GC/MS and interpreted resulting Mass Spectra. Performed Pesticide/PCB Pesticide/PCB analyses by GC/ED. Performed volatileorganic analyses by GC/FID.
1/82 - 6/83	Organics Analyst International Technologies Corporation Performed and reviewed volatile and semivolatile environmental analyses by GC/MS and interpreted resulting Mass Spectra. Performed Pesticide/PCB analyses by GC/ED. Performed volatile organic analyses by GC/FID.
1/81 - 12/81	Physical Scientist Aid USEPA Performed and reviewed volatile, base neutral and acid fraction environmental analyses by GC/MS and interpreted resulting Mass Spectra. Performed Pesticide/PCB analyses by GC/ED. Performed volatile organic analyses by GC/FID.

ICMGMB

EDUCATION:

1991	Emilcott Associates, Inc. - Certificate for completing RCRA Hazardous Waste Training Program
1991	Emilcott Associates, Inc. - Certificate for completing Hazardous Materials Training Program
1990	St. Clares - Riverside Medical Center - Certificate for completing CPR Training
1989	County College of Morris - Certificate for completing Supervisory Skills Seminar
1986	Stonehill College North Easton, MA B.S. Biology

PROFESSIONAL EXPERIENCE

1/89 - Present	GC/MS Supervisor ICM laboratories - Division of Industrial Corrosion Management, Inc. Supervision of GC/MS analysts. Coordination of work flow. Technical data review for all GC/MS data. Troubleshooting of instruments and other technical problems. Preparation of organic CLP diskette deliverables.
2/87 - 1/89	GC/MS Analyst ICM Laboratories- Division of Industrial Corrosion Management, Inc. Performed and reviewed volatile and semivolatile organic analyses by GC/MS with RTE Data System on environmental samples utilizing SW846, EPA Series 500 and 600, and CLP methodologies. Interpretation of resulting mass spectra. Preparation of standards. Routine instrument maintenance.
8/87 - 2/88	GC Analyst ICM Laboratories - Division of Industrial Corrosion Management, Inc. Performed volatile organic analysis by GC on environmental samples using 500 and 600 series methods. Interpretation of data. Preparation of

standards.

1/87 - 8/87 General Chemistry Analyst
ICM Laboratories - Division of Industrial Corrosion Management, Inc.

Performed general chemistry analyses on environmental samples following Standard Methods, SW846, and EPA procedures. Preparation of standards.

ICMGBB

EDUCATION:

1982	Cook College, Rutgers University New Brunswick, NJ B.S. Biology

PROFESSIONAL EXPERIENCE

9/90- Present	GC/MS Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs and reviews volatile and semi-volatile organic analyses by GC/MS with RTE Data System on environmental samples utilizing SW846, EPA Series 500 and 600, and CLP Methodologies. Interpretation of resulting Mass Spectra. Preparation of standards. Routine instrument maintenance.
9/87 - 9/90	Inorganics Analyst ICM Laboratories - Division of Industrial Corrosion Management, Inc. Performed and reviewed trace metal analyses by ICP, Graphite Furnace, Flame AA and Cold Vapor AA utilizing SW846, EPA and CLP Methodologies. Interpretation of resulting data. Preparation of standards. Routine instrument maintenance.
12/86 - 9/87	General Chemistry Supervisor ICM Laboratories-Division of Industrial Corrosion Management, Inc. Supervision of general chemistry analysts. Coordination of work flow. Technical data review of general chemistry data. Trouble shooting of instruments and other technical problems.
5/86 - 12/86	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.

ICMGGT

EDUCATION:

1993	ICM Laboratories-Certificate for completing GC/MS Interpretation of Electron Ionization Spectra Training Course
1993	ICM Laboratories-Certificate for completing GC/MS Operation-Volatile Training Course
1993	ICM Laboratories-Certificate for completing GC/MS Operation-Semivolatile Training Course
1982	Rutgers University New Brunswick, N.J. BA Chemistry

PROFESSIONAL EXPERIENCE:

6/93 - Present	GC-GC/MS Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs and reviews volatile and semivolatile organic analyses by GC/MS with RTE Data System on environmental samples utilizing SW846, EPA Series 500 and 600, and CLP methodologies. Performs and reviews analyses on environmental samples for Pesticide, PCB's and Herbicides. Interpretation of resulting mass spectra. Preparation of standards. Routine instrument maintenance.
4/90 - 4/93	GC/MS Chemist Laboratory Resources Performed and reviewed base neutral and acid extractable analyses. Interpretation of resulting mass spectra.
11/88 - 3/90	GC Chemist Laboratory Resources Performed and reviewed analyses on environmental samples for Pesticide, PCB's and Herbicides.

Interpretation of resulting mass spectra. Analyzed for volatile organics using the Trecor 585 and Tekmar purge and trap instrument.

9/87 - 10/88 Extractions Chemist
Laboratory Resources

Responsible for the preparation of waters, soils, and wastes for analysis by GC and GC/MS. Performed various wet chemistry analyses.

ICMRB

EDUCATION:

1984	State University of New York Oneonta, NY B.S. Biology

PROFESSIONAL EXPERIENCE:

06/95 - Present	Inorganic Lab Manager ICM Laboratories-Division of Industrial Corrosion Management, Inc. Supervision of General Chemistry, Metals, and Microbiology departments. Coordination of work flow. Technical data review of analyses. Troubleshooting of instruments and other technical problems.
10/89 - 06/95	General Chemistry Supervisor ICM Laboratories-Division of Industrial Corrosion Management, Inc. Supervision of General Chemistry analysts. Coordination of work flow. Technical data review for General Chemistry analyses. Troubleshooting of instruments and other technical problems. Department performs full range of General Chemistry analyses including cyanide, phenol, petroleum hydrocarbon, etc. utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. In addition to classical Wet Chemistry techniques, the department also performs TCLP extractions and utilizes TOC analyzer and autoanalyzer.
8/88 - 10/89	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.
6/86 - 6/88	Laboratory Supervisor Pompton Lakes Municipal Utilities Authority Performed the analyses necessary to keep a small water and wastewater laboratory certified by the state. Also performed analyses necessary to control wastewater treatment.

ICMMLM

EDUCATION:

1992	Emilcott Associates, Inc.-Certificate for completing Health and Safety Program
1991	Emilcott Associates, Inc.-Certificate for completing RCRA Hazardous Waste Training Program
1991	Emilcott Associates, Inc.-Certificate for completing Hazardous Materials Training Program
1990	St. Clares-Riverside Medical Center-Certificate for completing CPR Training
1989	ICM Laboratories-Certificate for completing Mercury Atomic Absorption Training Course
1989	ICM Laboratories-Certificate for completing Graphite Furnace Atomic Absorption Training Course
1989	ICM Laboratories-Certificate for completing ICP Training Course
1989	Perkin-Elmer-Certificate for completing Atomic Spectroscopy and Graphite Furnace Atomic Absorption Course
1982	Adelphi University Garden City, NY B.A. Biology

PROFESSIONAL EXPERIENCE:

11/89 - Present

AA/ICP Specialist
ICM Laboratories-Division of Industrial Corrosion Management, Inc.

Supervision of Trace Metals analysts. Coordination of work flow. Performs and reviews Trace Metals analyses by ICP, Graphite Furnace, Flame AA and Cold Vapor AA utilizing SW846, EPA and CLP Methodologies. Preparation of Inorganic CLP

diskette deliverables. Responsible for the operation and maintenance of instruments. Performs sample preparation. (Microwave digestion procedure is not employed).

1/89 - 11/91

Evening Shift Supervisor
ICM Laboratories-Division of Industrial Corrosion Management, Inc.

Responsible for general supervision of laboratory during the evening shift (4pm-midnight). Coordinated work flow, handled problems, shut down facilities at end of work day.

8/83 - 6/88

Teacher
Pope John XXIII High School
Sparta, NJ

Responsiblities included the teaching of biology, chemistry and earth sciences.

ICMMPC

EDUCATION:

1992 - Present	East Stroudsburg University
1987 - 1989	East Stroudsburg, Pennsylvania
	Major-Biochemistry

PROFESSIONAL EXPERIENCE:

08/95 - Present	Inorganic Analyst
	ICM Laboratories-Division of Industrial Corrosion
10/94 - 12/94	Management, Inc.
08/92 - 04/93	Performs and reviews Trace Metal analyses by ICP, Graphite Furance, Flame AA and Cold Vapor AA utilizing SW846, EPA 200.7 and 200 series, and CLP methodologies. Interpretation of resulting data. Preparation of standards. Routine instrument maintenance. Responsible for the operation, maintenance of graphite furnace, flame and cold vapor atomic absorption instruments. Performs sample preparation. (Microwave digestion procedure is not employed).
01/95 - 07/95	General Chemistry Analyst Diversey Corp. Performed and reviewed General Chemistry analyses. Preparation of standards. Routine instrument maintenance.
01/90 - 10/91	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.

ICMMRJ

EDUCATION:

1988	Montclair State College Upper Montclair, NJ B.S. Biology, minor in Chemistry

PROFESSIONAL EXPERIENCE:

4/96 - Present	Metals analyst
8/93 - 2/96	Quality Control Specialist ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for review of data and laboratory reports for completeness and compliance to all NJDEPE and EPA regulations. Performance of contract compliance screening. Preparation of data deliverables.
10/91 - 8/93	Inorganic Leader EI Du Pont Responsible for set up of the metals laboratory, the training of personnel and the operation and maintenance of Graphite Furnace, ICP and Cold Vapor Mercury Analyzer utilizing SW846 methods. Performed quality assurance review on all results obtained by metals lab.
5/91 - 9/91	Metals Team Leader York/IEA Laboratories Responsible for supervision of metals lab. Coordinated production, trained personnel and performed data quality review. Performed anlayses on Graphite Furnace and ICP following SW846 and EPA CLP protocol.
4/89 - 5/91	Inorganic Chemist York/IEA Laboratories Performed environmental metals analyses utilizing SW846 and EPA CLP protocol. Operated Graphite Furnace and ICP instruments. Performed Mercury extraction and analysis, Hexavalent Chromium extraction and analysis, and metals digestion. Reviewed and interpreted resulting data.

ICMGK

EDUCATION:

1974	Bombay University Bombay, India B.S. in Chemistry

PROFESSIONAL EXPERIENCE:

8/95 - Present	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs and reviews General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.
6/91 - 8/95	Inorganics Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs and reviews trace metal analyses by ICP, Graphite Furance, Flame AA and Cold Vapor AA utilizing SW846, EPA 200.7 and 200 series, and CLP methodologies. Interpretation of resulting data Preparation of standards. Routine instrument maintenance
9/88 - 6/91	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.
10/87 - 4/88	Inorganics Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed Trace Metals analyses by Graphite Furnace, Flame AA and Cold Vapor AA utilizing SW846 and EPA Methodologies. Interpretation of resulting data. Preparation of standards. Routine instrument maintenance.
3/87 - 10/87	Extractions Chemist ICM Laboratories-Division of Industrial Corrosion

Management, Inc.

Performed Extractions of environmental samples for the Organic analyses of pesticides, PCB's semi-volatiles and herbicides. Extracted and analyzed for petroleum hydrocarbons on the infrared spectrophotometer.

10/86 - 3/87

Microbiology Analyst
ICM Laboratories-Division of Industrial Corrosion Management, Inc.

Performed Microbiological analyses on environmental samples, testing for total coliform, fecal coliform fecal strep, standard plate count, pseudomonas and enterococci using Standard Methods and EPA

ICMVN

EDUCATION:

1968	Bucharest Polytechnical Institute Bucharest, Romania M.S. - Geology: Concentration in Petroleum and Gas.

PROFESSIONAL EXPERIENCE:

5/89 - Present	General Chemistry Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs and reviews General Chemistry analyses utilizing ASTM, Standard Methods, SW846, EPA and CLP procedures. Preparation of standards. Routine instrument maintenance.
1969 - 1988:	Environmental Engineer/Research Department Institute for Land Reclamation, Studies and Design Bucharest, Romania

ICMJM

EDUCATION:

1962	Eastern School For Physicians Aides Certified Medical Technologist

PROFESSIONAL EXPERIENCE:

3/90-Present	Laboratory Technician ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performs microbiological and general analyses on water and waste water.
9/89-3/90	Sample Preparation Technician/ICM Laboratories Responsibilties include the preparation of soil and water samples for analysis in the Metals Laboratory.
1968-1989	Full-time domestic work including geriatric and Child care.

ICMEPB

EDUCATION:

1988	County College of Morris Randolph, NJ A.S. in Biology

PROFESSIONAL EXPERIENCE:

5/90 - Present	Extractions Supervisor ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for supervision of Extractions Chemists. Coordination of work flow. Trouble-shooting of instruments. Performs extractions and concentrations of environmental samples for the Organic analysis of herbicides, pesticides, PCB's, and semi-volitiles utilizing SW846 EPA and CLP methodologies. Extracts and analyzes for petroleum hydrocarbons on the infrared spectophotometer. Preparation of standards and reagents.

ICMQCT

EDUCATION:

1984	University of New Hampshire Durham, N.H. B.S. Animal Science

PROFESSIONAL EXPERIENCE:

11/91 - Present	Quality Control Supervisor ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for the management of Quality Control Specialists. Coordination of workflow and data validation. Performance of contract compliance screening. Preparation of data deliverables.
4/89 - 11/91	Quality Control Specialist ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for review of data and laboratory reports for completeness and compliance to all NJDEPE and EPA regulations. Performance of contract compliance screening. Preparation of data deliverables.
11/87 - 4/89	Client Services/Sample Management Technician ICM Laboratories-Division of Industrial Corrosion Management, Inc. Duties included sample receipt, log-in, preparing and proofing chains of custody. Preparing bottle orders and arranging shipment. Acted as liason between customers and laboratory by providing price quotes, status of projects, regulatory requirements etc.
1/86 - 11/87	Inorganics Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed and reviewed trace metals analyses by Graphite Furnace, Flame AA, and Cold Vapor AA utilizing SW846 and EPA Methodologies. Interpretation of resulting data. Preparation of Standards. Routine instrument maintenance.

ICMQDB

EDUCATION:

Cook College - Rutgers University
New Brunswick, NJ
B.S. Environmental Science

PROFESSIONAL EXPERIENCE:

8/91 - Present

Quality Control Specialist/Special Analytical Services (SAS) Project Manager
ICM Laboratories - Division of Industrial Corrosion Management, Inc.

Quality Control Specialist
Responsible for review of data and laboratory reports for completeness and compliance to all NJDEPE and EPA regulations. Performance of contract compliance screening. Preparation of data deliverables.

Special Analytical Services Project Manager
Responsible for the review of data reports for completeness and compliance to Special Analytical Services Contract requirements. Also serve as the primary contact and coordinator for SAS work.

6/90 -8/91

Environmental Specialist
Suburban Regional Health Commission

Investigated and evaluated known or potential environmental problems associated with air and noise pollution. Interpret and apply laws and regulations relating to the environment.

ICMKN

EDUCATION:

1980	County College of Morris Randolph, NJ A.S. Biology

PROFESSIONAL EXPERIENCE:

1/90 - Present	Client Services/Sample Management Supervisor ICM Laboratories-Division of Industrial Corrosion Management, Inc. Supervision of Client Services Representatives and Sample Management Technicians. Coordination of work flow. Responsible for all aspects of sample receipt, log-in, full chain of custody documentation and distribution of samples and/or extracts. Oversees sample container preparation, preservation and shipments. Client Services department acts as liason between customers and laboratory.
3/89 - 1/90	Client Services/Sample Management Technician ICM Laboratories-Division of Industrial Corrosion Management, Inc. Duties included sample receipt, log-in, preparing and proofing chains of custody. Preparing bottle orders and arranging shipment. Acted as liason between customers and laboratory by providing price quotes, status of projects, regulatory requirements, etc.
8/88 - 3/89	Microbiology Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Performed Microbiological analyses on environmental samples, testing for total coliform, fecal coliform fecal strep, standard plate count, psuedomonas and enterococci using Standard Methods and EPA procedures.
3/87 - 3/88	Microbiology Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc.

Performed Microbiological analyses on environmental samples, testing for total coliform, fecal coliform fecal strep, standard plate count, psuedomonas and enterococci using Standard Methods and EPA procedures.

ICMPS

EDUCATION:

1993	East Stroudsburg University East Stroudsburg, PA B.S. Environmental Science
1989	County College of Morris Randolph, NJ Liberal Arts Major

PROFESSIONAL EXPERIENCE:

10/94 - Present

Client Services Representative/Sample Management Technician
ICM Laboratories-Division of Industrial Corrosion Management, Inc.

Duties included sample receipt, log-in, preparing and proofing chains of custody, and internal sample transfer. Prepared bottle orders and arranged shipment. Acted as liason between customers and laboratory by providing price quotes, status of projects, regulatory requirements, etc.

ICMSJB

EDUCATION:

1990	Completed 40 Hour OSHA Safety Training Course
1963	Morristown High School Morristown, NJ High School Graduate

PROFFESIONAL EXPERIENCE:

1989 - Present	Assistant Sampling Supervisor ICM Laboratories, Division of Industrial Corrosion Management, Inc. Responsibilities include the coordination of sample pick-up and drop-off. Supervises field sampling of monitoring wells, industrial discharges, surface waters, grab samples and potable water samples. Familiar with regulations regarding environmental sampling. Responsible for the Health and Safety training of staff.
1988 - 1989	Sampling Technician Responsible for sampling of water and wastewater samples from various sources for environmental clients.
1985 - 1988	Maintenence Department Support Services Assistant

ICMAC

EDUCATION:

1995	New York University New York, New York Courses toward M.S. degree in Computer Graphic Communication and Technology
1994	Montclair State University Upper Montclair, NJ B.S. Computer Science & Mathematics

PROFESSIONAL EXPERIENCE:

11/95 - Present	Programmer Analyst ICM Laboratories-Division of Industrial Corrosion Management, Inc. Responsible for installing, operation, and maintenance of software and programs generating, updating, and quality controlling analytical databases and automated deliverables. Also responsible for upkeep of terminals and printers throughout the company.
1/95 - 11/95	Administrative Directory, Group Sales Dept. NJ Nets NBA Basketball Team End-user system analyst, database programming & management.
9/93 -1/95	Computer Lab Assistant Montclair State University Assisted with batch compilers, terminal operations and system processes. Installed new network hardware and software.

Section 4

Methodology

2632 RDC-00870

Methodology

The following is a listing of the primary approved methods typically used by ICM Laboratories. Please note that an alternate approved method may substituted.

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Microbiology:		
Total Coliform - Membrane Filter	USEPA Part III Section B	---
Total Coliform - Most Probable Number (MPN)	USEPA Part III Section B	---
Fecal Coliform - Membrane Filter	USEPA Part III Section C.2	---
Fecal Coliform - Most Probable Number (MPN)	USEPA Part III Section C	---
Fecal Streptococci - Membrane Filter	SM17 Method 9230 2C and USEPA Part III Section D	---
Fecal Streptococci - Most Probable Number (MPN)	SM17 Method 9230 2B USEPA Part III Section D	---
General Chemistry:		
Acidity	EPA 305.1	---
Alkalinity	EPA 310.1	---
Ammonia (Distillation)	EPA 350.2	---
Ammonia (Automated)	EPA 350.1	---
BOD 5 Day, 20 Day, and Carbonaceous	SM17 Method 5210 EPA 405.1	---
Bromide	EPA 320.1	---

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Chloride (Automated)	EPA 325.1 EPA 325.2	---
Total Residual Chlorine	EPA 330.5	---
Chemical Oxygen Demand	EPA 410.1 EPA 410.2 EPA 410.3 Hach Method 8000 SM16 Method 508	---
Hexavalent Chromium	SM14 Method 307B	SW846 Method 3060 & 7196
Specific Conductance	EPA 120.1	SW 846 Method 9050
Color	EPA 110.2	---
Corrosivity	SW 846 Part II Characteristics 7.2	SW 846 Part II Characteristics 7.2
Corrosivity Toward Steel (For Liquid Waste Matrix)	---	SW 846 Method 1110
Total Cyanide	USEPA CLP SOW ILMO3.0 SM16 Method 412C Method 335.2 SM17 Method 4500-CN	USEPA CLP SOW ILMO3.0 SM16 Method 412C Method 335.2SM17 Method 4500-CN
Total Cyanide (Solid or Oil Matrix)	SW 846 Method 9010A	SW 846 Method 9010A
Total and Amenable Cyanide	SW 846 Method 9010A	SW 846 Method 9010A
Cyanide Amenable to Chlorination	EPA 335.1	---
Dissolved Oxygen	EPA 360.1 EPA 360.2	---

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Flashpoint/Ignitability	SW 846 Chapter 7 Section 7.1 SW 846 Method 1010 ASTM Method D93-85	SW 846 Chapter 7 Section 7.1 SW 846 Method 1010 ASTM Method D93-85
Fluoride	EPA 340.1 EPA 340.2	---
Total Hardness	EPA 130.2	---
Methylene Blue Active Substances (MBAS)	EPA 425.1 SM17 Method 5540C	---
Nitrate & Nitrite	EPA 353.2	---
Odor	SM16 Method 207	---
Oil & Grease Total Recoverable	EPA 413.1	EPA 413.1
Oil & Grease (For Sludge Matrix)	---	SW 846 Method 9071
Organic Nitrogen	EPA 351.3 EPA 350.1	---
Ortho Phosphate	EPA 365.2	---
Paint Filter Liquids Test	SW 846 Method 9095	SW 846 Method 9095
Petroleum Hydrocarbons Total Recoverable	EPA 418.1	EPA 418.1
pH	EPA 150.1	SW 846 Method 9045
Phenolics Total Recoverable	EPA 420.2 SM17 Method 5530C	EPA 420.2 SM17 Method 5530C
Phenolics	SW 846 Method 9066 and Method 9065	SW 846 Method 9066 and Method 9065
Phosphorus, Total	EPA Method 365.2	---

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Reactivity : Reactive Cyanide Reactive Sulfide	SW 846 Part II Section 7.3 SW 846 Method 9010 and Method 9030 SM17 4500-CN	SW 846 Part II Section 7.3 SW 846 Method 9010 and Method 9030 SM17 4500-CN
Percent Solids	USEPA ILMO3.0	USEPA ILMO3.0
Total Dissolved Solids	USEPA SOW Waters/Soils SM14 Method 208B EPA 160.1	---
Total Solids	EPA 160.3	---
Total Solids and Volatile Solids	---	SM17 Method 2540G
Total Suspended Solids	EPA 160.2	---
Sulfate	EPA 375.4	---
Sulfide	EPA 376.1 SM17 Method 4500-S SW 846 9030	SW 846 9030
Sulfite	SM16 Method 428A	---
Temperature	EPA 170.1 SM17 Method 2550	---
Total Kjeldahl Nitrogen	EPA 351.3 EPA 351.2 SM17 Method 4500-N	---
Total Organic Carbon (TOC)	EPA 415.1	EPA 415.1
Total Organic Halogen (TOX)	SW 846 Method 9020	SW 846 Method 9020 ASTM ST976 1988 Dohrmann TOX Manual Appendix A
Turbidity	EPA 180.1	---

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Elemental Analysis:		
All elements can also be analyzed and reported by USEPA SOW Multi-Media Multi-Concentration Latest Edition		
Aluminum	EPA 200.7	SW 846 Method 6010
Antimony	EPA 200.7	SW 846 Method 6010
Arsenic	EPA 206.2	SW 846 Method 7060
Barium	EPA 200.7	SW 846 Method 6010
Beryllium	EPA 200.7	SW 846 Method 6010
Cadmium	EPA 200.7	SW 846 Method 6010
Calcium	EPA 200.7	SW 846 Method 6010
Chromium	EPA 200.7	SW 846 Method 6010
Cobalt	EPA 200.7	SW 846 Method 6010
Copper	EPA 200.7	SW 846 Method 6010
Iron	EPA 200.7	SW 846 Method 6010
Lead	EPA 239.2	SW 846 Method 6010
Magnesium	EPA 200.7	SW 846 Method 6010
Manganese	EPA 200.7	SW 846 Method 6010
Mercury	EPA 245.1	SW 846 Method 7470

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Molybdenum	EPA 200.7	SW 846 Method 6010
Nickel	EPA 200.7	SW 846 Method 6010
Potassium	EPA 200.7	SW 846 Method 6010
Selenium	EPA 270.2	SW 846 Method 7740
Silver	EPA 200.7	SW 846 Method 6010
Sodium	EPA 200.7	SW 846 Method 6010
Tin	EPA 200.7	SW 846 Method 6010
Thallium	EPA 279.2	SW 846 Method 7841
Titanium	EPA 200.7	SW 846 Method 6010
Vanadium	EPA 200.7	SW 846 Method 6010
Zinc	EPA 200.7	SW 846 Method 6010
Organic Analysis:		
Gas Chromatographic Methods:		
Trihalomethanes	40 CFR Part 141 Method 501.1	---
Volatile Organic Compounds	Methods for the Determination of Organic Compounds in Finished Drinking Water Method 502.2	---
Purgeable Halocarbons	40 CFR Part 136 Method 601	SW 846 Method 8010

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Purgeable Aromatics	40 CFR Part 136 Method 602	SW 846 Method 8020
Non-Halogenated Volatile Organics By Direct Aqueous Injection Petroleum Hydrocarbons GCFID Gasoline and Diesel Range	SW 846 Method 8015	SW 846 Method 8015
Organochlorine Pesticides and PCBs	40 CFR Part 136 Method 608	SW 846 Method 8080
Drinking Water Determination of 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane	Methods for the Determination of Organic Compounds in Finished Drinking Water Method 504	---
Organochlorine Pesticides and PCBs in Drinking Water	Methods for the Determination of Organic Compounds in Finished Drinking Water Method 505	---
Screening for PCBs by Perchlorination	Methods for the Determination of Organic Compounds in Finished Drinking Water Method 508A	---
Chlorinated Herbicides	Methods for the Determination of Organic Compounds in Finished Drinking Water Method 515.1	SW 846 Method 8150
Pesticides/PCBs	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLM01.0-1.8	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLM01.0-1.8

Parameter	Reference Aqueous	Reference Soils/Solids/ Liquid Wastes
Gas Chromatography/Mass Spectroscopy:		
Purgeable Volatile Organics	USEPA Environmental Monitoring Systems Laboratory (4/88) Method 524.2	---
Purgeable Volatile Organics	40 CFR Part 136 Method 624	SW 846 Method 8240 and Method 8260
Volatile Organics	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLMO1.0-1.8	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLMO1.0-1.8
Extractable Semivolatile Organic Compounds	40 CFR Part 136 Method 625	SW 846 Method 8270
Extractable Semivolatile Organic Compounds	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLMO1.0-1.8	USEPA CLP SOW for Organics Multi-Media Multi-Conc. OLMO1.0-1.8
Toxic Characteristic Leaching Procedure	40 CFR Vol 55 No 126, 6/29/90 Appendix II Method 1311	SW 846 Method 1311

The above reference abbreviations represent the following:

1. USEPA = USEPA-600/8-78-017, Part III Appropriate Section

2. SM# = Standard Methods for the Examination of Water and Wastewater, The # indicates the particular Edition

3. EPA = EPA Methods for Chemical Analysis of Water and Waste, March 1983

4. SW 846 = Test Methods for Evaluating Solid Waste, SW-846, 3rd Edition, 1986

5. USEPA CLP:

   A. USEPA CLP SOW for Inorganic Analysis, Multi- Media Concentration, ILM03.0 September 1991 or

   B. USEPA CLP SOW for Organic Analysis, Multi-Media concentration, OLM01.0-1.8 or

   C. USEPA SOW for Water and Soil Characterization in Multi-Media Multi-Concentration Rev. 2.0 November 1990

6. ASTM = American Society for Testing and Materials, 1985

ORGANIC SAMPLE CONTAINER/PRESERVATION/HOLDING TIMES/VOLUME

Parameter	Sample Container	Preservation	Maximum Holding Time	Sample Volume(ml)
VOLATILE ORGANICS:				
Potable Water:				
Trihalo-methanes	G, teflon lined septum	Cool 4 deg C*	14 days	2-40
Halogenated organics	G, teflon lined septum	Cool 4 deg C* 1:1 HCl to pH<2	14 days	2-40
Aromatic Unsaturated Compounds	G, teflon lined septum	Cool 4 deg C** 1:1 HCl to pH<2	14 days	2-40
Organic Compounds	G, teflon lined septum	Cool 4 deg C* 1:1 HCl to pH<2	14 days	4-40
Wastewater:				
Purgeable Halocarbons	G, teflon lined septum	Cool 4 deg C*	14 days	2-40
Purgeable Aromatics	G, teflon lined septum	Cool 4 deg C* 1:1 HCl to pH<2	14 days	2-40
		Cool 4 deg C*	7 days	
Aqueous, Non-Aqueous, and Waste Samples:				
Volatile Organics (Aqueous)	G, teflon lined septum	Cool 4 deg C	14 days	2-40

Acrolein (Aqueous)	G, teflon lined septum	Cool 4 deg C pH adjustment to 4-5 Cool 4 deg C	14 days 3 days	2-40
Acrylonitrile (Aqueous)	G, teflon lined septum	Cool 4 deg C	14 days	2-40
Volatile organics (Soil/Sed. Sludge)	G, teflon liner	Cool 4 deg C	14 days	2-40 or 4 oz amber
Extractable organics (Aqueous)	G, amber teflon liner	Cool 4 deg C	Extraction 7 days Analysis 40 days from extraction	1000
Extractable organics (Soil/ Sed./Sludge)	G, wide mouth with teflon liner	Cool 4 deg C	Extraction 14 days Analysis 40 days from extraction	16 oz
Total Petroleum Hydrocarbons (Aqueous)	G, teflon liner	Cool 4 deg C H_2SO_4 to pH<2	7 days	1000
Total Petroleum Hydrocarbons (Soil/Sed. Sludge)	G, amber teflon liner	Cool 4 deg C	7 days (Gasoline/ Kerosine site) 28 days (Other)	4 oz
EPTOX (Organics)	G, teflon liner	Cool 4 deg C	14 days	4 oz

TCLP (Volatile organics)	G, teflon liner	Cool 4 deg C	Extraction 14 days Analysis 14 days from extraction	4 oz
TCLP (Semi-volatiles, Pest., Herb.)	G, teflon liner	Cool 4 deg C	TCLP Extraction 14 days Prep.Extraction 7 days Analysis 40 days from prep. ext.	4-1000 or 16 oz
TCLP (Metals)	G, teflon liner	Cool 4 deg C	TCLP Extraction 180 days(except Mercury) 28 days (Mercury) Analysis 180 days(except Mercury) 28 days (Mercury)	2-1000 or 16 oz

P = Polethylene

G = Glass

* NA2S2O3 should be used in the presence of residual chlorine.

** Ascorbic Acid should be used in the presence of residual chlorine.

INORGANIC CONTAINER/PRESERVATION/HOLDING TIMES/VOLUME

Parameter	Sample Container	Preservation	Maximum Holding Time	Sample Volume(ml)
Acidity	P	Cool 4 deg C	14 days	200
Alkalinity	P	Cool 4 deg C	14 days	200
Ammonia	P	Cool 4 deg C H2SO4 to pH<2	28 days	500
BOD	P	Cool 4 deg C	48 hours	400
Bromide	P	None required	28 days	400
COD	P	Cool 4 deg C H2SO4 to pH<2	28 days	50
Chloride	P	None required	28 days	50
Chlorine, Total Residual	P	None required	Analyze immediately	200
Color	P	Cool 4 deg C	48 hours	100
Chromium, hexavalent	P	Cool 4 deg C	24 hours	100
Cyanide	P	Cool 4 deg C NaOH to pH>12 0.6g ascorbic acid*	14 days**	500
Fluoride	P	None required	28 days	300
pH	P	None required	Analyze immediately	50
Langlier	P	Cool 4 deg C	24 hours	500
Mercury	P	HNO3 to pH<2	28 days	100
Metals, except Chromium, hex. and Mercury	P	HNO3 to pH<2	6 months	100
Nitrate	P	Cool 4 deg C	48 hours	50

Nitrate/ Nitrite	P	Cool 4 deg C H_2SO_4 to pH<2	28 days	50
Nitrite	P	Cool 4 deg C	48 hours	50
Nitrogen, Total Kjeldahl(TKN)	P	Cool 4 deg C H_2SO_4 to pH<2	28 days	100
Nitrogen, Total Organic	P	Cool 4 deg C H_2SO_4 to pH<2	28 days	600
Oil & Grease	G	Cool 4 deg C H_2SO_4 to pH<2	28 days	1000
Organic Carbon, Total (TOC)	P	Cool 4 deg C H_2SO_4 to pH<2	28 days	50
Organic Halides, Total (TOX)	P	Cool 4 deg C H_2SO_4 to pH<2	7 days	250
Orthophosphate	P	Filter immediately Cool 4 deg C	48 hours	100
Oxygen, dissolved	G(BOD bottle)	None required	Analyze immediately	300
Phenols	G	Cool 4 deg C H_2SO_4 to pH<2	28 days	500
Phosphorus, Total	P	Cool 4 deg C H_2SO_4 to pH<2	28 days	100
Reactivity to Cyanide	P	Cool 4 deg C	14 days	50
Reactivity to Sulfide	P	Cool 4 deg C	7 days	50
Solids, Total	P	Cool 4 deg C	7 days	100
Solids, Total Suspended	P	Cool 4 deg C	7 days	250
Solids, Total Dissolved	P	Cool 4 deg C	7 days	250
Solids, Total Volatile	P	Cool 4 deg C	7 days	100

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Solids, Settleable	P	Cool 4 deg C	48 hours	250
Specific Conductance	P	Cool 4 deg C	28 days	100
Sulfate	P	Cool 4 deg C	28 days	50
Sulfide	P	Cool 4 deg C add zinc acetate + NaOH to pH>9	7 days	1000
Sulfite	P	None required	Analyze immediately	100
Surfactants	P	Cool 4 deg C	48 hours	100
Turbidity	P	Cool 4 deg C	48 hours	50

G = Glass

P = Polyethylene

*Should only be used in the presence of residual chlorine.

** Maximum holding time is 24 hours when sulfide is present. Optionally all samples may be tested with lead acetate paper before pH adjustments in order to determine if sulfide is present. If sulfide is present, it can be removed by the addition of cadmium nitrate powder until a negative spot test is obtained. The sample is filtered and then NaOH is added to pH 12.

Microbiological Analyses

Coliform, Total	Sterile P	Cool 4 deg C NA2S2O3 if Res. Chlorine	30 hours- Drinking Water 6 hours- all other sources	100
Coliform, Fecal	Sterile P	Cool 4 deg C NA2S2O3 if Res. Chlorine	6 hours	100
Fecal Streptococci	Sterile P	Cool 4 deg C NA2S2O3 if Res. Chlorine	6 hours	100
Standard Plate Count	Sterile P	Cool 4 deg C NA2S2O3 if Res. chlorine	6 hours	100
Pseudomonas Aeruginosa	Sterile P	Cool 4 deg C NA2S2O3 if Res. chlorine	6 hours	100

* "Microbiological Methods for Monitoring the Environment, Water and Waste, 1978", EPA-600/8-78-017, U.S. Environmental Protection Agency.

** Membrane filter technique and/or Most Probable Number method.

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Section 5

Quality Assurance

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Quality Assurance Policy and Objectives:

It is the policy of ICM's Management that Quality Assurance is an integral part of all employees' job responsibilities. All employees are expected to follow exactly the quality assurance and quality control procedures set up for their particular position. No changes to these procedures can be made unless they have been authorized by the QA Manager, the company President, and the laboratory Technical Director.

The objective of ICM's Quality Assurance Program is to produce accurate, reproducible, and supportable data to be used for regulatory as well as informational purposes. The various aspects of the program (as outlined in this section) have been implemented to ensure that the data produced is of the highest possible quality.

Quality Assurance Management:

QA Department Organization:

The quality assurance program is directly administered by a Quality Assurance Officer/Manager with assistance from 5 Quality Control Coordinators. They are responsible for data review and to ensure proper QA/QC implementation.

QA/QC Responsibilities and Reporting Relationships:

The QA Officer reports directly to the company president. She is responsible for communication of all QA policies and procedures to the laboratory department managers. The department managers in turn are directly responsible for the Quality Assurance/Quality Control in their respective departments.

QA Document Control Procedures:

All applicable QA/QC documentation is tracked by the Document Control Officer. For a full explanation of these procedures, refer to the section titled Document Control Procedures.

Quality Assurance Program Assessment:

The effectiveness of ICM's Quality Assurance program is evaluated in a variety of ways. ICM's system of internal and external audits provides direct feedback on the program. External audits performed by NJDEPE, EPA, PADER, NYSDOH or individual clients evaluate all aspects of the analytical process from sample log-in and storage, through analysis and method QC, to final data review and report production. Internal audits are periodically conducted by the QA department and the Technical Director. These audits are used to detect and correct any specific problems.

Another system which provides feedback on the QA/QC program is the analysis of blind Performance Evaluation Quality Control Samples. ICM participates in External Performance Evaluation Studies for NJDEPE Drinking Water, Wastewater, and A280s; EPA DMRs and NYSDOH Potable, Non Potable and Solid/Hazardous Categories. On a more frequent basis the QA department administers a program of internal blind QA sample analysis. The results of the analysis of these blind samples helps to evaluate the QA program, the method QC, instrumentation, and the technique of individual analysts.

Finally the QA program is evaluated by the data review process (See Technical and Managerial Review: Data Validation and Data Package Preparation Section). Every data package is thoroughly reviewed prior to submission to the client. The final overall Data package review can detect QA problems from any prior point in the analytical process.

Feedback on QA problems is accomplished using a system of speed memos. As a QA problem is detected the appropriate department manager (and if necessary the technical director) is contacted and a course of corrective action is agreed upon. A speed memo detailing the problem and the proposed corrective action is issued to all affected individuals. The department manager is responsible for implementation of the corrective action and for providing feedback to the QA Manager.

These processes are used to determine if modification of the QA program or structure is needed. Proposed changes are discussed among the company President, the Technical Director, and QA Manager before implementation.

Performance Evaluation Quality Control Samples

Internal:

The Quality Assurance Manager is responsible for administering an In-House blind check sample program. Quality control samples are obtained from the EPA and from a private supplier. Results of these samples are filed with the Quality Assurance Manager. The knowns are then introduced into the system as a typical sample and analyzed as such. The final results are reported to the Quality Assurance Manager and evaluated. This process allows for close monitoring of the accuracy of laboratory analyses on blind samples. If a problem is discovered, the Quality Assurance Manager brings it to the attention of the Company President and Department Manager. With the assistance of the Technical Director, the cause of the problem is determined and appropriate corrective action is taken. Another blind sample is sent through the laboratory to confirm the problem has been resolved.

External:

ICM also participates in the following Performance Evaluation Studies: NJDEPE Drinking Water, NJDEPE Wastewater, NJDEPE A280, EPA DMRs, NYSDOH Potable Water, NYSDOH Non Potable Water and NYSDOH Solid/Hazardous Waste.

Laboratory Audits

Internal:

Periodically the Quality Assurance Manager, along with the Technical Director, conducts internal audits to evaluate the performance of the various departments. The audit involves a thorough laboratory inspection to evaluate the following areas:

- Adherence to all laboratory procedures as specified in applicable New Jersey, Pennsylvania and New York regulations, EPA Contract Laboratory Program protocol, NJDEPE Professional Laboratory Analytical Services requirements and NYSDEC Analytical Services Protocol.
- Verification of methodology
- Adherence to all method QC requirements
- Frequency of dups, spikes, blanks, and QC sample analyses
- Maintenance of documentation in adherence with good laboratory practices
- Verification that laboratory equipment, supplies, and reagents are properly maintained

The findings of the audit are documented and a copy given to the Company President and the Department Manager. Any problems and their prospective resolutions are discussed among the QA Manager, Technical Director, and Department Manager. After an agreed upon time period, it is the responsibility of the QA Manager to ensure that the required corrective action has been implemented. All audit documentation are kept on files by the QA Officer.

External:

Laboratory audits are also conducted by the NJDEPE for both drinking and wastewater certification requirements, Pennsylvania DER for their lab certification program, EPA for discharge permit holders and NYSDOH for Potable, Non Potable and Solid/Hazardous Waste certification.

Quality Control Checks

In order to determine accuracy and precision of laboratory analyses, a system of blank, duplicate, spike, and quality control testing has been established. For every 10 samples or batch of samples (whichever is fewer), one blank, duplicate sample, spiked sample, and external QC sample is analyzed.

The blank must meet QC criteria - no analyte can be detected above the minimum detection limit (except for certain organic analysis which have specific blank requirements). The relative percent difference between duplicates and spike sample recoveries are calculated as follows:

$$RPD = \frac{|\text{Value A} - \text{Value B}|}{\text{Avg. of Value A \& B}} \times 100$$

$$\% \text{ Recovery} = \frac{\text{Spiked sample result} - \text{sample result}}{\text{Amount spike added}} \times 100$$

Monitoring QC Limits

QC data is monitored via Shewhart Quality Control Charts and utilized to identify data trends which may indicate analytical problems.

- Precision:
  The relative percent difference between duplicates (R) and the Shewhart factors are utilized to calculate control limits as follows:
  UCLR (Upper Control Limit) = 3.27 R
  UWLR (Upper Warning Limit*)= 2.51 R
  *UWL corresponds to 95% confidence level.

- Accuracy:
  The average of the recoveries (P) for spikes samples are calculated as well as the standard deviation (Sp). Control limits are then defined as follows:
  UCL (Upper Control Limit) = P + 3Sp
  LCL (Lower Control Limit) = P - 3Sp
  Notes: 1. Although this approach is resistant to variability in true concentrations, somewhat higher Sp values are observed when low level spikes are employed, such as the 5 ug/l spikes recommended by the NJDEP for GC methods for volatile organics in potable water.
  2. Control limits are calculated as P +/- 2 Sp for certain organic parameters when so directed in Federal Register methods.

The control limits are drawn on the Shewhart graph and the RPDs, the spike recoveries, or the QC recoveries are plotted. In applying the control chart, any points beyond the control limits indicate an out-of-control situation. When an out-of-control situation occurs, analyses must be stopped until the problem has been identified and resolved. These charts are also utilized to identify trends which can be checked and resolved before the system goes out of control.

In addition to the Shewhart limits the laboratory uses contract established limits for CLP Organics.

QA/QC Responsibility

If a particular analysis is not meeting established quality control limits, it is first the responsibility of the analyst to try to determine the cause of the problem and take any necessary corrective action (e.g. preparing new reagents or standards, recalibrating the instrument, etc.). If the analysis still does not meet QC limits and the problem is beyond their expertise, the analyst is to notify their supervisor. It is now the responsibility of the supervisor to investigate the problem. If necessary, the supervisor shall call on the department manager or the technical director for assistance.

QA Corrective Action, Reporting Procedures, & Responsibility Designation

It is the responsibility of the Quality Assurance Manager to facilitate communication of all quality assurance related issues. She reports directly to the company president and updates him on the status of laboratory QA practices as well as relating any QA problems which may exist. The QA Manager provides feedback to department managers on the status of general lab practices. This includes notifying the department managers of the results of external and internal PE analyses, external and internal audits, and comments or problems found through the data review process.

The QA Manager discusses any QA problems found with the appropriate department manager (and if necessary, the technical director) and a course of corrective action is determined. A speed memo is issued to all affected individuals detailing the problem and the proposed corrective action. A copy of the speed memo is retained by the QA manager. The department manager provides feedback to the QA manager on the effectiveness of the corrective action.

PROBLEM RESOLUTION, FEEDBACK and CORRECTIVE ACTION

If any problems with analysis or QC procedures are detected during the data review process, the following procedures are implemented:

The departmental supervisor is contacted and the problem is discussed. It is the supervisor's responsibility to implement a corrective action. This includes notification of the problem to the analyst, as well as the corrective action taken.

Any discrepancies that cannot be resolved are discussed with the technical director, QA manager, and departmental supervisor until a resolution can be agreed upon.

SPECIFIC QA/QC REQUIREMENTS

The analyst is responsible for ensuring all work performed meets the QA/QC requirements specified in the NJDEPE contract, NYSDEC Protocol and the applicable method. The QA/QC requirements include, but are not limited to the following. For a more detailed description see the individual methods.

NJDEPE Task II, III; NYSDEC ASP Category A and B and commercial work:

GC/MS(624, 625)

-The GC/MS system is tuned once every 12 hours. The tune must meet criteria before blanks, standards and samples can be run. Any sample injected after the 12 hour period must be reanalyzed.
-For GC/MS analyses the system is calibrated using an internal standard technique and a 12 hour sequence. The instrument is initially calibrated at 5 concentration levels. The calibration is evaluated using a system of calibration check compounds (CCCs) and system performance check compounds (SPCCs). The percent relative standard deviation for the CCCs must be less than 30% for the initial 5 point calibration to be valid. The SPCCs must have a response factor of at least 0.300 (0.250 for Bromoform) for Volatiles and 0.050 for Semivolatiles for the initial calibration.
-A continuing calibration is performed every 12 hours, immediately after the tune. The percent difference of the CCCs must be less than 25% for the continuing calibration. If any of the CCCs exceed this limit then a new initial calibration must be performed. The SPCCs must have a response factor of at least 0.300 (0.250 for Bromoform) for volatiles and 0.050 for Semivolatiles on the continuing calibration.
-Surrogates are added to each blank, sample, spike and standard. Surrogate recoveries must fall within the specified control limits. If surrogates fall outside the control limits they are reanalyzed. If any one blank surrogate is outside the control limits, the laboratory will take corrective action and reanalyze all associated samples.
-Spike and spike duplicates are run with every batch or every group of 20 samples.
-For TCLP analysis, a MS/MSD is analyzed at a frequency of one sample in twenty. Spiking solution contains all TCLP volatile and/or semivolatile analytes. The spiking solution is added to the TCLP extract at method specified levels.
-For Task II- no analytes can be detected above the MDL for the blank. If the blank exceeds this criteria the system and all associated samples are considered "out of control", and will be reanalyzed.
For Task III-no analytes can be detected above the MDL for the blank(except for certain organic analytes which have specific blank requirements).
-Detection limits should achieve the contract or method specific MDL's.

GC/MS(524.2, 525.1)

-The GC/MS system is tuned once every 8 hours. The tune must meet criteria before blanks, standards and samples can be run. Any sample injected after the 8 hour period must be reanalyzed.
-For GC/MS analyses the system is calibrated using an internal standard technique and an 8 hour sequence. The instrument is initially calibrated at 5 concentration levels. For Method 524.2 each analyte and surrogate the RSD must be less than 20% for the initial 5 point calibration to be valid. For Method 525.1 each analyte and surrogate, the RSD must be less than 30% of the initial 5 point calibration to be valid. As an alternative to the RSD meeting the 20%/30% criteria, ICM can generate a second or third order regression calibration curve for quantitation purposes.
-A continuing calibration is performed every 8 hours, immediately after the tune. For Method 524.2 and 525.1, the RF for each analyte and surrogate must be within 30% of the mean value measured in the initial calibration. Alternatively, if a second or third order regression is used, the point from the continuing calibration check for each analyte and surrogate must fall, within the analyst's judgement, on the curve from the initial calibration.
-Surrogates are added to each blank, sample, spike and standard. Surrogate recoveries must fall within the specified control limits. If surrogate fall outside the control limits they are reanalyzed.
-Laboratory fortified blanks are run with every batch or every group of 20 samples.
-For Method 525.1, a laboratory fortified sample matrix is run with every batch or every group of 20 samples.
-A field reagent blank(if supplied by the client) is analyzed with every set of field samples.
-At least quarterly, replicates of laboratory fortified blanks and a quality control sample are analyzed.
-No analytes can be detected above the MDL for the blank.
-Detection limits should achieve the contract or method specific MDL's.

GC-

-For GC analyses the system is calibrated using an external standard technique. The instrument is initially calibrated at five concentratio levels. If the relative standard deviation(RSD) of the response factor for any analyte is constant over the calibration range, an average rf may be used for calculation purposes. Otherwise, calculations must be made from the curve. The low point standard is generally 2 times the MDL.
-A continuing calibration is performed daily(every 24 hours). If the response for any parameter varies more than the method allows, the test must be repeated using a fresh calibration standard. If criteria cannot be met a new calibration curve must be generated.

-For PCB only analysis the initial calibration consists of a three to five point curve of Aroclor 1016 and 1260. After the initial calibration a mid-level standard is run for all Aroclors. Every 24 hours and at the end of a sequence a mid-level standard of Aroclor 1016 and 1260 is analyzed. If an Aroclor other than Aroclor 1016 or 1260 is identified, an initial three to five point calibration for the identified Aroclor must be analyzed for confirmation and quantitation.
-The stability of the GC system is monitored by recording the retention times of the surrogate(s). Retention time shift limits vary with surrogate identity and column type.
-QC(or second source) standards are analyzed at a concentration and frequency as specified in the individual method, as are the recovery criteria.
-Surrogates are added to each blank, sample, spike and standard. Surrogate recoveries must fall within the specified control limits.
-For Method 608, spikes and spike duplicates are run at a frequency required by the method. Recovery limits are method specific.
-For NJDEPE Analytical Contract work(Methods 505, 508, 608 and 8080), when pesticides/Aroclors are being analyzed a Aroclor spike(Aroclor 1016 and 1260) is analyzed in addition to the pesticide spike. If samples are only being analyzed for Aroclors, then only an Aroclor spike is required.
-For Methods 505 and 508, Laboratory fortified blanks, laboratory fortified sample matrix and quality control samples are run at concentrations and frequencies specified in the individual methods. Recovery criteria are also method specific.
-For TCLP analysis, a MS/MSD is analyzed at a frequency of one sample in twenty. Spiking solution contains all pesticide compounds except for toxaphene. The spiking solution is added to the TCLP extract, at method specific levels.
-No analytes can be detected above the MDL for the blank. If the blank exceeds the MDL the system is considered "out of control" and the blank and associated samples are reanalyzed.
-Any analytes tentatively identified on a primary GC column must be confirmed by a second analytical technique, dissimilar column or GC/MS.

Metals-

-Atomic Absorption and ICP instruments are calibrated for each analytical run. For graphite furnace and flame atomic absorption, a blank and five calibration standards are run. The ICP is calibrated using a blank and a mixed calibration standard. The agreement between the true value and actual value must be +/-10%.
-Initial Calibration Verification(ICV) is analyzed after the instrument calibration. It must agree +/-10% between the true value and the actual.
-Continuing Calibration Verification(CCV) are run every 10 samples. CCV must be +/-10% of the true value.
-Interference Check Solutions(for ICP only) is run to access the interelement interferences.
-Laboratory Control Sample is analyzed for each analyte and must agree within +/- 25% of the true value. For the NJDEPE Analytical Services Contract, each analyte must agree within +/- 15% of the true value.

-Spike analysis:
a) is done at a frequency of at least 10%. Spike recovery must be within +/-25%(75 - 125%).
b) if the spike recovery is less 40% the sample is diluted and analyzed with another spike.
c) if the sample concentration is less than the MDL, the sample is reported as less than the MDL and not diluted and respiked.
d) if the sample concentration is greater than the linear range the sample is diluted and reanalyzed.
e) For the NJDEPE Analytical Contract, if the spike recovery is less than 40% and if the sample concentration is greater than the MDL, the sample is diluted by a factor of 2 and reanalyzed. If after 2 dilutions the spike recovery is still less than 40%, the data is noted as having an interference problems.
f) if the spike recovery is greater than or equal to 40% and the sample absorbance or concentration is less than or equal to 50% of the spike sample, the sample will be reported as less than the MDL.
g) if sample concentration is less than or equal to 50% of the spike and the spike recovery is between 85-115%, the sample is quantitated directly from the calibration curve.
h) For the NJDEPE Analytical Contract, if the sample concentration is greater than of equal to 50% of the spike and the spike recovery is less than 85% or greater than 115%, the sample must be quantitated by the Method of Standard Addition.
-For TCLP analyses a matrix spike and duplicate is analyzed. TCLP extracts must be analyzed by the Method of Standard Addition, unless a matrix spike is within SW846 acceptable QC limits.
-Duplicate analysis must be within QC limits of +/- 20% or +/- MDL.
-Blanks(preparative, ICB and CCB) are analyzed after the ICV and CCV and must not contain any results greater than the absolute value of the MDL.
-For furnace analyses duplicate injections are required. If duplicate injection readings, for results above the MDL, do not agree within +/- 20% RSD, the sample must be re-analyzed. If the RSD is greater than 20% the individual injection concentration difference between must be less than the MDL.

General Analytical-

-For spectrophotometric tests, standard curves are run at least every 3 months. These curves are checked daily by analyzing a high and a low standard. Acceptance limits are +/- 10% for low range standards and +/- 5% for high range standards.
-For automated analysis, calibrations are made daily using at least five standards and a blank.
-When using titrations to determine concentrations, all titrants are standardized daily.
-The infrared spectrophotometer is calibrated every three months, and checked daily with a mid range standard. The midrange must be within 10% of the true value.
-Blank values must be less than or equal to the MDL.
-Duplicate samples must be run once every 20 samples and be within the QC limits.

-Spike samples must be run once every 20 samples and be within the QC limits of 75-125%.
-External control sample must be run once every 20 samples and be within the 95% C.I.
-For NJDEPE Analytical Contract:
Reactivity-All method performance and QC criteria for the method is followed. Spike recoveries must meet a minimum of 50% recovery limit.
Corrosivity-All method performance and QC criteria for the method is followed. Duplicate samples are analyzed for each analytical batch.
Ignitability-All method performance and QC criteria for the method is followed.

NJDEPE Task IV/CLP:

For Task IV analysis the most current QA/QC requirements and limits specified in the USEPA CLP SOW are adhered to.

GC/MS-
-The GC/MS system is tuned once every 12 hours. The tune must meet criteria before blanks, standards and samples can be run. Any sample injected after the 12 hour period must be reanalyzed.
-For GC/MS analyses the system is calibrated using an internal standard technique and a 12 hour sequence. The instrument is initially calibrated at 5 concentration levels. The calibration must meet the minimum RRF and %RSD criteria.
-A continuing calibration is performed every 12 hours. The percent difference between the initial and continuing curves must be <25%, and also meet the RRF and %RSD criteria.
-Internal standard areas and retention times must be monitored and meet all criteria.
-Spike/spike duplicate are run with every batch or every group of 20 samples.
-Surrogates are added to each blank, sample, spike and standard. Surrogate recoveries must fall within the specified control limits.
-Method blanks, for the NJDEPE contract, for GC/MS volatile analysis must contain less than or equal to three times the Contract Required Quantitation Limit(CRQL) for methylene chloride, acetone and 2-butanone. For semi-volatiles analysis the blank must contain less than three times the CRQL for phthalate esters. For routine, non-contract samples the method blank for volatile and semi-volatile analysis must contain less than of equal to five times the CRQL for the above compounds. For all other compounds, the method blank must contain less than or equal to the CRQL of any TCL analyte. If the method blank exceeds any of these criteria, the contractor must consider the system out of control. Corrective action is taken, and all samples associated with the blank are re-extracted, repurged and/or reanalyzed. Aqueous method blanks are utilized for all matrices.
-Detection limits are the CRQLs as specified by the most recent SOW.

GC-

-Initial calibration sequence consists of 17 standards, a combination of Resolution Checks, Performance Evaluation Mixtures(PEM), Aroclor standards, low, mid and high pesticide standards and blanks, which must meet acceptance criteria before samples can be run.
-Breakdown of DDT and Endrin in the Performance Evaluation Mixtures must be less than 20.0 percent for each compound or 30.0 percent for the combined breakdown.
-Peak resolution must meet QC criteria.
-Continuing calibration, consisting of blanks, PEM and a mid point standard of Mixture A or B, must be run every 12 hours.
-Absolute retention of single and multicomponent analytes and surrogates must be monitored and meet QC criteria.
-Surrogates are calculated for both columns, but QC criteria is only advisory criteria.
-Spike and spike duplicate must be extracted and analyzed with every 20 samples of each matrix. QC criteria is only advisory.
-Method blanks may not contain any targeted compound greater than the CRQL.
-Instrument blanks are analyzed every 12 hours and may not contain any targeted compounds greater than 0.5 times the CRQL.
-Florisil Cartridge Cleanup and Sulfur Removal: Cartridge Performance Check must meet QC criteria: pesticides 80-120% recovery, trichlorophenol in less than 5% and there must be no peaks interfering with the target analytes. All samples, blanks and spikes must be cleaned with florisil cartridges. Samples that require sulfur cleanup must have the method blank cleaned up as well.
-GPC Cleanup: The system is calibrated once every seven days. Calibration is checked daily or before each run and the UV tracing compared to the last calibration tracing. All peaks must be symmetrical. All peaks must exhibit proper resolution, as per QC criteria. For each sample the flow rate, volume of eluate, laboratory room temperature and column pressure must be monitored and meet QC criteria. Blanks can contain no analyte detected at a concentration greater than half the CRQL.

Metals-

-Instrument Calibration is performed prior to each analytical run, at least once per eight hour period.
-Initial Calibration Verification(ICV) is analyzed after instrument calibration. Must agree +/- 10% between the true value and the actual value.
-Initial Calibration Blank(ICB) and Continuing Calibration Blanks(CCB) must not exceed the absolute value of the CRDL.
-Continuing Calibration Verification(CCV) are run every 10 samples. Must agree +/- 10% between the true and actual values.
-Interference Check Samples(ICS) are run for ICP analysis only. They are run to verify interelement and background corrections factors. It is run at least twice per eight hour working shift and must be within the QC criteria of +/-20% of the true value.

-If the absolute value of the concentration of the preparation blank is less than or equal to the CRDL then no correction is made to sample results. If any analyte concentration in the blank is greater than the CRDL the lowest concentration of that analyte in the associated samples must be ten times the blank correction. If this criteria is not met, all samples associated with the blank whose analyte concentration is less than ten times the blank concentration and above the CRDL, must be redigested and reanalyzed.
-Laboratory Control sample is prepared for every batch. It must agree within +/-20% of the true value.
-ICP Serial Dilution is performed on a sample from every group of samples of a similar matrix. It must agree within +/-10% of the original analysis.
-Spike sample analysis is performed on one sample from each group of samples of similar matrix. QC criteria is 75-125%.
-Duplicate sample analysis is performed on sample from each group of samples of a similar matrix. It must meet QC criteria of +/-20%, if the results are equal or greater than 5 times the CRDL or +/- the CRDL if the results are less than five times the CRDL.
-CRI(for ICP analysis) is run at a minimum of twice per eight hour working shift, to verify linearity near the CRDL.
-CRA(for AA analysis) is analyzed only at the beginning of the run to verify linearity near the CRDL.
-Linear Range Analysis(LRA) is for ICP analysis only. Analysis is done quarterly for each element. It must be within 5% of the true value.
-Instrument Detection Limit(IDL) is determined quarterly. IDLs must fall below the CRDLs.
-Furnace analysis requires:
  -All results to fall within the calibration range and to have duplicate injections.
  -When concentrations exceed the CRDL the duplicate injection must meet within 20% RSD or the sample is rerun for a total of 2 injections. If the data still does not meet 20% criteria the data is flagged.
  -The analytical spike is run immediately after the sample and the recovery directly determines how the data should be flagged.
  -Method of standard addition(MSA) must be used if the sample concentration is greater than or equal to 50% of the spike and the spike recovery is less than 85% or greater than 115%.

General Analytical(Cyanide analysis)-

-Instrument calibration is done daily with 1 blank, and three levels of standards,which includes one standard at the CRDL.
-Initial Calibration Verification(ICV) sample is distilled. It is analyzed after the instrument calibration and must be with QC limits of 85-115%.
-Continuing Calibration Verification(CCV) is analyzed every 10 samples or two hours. It must meet QC limits of 85-115%.
-Initial Calibration Blank(ICB) and Continuing Calibration Blank(CCB) values can not exceed the CRDL.

-If the absolute value of the concentration of the preparation blank is less than or equal to the CRDL then no correction is made to sample results. If any analyte concentration in the blank is greater than the CRDL the lowest concentration of that analyte in the associated samples must be 10 times the blank correction. If this criteria is not met, all samples associated with the blank and analyte's concentration is less than 10 times the blank concentration and above the CRDL, must be redigested and reanalyzed.
-Spike sample analysis consisting of one spiked sample is performed on each group of samples of a similar matrix. QC criteria is 75-125%.
-Duplicate sample analysis consisting of one duplicate sample is analyzed for each group of samples of a similar matrix. It must meet QC criteria of +/-20%, if the results are equal of greater than 5 times the CRDL or +/- the CRDL if the results are less than 5 times the CRDL.
-Laboratory Control Sample is performed on soil Cyanide samples only. One laboratory control sample per batch is performed. It must meet control limits of 80-120%.

Data Validation and Review

The Quality Assurance Officer(QAO) oversees the data validation and review process. This process is accomplished through various QA/QC systems which are specified in the QA inspection/correction action section of the SOP. These systems include, but are not limited to: audits, reference material analyses, quality control checks and performance evaluations. The data generated goes through a series of checks for various QA/QC problems and nonconformances. The checks are performed by the analyst, the department supervisor/manager, the QC department and a technical proofer. The system is designed to detect any reporting or calculation errors so they can be addressed prior to data submission.

Data Review Procedure

The following is ICM's standard procedure for analytical data review of NUDEPE Task II, III, IV; NY work and commercial work.

Analyst:

- The analyst is responsible for ensuring that all work performed the specifications and criteria outlined in the method and contract. They are to double check all aspects of their analyses, including instrumental conditions, QA/QC limits, calculations, and compound identification (for Organic analyses).

Department Supervisor/Manager:

- The second data review is performed by the department managers. The manager checks the standards, dilutions, calculations, minimum detection limits, significant figures and QC procedures. They also check the relationship between parameters of a particular sample and between the samples in a specific project.

Data Assembly and Overall Review:

- The third data review is performed by the Quality Control Coordinator. The coordinator reviews the data initially for minimum detection limits, reporting units, holding times and quality assurance data. He/she also assembles the data package and ensures that all required analysis have been performed and property reported and that all required data deliverables, such as the laboratory chronicles, methodologies, nonconformance summary, etc.... are completed and included in the report package.

Final Overall Review

- The fourth data review is performed by a different Quality Control Coordinatator. Their responsibility is to double check the project for completion and to ensure all required deliverables and quality control data is included in the report package. Special emphasis is placed on checking the data deliverables completed by the previous coordinator to ensure they are complete and accurate.

Technical Proofreader(Task II and III):

- The fifth data review is performed following the typing of the project. This review entails not only checking the accuracy of the statistical typing, but also checking that the proper reporting format has been utilized.

Company President:

- The company president's signature on the project verifies that the project is complete and all of the above criteria has been satisfied.

Dept. Mgr._____
QA Mgr. _____

EXTERNAL CHAIN OF CUSTODY PROCEDURES:

A. External chain of custody forms must be used with all samples. For commercial samples, ICM chain of custody is used, (Exhibits B and C). For NJDEPE contract samples, DEPE forms 095 or 096 are used. In addition, other client and state chain of custodies may be used(ie-NY, PA).

B. A sample or sample container is considered to be in custody under the following conditions: 1) It is in the persons' actual possession, 2) It is in the person's view after being in their physical possession, or 3) It was in their possession and then locked in a refrigerator or sealed in a cooler.

C. When sample container coolers are relinquished to field personnel, the person who breaks the sample cooler seal must sign the field chain of custody and Sampling Equipment Custody Record in receipt of the sample containers. Sample containers should be examined by field personnel for breakage or improper preservation. If any breakage or shipping error has occurred, this should be noted on the field chain of custody. The laboratory should be contacted immediately for replacement containers via alternate shuttle.

D. Field Chain of Custody is retained in the field by sampling personnel. This document should stay with the sample coolers at all times.

E. When ICM employees receive samples from sampling personnel in the field, sample receipt procedures should be followed. If samples are received directly from field sampler, coolers will be sealed for transport after receipt by driver. If samples are relinquished to anyone other than field sampler, seals should be used in the interim. ICM drivers will obtain signatures of person who held sealed coolers and then transport coolers to laboratory where seals will be broken by Sample Management Technicians. Whenever custody seals are used, custody seal numbers should be recorded on the Sample Equipment Custody Record.

F. All paperwork, including field chain of custody forms should be checked for completeness and accuracy in the field. If any omissions or errors are noted, field sampling personnel should be questioned at that time. If questions arise that field sampling personnel are unable to answer, samplers should provide name and phone number of the Project Manager.

G. Upon receipt of sample coolers at the laboratory, whether by ICM courier or overnight carrier, coolers are examined for damage or broken custody seals. Condition of sample coolers and seals should be noted on the field chain of custody. If seals and cooler are intact, sample receipt procedures may begin. If seals are not intact or cooler is damaged such that sample integrity is threatened, client must be contacted by sample management or customer service personnel immediately.

H. The Sample Custody Officer is responsible for overseeing the proper external chain of custody procedures are followed.

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ICM LABORATORIES

CHAIN OF CUSTODY REPORT

CLIENT:

ADDRESS:

PHONE:

PROJECT:

PROJ. MGR.:

BILL TO:

SEND REPORT TO:

IN CASE OF QUESTIONS UPON SAMPLE RECEIPT CALL:

PHONE:

DELIVERABLES:

- ☐ REDUCED DELIVERABLES NON CLP FORMAT
- ☐ REDUCED DEL. CLP FORMAT
- ☐ REGULATORY FORMAT
- ☐ FULL DEL. CLP FORMAT
- ☐ NPDES
- ☐ STATE FORMS REQUIRED

TURNAROUND TIME

FAX (PRELIMINARIES) (if required)

HARDCOPY

COOLER TEMP

LABORATORY ID CODE	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	COMPOSITE	SAMPLE MATRIX: GRAB	SOIL	LIQUID	SLUDGE	OTHER	# OF BOTTLES	ANALYSIS											PRESERVATIVES: H_2SO_4	HNO_3	HCL	NAOH	OTHER

SAMPLED BY: DATE: TIME:

RELINQUISHED BY: DATE: TIME:

RECEIVED BY: DATE: TIME:

RELINQUISHED BY: DATE: TIME:

RECEIVED BY: DATE:

COMMENTS:

COMPOUND LIST

- [ ] PRIORITY POLLUTANT
- [ ] TARGET COMPOUND LIST

CONCENTRATIONS EXPECTED

- ☐ HIGH
- ☐ MEDIUM

IS SAMPLE CHLORINATED? ☐ YES ☐ NO

110

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ICM LABORATORIES — CHAIN OF CUSTODY RECORD

CLIENT: _____

MAILING ADDRESS: _____

PHONE: _____

ADDRESS FROM WHICH SAMPLES WERE TAKEN: _____

ANALYSIS REQUIRED FOR: (Please Check One)

- [ ] INFORMATION ONLY
- [ ] MORTGAGE COMPANY COMPLIANCE
- [ ] HEALTH DEPT COMPLIANCE
- [ ] NJDEPE COMPLIANCE
- [ ] STATE FORMS REQUIRED

PWSID # _____

COPY OF RESULTS TO: _____

SAMPLING PERIOD

- [ ] MONTHLY
- [ ] QUARTERLY
- [ ] ANNUALLY
- [ ] OTHER _____

#SAMPLES/PERIOD _____

(Check box if applies)

SAMPLE CONTAINERS OBTAINED FROM ICM ____ YES ____ NO

SAMPLES COLLECTED BY ICM ____ YES ____ NO

IS SAMPLE CHLORINATED ____ YES ____ NO

[ ] IS SAMPLE A LEAD & COPPER SAMPLE (SEE BELOW)

SAMPLERS NAME: _____

SAMPLING & ANALYSIS REQUESTED BY: _____

FOR TOTAL COLIFORM SAMPLES:

- [ ] IS THIS A REPEAT SAMPLE
- [ ] IS THIS A ROUTINE SAMPLE
- [ ] IS THIS A CHECK SAMPLE

FOR 502.2 SAMPLES:

IS SAMPLE:

- [ ] RAW
- [ ] TREATED
- [ ] CHECK SAMPLE

LABORATORY IDENTIFICATION	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	# OF BOTTLES	T/C	POTABLE PACKAGE	VOLATILE SCREEN	ANALYSES (FILL IN OTHER ANALYSES)						COMMENTS

SAMPLES DELIVERED TO ICM BY: _____

DATE: _____

TIME: _____

SAMPLES RECEIVED BY ICM: _____

DATE: _____

TIME: _____

PAID: [ ] CASH [ ] CHECK

LEAD & COPPER SAMPLES: (Please complete following information)

NUMBER OF DISTRIBUTION TAP SAMPLES REQUIRED _____

PLEASE CHECK APPROPRIATE BOX:

LOC TYPE	DESCRIPTION	NO.	LOC TYPE	DESCRIPTION	NO.
[ ] A	Lead Service Lines	1	[ ] D	Building & Multifamily Residences Containing Lead Pipes or Service Lines	2
[ ] B	Single Family Structures with Copper Pipe & Lead Solder Installed after 1982	1	[ ] E	Single Family Structures that contain Copper Pipe with Lead Solder Installed before 1983	3
[ ] C	Building & Multifamily Residences with Copper Pipes & Lead Solder Installed	2	[ ] F	Other	?

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LABORATORY WATER

The source of ICM's deionized water is a Polymetric System which consists of a single activated carbon filtration cylinder followed by three mixed bed cation/anion exchange Resin cylinders. The carbon cylinder is designed to remove all trace organic contaminants, and the resin cylinders remove all of the inorganic anions and cations. The water produced from this system is 16 megohm-cm or better which exceeds Type I through Type III water quality requirements. The resisitivity is monitored by the system and new tanks are installed when needed.

ICM also has a backup Polymetric System in case the main source shows contamination. If both sources of laboratory water show contamination purchased bottle water will be used. Prior to the purchased bottle water being used the water will have to adhere to all the N.J.A.C. (N.J.A.C. 7:18) requirements and method blank criteria, see Analysis of Laboratory Water in the Preparation and QA/QC Procedures for Laboratory Water section.

ANALYSIS OF LABORATORY WATER

Laboratory deionized water is used as method or preparative blanks for all analysis done in house. The method blank must meet QC criteria-no analyte can be detected above the minimum detection limit (except for certain organic analysis which have specific blank requirements). If analytes are found above the MDL the analysis is rerun. If the analyte is confirmed, the use of the water is discontinued until the source of the contamination is found.

The New Jersey Administrative Code(N.J.A.C. 7:18) requirements for laboratory water are adhered to. These include:
-annual analysis for trace metals(Pb, Cd, Cr, Cu, Ni, Zn) must not be greater than 0.05 mg/l, total metals must be equal to or less than 1.0 mg/l.
-annual analysis for bactericidal properties. The result must be between 0.8-3.0.
-daily analysis for conductance. The conductance is maintained below 2 micromhos/cm at 25 degrees C.
-monthly analysis for pH, chlorine residual and standard plate count. pH must be 5.5-7.5, residual chlorine 0.0 and standard plate count <500 colonies/ml.

It is the responsibility of the Departmental Managers and the Quality Assurance Officer to monitor the laboratory water meets all QC criteria.

PROCEDURE FOR TRACKING TRIP AND FIELD BLANKS

The deionized water used in the preparation of trip and field blanks can be traced back to the laboratory analyzed blank for the day the blanks were prepared.

All trip and field blanks originate from the Sample Login/Receiving Department. They can be traced by using the date the blanks were prepared. The date of preparation is found on the sample equipment record and/or the field chain of custody. This date can then be traced to the laboratory and compared to results of laboratory analyzed blanks.

FIELD QUALITY ASSURANCE AND QUALITY CONTROL

Quality Control and quality assurance(QA/QC) samples are intended to provide control over the collection of environmental measurements and subsequent validation, review, and interpretation of generated analytical data. The following is a breakdown by matrix of blank sample requirments.

1) Non-aqueous matrix

A. Field Blanks-The purpose of this blank is to place a mechanism of control on sample equipment handling, preparation, storage and shipment. The performance of field blanks requires two(2) sets of identical bottles; one set filled with demonstrated analyte free water provided by the laboratory and one set of identical empty bottles with field blank labels. The field blank bottles will correspond to the sample parameters being analyzed.

At the field location, in an area suspected to be contaminated, the water is passed from the full set of bottles through the dedicated or field decontaminated sampling device and into the empty set of bottles.

B. Trip Blanks-No trip blanks are required for non-aqueous samples.

C. Frequency-For sampling events lasting more than one day, field blanks for the non-aqueous matrix should be performed at a rate of 10% of the total number of samples collected throughout the event. For example: If forty samples are to be collected over six days-10% of 40 samples or 4 field blanks should be performed. If a one day sampling event has less than ten samples collected, then one field blank should be done.

2) Aqueous Matrix

A. Field Blanks-Field blanks are performed as per section I.A.

B. Trip Blanks-Trip blanks are used exclusively for volatile organic analysis(aqueous sampling only) and its purpose is to measure possible cross contamination of samples during shipping to and from the site to the lab. The trip blank is never opened and travels with the empty sample bottles to the site and travels with the samples collected back to the laboratory. The trip blank shall not be held on site for more than 2 calendar days.

C. Frequency-The frequency for field blanks for an aqueous sampling event is one per day. Field blanks are not generally required for potable sampling events or when samples are collected into the sample container directly. If during potable sampling, a known source of contamination exists within close proximity of the potable source, then a field blank may be required. The frequency for trip blanks are to be included at a rate of one set per sample shipment.

3) Duplicate Samples

The collection of duplicate samples is to provide evaluation of laboratory performance by comparing analytical results of two samples(one duplicate) from the same sample location.

The frequency of duplicate samples for both the aqueous and non-aqueous matrix is a minimum of 5% of the total number of samples collected or one duplicate sample per twenty collected samples.

When obtaining duplicate samples for a soil matrix, homogenization of the sample is required. This is done by mixing soil together until a consistent physical appearance is achieved. Then the sample is divided in half and the soil container is filled alternately from each half. Homogenization is never performed for soil samples being analyzed for volatile organics due to the loss of volatiles while mixing the sample.

The duplicate samples for the aqueous matrix should be obtained by alternately filling sample containers from the same sampling device for each parameter.

4) QA/QC Handling Time

The field and trip blank samples must travel with sample containers and must arrive on-site within one day of their preparation in the laboratory. Blanks and their associated samples may be held on-site or no longer than two calender days and must arrive back in the laboratory within one day of shipment from the field. Thsi constitutes a maximum of a four(4) day handling time. Blanks and all samples must be maintained a 4° C while stored on-site and during shipment to the laboratory. The only acceptable exception to this handling time is stormwater runoff samples.

5) pH Monitoring of Samples

To monitor and verify sample containers pH status, a small amount of the sample is poured into a clean beaker or the container cap and a pH test paper strip or pH meter is used to verify pH status on a sample. The pH test aliquot is not put back into the sample. Sample preservation kits are available if a sample pH preservative is absent or additional preserve is needed to acheive the required pH.

6) pH Meter and Conductivity Meter Calibration

A. pH meter Calibration

1) Turn power on
2) Rinse pH probe with deionized water
3) Place probe in buffer solution 4
4) Press pH button and the STD button
5) Wait for reading to stabilize at 4.00
6) Rinse pH probe with deionized water
7) Place pH probe in buffer solution 10 and press STD
8) Wait for reading to stabilize at 10.00
9) Rinse pH probe with deionized water
10) Place pH probe in buffer solution 7
11) If reading is approximately 7.00 END and record in logbook

NOTE: Replace buffer solutions if pH reading doesn't match buffer soutions. To prevent undo maintance store pH probe in buffer or deionized water and always rinse pH probe with deionized water after every use.

7) Conductivity Meter Calibration

A. Turn power on

B. Turn switch to Batt+, then Batt-. Meter should read wit in Batt OK scale.

C. Rinse conductivity probe with deionized water

D. Turn range switch to position X1K.

E. Place probe in 1000 micromhos conductivity standard solution

F. Adjust calibration knob if needed to get meter reading of 1 00 micromhos. If so END.

G. If 1000 micromhos reading cannot be obtained then turn power off

H. Using flat head screwdriver, adjust th zero adjustment screw on the meter so the needle indicates zero.

I. Repeat step A thru G.

NOTE: Always rinse probe with deionized water after every use and store it in deionized water when not in use. Never allow meter to get wet or cold.

8) Field Logbooks

All samplers should have a logbook that is bound with water resistant pages. All information regarding the site and sampling procedures must be documented. Notations should be made with reference to time and date. All information available is recorded in the logbook.

Section 6

Certifications

2632 RDC-00918

Certification Summation

ICM is a New Jersey Department of Environmental Protection and Energy (NJ DEPE Lab ID #14116) certified laboratory. ICM is also a NJDEPE Contract Laboratory (A60084) under the X-26174 contract for Task III (Regulatory) and Task IV (CLP) analysis.

In addition, we are also certified by the following:

1. Pennsylvania Department of Environmental Resources
   Certification Number 68-387

2. Delaware Health and Social Services
   Certification Number NJ-104

3. New York State Department of Health for Potable, Non-Potable Water and Solid Waste analysis.
   Certification Number 11376

4. New York State Department of Health for CLP accreditation.
   Certification Number 11376

5. State of Connecticut, Department of Public Health and Addiction Services.
   Certification Number PH-0160

6. State of Maryland Department of Health and Mental Hygiene Laboratories Administration
   Certification Number 244

ICM has met the qualifications necessary to do EPA Contract Laboratory Program level organics and inorganic analyses. ICM has recently completed a full EPA organics contract and still routinely works on EPA contracts called Special Analytical Services (SAS) Contracts. These contracts are only available to laboratories who are in good standing in the EPA CLP program.

STATE OF NEW JERSEY

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Let's protect our earth

Certifies That

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph NJ 07869

having duly met the requirements of the

Regulations Governing Laboratory Certification
And Standards Of Performance N.J.A.C. 7:18 et. seq.

is hereby approved as a

State Certified Water Laboratory

To perform the analyses as indicated on the Annual Certified Parameter List which must accompany this certificate to be valid

14116
PERMANENT CERTIFICATION NUMBER

July 16, 1982
DATE

COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION

120

2632 RDC-00920

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF QUALITY ASSURANCE
ANNUAL CERTIFIED PARAMETER LIST FOR 1995-1996

INDUSTRIAL CORROSION MGT, INC (14116) IS CERTIFIED TO PERFORM THE ANALYSES BELOW UNTIL JUNE 30 1996.

DRINKING WATER LABORATORY CERTIFICATION

MICROBIOLOGY

303 TOT COLI-MEMBRANE FILTER

305 TOT COLI-MPN (10ML/20ML)

309 TOTAL COLIFORM (ONPG-MUG)

315 FECAL COLIFORM (TC TO EC)

321 E. COLI (ONPG-MUG)

LIMITED CHEMISTRY

001 ALKALINITY, TITRIMETRIC

003 CALCIUM, EDTA TITRIMETRIC

004 CONDUCTIVITY

005 ORTHOPHOSPHATE, COLORIMET

008 TEMPERATURE

020 NITRITE, AUTO CD REDUCTIO

034 CYANIDE, SPECTROPHOTO

934 NITRATE, AUTO CD REDUC

935 FLUORIDE-ELECTRODE

936 FLUORIDE-COLOR/PRE DISTIL

DRINKING WATER LABORATORY CERTIFICATION

LIMITED CHEMISTRY

944 TURBIDITY

945 CHLORINE RESIDUAL

947 CHLORIDE, HG OR AG NITRAT

948 COLOR, PLATINUM COBALT

949 ABS/LAS METHYLENE BLUE

950 ODOR, CONSISTENT SERIES

951 PH, GLASS ELECTRODE

952 TOT DISS SOLIDS, TOT RES

953 HARDNESS, EDTA

956 SULFATE, GRAVIM OR TURBID

METALS

010 CALCIUM, ICAP

017 ALUMINUM, ICAP

022 SILICA (ICP)

025 ANTIMONY, GRAPH FURNACE

030 NICKEL, ICAP

031 THALLIUM, GRAPH FURNACE

036 BERYLLIUM, ICAP

912 HG,MANUAL COLD VAPOR

914 AS, GRAPHITE FURNACE

916 CD, GRAPHITE FURNACE

DRINKING WATER LABORATORY CERTIFICATION

METALS

918 PB, GRAPHITE FURNACE

920 SE, GRAPHITE FURNACE

921 AG, GRAPHITE FURNACE

954 NA, ATOMIC ABSORPTION

961 BARIUM, ICAP

962 CADMIUM, ICAP

963 CHROMIUM, ICAP

965 SILVER, ICAP

966 COPPER, ICAP

967 IRON, ICAP

968 MANGANESE, ICAP

969 ZINC, ICAP

ORGANICS

502.2 VOC (PT/GC)

524.2 VOC (PT/GC-MS)

WATER POLLUTION LABORATORY CERTIFICATION

MICROBIOLOGY

74054 FECAL STREPTOCOCCI

74055 FECAL COLIFORM

74056 TOTAL COLIFORM

74057 ENTEROCOCCI

WATER POLLUTION LABORATORY CERTIFICATION

MICROBIOLOGY

74058 HETEROTROPHIC PLATE COUNT

74059 PSEUDOMONAS AERUGINOSA

LIMITED CHEMISTRY

00010 TEMPERATURE

00076 TURBIDITY

00080 COLOR

00095 SPECIFIC CONDUCTANCE

00299 DISS OXYGEN-ELECTRODE

00300 DISS OXYGEN-WINKLER

00310 BOD(5/20 DAY)

00320 CARBONACEOUS BOD(5/20DAY)

00340 COD

00400 HYDROGEN ION-PH

00410 ALKALINITY

00436 ACIDITY

00500 TOT SOLIDS

00505 TOT VOLATILE SOLIDS

00530 SUSP SOLIDS

00545 SETT SOLIDS-VOLUMETRIC

00556 OIL AND GREASE

00605 ORGANIC NITROGEN

WATER POLLUTION LABORATORY CERTIFICATION

LIMITED CHEMISTRY

00610 AMMONIA NITROGEN

00615 NITRITE

00625 TOT KJELDAHL NITROGEN

00630 NITRATE

00650 PHOSPHORUS, TOT AS PO4

00660 ORTHOPHOSPHATE AS PO4

00665 PHOSPHORUS, TOT AS P

00671 ORTHOPHOSPHATE AS P

00680 ORGANIC CARBON, TOTAL

00681 ORGANIC CARBON, DISSOLVED

00720 CYANIDE, TOTAL

00722 CYANIDE, AMEN TO CHLOR

00740 SULFITE

00745 SULFIDE

00900 HARDNESS

00940 CHLORIDE

00945 SULFATE

00951 FLUORIDE, TOTAL

00955 SILICA

01032 CR HEX

32730 PHENOLS

38260 SURFACTANTS

WATER POLLUTION LABORATORY CERTIFICATION

LIMITED CHEMISTRY

50060 CHLORINE RESIDUAL

70300 TOT DISS SOLIDS

METALS

00915 CALCIUM (ICAP)

00925 MAGNESIUM (ICAP)

00929 SODIUM (ICAP)

00935 POTASSIUM (ICAP)

00956 SILICA (ICAP)

01000 ARSENIC (ICAP)

01002 ARSENIC (AA/GF)

01005 BARIUM (ICAP)

01010 BERYLLIUM (ICAP)

01020 BORON (ICAP)

01025 CADMIUM (ICAP)

01030 CHROMIUM (ICAP)

01035 COBALT (ICAP)

01040 COPPER (ICAP)

01045 IRON (ICAP)

01049 LEAD (ICAP)

01051 LEAD (AA/GF)

01055 MANGANESE (ICAP)

WATER POLLUTION LABORATORY CERTIFICATION

METALS

01057 THALLIUM (ICAP)

01059 THALLIUM (AA/GF)

01060 MOLYBDENUM (ICAP)

01065 NICKEL (ICAP)

01075 SILVER (ICAP)

01085 VANADIUM (ICAP)

01090 ZINC (ICAP)

01095 ANTIMONY (ICAP)

01097 ANTIMONY (AA/GF)

01102 TIN (AA/GF)

01105 ALUMINUM (ICAP)

01145 SELENIUM (ICAP)

01147 SELENIUM (AA/GF)

71900 MERCURY (COLD VAPOR)

ORGANICS

601 PURGEABLE HALOCARBONS(GC)

602 PURGEABLE AROMATICS (GC)

608 PESTICIDES & PCBS (GC)

624 PURGEABLES (GC/MS)

625 B/N, ACIDS & PEST (GC/MS)

THIS LIST MUST BE CONSPICUOUSLY DISPLAYED WITH THE PERMANENT CERTIFICATE AT THE LABORATORY

2632 RDC-00927

State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection
Office of Quality Assurance
CN424
Trenton, NJ 08625-0424
Tel (609) 292-3950
Fax (609) 777-1774

Robert C. Shinn, Jr.
Commissioner

14116 INDUSTRIAL CORROSION MGT,INC
1152 ROUTE 10
RANDOLPH NJ 07869
ATTN: RICHARD LEVINE

August 1, 1996

Dear Laboratory Manager:

On July 1, 1996, the N.J.A.C. 7:18, Regulations Governing the Certification of Laboratories and Environmental Measurements became effective. The mailing of the 1996/1997 renewal applications and fee invoices have been delayed. Therefore, a new annual parameter list was not issued to replace the list which expired June 30, 1996.

Enclosed is a copy of your current laboratory certification status. This document will serve as a temporary annual parameter list. The temporary annual parameter list will be valid until an updated list is issued or June 30, 1997.

The Office of Quality Assurance (OQA) is currently revising the application and printing copies of the new regulations. Once this is complete, OQA will mail the application package to your laboratory. Upon receipt of the application please review it carefully, complete the necessary sections and return it to our office. Based on the information from the application an invoice will be generated and mailed to you. Once our office receives payment from your laboratory an annual certified parameter list will be issued.

Please direct all correspondence and inquiries to me at (609) 633-6752, or by letter to this Office at the letterhead address.

Sincerely,

Michael D. DiBalsi
Supervising Environmental Specialist
Office of Quality Assurance

Enclosure

127-1

New Jersey is an Equal Opportunity Employer

CERTSUM DATABASE

7/31/96 TEMPORARY ANNUAL PARAMETER LIST

CERTIFICATION ID 14116 EPA NJ
LAB NAME INDUSTRIAL CORROSION MGT,INC
ADDRESS 1152 ROUTE 10
CITY RANDOLPH STATE NJ ZIP 07869
MANAGER RICHARD LEVINE
PHONE 201-584-0330 LOT/BLOCK - FAX:

A.DRINKING WATER CERTIFIC: C

I. MICROBIOLOGY(DW): C

C 303,T.c(mf) C 309,T.c(ONPG) C 321,E.c(ONPG) 319,E.c(NA+MUG)
C 305,T.c(ft) C 315,F.c(TC-->EC) 323,T.c(Colisure)
307,T.c(PA) 317,E.c(EC+MUG) 325,E.c(Colisure)

II. LIMITED CHEMISTRY(DW): C

C 935,F,"Electrode"
C 936,F,"Distill_Color"
937,F,"Auto_Aliz_F_Blue"
938,F,"Modified_Auto"
940,F,"Zr_Erio_Cyanide"
939,F,"Auto_Electrode"
931,F,"Ion Chrom"
932,Nitrate,"Cd_Red"
933,Nitrate,"Auto_Hydr"
C 934,Nitrate,"Auto_Cd_Red"
919,Nitrate,"Electrode"
957,Nitrate,"Ion Chrom"
926,As,"Ag_DEDT_Carb"
C 947,Cl,"Hg_Ag_NO3"
958,Cl,"Ion Chrom"
C 946,Cl,"Potentiometric"
C 945,Chlorine Residual
C 953,Hardness
C 951,pH,"Glass Electrode"
955,Sodium
C 956,Sulfate
959,Sulfate,"Ion Chrom"
C 952,Total Dissolv Solids
C 944,Turbidity
927,Copper
928,Iron
929,Manganese
930,Zinc
C 948,Color,"Pt_Co"
C 950,Odor,"Const_Series"
C 949,ABS/LAS,"Methylene Bl"

III. METALS(DW): C

910,As."Hyd.Gen"
C 914,As,"GF"
C 960,As,"ICP"
901,Ba,"AA"
915,Ba,"GF"
C 961,Ba,"ICP"
907,Cd,"AA"C.E.
C 916,Cd,"GF"
C 962,Cd,"ICAP"
908,Cr,"AA,C.E.
917,Cr,"GF"
C 963,Cr,"ICP"
909,Pb,"AA,C.E.
C 918,Pb,"GF"
C 912,Hg,"MCV"
913,Hg,"ACV"
911,Se,"Hyd.Gen
C 920,Se,"GF"
902,Ag,"AA"
C 921,Ag,"GF"
C 965,Ag,"ICP"
903,Cu,"AA"
922,Cu,"GF"
C 966,Cu,"ICP"
904,Fe,"AA"
923,Fe,"GF"
C 967,Fe,"ICP"
905,Mn,"AA C.E."
924,Mn,"GF"
C 968,Mn,"ICP"
C 934,Na,"AA"
906,Zn,"AA"
925,Zn,"GF"
C 969,Zn,"ICP"
C 970,Na,"ICP"

III.(a),Metals(Pb&Cu Rules & 7/30/92 & Proposed'93 Rules)C

C 009,Ca"AA"
C 010,Ca"ICP"
011,Cu"PltFur
012,Cu"ICP/MS
C 013,Pb"PltFur
014,Pb"ICP/MS
015,Al"GF"
016,Al"AA"
C 017,Al"ICP"
019,Al"ICP/MS
C 022,SiO2"ICP"
024,Sb "Hydr."
C 025,Sb "GF"
026,Be "GF"
027,Be "ICP/MS"
028,Ni "AA"
029,Ni "GF"
C 030,Ni "ICP"
C 031,Tl "GF"
032,Tl "ICP/MS"
047,Hg "ICP/MS"
C036,Be,"ICP"
037,Sb,"ICP/MS"
038,As,"ICP/MS"
039,Ba,"ICP/MS"
040,Cd,"ICP/MS"
041,Cr,"ICP/MS"
042,Mn,"ICP/MS"
043,Ni,"ICP/MS"
044,Se,"ICP/MS"
045,Ag,"ICP/MS"
046,Zn,"ICP/MS"

II(a).Limited Chem(Pb&Cu Rules & 7/30/92 Rules)C

C 001,Alk. "Titr"
002,Alk."E-Titr"
C 003,Ca,"Titr"
C 004,Conductiv."
C 005,o-P(P)Un/Col
006,o-P(P)"Auto Col"C
007,SiO2
C 008,Temperature
018,Asbestos"TEM"
019,NO2"Spectrophot"C
C 020,NO2,Auto-R
021,NO2,Cd-Red
023,NO2,"IC"
C 033,SO4,"Color
034,CN,"Spect"
035,o-P(P),"IC"

IV. ORGANICS(DW):C

501.1, TOTAL THM'S
501.2, TOTAL THM'S
502.1, VOC P&T GC(Pack)
C 502.2 VOC P&T GC(Capil)
502.2T THM's only
503.1 VOAC,PT/Arom.
504 DBE &DB3CP"GC"
505 OrganoHal Pest/PCB
505P OrganClPest"EMLT"
506 Adipat/Phthal(PID)
507 N/P-Pest. "GC"
508 Cl-Pest."GC"
508A PCB's-Confimation
508P OrganoCl Pests"EMLT"
515.1 Chl.Herbs."GC"
515.1H Regul.Herbs/PCP(2,4-0;Silvex;Dalapon)
524.1 VOC's-GC/MS(Packed)
C 524.2 VOC's-GC/MS(Capillary)
525.1 PAH/PEST"GC/MS"
531.1 Carbamates(HPLC)
547 Glyphosate(HPLC)
548 Endothall(GC/ECD)
549 Diquat (HPLC)
550 PAH,(HPLC)liq/liq
550.1 PAH (HPLC)SPE
551 Disinfection Biproducts
551T (Trihalomethanes only)
552.1 Haloacetic acid/Dalapon
555 Chlorinated Acids
1613 2,3,7,8 TCDD(Dioxin)

V. Radiological(DW)

401 Gross alpha	407 Ra-Tot	414 Co-60
402 Gross beta	408 H3	415 Ru-106
403 Sr-89	409 U	416 Zn-65
404 Sr-90	410 Cs-134	417 K
405 Ra-226	411 Cs-137	418 Pu-239
406-Ra-228	412 I-131	419 Ba-133

VI. Radon(DW):

413 Radon

Legend:
C(Certified) A(Applied) S(Suspended)
c(Certified by Capillary Column GC)

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7/31/96 TEMPORARY ANNUAL PARAMETER LIST

CERTIFICATION ID 14116 EPA NJ
LAB NAME INDUSTRIAL CORROSION MGT,INC
ADDRESS 1152 ROUTE 10
CITY RANDOLPH STATE NJ ZIP 07869
MANAGER RICHARD LEVINE
PHONE 201-584-0330

B. WATER POLLUTION CERTIFICATION: C

I. MICROBIOLOGY(WP): C
C 74055 F.Coli C 74054 F.Strep C 74058 Heterotro Pl
C 74056 T.Coli C 74057 Enterococci C 74059 Pseudomonas aerug.

II. LIMITED CHEMISTRY(WP): C
C 00436 Acid C 00500 TS C 00660 oP,PO4 01042 Cu,T
C 00410 Alkal C 70300 TDS C 00671 oP,P 01045 Fe,T
C 00610 NH4-N C 00530 SS C 00630 NO3 01051 Pb,T
C 00310 BOD5/20C 00545 SS,V C 00615 NO2 00927 Mg,T
C 00340 COD 00546 SS,G C 00556 Oil&Gr 01055 Mn,T
C 00940 Cl C 00505 TVolS C 00680 OrC,T 01067 Ni,T
C 50060 Cl2,R C 00095 SCond C 00681 OrC,D 00937 K, T
C 00080 Color C 00945 SO4 C 00605 OrN C 00955 SiO2
C 00720 CN, T C 00745 S-- 01105 Al,T 00929 Na,T
C 00722 CN,Cl2 C 00740 SO3 01002 As,T 01087 V, T
C 00300 DO,WIN C 38260 Surf 01012 Be,T 01092 Zn,T
C 00299 DO,El C 00010 Temp 01022 B, T C 00320 CBOD
C 00951 F,TOT C 00076 Turb 01027 Cd,T (5 & 20 DAY)
C 00900 Hardn C 32730 Phen 00916 Ca,T
C 00400 H+,pH C 00650 P,PO4 C 01032 Cr,VI
C 00625 TKN C 00665 P,P 01034 Cr,T

III.METALS(WP): C
01106 Al,AA/GF C 01035 Co,ICAP 01210 Pd,AA/GF
C 01105 Al,ICAP 01042 Cu,AA/GF 01171 Pt,AA/GF
C 01097 Sb,AA/GF C 01040 Cu,ICAP 28201 Rh,AA/GF
C 01095 Sb,ICAP 71910 Au,AA/GF 27901 Ru,AA/GF
C 01002 As,AA/GF 01046 Fe,AA/GF C 01147 Se,AA/GF
C 01000 As,ICAP C 01045 Fe,ICAP C 01145 Se,ICAP
01007 Ba,AA/GF C 01051 Pb,AA/GF 01077 Ag,AA/GF
C 01005 Ba,ICAP C 01049 Pb,ICAP C 01075 Ag,ICAP
01012 Be,AA/GF 00937 K,AA 00930 Na,AA
C 01010 Be,ICAP C 00935 K,ICAP C 00929 Na,ICAP
C 01020 B,ICP 00927 Mg,AA C 00956 SiO2,ICAP
01027 Cd,AA/GF C 00925 Mg,ICAP C 01059 Tl,AA/GF
C 01025 Cd,ICAP 01056 Mn,AA C 01057 Tl,ICAP
00916 Ca,AA C 01055 Mn,ICAP C 01102 Sn,AA/GF
C 00915 Ca,ICAP C 71900 Hg,CV 01152 Ti,AA/GF
01032 CrVI,AA 01062 Mo,AA/GF 01087 V,AA/GF C 01104 Sn, ICP
01034 Cr,AA/GF C 01060 Mo,ICAP C 01085 V,ICAP
C 01030 Cr,ICAP 01067 Ni,AA/GF 01092 Zn,AA/GF
01037 Co,AA/GF C 01065 Ni,ICAP C 01090 Zn,ICAP

IV. ORGANICS(WP): C
C 601 Purgeable Halocarbon, P&T/GC/HECD
C 602 Purgeable Aromatics,P&T/GC/PID
604 Phenols
C 608 Pesticides & PCB's
C 608P Organochlorine Pesticides: Aldrin/Dieldrin/ DDD/DDE/DDT/Heptachlor/Chlordane
608PB PCB's only
610 PAH's
612 Chlorinated Hydrocarbons,Extr.w GC/ECD
c 624 Purgeables,P&T w GC/MS
C 625 B/N, Acids, Pesticides, Extr. w. GC/MS

V. BIOASSAY(WP):
99004 Acute Toxicity

VI. Radon(WP):
82303 Radon

C. AIR
1. Radon/Radon Progeny
451,Ra,"Charcoal Cannister"
452,Ra,"Alpha-Track"
453,Ra,"Pump_Carbon_Grab"
454,Ra,"RPISU"
455,Ra,"Charcoal_Liquid_Scintillation"

Continuous Monitoring
00401 CONT pH
00011 CONT Temperature
50061 CONT Cl2 Residual
00091 CONT Conductivity

Legend: C (Certified); A (Applied); S (Suspended)
c (Certified by Capillary Column GC)

127-3

Pennsylvania Department of Environmental Protection

P. O. Box 1467
Harrisburg, Pennsylvania 17105-1467
November 1, 1996

(717) 783-7150
FAX# (717) 783-1502

Bureau of Laboratories

Certified Mail Z 398 777 959

Richard Levine, Laboratory Director
Industrial Corrosion Management
1152 Route 10
Randolph, NJ, 07869

RE: Laboratory Certification Status
DEP# 68-387, EPA# NJ00104, WS037

Dear Mr. Levine:

Recently, a set of chemical Performance Evaluation samples were sent to you for analysis through EPA's Quality Assurance Program. The results of your analyses, the true values, and acceptance limits are provided on the attached data report. Based on this report, your current status in the Laboratory Certification Program in Pennsylvania is as shown below:

Category of Analysis	Certification Status
TM2, CN, C, VOC1*	Classified as "Certified"
	Information on approved methods, data reporting instructions, and a laboratory identification number, if applicable, will be forwarded.
	Classified as "Provisionally Certified"
	You must follow the procedures in Appendix A of the "Critical Elements of Chemistry" and/or correct the deviations listed on your laboratory's on-site report in order to be upgraded to "Certified".
	Classified as "Not Certified"
	No drinking water analysis data will be accepted by the Department or its Designee in the category listed until satisfactory Performance Evaluation results have been achieved.

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http://www.dep.state.pa.us

Printed on Recycled Paper

Other Comments:

* VOCl by Method 524.2 is satisfactory.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, P.O. Box 8457, Harrisburg, PA 17105-8457, (717) 787-3483. TDD users may contact the Board through the Pennsylvania Relay Service (800) 654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedures may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at (717) 787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

If you have any questions on your laboratory's status, contact Mr. Edward Maser.

Sincerely,

Ted Lyter

P. Ted Lyter, Chief
Laboratory Certification
Department of Environmental Protection

DELAWARE HEALTH
AND SOCIAL SERVICES

DIVISION OF PUBLIC HEALTH

CERTIFICATE OF APPROVAL FOR DRINKING WATER ANALYSIS

issued to

Industrial Corrosion Management, Inc.

located at

1152 Route 10

Randalph, New Jersey 07869

is granted approval for recopricity enforcement purposes under
the Safe Drinking Water Act
for the following parameters

FULL CERTIFICATION:

Total Coliform Membrane Filter, Total Coliform Multiple Tube, MMO-MUG, E. coli (EC Medium & MUG), Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc, Nitrate, Nitrite, Fluoride, VOC-1, VOC-3, VOC-4, TDS, Calcium, pH units, Alkalinity, Sodium, Sulfate, Cyanide

PROVISIONAL CERTIFICATION:

Certificate Number: NJ104

Date of Issue: June 10, 1996

Expiration Date: June 30, 1997

Mahadeo P. Verma, Ph.D., MPH, HCLD
DIRECTOR OF LABORATORIES

Edward G. Hallock
PROGRAM MANAGER
OFFICE OF DRINKING WATER

129

BARBARA A. DEBUONO, M.D., M.P.H. Commissioner

Expires 12:01 AM April 1, 1.
ISSUED April 1, 1996
REVISED July 24, 1996

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11376

Director: MR. RICHARD LEVINE
Lab Name: INDUSTRIAL CORROSION MGMT
Address : 1152 ROUTE 10
RANDOLPH NJ 07869-1896

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES NON POTABLE WATER

All approved subcategories and/or analytes are listed below:

Chlor. Hydrocarbon Pesticides :
- 4,4'-DDD
- 4,4'-DDE
- 4,4'-DDT
- alpha-BHC
- Aldrin
- beta-BHC
- Chlordane total
- delta-BHC
- Dieldrin
- Endrin aldehyde
- Endrin
- Endosulfan I
- Endosulfan II
- Endosulfan sulfate
- Heptachlor
- Heptachlor epoxide
- Lindane
- Methoxychlor
- Toxaphene

Wastewater Miscellaneous :
- Cyanide, Total
- Phenols
- Oil & Grease Total Recoverable
- Hydrogen Ion (pH)
- Specific Conductance
- Surfactant (MBAS)
- Temperature
- Organic Carbon, Total

Chlorophenoxy Acid Pesticides (ALL)
Haloethers (ALL)
Nitroaromatics and Isophorone (ALL)
Polychlorinated Biphenyls (ALL)
Purgeable Aromatics (ALL)
TCLP Additional Compounds (ALL)

Mineral :
- Alkalinity
- Chloride
- Fluoride, Total
- Sulfate (as SO4)
- Hardness, Total

Acrolein and Acrylonitrile (ALL)
Wastewater Bacteriology (ALL)
Benzidines (ALL)
Chlorinated Hydrocarbons (ALL)
Wastewater Metals I (ALL)
Nitrosoamines (ALL)
Phthalate Esters (ALL)
Purgeable Halocarbons (ALL)

Nutrient :
- Nitrite (as N)
- Nitrate (as N)
- Orthophosphate (as P)
- Phosphorus, Total

Wastewater Metals III :
- Cobalt, Total
- Molybdenum, Total
- Thallium, Total

Demand (ALL)
Wastewater Metals II (ALL)
Polynuclear Aromatics (ALL)
Priority Pollutant Phenols (ALL)
Residue (ALL)

Serial No.: 033119

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown.
Must be conspicuously posted. Valid certificate has a red serial number.

DOH-3317 (3/95)

BARBARA A. DEBUONO, M.D., M.P.H. Commissioner

Expires 12:01 AM April 1, 1.
ISSUED April 1, 1996
REVISED July 24, 1996

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11376
Director: MR. RICHARD LEVINE
Lab Name: INDUSTRIAL CORROSION MGMT
Address : 1152 ROUTE 10
RANDOLPH NJ 07869-1896

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/ POTABLE WATER

All approved subcategories and/or analytes are listed below:

Volatile Aromatics (ALL)
Volatile Halocarbons (ALL)

Serial No.: 033120

Wadsworth Center

Property of the New York State Department of Health. Valid only at the address shown.
Must be conspicuously posted. Valid certificate has a red serial number.

DOH-3317 (3/95)

NEW YORK STATE DEPARTMENT OF HEALTH

BARBARA A. DEBUONO, M.D., M.P.H. Commissioner

Expires 12:01 AM April 1, 1
ISSUED April 1, 1996
REVISED July 24, 1996

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11376

Director: MR. RICHARD LEVINE
Lab Name: INDUSTRIAL CORROSION MGMT
Address : 1152 ROUTE 10
RANDOLPH NJ 07869-1896

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/SOLID AND HAZARDOUS WASTE

All approved subcategories and/or analytes are listed below:

Characteristic Testing :
- Corrosivity
- Ignitability
- Reactivity
- TCLP
- Tox. Toxicity

Miscellaneous :
- Cyanide, Total
- Hydrogen Ion (pH)

Metals II (ALL)
Polychlorinated Biphenyls (ALL)
Purgeable Aromatics (ALL)
Acrolein and Acrylonitrile (ALL)
Chlor. Hydrocarbon Pesticides (ALL)
Haloethers (ALL)
Nitroaromatics Isophorone (ALL)
Phthalate Esters (ALL)
Purgeable Halocarbons (ALL)
Chlorophenoxy Acid Pesticides (ALL)
Chlorinated Hydrocarbons (ALL)
Metals I (ALL)
Polynuclear Arom. Hydrocarbon (ALL)
Priority Pollutant Phenols (ALL)

Serial No.: 033121

Wadsworth Cente

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Must be conspicuously posted. Valid certificate has a red serial number.

DOH-3317 (3/95)

132

2632 RDC-00936

BARBARA A. DEBUONO, M.D., M.P.H. Commissioner

Expires 12:01 AM April 1,
ISSUED April 1, 1996
REVISED July 24, 1996

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11376

Director: MR. RICHARD LEVINE
Lab Name: INDUSTRIAL CORROSION MGMT
Address : 1152 ROUTE 10
RANDOLPH NJ 07869-1896

is hereby APPROVED as an Environmental Laboratory for the category

CONTRACT LABORATORY PROTOCOL (CLP)

All approved subcategories and/or analytes are listed below:

CLP Inorganics	CLP PCB/Pesticides	CLP Semi-Volatile Organics	CLP Volatile Organics

Serial No.: 033122

Wadsworth Cen

Property of the New York State Department of Health. Valid only at the address shown.
Must be conspicuously posted. Valid certificate has a red serial number.

DOH-3317 (3/95)

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2632 RDC-00937

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Wadsworth Center The Governor Nelson A. Rockefeller Empire State Plaza P.O. Box 509 Albany, New York 12201-0509

Barbara A. DeBuono, M.D., M.P.H.
Commissioner

Karen Schimke
Executive Deputy Commissioner

June 26, 1996

Dear Laboratory Director:

Please note that your 1995-96 Certificate(s) of Approval, originally extended to June 30, 1996 has/have been further extended to July 31, 1996. This action has been necessitated by the lack of an approved New York State budget.

Enclosed please find your current 1996-97 ELAP fee statement. Upon receipt of at least one quarter of the annual amount due, your 1996-97 Certificate(s) of Approval will be issued.

Verification of your laboratory's approved ELAP status is available by calling the Program Office at (518) 485-5570.

Sincerely,

Joyce Joslin
Administrative Aide
Environmental Laboratory
Approval Program

Enc.

State of Connecticut, Department of Public Health

APPROVED ENVIRONMENTAL LABORATORY

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS, OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

INDUSTRIAL CORROSION MANAGEMENT, INC.

LOCATED AT 1152 ROUTE 10 IN RANDOLPH, NJ 07869 AND

REGISTERED IN THE NAME OF RICHARD S. LEVINE

THIS CERTIFICATE IS ISSUED IN THE NAME OF RICHARD S. LEVINE WHO HAS BEEN DESIGNATED BY THE REGISTRANT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS: POTABLE WATER, WASTEWATER AND/OR TRADE WASTE, SOIL

Examination For:

Bacteria
Inorganic Chemicals
Organic Chemicals

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

THIS CERTIFICATE EXPIRES March 31 19 98 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH.

DATED AT HARTFORD, CONNECTICUT, THIS 30th DAY OF May, 19 96

NO. PH-0160
OL 181B REV 1-96

Paul Schur
DIRECTOR, DIVISION OF ENVIRONMENTAL HEALTH

135

2632 RDC-00939

Rec'd 7/23/96

CONNECTICUT STATE DEPARTMENT OF HEALTH

LABORATORY DIVISION

WEDNESDAY JULY 17, 1996 9:13 AM

REGISTRATION DATE 04/01

PH0160 INDUSTRIAL CORROSION MANAGEMENT, INC 1152 ROUTE 10 RANDOLPH, NJ 07869
REGISTRANT RICHARD S. LEVINE DIRECTOR RICHARD S. LEVINE
CO-DIRECTOR
MEDICARE NUMBER- INTERSTATE NUMBER-

TEST 200 POTABLE WATER
TEST 201 WASTEWATER AND/OR TRADE WASTE
TEST 203 SOIL
TEST 211 MICROBIOLOGY
TEST 212 TOTAL COLIFORM-MEMBRANE FILTER
TEST 213 TOTAL COLIFORM-MULTIPLE TUBE FERMENTATION
TEST 214 FECAL COLIFORM-MEMBRANE FILTER
TEST 215 FECAL COLIFORM-MULTIPLE TUBE FERMENTATION
TEST 216 FECAL STREPTOCOCCUS-MEMBRANE FILTER
TEST 217 FECAL STREPTOCOCCUS-MULTIPLE TUBE FERMENTATION
TEST 218 STANDARD PLATE COUNT
TEST 224 MMO-MUG TEST
TEST 229 ENTEROCOCCI- MF
TEST 230 CHEMISTRY
TEST 231 INORGANIC CHEMICALS
TEST 232 PHYSICAL EXAMS
TEST 233 COLOR
TEST 234 ODOR
TEST 235 TURBIDITY
TEST 236 PH
TEST 237 CONDUCTIVITY
TEST 238 TEMPERATURE
TEST 239 MINERALS
TEST 240 ACIDITY
TEST 241 ALKALINITY
TEST 242 HARDNESS
TEST 243 SULFATE
TEST 244 SULFIDE
TEST 245 SULFITE
TEST 246 BROMIDE
TEST 247 CHLORIDE
TEST 248 FLUORIDE
TEST 249 CHLORINE
TEST 250 NUTRIENTS
TEST 251 AMMONIA
TEST 252 KJELDAHL NITROGEN
TEST 253 ORGANIC NITROGEN
TEST 254 NITRATE
TEST 255 NITRITE
TEST 256 ORTHO-PHOSPHATE

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TEST 257	TOTAL PHOSPHORUS
TEST 258	MISCELLANEOUS
TEST 259	TOTAL SOLIDS
TEST 260	TOTAL DISSOLVED SOLIDS
TEST 261	TOTAL VOLATILE SOLIDS
TEST 262	TOTAL SUSPENDED SOLIDS
TEST 263	CYANIDE
TEST 264	IGNITABILITY
TEST 265	SURFACTANTS
TEST 266	DEMAND
TEST 267	BOD
TEST 268	COD
TEST 269	TOC
TEST 270	METALS
TEST 271	ALUMINUM
TEST 272	ANTIMONY
TEST 273	ARSENIC
TEST 274	BARIUM
TEST 275	BERYLLIUM
TEST 276	BORON
TEST 277	CADMIUM
TEST 278	CHROMIUM TOTAL
TEST 279	CHROMIUM VI
TEST 280	COBALT
TEST 281	COPPER
TEST 282	IRON
TEST 283	LEAD
TEST 285	MAGNESIUM
TEST 286	MANGANESE
TEST 287	MERCURY
TEST 288	MOLYBEDNUM
TEST 289	NICKEL
TEST 290	POTASSIUM
TEST 291	SELENIUM
TEST 292	SILVER
TEST 293	SODIUM
TEST 294	THALLIUM
TEST 295	TIN
TEST 296	TITANIUM
TEST 297	VANADIUM
TEST 298	ZINC
TEST 311	ORGANIC CHEMICALS
TEST 312	PURGEABLE HALOCARBONS
TEST 313	PURGEABLE AROMATICS
TEST 314	PESTICIDES
TEST 315	HERBICIDES
TEST 316	PCB
TEST 317	PCB IN OIL
TEST 319	ACROLEIN AND ACRYLONITRILE
TEST 320	PHENOLS
TEST 321	BENZIDINES
TEST 322	PHTHALATE ESTERS
TEST 323	NITROSAMINES
TEST 324	NITROAROMATICS AND ISOPHORONE
TEST 325	POLYNUCLEAR AROMATIC HYDROCARBONS

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TEST 326	HALOETHERS
TEST 327	CHLORINATED HYDROCARBONS
TEST 329	BASE/NEUTRALS AND ACIDS
TEST 331	OIL AND GREASE
TEST 332	GROSS HYDROCARBONS (TPH)

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№ 455

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION

Certifies That

INDUSTRIAL CORROSION MANAGEMENT, INC
1152 Route 10, Randolph, New Jersey 07869

having duly met the requirements of the

Regulations Governing Laboratory Certification
And Standards Of Performance In Accordance With
The Annotated Code of Maryland,
is hereby approved as a

State Certified Water Quality Laboratory

To perform the analyses indicated on the Annual Certified Parameter List,
which must accompany this certificate.

Approved Analyses: **Metals 1,2; Inorganic 1,2,3,5; VOC 1**

Certification # 244

Date Issued October 29, 1996

Expiration Date September 30, 1997
(Not Transferable)

J. Mehsen Joseph
Director, Laboratories Administration

This certification is subject to unannounced laboratory inspections

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Section 7

Services

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Services

ICM Laboratories strives to meet the needs of our clients. Our professionals work diligently to provide high quality data and manage analytical projects to meet all client specifications.

Highlights of the services we offer are as follows:

Rush Analysis

ICM realizes that emergencies can arise and analytical information is required as fast as possible. We have established systems within in the laboratory to be able to accommodate samples which require expedited turnaround times. ICM routinely analyzes parameters such as Petroleum Hydrocarbons and Volatiles in 24 hours.

Sample Shuttles

Logistics play an important role for a laboratory. Samples must arrive within a certain time frame in order to meet various regulatory agency requirements. ICM provides sample pick-up and delivery service to aid our clients within a 175 mile radius. We employ overnight carrier services for distances greater than 175 miles.

Sample pick-up service typically requires a 24 hour notice to be scheduled. We do, however, accommodate clients that have emergency situations and require sample transportation immediately, as best as possible.

ICM drivers are trained in sample handling and custody procedures. They have also been trained in sampling and can perform tests such as pH, temperature, conductivity, dissolved oxygen, and residual chlorine.

ICM provides sample containers and laboratory de-ionized water to our clients. Sample container glassware is purchased from I-Chem and is certified clean. Our laboratory de-ionized water is a Polymetric System and produces 16 megohm-cm or better. This exceeds Type I through Type III water quality requirements.

Sampling

Field sampling services are available for the collection of ground water samples. We routinely sample monitoring wells, industrial discharges, surface waters, and potable water. All our field samplers are certified in accordance with OSHA regulations.

Sales & Client Services

Our sales and client service staff are our main point of contact with our clients. Our representatives are knowledgeable about environmental testing procedures and regulations and must be able to communicate information to and from our clients.

Client Services set up the analytical programs for each client and communicate specific project requirements to the laboratory via an IBM mainframe computer. Client Services coordinate the sample shuttle service and are available to give project status on the telephone.

Our Sales staff have technical backgrounds and are a useful resource to our client. They are able to answer questions regarding common laboratory technical issues. The sales staff meet with our clients to work out project information and relay the information to the laboratory.

Bulletin Board Program

In response to our client's request, ICM has developed a Bulletin Board Program that will notify a client of a permit or action level exceedence. Our Bulletin Board System could be utilized by any client that wishes to be notified if their results exceed a certain threshold level. This system works quite simply. At the onset of a project, the client would discuss with either the Sales or Client Service representative the action or permit levels for particular project. The ICM representative will then set the program up for the client in the IBM AS/400 Mainframe System.

As the analysts enter their results for the samples, they are made aware of the threshold levels. If any of the results exceed the levels indicated by the client, the information is immediately entered into the Bulletin Board System.

The Bulletin Board entries are then received by the appropriate Client Service Representative. This individual verbally notifies the client of the sample excursion. Immediately following verbal notification, the representative will send a written notification of the excursion via fax.

Immediate notification of exceeded permit limits or threshold levels can save thousands of dollars. You now have opportunity to resample to bring your monthly averages down or quickly act on a site when necessary.

Computer Data Management

1. Computer System

ICM maintains an IBM AS400 Model E20 computer system which supports 250 devices (terminals, printers) and has 32 megabytes of RAM and 3 gigabit of storage. The AS400 is infinitely expandable.

The IBM system provides in house sample tracking, analytical calculations, reporting, laboratory Standard Operating Procedures, as well as ordering of supplies, equipment inventory, accounting, billing, and payroll. All software is developed by ICM. We have two programmers/operators available full time to make changes and modifications as necessary. Any modification to the software are thoroughly checked by the laboratory and QA personnel before they are placed on line.

2. Back-ups

All data on the IBM is backed up daily (including weekends). Two separate back-up copies are maintained and rotated every other day. Back-up is performed and secured by the two computer programmer/operators. One copy of the back-up always remains off premise. Recovery can be made easily from the back-ups. In cases where recovery has been required, the back-up was able to restore the system within hours without any data or software loss.

3. Security

ICM utilizes the security system that IBM has created for the AS400. Access to the system is restricted by programming that IBM developed and ICM maintains. Only the two programmers have access to the source code and data files. Individual users can only perform their assigned tasks on the system. The user is given a security classification and must remain within the classification's level of clearance.

The area that houses the computer system hardware is always restricted and locked.

4. Electronic Data Transfer

Computer technology has come a long way in the past years. Information can now be transferred instantaneously and decisions can be made quickly. ICM has always believed in the efficiency created through computerization and automation.

As a service to our clients, ICM does offer electronic data transfer. The AS400 permits external communication via mode, TCP/IP and other protocols. Initially, ICM would meet with the client and discuss the format which they would like their data presented. ICM would then develop the format and ask the client to review it for approval.

Once the format is developed, we would implement the program into the laboratory information management system. As the work comes into the laboratory, all information developed for the client would be linked by account and project number.

As for the formats that ICM offers, we generally set up our clients in Lotus, FoxPro, or Quatro Pro. Currently our clients mostly request spreadsheet summary tables for their electronic data. However, some have requested database setups such as FoxPro.

Although we mostly offer Lotus, ICM is very flexible and will work hard to meet our client's needs. ICM's computer programmers will speak with our client's computer people and set up a system that would best meet the client's needs.

Reporting

Several levels of reporting packages are offered based on the levels of quality assurance and deliverables required. Deliverables offered are those required by the State of New Jersey, New York, and Pennsylvania. ICM is flexible and can customize a report to meet another state or client requirements.

The following is a summation of the report packages offered. For a more detailed accounting of the individual contents of each package please review the Appendix section of this document. A report will be generated per chain of custody received, unless otherwise specified by the client.

1. Full Laboratory Data Deliverables--US EPA CLP Methods

   US EPA Statement of Work forms are used to report the data. This report package offers a high level of quality assurance data. Specific US EPA CLP methods are utilized to perform the analysis. ICM utilizes the organics and inorganics most current Multi-Media, Multi-Concentration Statement of Work.

2. Full Laboratory Data Deliverables--Non-USEPA CLP Methods

This package is commonly termed "Regulatory Format". Similar to the CLP package, Regulatory Format offers a high level of quality assurance. Typically, this package is solely required in New Jersey. Methods utilized for this deliverable are from SW-846 and 40 CFR 136, 141 and 142. New Jersey State forms are used to report the data.

3. Reduced Laboratory Data Deliverables--USEPA CLP Methods

ICM has termed this package "CLP II". Samples for this deliverable would be run according to USEPA CLP methods, however the report package would not include the comprehensive quality assurance deliverables the first option offered. CLP result forms would still be used in this package.

4. Reduced Laboratory Data Deliverables--Non-USEPA CLP Methods

This is the most commonly requested deliverable package. ICM calls this deliverable package Reduced Deliverables II. Methodologies utilized for this deliverable would be SW-846, 40 CFR 136, 141, and 142, as well as Standard Methods etc. ICM delivers the data for this report on its own forms. Reduced Deliverables II is typically used for site remediation.

5. Reduced Laboratory Data Deliverables--NPDES

In the past this package has been called "Tier II". The deliverables are taken from the Division of Hazardous Waste Management Remedial Investigation Guidance Document. ICM reporting forms are used and methods utilized are the same as for the Reduced Deliverables II package. ICM calls this package "Reduced Deliverables I.

6. NYSDEC ASP Category A

All methods and reporting criteria are packaged in accordance with NYSDEC ASP. This package has a minimal leve of quality assurance criteria. ICM reporting forms are used for the data.

7. NYS ASP Category B

All methods and reporting criteria are packaged in accordance with NYSDEC ASP. The level of quality assur ce criteria is extensive in this package. ICM reporting c ms are used in this package.

8. NYS DEC CLP Package

All methods and reporting criteria are packaged in accordance with NYS DEC. The level of quality assurance is similar to USEPA CLP full deliverables. CLP forms are used to report the data.

9. Standard Report

The standard report is our basic package. This report includes a field chain of custody, sample results, and surrogate recoveries for organic analysis.

Billing

The billing department prepares all invoices based on quotations prepared for the client from the sales department. Clients are billed on a per sample per chain of custody basis. Therefore, if a client has sent 10 samples on one day and another 20 on the next, the 10 samples will be billed separately from the 20.

Appendix I

2632 RDC-00951

APPENDIX
FULL INORGANICS
COMPLETE SDG FILE (CSF)
INVENTORY SHEET

Lab Name: _____ City/State: _____

Case No. _____ SDG No. _____ SDG Nos. to Follow: _____ _____ _____

SAS No. _____ Contract No. _____ SOW No. _____

All documents delivered in the Complete SDG File must be original documents where possible. (Reference Exhibit B, Section II F and Section III U)

	Page Nos.		(Please Check:)	
	From	To	Lab	Region
1. Inventory Sheet (DC-2) (Do not number)			___	___
2. Cover Page	___	___	___	___
3. Inorganic Analysis Data Sheet (Form I-IN)	___	___	___	___
4. Initial & Continuing Calibration Verification (Form IIA-IN)	___	___	___	___
5. CRDL Standards For AA and ICP (Form IIB-IN)	___	___	___	___
6. Blanks (Form III-IN)	___	___	___	___
7. ICP Interference Check Sample (Form IV-IN)	___	___	___	___
8. Spike Sample Recovery (Form VA-IN)	___	___	___	___
9. Post Digest Spike Sample Recovery (Form VB-IN)	___	___	___	___
10. Duplicates (Form VI-IN)	___	___	___	___
11. Laboratory Control Sample (Form VII-IN)	___	___	___	___
12. Standard Addition Results (Form VIII-IN)	___	___	___	___
13. ICP Serial Dilutions (Form IX-IN)	___	___	___	___
14. Instrument Detection Limits (Form X-IN)	___	___	___	___
15. ICP Interelement Correction Factors (Form XIA-IN)	___	___	___	___
16. ICP Interelement Correction Factors (Form XIB-IN)	___	___	___	___
17. ICP Linear Ranges (Form XII-IN)	___	___	___	___
18. Preparation Log (Form XIII-IN)	___	___	___	___
19. Analysis Run Log (Form XIV-IN)	___	___	___	___
20. ICP Raw Data	___	___	___	___
21. Furnace AA Raw Data	___	___	___	___
22. Mercury Raw Data	___	___	___	___

Form DC-2 ILM03.0

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	Page Nos. From	To	(Please Check:) Lab	Region
23. Cyanide Raw Data	___	___	___	___
24. Preparation Logs Raw Data	___	___	___	___
25. Percent Solids Determination Log	___	___	___	___
26. Traffic Report	___	___	___	___
27. EPA Shipping/Receiving Documents				
Airbill (No. of Shipments ____)	___	___	___	___
Chain-of-Custody Records	___	___	___	___
Sample Tags	___	___	___	___
Sample Log-In Sheet (Lab & DCI)	___	___	___	___
SDC Cover Sheet	___	___	___	___
28. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
29. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
30. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records _____	___	___	___	___
Analysis Records _____	___	___	___	___
Description _____	___	___	___	___
31. Other Records (describe or list)				
Telephone Communication Log	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___

32. Comments:

_____

_____

Completed by (CLP Lab):

_____	_____	_____
(Signature)	(Print Name & Title)	(Date)

Audited by (EPA):

_____	_____	_____
(Signature)	(Print Name & Title)	(Date)

APPENDIX

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME _____

CITY/STATE _____

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

CONTRACT NO. _____

SOW NO. _____

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II and SECTION III.)

	PAGE NOs FROM	TO	CHECK LAB	EPA
Inventory Sheet (Form DC-2) (Do not number)	___	___	___	___
SDG Case Narrative	___	___	___	___
SDG Cover Sheet/Traffic Report	___	___	___	___
Volatiles Data				
a. QC Summary				
System Monitoring Compound Summary (Form II VOA)	___	___	___	___
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	___	___	___	___
Method Blank Summary (Form IV VOA)	___	___	___	___
GC/MS Instrument Performance Check (Form V VOA)	___	___	___	___
Internal Standard Area and RT Summary (Form VIII VOA)	___	___	___	___
b. Sample Data	___	___		
TCL Results - (Form I VOA)			___	___
Tentatively Identified Compounds (Form I VOA-TIC)			___	___
Reconstructed total ion chromatograms (RIC) for each sample			___	___
For each sample:				
Raw spectra and background-subtracted mass spectra of target compounds identified			___	___
Quantitation reports			___	___
Mass spectra of all reported TICs with three best library matches			___	___
c. Standards Data (All Instruments)	___	___		
Initial Calibration Data (Form VI VOA)			___	___
RICs and Quan Reports for all Standards			___	___
Continuing Calibration Data (Form VII VOA)			___	___
RICs and Quantitation Reports for all Standards			___	___
d. Raw QC Data				
BFB	___	___	___	___
Blank Data	___	___	___	___
Matrix Spike/Matrix Spike Duplicate Data	___	___	___	___

FORM DC-2-1

CLM01.7

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	TO	CHECK LAB	EPA
Semivolatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	___	___	___	___
MS/MSD Summary (Form III SV)	___	___	___	___
Method Blank Summary (Form IV SV)	___	___	___	___
GC/MS Instrument Performance Check (Form V SV)	___	___	___	___
Internal Standard Area and RT Summary (Form VIII SV)	___	___	___	___
b. Sample Data	___	___		
TCL Results (Form I SV-1, SV-2)				
Tentatively Identified Compounds (Form I SV-TIC)			___	___
Reconstructed total ion chromatograms (RIC) for each sample			___	___
For each sample:				
Raw spectra and background-subtracted mass spectra of target compounds			___	___
Quantitation reports			___	___
Mass spectra of TICs with three best library matches			___	___
GPC chromatograms (if GPC performed)			___	___
c. Standards Data (All Instruments)	___	___		
Initial Calibration Data (Form VI SV-1, SV-2)			___	___
RICs and Quan Reports for all Standards			___	___
Continuing Calibration Data (Form VII SV-1, SV-2)			___	___
RICs and Quantitation Reports for all Standards			___	___
Semivolatile GPC Calibration Data-UV detector traces			___	___
d. Raw QC Data				
DFTPP	___	___	___	___
Blank Data	___	___	___	___
Matrix Spike/Matrix Spike Duplicate Data	___	___	___	___
Pesticides				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II PEST)	___	___	___	___
MS/MSD Duplicate Summary (Form III PEST)	___	___	___	___
Method Blank Summary (Form IV PEST)	___	___	___	___

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	TO	CHECK LAB	EPA
Pesticides (cont.)				
b. Sample Data	___	___		
TCL Results - Organic Analysis Data Sheet (Form I PEST)			___	___
Chromatograms (Primary Column)			___	___
Chromatograms from second GC column confirmation			___	___
GC Integration report or data system printout			___	___
Manual work sheets			___	___
For pesticides/Aroclors confirmed by GC/MS, copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			___	___
c. Standards Data	___	___		
Initial Calibration of Single Component Analytes (Form VI PEST-1 and PEST-2)			___	___
Initial Calibration of Multicomponent Analytes (Form VI PEST-3)			___	___
Analyte Resolution Summary (Form VI PEST-4)			___	___
Calibration Verification Summary (Form VII PEST-1)			___	___
Calibration Verification Summary (Form VII PEST-2)			___	___
Analytical Sequence (Form VIII PEST)			___	___
Florisil Cartridge Check (Form IX PEST-1)			___	___
Pesticide GPC Calibration (Form IX PEST-2)			___	___
Pesticide Identification Summary for Single Component Analytes (Form X PEST-1)			___	___
Pesticide Identification Summary for Multicomponent Analytes (Form X PEST-2)			___	___
Chromatograms and data system printouts				
A printout of retention times and corresponding peak areas or peak heights			___	___
Pesticide GPC calibration data - UV detector traces			___	___
d. Raw QC Data				
Blank Data	___	___	___	___
Matrix Spike/Matrix Spike Duplicate Data	___	___	___	___

FORM DC-2-3

OLM01.7

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	TO	CHECK LAB	EPA
Miscellaneous Data				
Original preparation and analysis forms or copies of preparation and analysis logbook pages				
Internal sample and sample extract transfer chain-of-custody records				
Screening records				
All instrument output, including strip charts from screening activities (describe or list)				
_____				
_____				
EPA Shipping/Receiving Documents				
Airbills (No. of shipments ___)				
Chain-of-Custody Records				
Sample Tags				
Sample Log-In Sheet (Lab & DCI)				
Miscellaneous Shipping/Receiving Records (describe or list)				
_____				
_____				
Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
_____				
_____				
C. **Other Records** (describe or list)				
Telephone Communication Log				
_____				
_____				

D. Comments: _____

Completed by: _____ (Signature) _____ (Printed Name/Title) _____ (Date)
(CLP Lab)

Audited by: _____ (Signature) _____ (Printed Name/Title) _____ (Date)
(EPA)

FORM DC-2-4

OLM01.

Appendix II

2632 RDC-00958

APPENDIX

ORDER OF DATA DELIVERABLES FOR NJDEPE REGULATORY FORMAT

Title Page

Table of Contents

Chain of Custody
- External(Field C-of-C)
- Internal

Methodologies

Data Summary Package
- Nonconformance Summary

- GC/MS Volatiles
  - Quality Control Data
    - Tune summary
    - Surrogate recovery summary
    - Method blank summary
    - MS/MSD summary
    - Internal standard summary
    - Calibration summary
  - Sample Data Package
    - Sample results and MDLs
    - Sample chromatograms
    - Quantitation reports
    - Mass spectra
    - Library searches
  - Standards Data Package
    - Initial calibration data
    - Continuing calibration data
    - Chromatograms, quantitation reports, spectra of stds.
  - Raw QC Data package
    - BFB spectra and mass listing
    - Method blank chromatogram, quantitation reports and mass spectra
    - MS/MSD chromatograms, quantitation reports and mass spectra
    - Copy of Instrument Run Log

- GC/MS Extractables
  - Quality Control Data
    - Tune summary
    - Surrogate recovery summary
    - Method blank summary
    - MS/MSD summary
    - Internal standard summary
    - Calibration

- -Sample Data Package
  - Sample results and MDLs
  - Sample chromatograms
  - Quantitation reports
  - Mass spectra
  - Library searches
- -Standards Data Package
  - Initial calibration data
  - Continuing calibration data
  - Chromatograms, quantitation reports, spectra of stds.
- -Raw QC Data Package
  - DFTPP spectra and mass listing
  - Method blank chromatogram, quantitation reports and mass spectra
  - MS/MSD chromatograms, quantitation reports and mass spectra
  - Copy of Instrument Run Log
- -Extraction Logs
- -GPC Analysis
  - U.V. traces for all initial calibrations
  - Weekly calibrations
  - Daily calibrations
  - Blanks
  - Verify that:
    - -all peaks are identified
    - -% resolution calculations

-GC Analysis

- -Quality Control Data
  - Surrogate recovery summary
  - Method blank summary
  - MS/MSD summary
  - Calibration summary
- -Sample Data Package
  - Sample results and MDLs
  - Sample chromatograms
  - Quantitation reports
  - Confirmatory chromatogram
  - Confirmatory quantitation report
- -Standards Data Package
  - Initial calibration data
  - Continuing calibration data
  - Chromatograms, quantitation reports, spectra of stds.
  - Calibration data for confirmation columns
- -Raw QC Data Package
  - Method blank chromatogram, quantitation report
  - MS/MSD chromatogram
  - Copy of Instrument Run Log
- -Extraction Logs
- -GPC Analysis
  - U.V. traces for all initial calibrations
  - Weekly calibrations
  - Daily calibrations
  - Blanks
  - Verify that:
    - -all peaks are identified
    - -% resolution calculations

- Metals
  - Quality Control Data
    - Method blank summary
    - MS summary
    - Duplicate summary
    - Standard addition reports(if applicable)
    - Serial dilution summary(ICP)
    - Laboratory control sample
    - Interference check sample
    - Calibration summary
  - Sample Data Package
    - Sample results and MDLs
    - Quantitation reports
  - Standards Data Package
    - Initial calibration data
    - Continuing calibration data
    - Quantitation reports
    - ICAP interference table
  - Raw QC Data Package
    - Reagent blank data
    - MS data printout
    - Duplicate data printout
    - Standard addition data(if applicable)
    - Serial dilution data(ICP)
    - Laboratory control sample data
    - Copy of Instrument Run Log

- General Analytical
  - Quality Control Data
    - Reagent blank summary
    - Duplicate summary
    - MS results(if applicable)
    - Calibration summary
  - Sample Data Package
    - Sample results and MDLs
    - Quantitation reports
  - Standards Data Package
    - Initial calibration data
    - Continuing calibration data(if applicable)
    - Quantitation reports
  - Raw QC Data Package
    - Reagent blank data
    - MS data printout
    - Duplicate data printout

- TCLP
  - Quality Control Data
    - Method blank summary
    - TCLP blank summary
  - Sample Data Package
    - Sample results summary

Appendix III

2632 RDC-00962

APPENDIX

ORDER OF DATA DELIVERABLES FOR REDUCED DELIVERABLES II

Title/Cover Page

Chain of Custody
External Chain of Custody
Internal Chain of Custody

Methodology Review

Laboratory Chronicles

Conformance/Non-conformance Summary

Analytical Results(in numerical order) Each Lab number is in the following order:

- -GC/MS Volatile Results, plus report(if requested), worksheet, chromatogram, spectra
- -GC/MS Semivolatile Results, plus report(if requested), worksheet chromatogram, spectra
- -GC Results, chromatogram/s
- -Metals Results
- -General Chemistry Results
- -Petroleum Hydrocarbon Results

All analytical result pages for organic analyses will contain the following information: date sample received, date sample extracted, data sample analyzed, sample weight/volume, sample moisture content, dilution factor, GC column, list of analytes, method detection limit, practical quantitation limit and detected analyte concentrations.

Analytical result pages for inorganic analyses will contain the following information: sample identification number, sample matrix, date sample received, date sample analyzed, sample moisture content, dilution factor, list of target analytes and detected analyte concentrations and method detection limits.

Quality Assurance data (in the same order as the Lab Reports)
For GC/MS Analyses(Volatiles, Semivolatiles):

- -Tuning Results Summary
- -Method Blank Results Summary
- -Calibration Summary
- -Surrogate Recovery Summary
- -Matrix Spike/Matrix Spike Duplicate Results Summary
- -Internal Standard Summary

For GC Analyses:
-Method Blank Results Summary
-Standards Summary
-Surrogate Recovery Summary
-Matrix Spike/Matrix Spike Duplicate Results Summary
-Retention Time Shift Summary(if applicable)

For Metals Analyses:
-Blank Results Summary
-Calibration Summary
-ICP Interference Check Sample Results Summary
-Spike Sample Results Summary
-Duplicate Sample Results Summary
-Laboratory Control Sample Results Summary
-Serial Dilution Summary

For General Chemistry Analyses:
-Blank Results Summary
-Spike Sample Results Summary
-Duplicate Sample Results Summary

For Petroleum Hydrocarbon Analyses:
-Blank Results Summary
-Spike Sample Results Summary
-Duplicate Sample Results Summary
-IR spectra for standards, blanks and samples

Appendix IV

2632 RDC-00965

APPENDIX

ORDER OF DATA DELIVERABLES FOR REDUCED DELIVERABLES I

Title Page

Table of Contents

Data Summary

Laboratory/Client Cross Reference Page

Deliverables Checklist

Field Chain of Custody

Analysis Request

Laboratory Chronicles

Conformance/Nonconformance Summary

Methodology Summaries (in the same order as Lab Reports)

Analytical Results(in numerical order)-Each Lab number is in the following order:

- -VOA results, plus report(if requested), quant report, chromatogram, spectra
- -AF results, plus report(if requested), quant report, chromatogram, spectra
- -BN results, plus report(if requested), quant report, chromatogram, spectra
- -Pest/PCB results, chromatogram
- -Metals
- -Pet. Hydro
- -General Analytical

(All analytical result sheets will contain the results, Method Detection Limit and blank results)

Quality Assurance data (in the same order as the Lab Reports)

For GC/MS analyses (VOAs, ABNs):

- -Non-targeted peaks for the blank (if samples required plus peaks
- -Blank quant report, chromatogram, spectra
- -Surrogate summary sheet
- -Spike/Spike Duplicate summary sheet
- -Tune sheets
- -Initial and Continuing Calibration sheets

For Pest/PCBs analyses:
- Blank chromatogram
- Surrogate summary sheet
- Retention time shift-with initial and continuing calibration dates (if required by the method)
- Spike/Spike Duplicate summary sheet
- Chromatogram of standard(if there is a hit in the sample)

Metals analyses:
- Duplicate summary sheet
- Spike recovery summary sheet

Petroleum Hydrocarbon and General Analytical analyses:
- Spike recovery summary sheet
- Duplicate summary sheet

Appendix VI

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NYSDEC ASP Category B

1. SDG Narrative
   -shall include Laboratory name, Case number, Sample Delivery Group(SDG), sample numbers in SDG, Contract number, and any problems encountered(including an explanation for all flagged edits-manual edits-on quantitation lists). The SDG shall also include the standard verbatim used for CLP packages, with the Laboratory Manager signature.

2. Contract Lab Sample Information Sheets(CLSIS)

3. NYSDEC Data Package Summary Forms

4. Chain of Custody Forms
   -both external and internal chain-of-custodies for each sample

5. GC/MS Volatiles Data
   a. QC Summary
      (1) System Monitoring Compound Summary(Form II-VOA)
      (2) Matrix Spike/Matrix Spike Duplicate Summary(Form III-VOA)
      (3) QC Check Sample/Standard
      (4) Method Blank Summary(Form IV-VOA)
      (5) GC/MS Instrument Performance Check(Form V-VOA)
      (6) Instrument Detection Limits

   b. Sample Data
      (1) Organic Analysis Data Sheet(Form I-VOA)
      (2) Tentatively Identified Compounds(Form I-VOA-TIC)
      (3) Reconstructed Total Ion Chromatograms(RIC) for each sample
      (4) Quantitation reports
      (5) Spectra of all compounds identified in the sample

   c. Standards Data
      (1) Initial Calibration Data(Form VI-VOA)
          Initial stds. RICs and quantitation reports
      (2) Continuing Calibration Data (Form VII-VOA)
          Continuing stds. RICs and quantitation reports

   d. Raw QC Data
      (1) BFB for each 12 hour period
          Bar graph spectrum
          Mass listing
          RIC
      (2) Blank Data
          Results (Form I-VOA)
          Tentatively Identified Compounds (Form-I-VOA-TIC)
          RIC and quantitation report
          Spectra for all compounds identified in the sample
      (3) Matrix Spike Blank Data
          Results (Form I-VOA)
          RIC and quantitation report

(4) Matrix Spike Data
Results (Form I-VOA)
RIC and quantitation report
(5) Matrix Spike Duplicate Data
Results (Form I-CLP-VOA)
RIC and quantitation report
(6) QC Check Sample/Standard
Results (Form I-VOA)
RIC and quantitation report

e. Copy of Calculations

f. Copy of Extraction Logs

6. GC/MS Semivolatiles Data

a. QC Summary
(1) Surrogate Percent Recovery Summary (Form II-SV)
(2) Matrix Spike/Matrix Spike Duplicate Summary (Form III-SV)
(3) QC Check Sample/Standard
(4) Method Blank Summary (Form IV-SV)
(5) GC/MS Instrument Performance Check (Form V-SV)
(6) Internal Standard Area and RT Summary (Form VIII-SV)
(7) Instrument Detection Limits

b. Sample Data
(1) Organic Analysis Data Sheet (Form I-SV-1,SV-2)
(2) Tentatively Identified Compounds (Form I-SV-TIC)
(3) RICs for each sample
(4) Quantitation reports
(5) Spectra of all compounds identified in the sample
(6) GPC chromatograms(if applicable)

c. Standards Data
(1) Initial Calibration Data (Form VI-SV-1, SV-2)
Initial stds RICs and quantitation reports
(2) Continuing Calibration Data (Form VII-SV-1, SV-2)
Continuing stds RICs and quantitation reports
(3) Internal Standard Area Summary (Form VIII-SV-1, SV-2)
(4) GPC Calibration Data

d. Raw QC Data
(1) DFTPP for each 12 hour period
Bar graph spectrum
Mass listing
RIC
(2) Blank Data
Results (Form I-SV-1, SV-2)
TIC (Form I-SV-TIC)
RIC and quantitation report
Spectra for all compounds identified in the sample

(3) Matrix Spike Blank Data
Results (Form I-SV-1, SV-2)
RIC and quantitation report
Spectra for all compounds identified in the sample
(4) Matrix Spike Data
Results (Form I-SV-1, SV-2)
RIC and quantitation report
(5) Matrix Spike Duplicate Data
Results (Form I-SV-1, SV-2)
RIC and quantitation report
(6) QC Check Sample/Standard Results (FORM I-SV, SV-2)
RIC and quantitation report

e. Copy of Calculations

f. Copy of Extraction Logs

7. GC/ECD Pesticide/Aroclor Data
a. QC Summary
(1) Surrogate Percent Recovery Summary (Form II-PEST)
(2) Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank Summary (Form III-PEST)
(3) QC Check Sample/Standard Recovery
(4) Method Blank Summary (Form IV-PEST)
(5) Instrument Detection Limits

b. Sample Data
(1) Organic Analysis Data Sheet (Form I-PEST)
(2) Copies of pesticide chromatograms(first and second GC column)
(3) UV traces from GPC, if applicable
(4) GC/MS confirmation, if applicable

c. Standards Data
(1) Initial Calibration of Single Component Analytes (Form VI-PEST-1 and PEST-2)
(2) Initial Calibration of Multicomponent Analytes (Form VI-PEST-3)
(3) Analyte Resolution Summary (Form VI-PEST-4)
(4) Calibration Verification Summary (Form VII-PEST-1)
(5) Calibration Verification Summary (Form VII-PEST-2)
(6) Analytical Sequence (Form VIII-PEST)
(7) Florisil Cartridge Check (Form IX-PEST-1)
(8) Pesticide GPC Calibration (Form IX-PEST-2), if applicable
(9) Pesticide Identification Summary for Single Component Analytes (Form X-PEST-1)
(10) Pesticide Identification Summary for Multicomponent Analytes (Form X-PEST-2)
(11) Chromatograms and data system printouts for all standards
(12) Pesticide GPC Calibration Data

d. Raw QC Data
   (1) Blank Data
       Results (Form I-PEST)
       Chromatogram and data system printout
   (2) Matrix Spike Data
       Results (Form I-PEST)
       Chromatogram and data system printout
   (3) Matrix Spike Duplicate Data
       Results (Form I-PEST)
       Chromatogram and data system printout
   (4) Matrix Spike Blank Data
       Results (Form I-PEST)
       Chromatogram and data system printout
   (5) QC Check Sample/Standard
       Results (Form I-PEST)
       Chromatogram and data system printout

e. Copy of Calculations

f. Copy of Extraction Logs

8. GC Organic Data
   a. QC Summary
      (1) Surrogate Percent Recovery Summary (Form II-GC)
      (2) Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank Summary (Form III-GC)
      (3) QC Check Sample/Standard Results (Form I-PEST)
          Chromatograms and data system printouts
      (4) Method Blank Summary (Form IV-GC)
      (5) Instrument Detection Limits

   b. Sample Data
      (1) Organic Analysis Data Sheet (Form I-GC)
      (2) Copies of chromatograms and data system printouts for first and second columns
      (3) GPC chromatograms, if applicable

   c. Standards Data
      (1) Initial Calibration Data
      (2) Continuing Calibration Data
      (3) QC Check Sample/Standard
      (4) Standard chromatograms and data system printouts for all standards

   d. Raw QC Data
      (1) Blank Data
          Results
          Chromatogram and data system printout
      (2) Matrix Spike Data
          Results
          Chromatogram and data system printout

(3) Matrix Spike Duplicate Data
Results
Chromatogram and data system printout
(4) QC Check Sample/Standard
Results
Chromatogram and data system printout

e. Copy of Calculations

f. Copy of Extraction Log

9. Inorganic Data
a. Inorganic Analysis Data Sheet (Form I-IN)

b. Quality Control Data
(1) Initial and Continuing Calibration Verification (Form II-IN (Part 1))
(2) CRDL Standard for AA and Linear Range Analysis for ICP (Form II-IN (Part 2))
(3) Blanks (Form III-IN)
(4) ICP Interference Check Sample (Form IV-IN)
(5) Spike Sample Recovery (Form V-IN (Part 1))
(6) Post Digest Spike Sample Recovery (Form V-IN (Part 2))
(7) Duplicates (Form VI-IN)
(8) Quality Control Sample (Form VII-IN)
(9) Standard Addition Results (Form VIII-IN)
(10) ICP Serial Dilutions (Form IX-IN)
(11) Holding Times (Form X-IN)

c. Verification of Instrument Parameters
(1) Instrument Detection Limits (Quarterly) (Form XI-IN)
(2) ICP Interelement Correction Factors (Annually) (Form XII-IN (Part 1))
(3) ICP Interelement Correction Factors (Annually) (Form XII-IN (Part 2))
(4) ICP Linear Ranges (Quarterly) (Form XIII-IN)

d. Raw Data
-must contain all instrument readouts including: standards, duplicates, sample results, including those readouts that may fall below the IDL.

e. Digestion Logs

10. Wet-Chemical Data
    a. Result Sheet

    b. Quality Control Data
        (1) Initial and Continuing Calibration Verification
        (2) CRQL Standard for Wet-Chemical Analysis
        (3) Blanks
        (4) Spike Sample Recovery
        (5) Post Digest Sample Recovery
        (6) Duplicates
        (7) Laboratory Control Sample
        (8) Holding Times

    c. Raw Data
        -shall include all instrument readouts used to obtain sample results, standards and duplicates.

    d. Digestion and Distillation Logs

11. Toxicity Characteristic Leaching Procedure(TCLP) Data

    a. Results (Form I-TCLP)

    b. TCLP Inorganic Quality Control Data
        (1) Initial and Continuing Calibration Verification {Form II-IN (Part 1)}
        (2) CRDL Standard for AA and Linear Range Analysis for ICP {Form II-IN (Part 2)}
        (3) Blanks (Form III-IN)
        (4) ICP Interference Check Sample (Form IV-IN)
        (5) Spike Sample Recovery {Form V-IN (Part 1)}
        (6) Post Digest Spike Sample Recovery {Form V-IN (Part 2)}
        (7) Duplicates (Form VI-IN)
        (8) Quality Control Sample (Form VII-IN)
        (9) Standard Addition Results (Form VIII-IN)
        (10) ICP Serial Dilutions (Form IX-IN)
        (11) Holding Times (Form X-IN)

    c. Verification of Instrument Parameters
        (1) Instrument Detection Limits (Quarterly) (Form XI-IN)
        (2) ICP Interelement Correction Factors (Annually) {Form XII-IN (Part 1)}
        (3) ICP Interelement Correction Factors (Annually) {Form XII-IN (Part 2)}
        (4) ICP Linear Ranges (Quarterly) (Form XIII-IN)

    d. Raw Data

    e. Digestion Logs

Appendix VII

2632 RDC-00975

INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME _____ CITY/STATE _____
CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____
CONTRACT NO. _____ ASP DATE _____

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II AND III.)

		PAGE NOS. FROM	PAGE NOS. TO	CHECK LAB	CHECK NYSDEC
1.	Inventory Sheet (Form DC-2) (Do not number)				
2.	Cover Page				
3.	Inorganic Analysis Data Sheet (FORM I - IN)				
4.	Initial & Continuing Calibration Verification (FORM IIA - IN)				
5.	CRDL Standards For AA and ICP (FORM IIB - IN)				
6.	Blanks (FORM III - IN)				
7.	ICP Interference Check Sample (FORM IV - IN)				
8.	Spike Sample Recovery (FORM VA - IN)				
9.	Post Digest Spike Sample Recovery (FORM VB - IN)				
10.	Duplicates (FORM VI - IN)				
11.	Laboratory Control Sample (FORM VII - IN)				
12.	Standard Addition Results (FORM VIII - IN)				
13.	ICP Serial Dilutions (FORM IX - IN)				
14.	Instrument Detection Limits (FORM X - IN)				
15.	ICP Interelement Correction Factors (FORM XIA - IN)				
16.	ICP Interference Correction Factors (FORM XIB - IN)				
17.	ICP Linear Ranges (FORM XII - IN)				
18.	Preparation Log (FORM XIII - IN)				
19.	Analysis Run Log (FORM XIV - IN)				
20.	ICP Raw Data				
21.	Furnace AA Raw Data				
22.	Mercury Raw Data				

FORM DC-2-IN-1

INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____

	PAGE NOS: FROM	TO	CHECK LAB	NYSDEC
23. Cyanide Raw Data				
24. Preparation Logs Raw Data				
25. Percent Solids Determination Log				
26. Contract Lab Sample Information Sheet (CLSIS)				
27. NYSDEC Shipping/Receiving Documents				
Airbill (No. of Shipments ____)				
Chain-of-custody Records				
Sample Tags				
Sample Log-in Sheet (Lab & DC1)				
SDG Cover Sheet				
28. Misc Shipping/Receiving Records (list all individual records)				
Telephone Logs				
_____				
_____				
29. Internal Lab Sample Transfer Records & Transfer Sheets (describe or list)				
_____				
_____				
30. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records _____				
Analysis Records _____				
Description _____				
31. Other Records (describe or list)				
Telephone Communications Log				
_____				
_____				

32. Comments:

_____

_____

Completed by (CLP Lab)

_____ (Signature) _____ (Print Name & Title) _____ (Date

Audited by (NYSDEC)

_____ (Signature) _____ (Print Name & Title) _____ (Date

FORM DC-2-IN-2

APPENDIX

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME _____ CITY/STATE _____
CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____
CONTRACT NO. _____ ASP DATE _____

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II AND III.)

	PAGE NOS. FROM	PAGE NOS. TO	CHECK LAB	CHECK NYSDEC
1. Inventory Sheet (Form DC-2) (Do not number)	___	___	___	___
2. SDG Case Narrative	___	___	___	___
3. Contract Lab Sample Information Sheet (CLSIS)	___	___	___	___
4. Volatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II-CLP-VOA)	___	___	___	___
Lab Control Sample Recovery (Form III-CLP-VOA	___	___	___	___
Method Blank Summary (Form IV-CLP-VOA)	___	___	___	___
Tuning and Mass Calibration (Form V-CLP-VOA)	___	___	___	___
b. Sample Data				
TCL Results (Form I-CLP-VOA)	___	___	___	___
Tentatively Identified Compounds (Form I-CLP-VOA-TIC)			___	___
Reconstructed total ion chromatograms (RIC) for each sample			___	___
For each sample:				
Raw spectra and background-subtracted mass spectra of target compounds identified			___	___
Mass spectra of all reported TICs with three best library matches			___	___
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI-CLP-VOA)	___	___	___	___
RICs and Quant Reports for all Standards	___	___	___	___
Continuing Calibration (Form VII-CLP-VOA)	___	___	___	___
RICs and Quant Reports for all Standards	___	___	___	___
Internal Standard Area and RT Summary (Form VIII-CLP-VOA)	___	___	___	___
d. QC Data				
BFB	___	___	___	___
Blank Data	___	___	___	___
Matrix Spike Blank Data	___	___	___	___
Matrix Spike Data	___	___	___	___
Matrix Spike Duplicate Data	___	___	___	___
5. Semivolatiles Data				
a. QC Summary	___	___	___	___
Surrogate Percent Recovery Summary (Form II-CLP-SV)	___	___	___	___
MS/MSD Summary (Form III-CLP-SV)	___	___	___	___
Method Blank Summary (Form IV-CLP-SV)	___	___	___	___
Tuning and Mass Calibration (Form V-CLP-SV)	___	___	___	___

FORM DC-2-ORG-1

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____

	PAGE NOS. FROM	PAGE NOS. TO	CHECK LAB	CHECK NYSDEC
5. Semivolatiles Data (cont.)				
b. Sample Data				
TCL Results (Form I-CLP-SV)	___	___	___	___
Tentatively Identified Compounds (Form I-CLP-SV-TIC)			___	___
Reconstructed total ion chromatograms (RIC) for each sample			___	___
For each sample:				
Raw spectra and background-subtracted mass spectra of target compounds identified			___	___
Mass spectra of all reported TICs with three best library matches			___	___
GPC chromatograms (if GPC performed)			___	___
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI-CLP-SV)	___	___	___	___
RICs and Quant Reports for all Standards	___	___	___	___
Continuing Calibration (Form VII-CLP-SV)	___	___	___	___
RICs and Quant Reports for all Standards	___	___	___	___
Internal Standard Area and RT Summary (Form VIIIB-CLP-SV and Form VIIIC-CLP-SV)	___	___	___	___
d. QC Data				
DFTPP	___	___	___	___
Blank Data	___	___	___	___
Matrix Spike Blank Data	___	___	___	___
Matrix Spike Data	___	___	___	___
Matrix Spike Duplicate Data	___	___	___	___
6. Pesticides				
a. QC Summary	___	___	___	___
Surrogate Percent Recovery Summary (Form II-CLP-PEST)	___	___	___	___
MS/MSD Summary (Form III-CLP-PEST)	___	___	___	___
Method Blank Summary (Form IV-CLP-PEST)	___	___	___	___
B. Sample Data				
TCL Results (Form I-CLP-PEST)	___	___	___	___
Chromatograms (Primary Column)			___	___
Chromatograms from second GC column confirmation			___	___
GC Integration report or data system printout and calibration plots			___	___
Manual work sheets			___	___
UV traces from GPC (if available)			___	___
For pesticides/Aroclors confirmed by GC/MS, copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			___	___

FORM DC-2-ORG-2

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____

	PAGE NOS. FROM	TO	CHECK LAB	NYSDEC
6. Pesticides Data (cont.)				
c. Standards Data				
Pesticides Evaluation Standards Summary (Form VIII-CLP-PEST-1)	___	___	___	___
Pesticides Evaluation Standards Summary (Form VIII-CLP-PEST-2)	___	___	___	___
Pesticides/Aroclor Standards Summary (Form IX-CLP-PEST)	___	___	___	___
Pesticides/Aroclor Identification (Form X-CLP-PEST)	___	___	___	___
Standard chromatograms and data system printout for all Standards	___	___	___	___
For pesticides/Aroclors confirmed by GC/MS, copies of spectra for standards used.	___	___	___	___
d. QC Data				
Blank Data	___	___	___	___
Matrix Spike Blank Data	___	___	___	___
Matrix Spike Data	___	___	___	___
Matrix Spike Duplicate Data	___	___	___	___
7. Miscellaneous Data				
Original preparation and analysis forms or copies of preparation and analysis logbook pages	___	___	___	___
Internal sample and sample extract transfer chain-of-custody records	___	___	___	___
Screening records	___	___	___	___
All instrument output, including strip charts from screening activities (describe or list)	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
8. NYSDEC Shipping/Receiving Documents				
Airbills (No. of shipments ____)	___	___	___	___
Chain-of-Custody Records	___	___	___	___
Sample Tags	___	___	___	___
Sample Log-In Sheet (Lab & DC-1)	___	___	___	___
SDG Cover Sheet	___	___	___	___
Miscellaneous Shipping/Receiving Records (describe or list)				
_____	___	___	___	___
_____	___	___	___	___

FORM DC-2-ORG-3

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____ _____ _____ SAS NO. _____

	PAGE NOS. FROM	TO	CHECK LAB	NYSDEC
9. Internal Lab Sample Transfer Records and Traffic Reports (describe or list)				
_____				
_____				
10. Other Records (describe or list)				
Telephone Communication Log				
_____				
_____				

11. Comments: _____

Completed by: _____ _____ _____
(CLP Lab) (Signature) (Printed Name/Title) (Date)

Audited by: _____ _____ _____
(NYSDEC) (Signature) (Printed Name/Title) (Date)

FORM DC-2-ORG-4

APPENDIX F

QUALIFICATIONS OF KEY PERSONNEL

Richard Parrish, P.G.

6 Florida Avenue
Commack, New York 11725
(516) 543-8822

Highlights of Qualifications

- Proven success in implementing productivity-enhancement programs
- Excellent personnel and financial management skills and experience
- Strong practical and theoretical foundation in improving engineering and production methods
- Solid experience working with government regulatory agencies

Professional Experience

Impact Environmental, Kings Park, New York — 1989-Present
Senior Geologist

Supervised geologists, industrial engineers, environmental biologists and computer analysts to develop and implement sampling and analysis operations, quality assurance programs and performance measurement systems. Managed all aspects of corporate finance and budgeting (one million dollar gross per year). Performed staffing analysis, computer systems analysis, computer simulation programming.

Served as supervisor and contract manager on over three hundred petrochemical spill sites throughout New York State, representing both generators and government agencies. Provided contract and sub-contract services to Fortune-500 companies including: Pepsicola Bottling Co. (Pespsico), Coca-Cola Bottling Co., Texaco (Star Enterprises), Burger King Corp., AT&T, Laidlaw, Blockbuster Video, Gencor and Reith-Rieley Construction Co. Provided contract and sub-contract services to regional financial institutions including: European American Bank, The Dime Savings Bank, Key Bank of New York, Fleet Bank, State Bank of Long Island, Long Island Commercial Bank, Shawmut, Roslyn Savings Bank, Home Federal Savings and Sterling Commercial Capital.

Pioneered the solid waste recycling industry. Major projects included the first beneficial use determinations (BUD) issued in the State of New York and the State of Indiana for the utilization of non-hazardous petroleum hydrocarbon contaminated soils as an asphalt aggregate. Said projects included designing, installing, permitting and testing pollution control apparatus (thermal oxidizers). Authored twelve BUD petitions for various other solid waste related projects in New York State. Developed new process for the recycling of petroleum hydrocarbon contaminated soils in the State of New York. Process was approved by the New York State Department of Environmental Conservation in November 1995.

Supervised RI/FS work plans development for Grove Cleaners and select sites within the New Cassel Industrial Park, Inactive Hazardous Waste Disposal Site.

Achievements

- Certified Professional Geologist, Tennessee Department of Commerce, 1994.
- Senior Project Manager for the Mt. Hope Soil Recycling Facility, Calverton, NY.
- Senior Project Manager for the Prima Soil Recycling Facility, Holtsville, NY.
- Senior Project Manager for the Rason Soil Recycling Facility, Cedarhurst, NY.
- Senior Project Manager for the ART Soil Recycling Facility, Indianapolis, IN.
- Recipient of the Long Island Association Young Entrepreneur of the Year, 1992.
- Recipient of Hofstra University School of Business Achievement Award, 1992.

Town of Smithtown, Department of Environmental Protection, Smithtown, New York 1985-1988

Investigator/Aide

Incident response supervisor for town hazardous material spill unit. Enforced the town health and safety codes. Assisted Suffolk County Health Department in enforcing sanitary codes. Investigated and prepared detailed reports of violations of the New York State Environmental Conservation Laws for submission to State Conservation Officers. Worked on various marine habitat/population surveys. Supervised all town sampling and analysis programs. Trained town employees on OSHA issues including the Written Hazard Communication Laws and "Right to Know" legislation.

Achievements

- Coauthored the Town of Smithtown Underground Storage Tank Management Program.
- Senior Project Manager for the State funded Nissequogue River Pollution Study.
- Senior Project Manager, Town of Smithtown Landfill Worker Safety and Hazardous Material Exposure Reduction Program; received an award for meritorious achievement.
- Lead Agent for a joint investigation between the Town of Smithtown and the Suffolk County District Attorneys Office to prosecute Chemtronics Corporation of Hauppauge.
- Senior Project Manager, Town of Smithtown Beach Water Quality Management Plan; included the sampling of beach waters in Smithtown by town officials and analysis by the county forensic laboratory for fecal coliform

Education

Masters in Waste Management - SUNY Stony Brook, Candidate (1996)
Bachelors of Arts - Earth and Space Science - SUNY Stony Brook, 1989
Waste Management Certificate Program, Waste Management Institute, CED, 1994

Training

United State Environmental Protection Agency, Office of Remedial and Emergency Response, forth hour training for Hazardous Materials Response for First Responders, Rochester, New York, 1988.

United State Environmental Protection Agency, Office of Remedial and Emergency Response, twenty-four hour training for Sampling for Hazardous Materials, Princeton, New Jersey, 1989.

New York State Law Enforcement Seminar, Stony Brook, New York, 1989.

Organizations

Member of the New York State Department of Environmental Conservation's Citizens Advisory Committee for Inactive Hazardous Material Waste Disposal Sites, 1989

National Wellwater Association, 1992

Member of the National Association of Environmental Professionals, 1992

National Asphalt Manufacturers Association, 1993

Long Island Association, 1990

Long Island Venture Group, 1992

Environmental Assessment Association, 1994

Keith M. Franzen
27 Winston Road, Centereach, New York, 11720 • (516) 732-2842

EDUCATION:

Bachelors of Engineering Degree, Mechanical Engineering, December 1993
State University of New York at Stony Brook

Bachelors of Science Degree, Construction Management, December 1991
Utica College of Syracuse University
Dean's Honor List - Spring 1991

Professional Engineer Candidate - Part A Satisfied

EMPLOYMENT:

Impact Environmental, Kings Park, New York
Engineering Geologist [May 1993 - Present]
Employed to perform geological engineering and design engineering tasks for Phase I and II Environmental Site Assessments and Corrective Action Plans. Responsible for scheduling projects, the preparation of reports and supervision of field personnel. Managed the design and construction of various hazardous substance containment structures.

Employment Highlights

- Project Manager for the Suffolk County Health Department Remedial Investigation Project conducted at the New York Institute of Technology Central Islip Campus. Involved defining the periphery of contamination originating from eight abandoned waste water lagoons.
- Project Manager for the New York State Department of Transportation Farragut Service Station Corrective Action Plan. Integral in the design and execution of an Investigation Report to determine the nature and extent of site contamination. Participated in the installation and operation of a groundwater pump and treat system to mitigate a dissolved product plume. Project value $200,000.
- Project Manager for over fifty active New York State Department of Environmental Conservation spill sites. Projects have included all phases of Corrective Action Plan stipulations between clients and the State of New York. Average project value $25,000.

Franzen Construction, Centereach, New York
Owner [August 1990 - May 1994]
Self-employed construction contractor. Performed design work, construction and evaluations of structural integrity of wood frame structures. Contracted for residential home improvements requiring carpentry, mason, plumbing and electrical skills.

TRAINING:

Geoprobe Operating Seminar, Kejr Engineering, Salina Kansas - Trained in the operation of the *Geoprobe* Model 8L Hydraulic Probing System. Interface with both standard and macro-bore assemblies. Member of the *Geoprobe* 100 Plus Club.

Knowledgeable in both Macintosh and IBM - compatible operating systems: System Software: MacDraw, MacWrite, Claris CAD, Claris Works, Excel, Surfer, Autocad R12, Harvard Graphics and Quattro Pro.

George Wright
407 East 87th Street, Apt 2A
New York, NY 10128
Tel. 212-860-4512
e-mail: g_wright@pipeline.com

Experience:

Metrocommute, Inc. — *New York, New York*
Environmental Scientist — 1997 to Present
Perform air quality modeling and noise analyses for mobile and stationary sources. Assist in traffic field studies and measure ambient noise. Prepare environmental impact statements and Phase I site assessments for development projects in the city. Provide weather forecasts for traffic field studies and the firm's internet site, metrocommute.com

New York City Department of Environmental Protection (DEP) — *New York, New York*
Environmental Scientist — 1995 to 1997
Reviewed submitted EISs for air quality, noise, traffic, and hazardous materials. Performed air quality modeling, traffic studies, and ambient noise measurement for city projects. Provided technical assistance for the city's Brownfields Program. Served as a liaison between DEP and the mayor's office. Reviewed projects for compliance with state hazardous materials procedures.

Lockwood Greene, Inc. — *New York, New York*
Air Quality Consultant — 1996
Performed an air quality analysis and prepared a report for a SUNY cogeneration facility in Buffalo.

New York City Department of City Planning — *New York, New York*
Environmental Specialist — 1993 to 1995
Conducted traffic, air quality, and noise field studies throughout the city. Assisted in the development of screening procedures for air quality and hazardous materials for zoning initiatives. Reviewed submissions and conducted analyses for air quality, noise, and hazardous materials.

Gibbs and Hill, Inc. — *New York, New York*
Environmental Specialist — 1991 to 1993
Performed dispersion modeling to predict air pollutant impacts for stationary and mobile sources. Prepared and reviewed Phase I and Phase II site remediations in Long Island. Conducted well sampling for PCB laden oil at the Pennsylvania and Fountain Avenue landfills in Canarsie, Brooklyn. Assisted in the preparation of job proposals for work in NY, NJ, and CT.

New Jersey Department of Agriculture — *Verona, New Jersey*
Environmental Scientist — 1987 to 1991
Assisted in the review and implementation of soil erosion plans throughout northern New Jersey. Developed computer programs for channel flow, rip-rap sizing, sediment basins, and soil erosion.

Envroplan, Inc. — *Roseland, New Jersey*
Air Quality Scientist — 1984 to 1985
Aided in the modeling of stationary sources using EPA dispersion models.

Education:

Rutgers University
BS, MS Meteorology — 1984, 1993

Occupational Health and Safety Administration (OSHA)
40-Hour HAZWOPER Training Course — 1992

Skills:

Experience with MS Office, Quark Express, Illustrator, Photoshop, Auto CAD, air quality models, noise monitoring, and FORTRAN programming, keyboarding 55 WPM, ability to sketch and paint

Impact Environmental
a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754
516.269.8800 telephone
516. 269.1599 facsimile

October 4, 1999

Ms. Anna C. Ruepp, Project Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, Room 242
50 Wolf Road
Albany, New York 12233-7010

Re: *299 Main Street Site No. 1-30-043S*
Sample Acquisition Plan

Dear Ms. Ruepp:

This letter serves as notification for subsurface investigative activities performed on the above referenced property. Specifically, an investigation was performed with the Geoprobe Operating System (pilot probe) on Thursday, September 30, 1999 to determine on-site groundwater depth below existing grade (BEG). This measurement was taken to justify vertical sampling depth intervals with respect to the sited soil grid and point source locations. The depth to groundwater (saturated zone) was determine to be approximately fifty-six (56) feet BEG. Accordingly, the sampling acquisition plan was adjusted to four vertical sampling intervals for all soil grid locations (10'-12', 15'-17', 30'-32' and 45'-47' BEG) and three vertical sampling intervals for all point source locations (15'-17', 30'-32' and 45'-47' BEG). Please advise if any additional requirements and/or adjustments to the soil acquisition plan are necessary.

Please contact me if you have any questions or comments regarding this matter.

Sincerely,
Impact Environmental Consulting, Inc.

Kevin Kleaka
Quality Assurance Officer

c: Richard Parrish, PM
Charlotte Biblow, Esq.
Paula Scappaturra
Chittibabu Vasudevan, P.E., Ph.D.
G. Anders Carlson, Ph.D.
Ray Cowen, Director Region 1, NYSDEC
Jeanna E. Hussey, Esq.

CHEMTECH
ANALAB/ICM DIVISION
205 Campus Plaza 1 • Raritan Center • Edison, NJ • 08837
Tel: 732.225.4111 Fax: 732.225.4110

Mr. Rich Parrish
Impact Environmental
1 Village Plaza
Kings Park NY 11754

Monday, October 04, 1999
REVISION

Re: Analytical support- 299 Main Street, Westbury
Quotation #5066

Dear Rich,

Chemtech is pleased to provide you with this quotation for analytical services. All analyses will be performed in accordance with the requirements of the proposal and approved methodologies. This quotation shall remain in effect for 30 days.

Services and Unit Prices:

ANALYSIS	MEDIA	QUANT.	MATRIX	TURNAROUND	$ UNIT PRICE
VOC 8260	GRID	50	Soil	21 day Hard copy	$95.00
VOC -8021 (STARS) **	UST	12	Soil	21 day Hard copy	$ 80.00
PAH 8270 (STARS)	UST	12	Soil	21 day Hard copy	$140.00
VOC-8021 (STARS) **	AGT	12	Soil	21 day Hard copy	$ 80.00
PAH 8270 (STARS)	AGT	12	Soil	21 day Hard copy	$140.00
VOC 624	GW	13	Water	21 day Hard copy	$ 95.00
BN 8270	UIW	12	Soil	21 day Hard copy	$145.00
VOC 8260	UIW	12	Soil	21 day Hard copy	$ 95.00
TAL Metals -6010	UIW	12	Soil	21 day Hard copy	$130.00
EPA 8015 GRO/DRO	UIW	12	Soil	21 day Hard copy	$125.00

** VOC methodology will utilize #8260 reporting the STARS VOC list of compounds at the prescribed STARS MEMO MDL's rendering a compliant VOC approach

Prices include the delivery of bottles, preservatives and COC's by UPS second day. The same day or overnight delivery charges will be assessed to the client (minimum charge is $25.00). Free return shipments will be provided for orders above $500.00

Hard copy results will be provided in 3 weeks with an ASP Category B deliverables package.

Samples will be properly stored at our facility, for a period of 30 days after the completion of the required analyses, unless there are further instructions.

We are looking forward to providing you with quality analytical services and on time delivery. Should you have any questions or need additional information, please do not hesitate to call me at (516) 867-6239 or cell (201) 538-2700

Sincerely,

Joe Dockery

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, Room 242
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-1708 FAX: (518) 457-4198

John P. Cahill
Commissioner

VIA FAX

October 4, 1999

Richard Parrish
Impact Environmental
1 Village Plaza
Kings Park, New York 11754

Dear Mr. Parrish:

Re: 299 Main Street Site No. 1-30-043 S
Revisions to FRI Work Plan

As discussed during our telephone conversation on Tuesday, September 28, 1999, your proposed revisions to the FRI work plan (dated September 27, 1999) are acceptable. Please keep me advised of any revisions to the schedule.

Sincerely,

Anna C. Ruepp

Anna C. Ruepp
Project Engineer

Impa. . Environmental
a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754
516.269.8800 telephone
516. 269.1599 facsimile

October 7, 1999

Ms. Anna C. Ruepp, Project Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, Room 242
50 Wolf Road
Albany, New York 12233-7010

Re: *299 Main Street Site No. 1-30-043S*
Work Plan Modification

Dear Ms. Ruepp:

This letter is to tender a modification to the Focussed Remedial Investigation Work Plan for the above referenced site. During the field mark-out of sampling locations, as determined by actual field surveyed measurements, it was evident that the proposed locations of two on-site monitoring wells need to be relocated due to overhead obstructions. The monitoring well location on the northeastern corner of the site is not feasible due to large trees in the immediate vicinity. It is proposed that this well location be translated inside the fenced area (as shown on fig #3). The monitoring well location on the southeastern corner of the site is not feasible due to overhead power lines in the immediate vicinity. It is proposed that this well location be translated approximately 10'-15' north (as shown on fig #3).

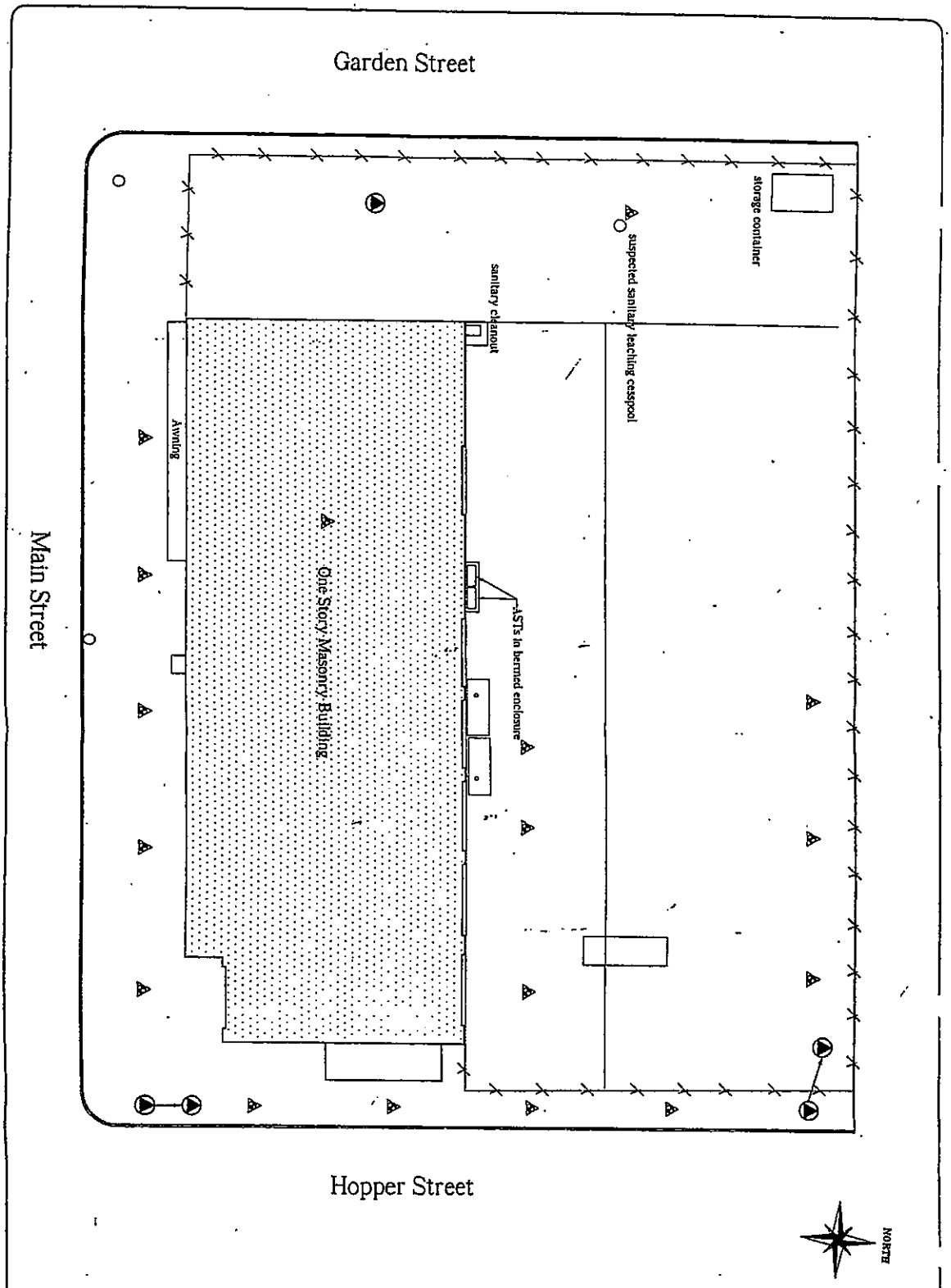
Upon your review and approval of these proposed modifications, we can confirm the schedule for monitoring well installation. Your cooperation is greatly appreciated in this matter. Please feel free to call with any questions or comments.

Sincerely,
Impact Environmental
Consulting, Inc.

Kevin Kleaka
Quality Assurance Officer

Enc.

c: Richard Parrish, PM
Charlotte Biblow, Esq.
Paula Scappaturra
Chittibabu Vasudevan, P.E., Ph.D.
G. Anders Carlson, Ph.D.
Ray Cowen, Director Region 1, NYSDEC
Jeanna E. Hussey, Esq.



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a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754

98-335
Figure 3: Groundwater Acquisition Plan
New Cassel, New York

Legend:
▲ groundwater probe node
soil probe node
monitoring well
scale: 1" = 20' Date modified: 8-31-99

Impact Environmental
a division of inocci environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754
516.269.8800 telephone
516. 269.1599 facsimile

October 7, 1999

Ms. Anna C. Ruepp, Project Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, Room 242
50 Wolf Road
Albany, New York 12233-7010

Re: *299 Main Street Site No. 1-30-043S*
Project Update

Dear Ms. Ruepp:

This letter serves as a summary of investigative activities performed to date with regards to the Focussed Remedial Investigation for the above referenced site. Presented below is a listing of activities that were completed thus far.

Investigative Activity	*Approximate date of completion*
Remote Survey	July 15, 1999
Destructive Survey	September 1, 1999
Final Site Visit	August 21, 1999
Review of building department records	July , 1999
Commencement of subsurface investigation	In progress

In addition, a revised field activities schedule is enclosed for your review. All future updates will be presented on a monthly schedule. Please feel free to call with any questions or comments.

Sincerely,
Impact Environmental Consulting, Inc.

Kevin Kleaka
Quality Assurance Officer

Enc.

c: Richard Parrish, P.M
Charlotte Biblow, Esq.
Paula Scappaturra
Chittibabu Vasudevan, P.E., Ph.D.
G. Anders Carlson, Ph.D.
Ray Cowen, Director Region 1, NYSDEC
Jeanna E. Hussey, Esq.

10/7/1999
Revised 299 Main Street Site No. 1-30-043S Field Work Schedule:

October 12	Geoprobe Soil Sampling (Grid/Point)
October 13	Geoprobe Soil Sampling (Point/UST)
October 18	Monitoring well installation
October 19	Monitoring well installation
October 20	Monitoring well gauging, developing & sampling / Geoprobe Groundwater Sampling
October 21	Geoprobe Groundwater Sampling
October 22	Geoprobe Groundwater Sampling
October 25	Geoprobe Groundwater Sampling

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, Room 242
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-1708 FAX: (518) 457-4198

John P. Cahill
Commissioner

VIA FAX

October 12, 1999

Kevin Kleaka
Impact Environmental Consulting, Inc.
1 Village Plaza
Kings Park, New York 11754

Dear Mr. Kleaka:

Re: 299 Main Street Site No. 1-30-043 S
New Cassel Industrial Area

Thank you for providing me with frequent updates on the status of the Focused Remedial Investigation at the 299 Main Street Site. Responses to your correspondence of October 4th and October 7th follow.

First, the soil sampling plan is correct as you have described it in your fax of October 4, 1999. As a reminder, please note that a distinction was made in the work plan with regard to "point source locations." The sampling interval that you described for "point source locations" is specific to storm water drywells, leaching lagoons, waste water disposal wells, retention pits, and cesspools (see Section 4.3.1 of the work plan). For underground storage tanks, the sampling intervals are 8'-10' bgs and 12'-14' bgs (per Section 4.3.2 of the work plan).

Second, I am in agreement with your proposal to relocate two of the on-site monitoring wells as per Figure 3 of your October 7th correspondence, to avoid overhead obstructions at the locations which were originally proposed.

Finally, thank you for the Project Update and Schedule as provided to me in your second letter of October 7th. I am glad to see that things are progressing smoothly. As I have previously mentioned to Richard Parrish, please give me a call if you encounter any difficulty obtaining access to the site. I can be reached at (518) 457-1708.

Sincerely,

Anna C. Ruepp

Anna C. Ruepp
Project Engineer

IMPACT E..VIRONMENTAL
a division of impact environmental consulting, inc.
1 VILLAGE PLAZA
KINGS PARK, NEW YORK 11754
631.269.8800 TELEPHONE
631.269.1599 FACSIMILE
IMPACTENVIRONMENTAL.COM

October 26, 2001

Mr. Joseph G. Jones, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway
Albany, New York 12233-7014

Re: FRI 299 Main Street Site-1-30-043S
Supplemental Investigation Report for Pollution Source PS-10

Dear Mr. Jones:

This letter serves as a supplemental investigation report with regards to the Focussed Remedial Investigation (FRI) of the above referenced site. Specifically, this report presents the methodologies and conclusions to the investigation of pollution source PS-10 as identified in the Final FRI Report, dated September 2000, prepared by Impact Environmental Consulting, Inc (IEC). The investigative activities were performed in accordance with the approved supplemental work plan, dated January 11, 2001 and under the oversight of the NYSDEC.

Background

The Final FRI Report identified that an above ground TCE storage/holding tank was formerly maintained within the eastern portion of the building. Consequently, this location was identified as a non-point pollution source (PS-10). The data obtained from the FRI failed to confirm that PS-10 had impacted Site groundwater quality. Accordingly, it was recommended that additional investigative activities be performed to confirm or refute if pollution source PS-10 had impacted Site groundwater quality. These activities were to include the acquisition of subsurface soil samples beneath the slab of the building with the area formerly used to house the above ground TCE storage/holding tank.

Investigative Activities

Field activities were conducted on March 22, 2001 and May 3, 2001 to evaluate the potential impact of PS-10 on Site soil quality. Three (3) soil-sampling locations were selected to obtain representative soil samples pertaining

to PS-10. One location, identified as GP-21, was sited within the center of the room that formerly housed the above ground TCE storage/holding tank. At the request of the NYSDEC, two additional soil-sampling locations were sited on the eastern side of the former tank room. These soil-sampling locations were identified as GP-22 and GP-23. These sampling locations can be referenced with Plate 1.

With regards to the soil sampling location GP-21, the concrete slab was cored within the former tank room and subsurface soil samples were acquired beneath the slab utilizing a hand auger. Subsurface soil samples were secured from grade to approximately six (6) feet below existing grade (BEG). This was the maximum depth attainable with the hand auger. Two (2) subsurface soil samples were selected from GP-21 for subsequent laboratory analysis. Said samples were secured from depth intervals of zero (0) to two (2) and four and one half (4.5) to six (6) feet BEG. These samples were labeled for identification purposes as 335-GP-021-SS2 and 335-GP-021-SS5, respectively.

With regards to the soil sampling locations GP-22 and GP-23, subsurface soil samples were acquired utilizing a Geoprobe Operating System. Subsurface soil samples were secured from said sampling locations at depth intervals of five (5) to seven (7), ten (10) to twelve (12) and fifteen (15) to seventeen (17) feet BEG. Each subsurface soil sample secured from sampling locations GP-22 and GP-23 was selected for subsequent laboratory analysis. These samples were labeled for identification purposes as 335-GP-022-SS7, 335-GP-022-SS12, 335-GP-022-SS17, 335-GP-023-SS7, 335-GP-023-SS12 and 335-GP-022-SS17, respectively.

Laboratory Analysis Results

The selected soil samples were subjected to laboratory analysis utilizing USEPA Test Method 8260 for target volatile organic analytes. The laboratory analytical quality assurance procedures (ASP B) conformed to the requirements established in the FRI Final Work Plan. The results of the laboratory analysis are presented on Table 1.

Evaluation of Results

The detected concentrations of target volatile organic analytes from soil samples secured from GP-21, GP-22 and GP-23 were below the applicable standards, criteria and guidances (SCGs). Table 2 provides a comparison of the detected concentrations versus the applicable SCGs.[1] Concentrations of chlorinated organic solvent related analytes were detected from soil samples secured from GP-21, GP-22 at depth intervals ranging from grade to seven (7) feet BEG below the applicable SCGs. None of the soil samples secured from GP-22 and GP-23 from a depth greater than seven (7) feet BEG detected any concentrations of chlorinated organic solvent related analytes

[1] NYSDEC TAGM # 4046, Recommended Soil Cleanup Objectives.

above minimum detection limits. These results confirm that former operations associated with PS-10 has not significantly impacted Site soil quality. Further, this data evidences that PS-10 is not a source of groundwater contamination. Accordingly, the pollution source PS-10 will not be addressed in the Site interim remedial measures.

Please feel free to call with any questions or comments.

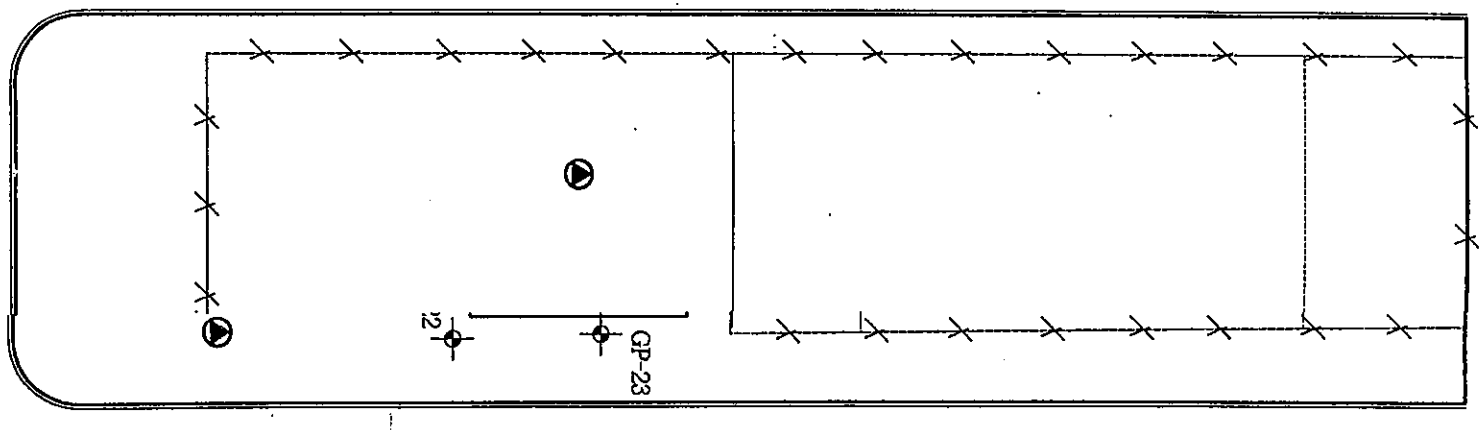
Sincerely,
Impact Environmental Consulting, Inc.

Kevin Kleaka
Quality Assurance Officer

Attachment

c: Richard Parrish, PM
Charlotte Biblow, Esq.
Paula Scappaturra
Chittibabu Vasudevan, P.E., Ph.D.
G. Anders Carlson, Ph.D.
Ray Cowen, Director Region 1, NYSDEC
Jeanna E. Hussey, Esq.

2632 RDC-00997



IMPACT ENVIRONMENTAL
a division of Impact Environmental Consulting Inc.
1 Village Plaza
Kings Park, New York 11754
631.269.8800 TELEPHONE
631.269.1669 FACSIMILE

98-335

Plate 1: PS-10 Sample Acquisition Plan

Westbury, New York

Legend
- monitoring well
- groundwater probe node
- soil probe node

scale: 1" = 20'

CHEMTECH 205 Campus Plaza 1 • Edison, NJ 08837 Phone: 732.225.4 . , Fax: 732.225.4110

DATA PACKAGE FOR RESULTS SUMMARY

PROJECT NAME: 299 MAIN ST.SITE
PROJECT # 98-335

IMPACT ENVIRONMENTAL
1 VILLAGE PLAZA
KINGS PARK, NY 11754
631-269-8800

CHEMTECH PROJECT L3679ASP
ATTENTION KEVIN KLEAKA

Since 1967

Table 1: Point Data Summary

Volatile Organic Soil Analysis

299 Main Street Site 01-30-043S

Westbury, New York

Sample ID	335-GP-021-SS2	335-GP-021-SS5	335-GP-022-SS7	335-GP-022-SS12	335-GP-022-SS17	335-GP-023-SS7	335-GP-023-SS12	335-GP-023-SS17
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatile Organic Analytes:								
Dichlorodifluromethane	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U
1,1-Dichloroethane	U	U	U	U	U	U	U	U
1,1-Dichloroethene	U	U	U	U	U	U	U	U
1,1-Dichloropropene	U	U	U	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U	U
2,2-Dichloropropane	U	U	U	U	U	U	U	U
2-Butanone	U	U	U	U	U	U	U	U
2-Chloroethyl Vinyl Ether	U	U	U	U	U	U	U	U
4-Methyl-2-Pentanone	U	U	U	U	U	U	U	U
Acetone	U	U	U	26	U	8	U	U
Benzene	30	U	U	U	U	U	U	U
Bromochloromethane	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U	U
Carbon Disulfide	U	U	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U	U
Chloroform	3.4J	U	U	U	U	U	U	U
Chloromethane	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	450	66	U	U	U	U	U	U
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U
Dibromoethane	U	U	U	U	U	U	U	U
Methylene Chloride	U	10	U	2.4J	U	2	2.2J	U
Toluene	41	U	U	U	U	U	U	U
Trans-1,2-Dichloroethene	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U
Trichloroethene	7.5	380	50	U	U	U	U	U
Trichlorofluoromethane	U	U	U	U	U	U	U	U
Vinyl Acetate	U	U	U	U	U	U	U	U
Vinyl Chloride	110	U	U	U	U	U	U	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

B: Indicates the analyte was identified in the sample blank and the actual sample.

Table 1: Point Data Summary

Volatile Organic Soil Analysis

299 Main Street Site 01-30-043S

Westbury, New York

Sample ID	335-GP-021-SS2	335-GP-021-SS5	335-GP-022-SS7	335-GP-022-SS12	335-GP-022-SS17	335-GP-023-SS17	335-GP-023-SS12	335-GP-023-SS17
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatile Organic Analytes:								
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U
1,2,3-Trichloropropane	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	85	U	U	U	U	U	U	U
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U
1,2-Dibromoethane	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	59	U	U	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U
1,3-Dichloropropane	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U
2-Chlorotoluene	U	U	U	U	U	U	U	U
2-Hexanone	U	U	U	U	U	U	U	U
4-Chlorotoluene	U	U	U	U	U	U	U	U
p-Isopropyltoluene	U	U	U	U	U	U	U	U
Bromobenzene	U	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U	U
Chlorobenzene	U	U	U	U	U	U	U	U
Dibromochloromethane	U	U	U	U	U	U	U	U
Ethylbenzene	10	U	U	U	U	U	U	U
Hexachlorobutadiene	U	U	U	U	U	U	U	U
Isopropylbenzene	8.4	U	U	U	U	U	U	U
m+p-Xylenes	35	U	U	U	U	U	U	U
Methyl-tert-butyl Ether	U	U	U	U	U	U	U	U
Napthanlene	10	U	U	U	U	U	U	U
n-Butylbenzene	U	U	U	U	U	U	U	U
n-Propylbenzene	9.1	U	U	U	U	U	U	U
o-Xylene	57	U	U	U	U	U	U	U
sec-Butylbenzene	4.3J	U	U	U	U	U	U	U
Styrene	U	U	U	U	U	U	U	U
tert-Butylbenzene	U	U	U	U	U	U	U	U
Tetrachloroethene	U	90	7.7J	U	1.9J	U	U	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

B: Indicates the analyte was identified in the sample blank and the actual sample.

Table 2: Contaminant Concentrations and Applicable SCGs

Volatile Organic Soil Analysis

299 Main Street Site 01-30-043S

Westbury, New York

Sample ID	335-GP-021-SS2	335-GP-021-SS5	335-GP-022-SS7	335-GP-022-SS12	335-GP-023-SS7	335-GP-023-SS12	Applicable SCG
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatile Organic Analytes:							
Acetone	U	U	U	26	8	U	200
Benzene	30	U	U	U	U	U	60
Chloroform	3.4J	U	U	U	U	U	300
cis-1,2-Dichloroethene	450	66	U	U	U	U	NA
Methylene Chloride	U	10	U	2.4J	2	2.2J	100
Toluene	41	U	U	U	U	U	1,500
Trichloroethene	7.5	380	50	U	U	U	700
Vinyl Chloride	110	U	U	U	U	U	200

Sample ID	335-GP-021-SS2	335-GP-021-SS5	335-GP-022-SS7	335-GP-022-SS17	Applicable SCG
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatile Organic Analytes:					
1,2,4-Trimethylbenzene	85	U	U	U	13,000
1,3,5-Trimethylbenzene	59	U	U	U	3,300
Ethylbenzene	10	U	U	U	5,500
Isopropylbenzene	8.4	U	U	U	5,000
m+p-Xylenes	92	U	U	U	1,200
Napthanlene	10	U	U	U	NA
n-Propylbenzene	9.1	U	U	U	14,000
sec-Butylbenzene	4.3J	U	U	U	25,000
Tetrachloroethene	U	90	7.7J	1.9J	1,400

U: Indicates the comound was analyzed for, but was not detected.
J: Indicates an estimated value detected below the MDL.
E: Indicates the analyte concentration exceeds the instrument calibration limits.
B: Indicates the analyte was identified in the sample blank and the actual sample.
Shaded box represents an SCG excedence.
Applicable SCGs derived from NYSDEC TAGM #4046, Recommended Soil Cleanup Objectives

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS2

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3539.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 9 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	5.5	U
74-87-3	Chloromethane	5.5	U
75-01-4	Vinyl Chloride	110	
74-83-9	Bromomethane	5.5	U
75-00-3	Chloroethane	5.5	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
67-64-1	Acetone	5.5	U
75-15-0	Carbon Disulfide	5.5	U
75-09-2	Methylene Chloride	5.5	U
156-60-5	trans-1,2-Dichloroethene	5.5	U
108-05-4	Vinyl Acetate	28	U
75-34-3	1,1-Dichloroethane	5.5	U
78-93-3	2-Butanone	5.5	U
594-20-7	2,2-Dichloropropane	5.5	U
156-59-2	cis-1,2-Dichloroethene	450	
74-97-5	Bromochloromethane	5.5	U
67-66-3	Chloroform	3.4	J
71-55-6	1,1,1-Trichloroethane	5.5	U
563-58-6	1,1-Dichloropropene	5.5	U
56-23-5	Carbon Tetrachloride	5.5	U
71-43-2	Benzene	30	
107-06-2	1,2-Dichloroethane	5.5	U
79-01-6	Trichloroethene	7.5	
78-87-5	1,2-Dichloropropane	5.5	U
74-95-3	Dibromomethane	5.5	U
75-27-4	Bromodichloromethane	5.5	U
108-10-1	4-Methyl-2-Pentanone	5.5	U
108-88-3	Toluene	41	
10061-02-6	t-1,3-Dichloropropene	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
142-28-9	1,3-Dichloropropane	5.5	U

FORM I VOA 3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS2

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3539.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 9 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
110-75-8	2-Chloroethyl vinyl ether	5.5	U
591-78-6	2-Hexanone	5.5	U
124-48-1	Dibromochloromethane	5.5	U
106-93-4	1,2-Dibromoethane	5.5	U
127-18-4	Tetrachloroethene	5.5	U
108-90-7	Chlorobenzene	5.5	U
630-20-6	1,1,1,2-Tetrachloroethane	5.5	U
100-41-4	Ethyl Benzene	10	
136777-61-2	m/p-Xylenes	35	
95-47-6	o-Xylene	57	
100-42-5	Styrene	5.5	U
75-25-2	Bromoform	5.5	U
98-82-8	Isopropylbenzene	8.4	
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
96-18-4	1,2,3-Trichloropropane	5.5	U
108-86-1	Bromobenzene	5.5	U
103-65-1	n-propylbenzene	9.1	
95-49-8	2-Chlorotoluene	5.5	U
108-67-8	1,3,5-Trimethylbenzene	59	
106-43-4	4-Chlorotoluene	5.5	U
98-06-6	tert-Butylbenzene	5.5	U
95-63-6	1,2,4-Trimethylbenzene	85	
135-98-8	sec-Butylbenzene	4.3	J
99-87-6	p-Isopropyltoluene	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
104-51-8	n-Butylbenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.5	U
120-82-1	1,2,4-Trichlorobenzene	5.5	U
87-68-3	Hexachlorobutadiene	5.5	U
91-20-3	Naphthalene	10	
1634-04-4	Methyl tert-butyl Ether	5.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS2

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3539.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 9 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
87-61-6	1,2,3-Trichlorobenzene	5.5	U

FORM I VOA 3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
335-GP-021-SS2

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No. L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3539.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 9.2 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 10

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	11.37	55	J
2.	Unknown	12.73	81	J
3. 108-87-2	Cyclohexane, methyl-	15.02	85	J
4. 611-14-3	Benzene, 1-ethyl-2-methyl-	26.06	130	J
5. 124-18-5	Decane	26.49	50	J
6.	Ethyl Methyl Benzene Isomer	26.80	60	J
7. 526-73-8	Benzene, 1,2,3-trimethyl-	28.31	82	J
8. 496-11-7	Indane	28.82	38	J
9. 95-93-2	Benzene, 1,2,4,5-tetramethyl	29.17	46	J
10. 1120-21-4	Undecane	29.63	120	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS2RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 001RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3537.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 9 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	28	UD
74-87-3	Chloromethane	28	UD
75-01-4	Vinyl Chloride	120	D
74-83-9	Bromomethane	28	UD
75-00-3	Chloroethane	28	UD
75-69-4	Trichlorofluoromethane	28	UD
75-35-4	1,1-Dichloroethene	28	UD
67-64-1	Acetone	28	UD
75-15-0	Carbon Disulfide	28	UD
75-09-2	Methylene Chloride	33	D
156-60-5	trans-1,2-Dichloroethene	28	UD
108-05-4	Vinyl Acetate	140	UD
75-34-3	1,1-Dichloroethane	28	UD
78-93-3	2-Butanone	28	UD
594-20-7	2,2-Dichloropropane	28	UD
156-59-2	cis-1,2-Dichloroethene	640	D
74-97-5	Bromochloromethane	28	UD
67-66-3	Chloroform	28	UD
71-55-6	1,1,1-Trichloroethane	28	UD
563-58-6	1,1-Dichloropropene	28	UD
56-23-5	Carbon Tetrachloride	28	UD
71-43-2	Benzene	42	D
107-06-2	1,2-Dichloroethane	28	UD
79-01-6	Trichloroethene	11	JD
78-87-5	1,2-Dichloropropane	28	UD
74-95-3	Dibromomethane	28	UD
75-27-4	Bromodichloromethane	28	UD
108-10-1	4-Methyl-2-Pentanone	28	UD
108-88-3	Toluene	77	D
10061-02-6	t-1,3-Dichloropropene	28	UD
10061-01-5	cis-1,3-Dichloropropene	28	UD
79-00-5	1,1,2-Trichloroethane	28	UD
142-28-9	1,3-Dichloropropane	28	UD

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS2RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3537.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 9 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
110-75-8	2-Chloroethyl vinyl ether	28	UD
591-78-6	2-Hexanone	28	UD
124-48-1	Dibromochloromethane	28	UD
106-93-4	1,2-Dibromoethane	28	UD
127-18-4	Tetrachloroethene	28	UD
108-90-7	Chlorobenzene	28	UD
630-20-6	1,1,1,2-Tetrachloroethane	28	UD
100-41-4	Ethyl Benzene	26	JD
136777-61-2	m/p-Xylenes	96	D
95-47-6	o-Xylene	150	D
100-42-5	Styrene	28	UD
75-25-2	Bromoform	28	UD
98-82-8	Isopropylbenzene	25	JD
79-34-5	1,1,2,2-Tetrachloroethane	28	UD
96-18-4	1,2,3-Trichloropropane	28	UD
108-86-1	Bromobenzene	28	UD
103-65-1	n-propylbenzene	29	D
95-49-8	2-Chlorotoluene	28	UD
108-67-8	1,3,5-Trimethylbenzene	240	D
106-43-4	4-Chlorotoluene	28	UD
98-06-6	tert-Butylbenzene	28	UD
95-63-6	1,2,4-Trimethylbenzene	380	D
135-98-8	sec-Butylbenzene	16	JD
99-87-6	p-Isopropyltoluene	28	UD
541-73-1	1,3-Dichlorobenzene	28	UD
106-46-7	1,4-Dichlorobenzene	28	UD
104-51-8	n-Butylbenzene	28	UD
95-50-1	1,2-Dichlorobenzene	28	UD
96-12-8	1,2-Dibromo-3-Chloropropane	28	UD
120-82-1	1,2,4-Trichlorobenzene	28	UD
87-68-3	Hexachlorobutadiene	28	UD
91-20-3	Naphthalene	56	D
1634-04-4	Methyl tert-butyl Ether	28	UD

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS2RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3537.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 9 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
87-61-6	1,2,3-Trichlorobenzene	28	UD

FORM I VOA 3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
335-GP-021-SS2RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No. L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3537.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 9.2 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 10 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 108-87-2	Cyclohexane, methyl-	14.98	150	J
2. 620-14-4	Benzene, 1-ethyl-3-methyl-	26.06	300	J
3. 124-18-5	Decane	26.49	77	J
4. 611-14-3	Benzene, 1-ethyl-2-methyl-	26.80	150	J
5.	Ethyl Methyl Benzene Isomer	28.31	210	J
6. 496-11-7	Indane	28.81	92	J
7. 488-23-3	Benzene, 1,2,3,4-tetramethyl	29.16	160	J
8. 1120-21-4	Undecane	29.63	230	J
9. 874-41-9	Benzene, 1-ethyl-2,4-dimethy	30.13	96	J
10. 95-93-2	Benzene, 1,2,4,5-tetramethyl	31.26	200	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS5

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3538.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 7 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.4	U
74-87-3	Chloromethane	5.4	U
75-01-4	Vinyl Chloride	5.4	U
74-83-9	Bromomethane	5.4	U
75-00-3	Chloroethane	5.4	U
75-69-4	Trichlorofluoromethane	5.4	U
75-35-4	1,1-Dichloroethene	5.4	U
67-64-1	Acetone	5.4	U
75-15-0	Carbon Disulfide	5.4	U
75-09-2	Methylene Chloride	10	
156-60-5	trans-1,2-Dichloroethene	5.4	U
108-05-4	Vinyl Acetate	27	U
75-34-3	1,1-Dichloroethane	5.4	U
78-93-3	2-Butanone	5.4	U
594-20-7	2,2-Dichloropropane	5.4	U
156-59-2	cis-1,2-Dichloroethene	66	
74-97-5	Bromochloromethane	5.4	U
67-66-3	Chloroform	5.4	U
71-55-6	1,1,1-Trichloroethane	5.4	U
563-58-6	1,1-Dichloropropene	5.4	U
56-23-5	Carbon Tetrachloride	5.4	U
71-43-2	Benzene	5.4	U
107-06-2	1,2-Dichloroethane	5.4	U
79-01-6	Trichloroethene	380	
78-87-5	1,2-Dichloropropane	5.4	U
74-95-3	Dibromomethane	5.4	U
75-27-4	Bromodichloromethane	5.4	U
108-10-1	4-Methyl-2-Pentanone	5.4	U
108-88-3	Toluene	5.4	U
10061-02-6	t-1,3-Dichloropropene	5.4	U
10061-01-5	cis-1,3-Dichloropropene	5.4	U
79-00-5	1,1,2-Trichloroethane	5.4	U
142-28-9	1,3-Dichloropropane	5.4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS5

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3538.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 7 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
110-75-8	2-Chloroethyl vinyl ether	5.4	U
591-78-6	2-Hexanone	5.4	U
124-48-1	Dibromochloromethane	5.4	U
106-93-4	1,2-Dibromoethane	5.4	U
127-18-4	Tetrachloroethene	90	
108-90-7	Chlorobenzene	5.4	U
630-20-6	1,1,1,2-Tetrachloroethane	5.4	U
100-41-4	Ethyl Benzene	5.4	U
136777-61-2	m/p-Xylenes	5.4	U
95-47-6	o-Xylene	5.4	U
100-42-5	Styrene	5.4	U
75-25-2	Bromoform	5.4	U
98-82-8	Isopropylbenzene	5.4	U
79-34-5	1,1,2,2-Tetrachloroethane	5.4	U
96-18-4	1,2,3-Trichloropropane	5.4	U
108-86-1	Bromobenzene	5.4	U
103-65-1	n-propylbenzene	5.4	U
95-49-8	2-Chlorotoluene	5.4	U
108-67-8	1,3,5-Trimethylbenzene	5.4	U
106-43-4	4-Chlorotoluene	5.4	U
98-06-6	tert-Butylbenzene	5.4	U
95-63-6	1,2,4-Trimethylbenzene	5.4	U
135-98-8	sec-Butylbenzene	5.4	U
99-87-6	p-Isopropyltoluene	5.4	U
541-73-1	1,3-Dichlorobenzene	5.4	U
106-46-7	1,4-Dichlorobenzene	5.4	U
104-51-8	n-Butylbenzene	5.4	U
95-50-1	1,2-Dichlorobenzene	5.4	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.4	U
120-82-1	1,2,4-Trichlorobenzene	5.4	U
87-68-3	Hexachlorobutadiene	5.4	U
91-20-3	Naphthalene	5.4	U
1634-04-4	Methyl tert-butyl Ether	5.4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS5

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3538.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 7 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
87-61-6	1,2,3-Trichlorobenzene	5.4	U

FORM I VOA 3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
335-GP-021-SS5

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No. L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3538.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 7.2 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 76-13-1	Ethane, 1,1,2-trichloro-1,2,	4.98	6.8	J
2.	Unknown	29.19	14	J
3.	Column Bleed	30.90	51	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS5RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3540.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 7 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	27	UD
74-87-3	Chloromethane	27	UD
75-01-4	Vinyl Chloride	27	UD
74-83-9	Bromomethane	27	UD
75-00-3	Chloroethane	27	UD
75-69-4	Trichlorofluoromethane	27	UD
75-35-4	1,1-Dichloroethene	27	UD
67-64-1	Acetone	27	UD
75-15-0	Carbon Disulfide	27	UD
75-09-2	Methylene Chloride	27	UD
156-60-5	trans-1,2-Dichloroethene	27	UD
108-05-4	Vinyl Acetate	130	UD
75-34-3	1,1-Dichloroethane	27	UD
78-93-3	2-Butanone	27	UD
594-20-7	2,2-Dichloropropane	27	UD
156-59-2	cis-1,2-Dichloroethene	47	D
74-97-5	Bromochloromethane	27	UD
67-66-3	Chloroform	27	UD
71-55-6	1,1,1-Trichloroethane	27	UD
563-58-6	1,1-Dichloropropene	27	UD
56-23-5	Carbon Tetrachloride	27	UD
71-43-2	Benzene	27	UD
107-06-2	1,2-Dichloroethane	27	UD
79-01-6	Trichloroethene	370	D
78-87-5	1,2-Dichloropropane	27	UD
74-95-3	Dibromomethane	27	UD
75-27-4	Bromodichloromethane	27	UD
108-10-1	4-Methyl-2-Pentanone	27	UD
108-88-3	Toluene	27	UD
10061-02-6	t-1,3-Dichloropropene	27	UD
10061-01-5	cis-1,3-Dichloropropene	27	UD
79-00-5	1,1,2-Trichloroethane	27	UD
142-28-9	1,3-Dichloropropane	27	UD

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS5RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3540.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 7 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
110-75-8	2-Chloroethyl vinyl ether	27	UD
591-78-6	2-Hexanone	27	UD
124-48-1	Dibromochloromethane	27	UD
106-93-4	1,2-Dibromoethane	27	UD
127-18-4	Tetrachloroethene	100	D
108-90-7	Chlorobenzene	27	UD
630-20-6	1,1,1,2-Tetrachloroethane	27	UD
100-41-4	Ethyl Benzene	27	UD
136777-61-2	m/p-Xylenes	27	UD
95-47-6	o-Xylene	27	UD
100-42-5	Styrene	27	UD
75-25-2	Bromoform	27	UD
98-82-8	Isopropylbenzene	27	UD
79-34-5	1,1,2,2-Tetrachloroethane	27	UD
96-18-4	1,2,3-Trichloropropane	27	UD
108-86-1	Bromobenzene	27	UD
103-65-1	n-propylbenzene	27	UD
95-49-8	2-Chlorotoluene	27	UD
108-67-8	1,3,5-Trimethylbenzene	27	UD
106-43-4	4-Chlorotoluene	27	UD
98-06-6	tert-Butylbenzene	27	UD
95-63-6	1,2,4-Trimethylbenzene	27	UD
135-98-8	sec-Butylbenzene	27	UD
99-87-6	p-Isopropyltoluene	27	UD
541-73-1	1,3-Dichlorobenzene	27	UD
106-46-7	1,4-Dichlorobenzene	27	UD
104-51-8	n-Butylbenzene	27	UD
95-50-1	1,2-Dichlorobenzene	27	UD
96-12-8	1,2-Dibromo-3-Chloropropane	27	UD
120-82-1	1,2,4-Trichlorobenzene	27	UD
87-68-3	Hexachlorobutadiene	27	UD
91-20-3	Naphthalene	27	UD
1634-04-4	Methyl tert-butyl Ether	27	UD

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-021-SS5RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3540.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 7 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
87-61-6	1,2,3-Trichlorobenzene	27	UD

FORM I VOA

3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
335-GP-021-SS5RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No. L3679 Site: 299 MAIN Location: LB12753 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 002RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E3540.D

Level: (low/med) LOW Date Received: 3/26/01

% Moisture: not dec. 7.2 Date Analyzed: 3/28/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 0

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1.				
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CHEMTECH 205 Campus Plaza 1 • Edison, NJ 08837 Phone: 732.225.4111 Fax: 732.225.4110

DATA PACKAGE FOR RESULTS SUMMARY

PROJECT NAME: 299 MAIN STREET
PROJECT # 1-30-0435

IMPACT ENVIRONMENTAL
1 VILLAGE PLAZA
KINGS PARK, NY 11754
631-269-8800

CHEMTECH PROJECT L4253ASP
ATTENTION KEVIN KLEAKA

Since 1967

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-022-SS7

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4509.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 3 Date Analyzed: 05/12/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	26	U
74-87-3	Chloromethane	26	U
75-01-4	Vinyl Chloride	26	U
74-83-9	Bromomethane	26	U
75-00-3	Chloroethane	26	U
75-69-4	Trichlorofluoromethane	26	U
75-35-4	1,1-Dichloroethene	26	U
67-64-1	Acetone	26	U
75-15-0	Carbon Disulfide	26	U
75-09-2	Methylene Chloride	26	U
156-60-5	trans-1,2-Dichloroethene	26	U
108-05-4	Vinyl Acetate	130	U
75-34-3	1,1-Dichloroethane	26	U
78-93-3	2-Butanone	26	U
594-20-7	2,2-Dichloropropane	26	U
156-59-2	cis-1,2-Dichloroethene	26	U
74-97-5	Bromochloromethane	26	U
67-66-3	Chloroform	26	U
71-55-6	1,1,1-Trichloroethane	26	U
563-58-6	1,1-Dichloropropene	26	U
56-23-5	Carbon Tetrachloride	26	U
71-43-2	Benzene	26	U
107-06-2	1,2-Dichloroethane	26	U
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	26	U
74-95-3	Dibromomethane	26	U
75-27-4	Bromodichloromethane	26	U
108-10-1	4-Methyl-2-Pentanone	26	U
108-88-3	Toluene	26	U
10061-02-6	t-1,3-Dichloropropene	26	U
10061-01-5	cis-1,3-Dichloropropene	26	U
79-00-5	1,1,2-Trichloroethane	26	U
142-28-9	1,3-Dichloropropane	26	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-022-SS7

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4509.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 3 Date Analyzed: 05/12/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
110-75-8	2-Chloroethyl vinyl ether	26	U
591-78-6	2-Hexanone	26	U
124-48-1	Dibromochloromethane	26	U
106-93-4	1,2-Dibromoethane	26	U
127-18-4	Tetrachloroethene	7.7	J
108-90-7	Chlorobenzene	26	U
630-20-6	1,1,1,2-Tetrachloroethane	26	U
100-41-4	Ethyl Benzene	26	U
136777-61-2	m/p-Xylenes	26	U
95-47-6	o-Xylene	26	U
100-42-5	Styrene	26	U
75-25-2	Bromoform	26	U
98-82-8	Isopropylbenzene	26	U
79-34-5	1,1,2,2-Tetrachloroethane	26	U
96-18-4	1,2,3-Trichloropropane	26	U
108-86-1	Bromobenzene	26	U
103-65-1	n-propylbenzene	26	U
95-49-8	2-Chlorotoluene	26	U
108-67-8	1,3,5-Trimethylbenzene	26	U
106-43-4	4-Chlorotoluene	26	U
98-06-6	tert-Butylbenzene	26	U
95-63-6	1,2,4-Trimethylbenzene	26	U
135-98-8	sec-Butylbenzene	26	U
99-87-6	p-Isopropyltoluene	26	U
541-73-1	1,3-Dichlorobenzene	26	U
106-46-7	1,4-Dichlorobenzene	26	U
104-51-8	n-Butylbenzene	26	U
95-50-1	1,2-Dichlorobenzene	26	U
96-12-8	1,2-Dibromo-3-Chloropropane	26	U
120-82-1	1,2,4-Trichlorobenzene	26	U
87-68-3	Hexachlorobutadiene	26	U
91-20-3	Naphthalene	26	U
1634-04-4	Methyl tert-butyl Ether	26	U

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VOLATILE ORGANICS ANALYSIS DATA IEET

SAMPLE NO.
335-GP-022-SS7

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4509.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 3 Date Analyzed: 05/12/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
87-61-6	1,2,3-Trichlorobenzene	26	U

FORM I VOA 3/90

1E

VOLATILE ORGANICS ANALYSIS D \ SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
335-GP-022-SS7

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No. L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4509.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 3.4 Date Analyzed: 5/12/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 10 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	23.30	200	J
2.	Unknown	25.28	530	J
3.	Unknown	25.78	360	J
4. 124-18-5	Decane	26.25	640	J
5.	Unknown	26.75	150	J
6. 2847-72-5	Decane, 4-methyl-	27.03	1200	J
7.	Unknown	27.57	860	J
8.	Unknown	28.27	1100	J
9. 493-02-7	Naphthalene, decahydro-, tra	28.73	800	J
10. 1120-21-4	Undecane	29.39	4500	J
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VOLATILE ORGANICS ANALYSIS DA' SHEET

SAMPLE NO.
335-GP-022-SS7RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 001RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4524.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 3 Date Analyzed: 5/14/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	130	UD
74-87-3	Chloromethane	130	UD
75-01-4	Vinyl Chloride	130	UD
74-83-9	Bromomethane	130	UD
75-00-3	Chloroethane	130	UD
75-69-4	Trichlorofluoromethane	130	UD
75-35-4	1,1-Dichloroethene	130	UD
67-64-1	Acetone	130	UD
75-15-0	Carbon Disulfide	130	UD
75-09-2	Methylene Chloride	92	JD
156-60-5	trans-1,2-Dichloroethene	130	UD
108-05-4	Vinyl Acetate	650	UD
75-34-3	1,1-Dichloroethane	130	UD
78-93-3	2-Butanone	130	UD
594-20-7	2,2-Dichloropropane	130	UD
156-59-2	cis-1,2-Dichloroethene	130	UD
74-97-5	Bromochloromethane	130	UD
67-66-3	Chloroform	130	UD
71-55-6	1,1,1-Trichloroethane	130	UD
563-58-6	1,1-Dichloropropene	130	UD
56-23-5	Carbon Tetrachloride	130	UD
71-43-2	Benzene	130	UD
107-06-2	1,2-Dichloroethane	130	UD
79-01-6	Trichloroethene	130	UD
78-87-5	1,2-Dichloropropane	130	UD
74-95-3	Dibromomethane	130	UD
75-27-4	Bromodichloromethane	130	UD
108-10-1	4-Methyl-2-Pentanone	130	UD
108-88-3	Toluene	130	UD
10061-02-6	t-1,3-Dichloropropene	130	UD
10061-01-5	cis-1,3-Dichloropropene	130	UD
79-00-5	1,1,2-Trichloroethane	130	UD
142-28-9	1,3-Dichloropropane	130	UD

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VOLATILE ORGANICS ANALYSIS DA SHEET

SAMPLE NO.

335-GP-022-SS7RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4524.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 3 Date Analyzed: 5/14/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
110-75-8	2-Chloroethyl vinyl ether	130	UD
591-78-6	2-Hexanone	130	UD
124-48-1	Dibromochloromethane	130	UD
106-93-4	1,2-Dibromoethane	130	UD
127-18-4	Tetrachloroethene	130	UD
108-90-7	Chlorobenzene	130	UD
630-20-6	1,1,1,2-Tetrachloroethane	130	UD
100-41-4	Ethyl Benzene	130	UD
136777-61-2	m/p-Xylenes	130	UD
95-47-6	o-Xylene	130	UD
100-42-5	Styrene	130	UD
75-25-2	Bromoform	130	UD
98-82-8	Isopropylbenzene	130	UD
79-34-5	1,1,2,2-Tetrachloroethane	130	UD
96-18-4	1,2,3-Trichloropropane	130	UD
108-86-1	Bromobenzene	130	UD
103-65-1	n-propylbenzene	130	UD
95-49-8	2-Chlorotoluene	130	UD
108-67-8	1,3,5-Trimethylbenzene	130	UD
106-43-4	4-Chlorotoluene	130	UD
98-06-6	tert-Butylbenzene	130	UD
95-63-6	1,2,4-Trimethylbenzene	130	UD
135-98-8	sec-Butylbenzene	130	UD
99-87-6	p-Isopropyltoluene	130	UD
541-73-1	1,3-Dichlorobenzene	130	UD
106-46-7	1,4-Dichlorobenzene	130	UD
104-51-8	n-Butylbenzene	130	UD
95-50-1	1,2-Dichlorobenzene	130	UD
96-12-8	1,2-Dibromo-3-Chloropropane	130	UD
120-82-1	1,2,4-Trichlorobenzene	130	UD
87-68-3	Hexachlorobutadiene	130	UD
91-20-3	Naphthalene	130	UD
1634-04-4	Methyl tert-butyl Ether	130	UD

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VOLATILE ORGANICS ANALYSIS DAT ^HEET

SAMPLE NO.

335-GP-022-SS7RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4524.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 3 Date Analyzed: 5/14/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
87-61-6	1,2,3-Trichlorobenzene	130	UD

FORM I VOA 3/90

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

335-GP-022-SS12

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4556.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 2 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	5.1	U
74-87-3	Chloromethane	5.1	U
75-01-4	Vinyl Chloride	5.1	U
74-83-9	Bromomethane	5.1	U
75-00-3	Chloroethane	5.1	U
75-69-4	Trichlorofluoromethane	5.1	U
75-35-4	1,1-Dichloroethene	5.1	U
67-64-1	Acetone	26	
75-15-0	Carbon Disulfide	5.1	U
75-09-2	Methylene Chloride	2.4	J
156-60-5	trans-1,2-Dichloroethene	5.1	U
108-05-4	Vinyl Acetate	25	U
75-34-3	1,1-Dichloroethane	5.1	U
78-93-3	2-Butanone	5.1	U
594-20-7	2,2-Dichloropropane	5.1	U
156-59-2	cis-1,2-Dichloroethene	5.1	U
74-97-5	Bromochloromethane	5.1	U
67-66-3	Chloroform	5.1	U
71-55-6	1,1,1-Trichloroethane	5.1	U
563-58-6	1,1-Dichloropropene	5.1	U
56-23-5	Carbon Tetrachloride	5.1	U
71-43-2	Benzene	5.1	U
107-06-2	1,2-Dichloroethane	5.1	U
79-01-6	Trichloroethene	5.1	U
78-87-5	1,2-Dichloropropane	5.1	U
74-95-3	Dibromomethane	5.1	U
75-27-4	Bromodichloromethane	5.1	U
108-10-1	4-Methyl-2-Pentanone	5.1	U
108-88-3	Toluene	5.1	U
10061-02-6	t-1,3-Dichloropropene	5.1	U
10061-01-5	cis-1,3-Dichloropropene	5.1	U
79-00-5	1,1,2-Trichloroethane	5.1	U
142-28-9	1,3-Dichloropropane	5.1	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

335-GP-022-SS12

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4556.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 2 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
110-75-8	2-Chloroethyl vinyl ether	5.1	U
591-78-6	2-Hexanone	5.1	U
124-48-1	Dibromochloromethane	5.1	U
106-93-4	1,2-Dibromoethane	5.1	U
127-18-4	Tetrachloroethene	5.1	U
108-90-7	Chlorobenzene	5.1	U
630-20-6	1,1,1,2-Tetrachloroethane	5.1	U
100-41-4	Ethyl Benzene	5.1	U
136777-61-2	m/p-Xylenes	5.1	U
95-47-6	o-Xylene	5.1	U
100-42-5	Styrene	5.1	U
75-25-2	Bromoform	5.1	U
98-82-8	Isopropylbenzene	5.1	U
79-34-5	1,1,2,2-Tetrachloroethane	5.1	U
96-18-4	1,2,3-Trichloropropane	5.1	U
108-86-1	Bromobenzene	5.1	U
103-65-1	n-propylbenzene	5.1	U
95-49-8	2-Chlorotoluene	5.1	U
108-67-8	1,3,5-Trimethylbenzene	5.1	U
106-43-4	4-Chlorotoluene	5.1	U
98-06-6	tert-Butylbenzene	5.1	U
95-63-6	1,2,4-Trimethylbenzene	5.1	U
135-98-8	sec-Butylbenzene	5.1	U
99-87-6	p-Isopropyltoluene	5.1	U
541-73-1	1,3-Dichlorobenzene	5.1	U
106-46-7	1,4-Dichlorobenzene	5.1	U
104-51-8	n-Butylbenzene	5.1	U
95-50-1	1,2-Dichlorobenzene	5.1	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.1	U
120-82-1	1,2,4-Trichlorobenzene	5.1	U
87-68-3	Hexachlorobutadiene	5.1	U
91-20-3	Naphthalene	5.1	U
1634-04-4	Methyl tert-butyl Ether	5.1	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-022-SS12

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4556.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 2 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
87-61-6	1,2,3-Trichlorobenzene	5.1	U

FORM I VOA 3/90

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
335-GP-022-SS12

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No. L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4556.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 1.8 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 76-13-1	Ethane, 1,1,2-trichloro-1,2,	4.71	8.1	J
2.	Column Bleed	25.86	6.5	JB
3.	Column Bleed	30.70	5.8	JB
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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

335-GP-022-SS17

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4560.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 4 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	5.2	U
74-87-3	Chloromethane	5.2	U
75-01-4	Vinyl Chloride	5.2	U
74-83-9	Bromomethane	5.2	U
75-00-3	Chloroethane	5.2	U
75-69-4	Trichlorofluoromethane	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
67-64-1	Acetone	5.2	U
75-15-0	Carbon Disulfide	5.2	U
75-09-2	Methylene Chloride	5.2	U
156-60-5	trans-1,2-Dichloroethene	5.2	U
108-05-4	Vinyl Acetate	26	U
75-34-3	1,1-Dichloroethane	5.2	U
78-93-3	2-Butanone	5.2	U
594-20-7	2,2-Dichloropropane	5.2	U
156-59-2	cis-1,2-Dichloroethene	5.2	U
74-97-5	Bromochloromethane	5.2	U
67-66-3	Chloroform	5.2	U
71-55-6	1,1,1-Trichloroethane	5.2	U
563-58-6	1,1-Dichloropropene	5.2	U
56-23-5	Carbon Tetrachloride	5.2	U
71-43-2	Benzene	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
79-01-6	Trichloroethene	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
74-95-3	Dibromomethane	5.2	U
75-27-4	Bromodichloromethane	5.2	U
108-10-1	4-Methyl-2-Pentanone	5.2	U
108-88-3	Toluene	5.2	U
10061-02-6	t-1,3-Dichloropropene	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
142-28-9	1,3-Dichloropropane	5.2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
335-GP-022-SS17

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4560.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 4 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
110-75-8	2-Chloroethyl vinyl ether	5.2	U
591-78-6	2-Hexanone	5.2	U
124-48-1	Dibromochloromethane	5.2	U
106-93-4	1,2-Dibromoethane	5.2	U
127-18-4	Tetrachloroethene	1.9	J
108-90-7	Chlorobenzene	5.2	U
630-20-6	1,1,1,2-Tetrachloroethane	5.2	U
100-41-4	Ethyl Benzene	5.2	U
136777-61-2	m/p-Xylenes	5.2	U
95-47-6	o-Xylene	5.2	U
100-42-5	Styrene	5.2	U
75-25-2	Bromoform	5.2	U
98-82-8	Isopropylbenzene	5.2	U
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U
96-18-4	1,2,3-Trichloropropane	5.2	U
108-86-1	Bromobenzene	5.2	U
103-65-1	n-propylbenzene	5.2	U
95-49-8	2-Chlorotoluene	5.2	U
108-67-8	1,3,5-Trimethylbenzene	5.2	U
106-43-4	4-Chlorotoluene	5.2	U
98-06-6	tert-Butylbenzene	5.2	U
95-63-6	1,2,4-Trimethylbenzene	5.2	U
135-98-8	sec-Butylbenzene	5.2	U
99-87-6	p-Isopropyltoluene	5.2	U
541-73-1	1,3-Dichlorobenzene	5.2	U
106-46-7	1,4-Dichlorobenzene	5.2	U
104-51-8	n-Butylbenzene	5.2	U
95-50-1	1,2-Dichlorobenzene	5.2	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.2	U
120-82-1	1,2,4-Trichlorobenzene	5.2	U
87-68-3	Hexachlorobutadiene	5.2	U
91-20-3	Naphthalene	5.2	U
1634-04-4	Methyl tert-butyl Ether	5.2	U

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VOLATILE ORGANICS ANALYSIS DAT SHEET

SAMPLE NO.
335-GP-022-SS17

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4560.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 4 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
87-61-6	1,2,3-Trichlorobenzene	5.2	U

FORM I VOA 3/90

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VOLATILE ORGANICS ANALYSIS D' \ SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

335-GP-022-SS17

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No. L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4560.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 3.5 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 76-13-1	Ethane, 1,1,2-trichloro-1,2,	4.67	7.7	J
2.	Column Bleed	25.86	6.2	JB
3.	Column Bleed	30.66	17	JB
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VOLATILE ORGANICS ANALYSIS DAT. :EET

SAMPLE NO.
335-GP-023-SS7

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4557.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 4 Date Analyzed: 05/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	5.2	U
74-87-3	Chloromethane	5.2	U
75-01-4	Vinyl Chloride	5.2	U
74-83-9	Bromomethane	5.2	U
75-00-3	Chloroethane	5.2	U
75-69-4	Trichlorofluoromethane	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
67-64-1	Acetone	8.2	
75-15-0	Carbon Disulfide	5.2	U
75-09-2	Methylene Chloride	2	
156-60-5	trans-1,2-Dichloroethene	5.2	U
108-05-4	Vinyl Acetate	26	U
75-34-3	1,1-Dichloroethane	5.2	U
78-93-3	2-Butanone	5.2	U
594-20-7	2,2-Dichloropropane	5.2	U
156-59-2	cis-1,2-Dichloroethene	5.2	U
74-97-5	Bromochloromethane	5.2	U
67-66-3	Chloroform	5.2	U
71-55-6	1,1,1-Trichloroethane	5.2	U
563-58-6	1,1-Dichloropropene	5.2	U
56-23-5	Carbon Tetrachloride	5.2	U
71-43-2	Benzene	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
79-01-6	Trichloroethene	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
74-95-3	Dibromomethane	5.2	U
75-27-4	Bromodichloromethane	5.2	U
108-10-1	4-Methyl-2-Pentanone	5.2	U
108-88-3	Toluene	5.2	U
10061-02-6	t-1,3-Dichloropropene	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
142-28-9	1,3-Dichloropropane	5.2	U

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VOLATILE ORGANICS ANALYSIS DAT IEET

SAMPLE NO.
335-GP-023-SS7

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4557.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 4 Date Analyzed: 05/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
110-75-8	2-Chloroethyl vinyl ether	5.2	U
591-78-6	2-Hexanone	5.2	U
124-48-1	Dibromochloromethane	5.2	U
106-93-4	1,2-Dibromoethane	5.2	U
127-18-4	Tetrachloroethene	5.2	U
108-90-7	Chlorobenzene	5.2	U
630-20-6	1,1,1,2-Tetrachloroethane	5.2	U
100-41-4	Ethyl Benzene	5.2	U
136777-61-2	m/p-Xylenes	5.2	U
95-47-6	o-Xylene	5.2	U
100-42-5	Styrene	5.2	U
75-25-2	Bromoform	5.2	U
98-82-8	Isopropylbenzene	5.2	U
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U
96-18-4	1,2,3-Trichloropropane	5.2	U
108-86-1	Bromobenzene	5.2	U
103-65-1	n-propylbenzene	5.2	U
95-49-8	2-Chlorotoluene	5.2	U
108-67-8	1,3,5-Trimethylbenzene	5.2	U
106-43-4	4-Chlorotoluene	5.2	U
98-06-6	tert-Butylbenzene	5.2	U
95-63-6	1,2,4-Trimethylbenzene	5.2	U
135-98-8	sec-Butylbenzene	5.2	U
99-87-6	p-Isopropyltoluene	5.2	U
541-73-1	1,3-Dichlorobenzene	5.2	U
106-46-7	1,4-Dichlorobenzene	5.2	U
104-51-8	n-Butylbenzene	5.2	U
95-50-1	1,2-Dichlorobenzene	5.2	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.2	U
120-82-1	1,2,4-Trichlorobenzene	5.2	U
87-68-3	Hexachlorobutadiene	5.2	U
91-20-3	Naphthalene	5.2	U
1634-04-4	Methyl tert-butyl Ether	5.2	U

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VOLATILE ORGANICS ANALYSIS DAT 1EET

SAMPLE NO.
335-GP-023-SS7

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4557.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 4 Date Analyzed: 05/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
87-61-6	1,2,3-Trichlorobenzene	5.2	U

FORM I VOA 3/90

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VOLATILE ORGANICS ANALYSIS D A SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
335-GP-023-SS7

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No. L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4557.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 3.9 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 76-13-1	Ethane, 1,1,2-trichloro-1,2,	4.67	10	J
2.	Column Bleed	25.86	6.2	JB
3.	Column Bleed	30.70	11	JB
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VOLATILE ORGANICS ANALYSIS DAT. IEET

SAMPLE NO.
335-GP-023-SS12

Lab Name: CHEMTECH Contract: IMPACK ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4558.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 5 Date Analyzed: 05/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	5.3	U
74-87-3	Chloromethane	5.3	U
75-01-4	Vinyl Chloride	5.3	U
74-83-9	Bromomethane	5.3	U
75-00-3	Chloroethane	5.3	U
75-69-4	Trichlorofluoromethane	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
67-64-1	Acetone	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-09-2	Methylene Chloride	2.2	J
156-60-5	trans-1,2-Dichloroethene	5.3	U
108-05-4	Vinyl Acetate	26	U
75-34-3	1,1-Dichloroethane	5.3	U
78-93-3	2-Butanone	5.3	U
594-20-7	2,2-Dichloropropane	5.3	U
156-59-2	cis-1,2-Dichloroethene	5.3	U
74-97-5	Bromochloromethane	5.3	U
67-66-3	Chloroform	5.3	U
71-55-6	1,1,1-Trichloroethane	5.3	U
563-58-6	1,1-Dichloropropene	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
71-43-2	Benzene	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
79-01-6	Trichloroethene	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
74-95-3	Dibromomethane	5.3	U
75-27-4	Bromodichloromethane	5.3	U
108-10-1	4-Methyl-2-Pentanone	5.3	U
108-88-3	Toluene	5.3	U
10061-02-6	t-1,3-Dichloropropene	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
142-28-9	1,3-Dichloropropane	5.3	U

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VOLATILE ORGANICS ANALYSIS DAT, IEET

SAMPLE NO.
335-GP-023-SS12

Lab Name: CHEMTECH Contract: IMPACK ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4558.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 5 Date Analyzed: 05/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
110-75-8	2-Chloroethyl vinyl ether	5.3	U
591-78-6	2-Hexanone	5.3	U
124-48-1	Dibromochloromethane	5.3	U
106-93-4	1,2-Dibromoethane	5.3	U
127-18-4	Tetrachloroethene	5.3	U
108-90-7	Chlorobenzene	5.3	U
630-20-6	1,1,1,2-Tetrachloroethane	5.3	U
100-41-4	Ethyl Benzene	5.3	U
136777-61-2	m/p-Xylenes	5.3	U
95-47-6	o-Xylene	5.3	U
100-42-5	Styrene	5.3	U
75-25-2	Bromoform	5.3	U
98-82-8	Isopropylbenzene	5.3	U
79-34-5	1,1,2,2-Tetrachloroethane	5.3	U
96-18-4	1,2,3-Trichloropropane	5.3	U
108-86-1	Bromobenzene	5.3	U
103-65-1	n-propylbenzene	5.3	U
95-49-8	2-Chlorotoluene	5.3	U
108-67-8	1,3,5-Trimethylbenzene	5.3	U
106-43-4	4-Chlorotoluene	5.3	U
98-06-6	tert-Butylbenzene	5.3	U
95-63-6	1,2,4-Trimethylbenzene	5.3	U
135-98-8	sec-Butylbenzene	5.3	U
99-87-6	p-Isopropyltoluene	5.3	U
541-73-1	1,3-Dichlorobenzene	5.3	U
106-46-7	1,4-Dichlorobenzene	5.3	U
104-51-8	n-Butylbenzene	5.3	U
95-50-1	1,2-Dichlorobenzene	5.3	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.3	U
120-82-1	1,2,4-Trichlorobenzene	5.3	U
87-68-3	Hexachlorobutadiene	5.3	U
91-20-3	Naphthalene	5.3	U
1634-04-4	Methyl tert-butyl Ether	5.3	U

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VOLATILE ORGANICS ANALYSIS DAT. HEET

SAMPLE NO.
335-GP-023-SS12

Lab Name: CHEMTECH Contract: IMPACK ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4558.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 5 Date Analyzed: 05/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
87-61-6	1,2,3-Trichlorobenzene	5.3	U

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VOLATILE ORGANICS ANALYSIS D A SHEET
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SAMPLE NO.
335-GP-023-SS12

Lab Name: CHEMTECH Contract: IMPACK ENVIRONMENTAL

Project No. L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O05

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4558.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 5.2 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 76-13-1	Ethane, 1,1,2-trichloro-1,2,	4.67	10	J
2.	Column Bleed	25.86	5.3	JB
3.	Column Bleed	30.66	10	JB
4.				
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VOLATILE ORGANICS ANALYSIS DAT HEET

SAMPLE NO.
335-GP-023-SS17

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4559.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 3 Date Analyzed: 05/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	5.2	U
74-87-3	Chloromethane	5.2	U
75-01-4	Vinyl Chloride	5.2	U
74-83-9	Bromomethane	5.2	U
75-00-3	Chloroethane	5.2	U
75-69-4	Trichlorofluoromethane	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
67-64-1	Acetone	5.2	U
75-15-0	Carbon Disulfide	5.2	U
75-09-2	Methylene Chloride	5.2	U
156-60-5	trans-1,2-Dichloroethene	5.2	U
108-05-4	Vinyl Acetate	26	U
75-34-3	1,1-Dichloroethane	5.2	U
78-93-3	2-Butanone	5.2	U
594-20-7	2,2-Dichloropropane	5.2	U
156-59-2	cis-1,2-Dichloroethene	5.2	U
74-97-5	Bromochloromethane	5.2	U
67-66-3	Chloroform	5.2	U
71-55-6	1,1,1-Trichloroethane	5.2	U
563-58-6	1,1-Dichloropropene	5.2	U
56-23-5	Carbon Tetrachloride	5.2	U
71-43-2	Benzene	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
79-01-6	Trichloroethene	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
74-95-3	Dibromomethane	5.2	U
75-27-4	Bromodichloromethane	5.2	U
108-10-1	4-Methyl-2-Pentanone	5.2	U
108-88-3	Toluene	5.2	U
10061-02-6	t-1,3-Dichloropropene	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
142-28-9	1,3-Dichloropropane	5.2	U

1A
VOLATILE ORGANICS ANALYSIS DAT/ IEET

SAMPLE NO.
335-GP-023-SS17

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4559.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 3 Date Analyzed: 05/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
110-75-8	2-Chloroethyl vinyl ether	5.2	U
591-78-6	2-Hexanone	5.2	U
124-48-1	Dibromochloromethane	5.2	U
106-93-4	1,2-Dibromoethane	5.2	U
127-18-4	Tetrachloroethene	5.2	U
108-90-7	Chlorobenzene	5.2	U
630-20-6	1,1,1,2-Tetrachloroethane	5.2	U
100-41-4	Ethyl Benzene	5.2	U
136777-61-2	m/p-Xylenes	5.2	U
95-47-6	o-Xylene	5.2	U
100-42-5	Styrene	5.2	U
75-25-2	Bromoform	5.2	U
98-82-8	Isopropylbenzene	5.2	U
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U
96-18-4	1,2,3-Trichloropropane	5.2	U
108-86-1	Bromobenzene	5.2	U
103-65-1	n-propylbenzene	5.2	U
95-49-8	2-Chlorotoluene	5.2	U
108-67-8	1,3,5-Trimethylbenzene	5.2	U
106-43-4	4-Chlorotoluene	5.2	U
98-06-6	tert-Butylbenzene	5.2	U
95-63-6	1,2,4-Trimethylbenzene	5.2	U
135-98-8	sec-Butylbenzene	5.2	U
99-87-6	p-Isopropyltoluene	5.2	U
541-73-1	1,3-Dichlorobenzene	5.2	U
106-46-7	1,4-Dichlorobenzene	5.2	U
104-51-8	n-Butylbenzene	5.2	U
95-50-1	1,2-Dichlorobenzene	5.2	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.2	U
120-82-1	1,2,4-Trichlorobenzene	5.2	U
87-68-3	Hexachlorobutadiene	5.2	U
91-20-3	Naphthalene	5.2	U
1634-04-4	Methyl tert-butyl Ether	5.2	U

1A
VOLATILE ORGANICS ANALYSIS DAT HEET

SAMPLE NO.
335-GP-023-SS17

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: L4253 Site: 299 MAIN S Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4559.D

Level: (low/med) LOW Date Received: 05/04/01

% Moisture: not dec. 3 Date Analyzed: 05/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
87-61-6	1,2,3-Trichlorobenzene	5.2	U

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VOLATILE ORGANICS ANALYSIS D A SHEET

TENTATIVELY IDENTIFIED COM, UNDS

SAMPLE NO.

335-GP-023-SS17

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No. L4253 Site: 299 MAIN Location: LB13711 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E4559.D

Level: (low/med) LOW Date Received: 5/4/01

% Moisture: not dec. 3.4 Date Analyzed: 5/15/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 2

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 76-13-1	Ethane, 1,1,2-trichloro-1,2,	4.67	9.3	J
2.	Column Bleed	30.66	8.8	JB
3.				
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Final

Focussed Remedial Investigation Report

Regarding:

299 Main Street Site
Westbury, New York
(Site Code 1-30-043S)

Submitted to:

The New York State
Department of Environmental Conservation

September 2000

IMPACT ENVIRONMENTAL

a division of impact environmental consulting, inc.

1 VILLAGE PLAZA, KINGS PARK, NEW YORK 11754 ❖ 631.269.8800 TELEPHONE ❖ 631.269.1599 FACSIMILE ❖ IMPACTENVIRONMENTAL.COM

Final

Focussed Remedial Investigation Report

Regarding:

299 Main Street Site
Westbury, New York
(Site Code 1-30-043S)

Richard Parrish, P.G.
Project Manager

Kevin Kleaka
Quality Control Officer

IMPACT ENVIRONMENTAL

a division of impact environmental consulting, inc.

1 VILLAGE PLAZA, KINGS PARK, NEW YORK 11754 ❖ 631.269.8800 TELEPHONE ❖ 631.269.1599 FACSIMILE ❖ IMPACTENVIRONMENTAL.COM

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1. INTRODUCTION

This Focused Remedial Investigation (FRI) report details the implementation and results of tasks that were scoped to investigate the environmental quality of 299 Main Street, Westbury, New York, herein identified as the "Site". The current owner of the Site is 2632 Realty Development Corp. This FRI report is submitted in accordance with the provisions of the Order on Consent between the NYSDEC and 2632 Realty Development Corp. dated June 30, 1999. The FRI tasks were performed in accordance with the FRI Work Plan submitted to and approved by the NYSDEC on June 4, 1999, and the USEPA document, Guidance for Conducting Remedial Investigations and Feasibility Studies Under the Comprehensive Environmental Response, Compensation and Liability Act, October 1988.

The Site is located within the western portion of the New Cassel Industrial Area (NCIA). The NCIA occupies an area of approximately 170 acres. A water quality study performed on groundwater within the NCIA by the County of Nassau in 1986 detected extensive and elevated concentrations of volatile organic contaminants in the regional groundwater. Consequently, in 1988 the New York State Department of Environmental Conservation (NYSDEC) designated the entire NCIA an Inactive Hazardous Waste Disposal Site (IHWDS), as defined in ECL: 27-1301.2.

In 1997, a Multi-site PSA Task 4 Report prepared by Lawler, Matusky and Skelly Engineers (LMS) for the NYSDEC suggested that individual properties within the NCIA contained the pollution sources responsible for the detected regional groundwater contamination. In recognition of this, the NYSDEC eliminated the regional listing approach and adopted a strategy of locating individual properties within the NCIA for listing as an IHWDS. Based upon an interpretation of the data in the LMS report, the NYSDEC determined that the Site was one of such properties. As such, the Site was listed on the State registry of IHWDS as site 01-30-043S.

1.1 Objectives and Scope

The approved FRI Work Plan was designed to delineate the nature, source and extent of contamination beneath the Site. The "focus" aspect of the FRI relates to acquiring strategic data to confirm or refute the Site as a primary or contributory source of chlorinated organic groundwater contamination. By virtue of proper procedure, it is also intended to comment on other groundwater aspects. Accordingly, an attempt was made to identify and test all existing and former on-site point and non-point pollution sources, and to evaluate what, if any, impact they had upon local and regional groundwater quality.

To identify all of the existing and former on-site point and non-point pollution sources, the following tasks were performed.

- Review of Site land use history.
- Review of previous on and off-site soil and groundwater quality investigations.
- Review of applicable records maintained by Local, State and Federal regulatory agencies.
- Review of geologic factors impacting contaminant migration.
- Interior inspection of the Site.
- Exterior inspection of the tentatively identified pollution source features.
- Remote survey of the Site exterior surface areas.
- Destructive survey of Site features.
- Groundwater sampling and analysis.
- Subsurface soil sampling and analysis.
- Survey and gauging of groundwater monitoring wells.
- Data tabulation.
- Data validation.
- Data interpretation.

2. SITE BACKGROUND STUDY

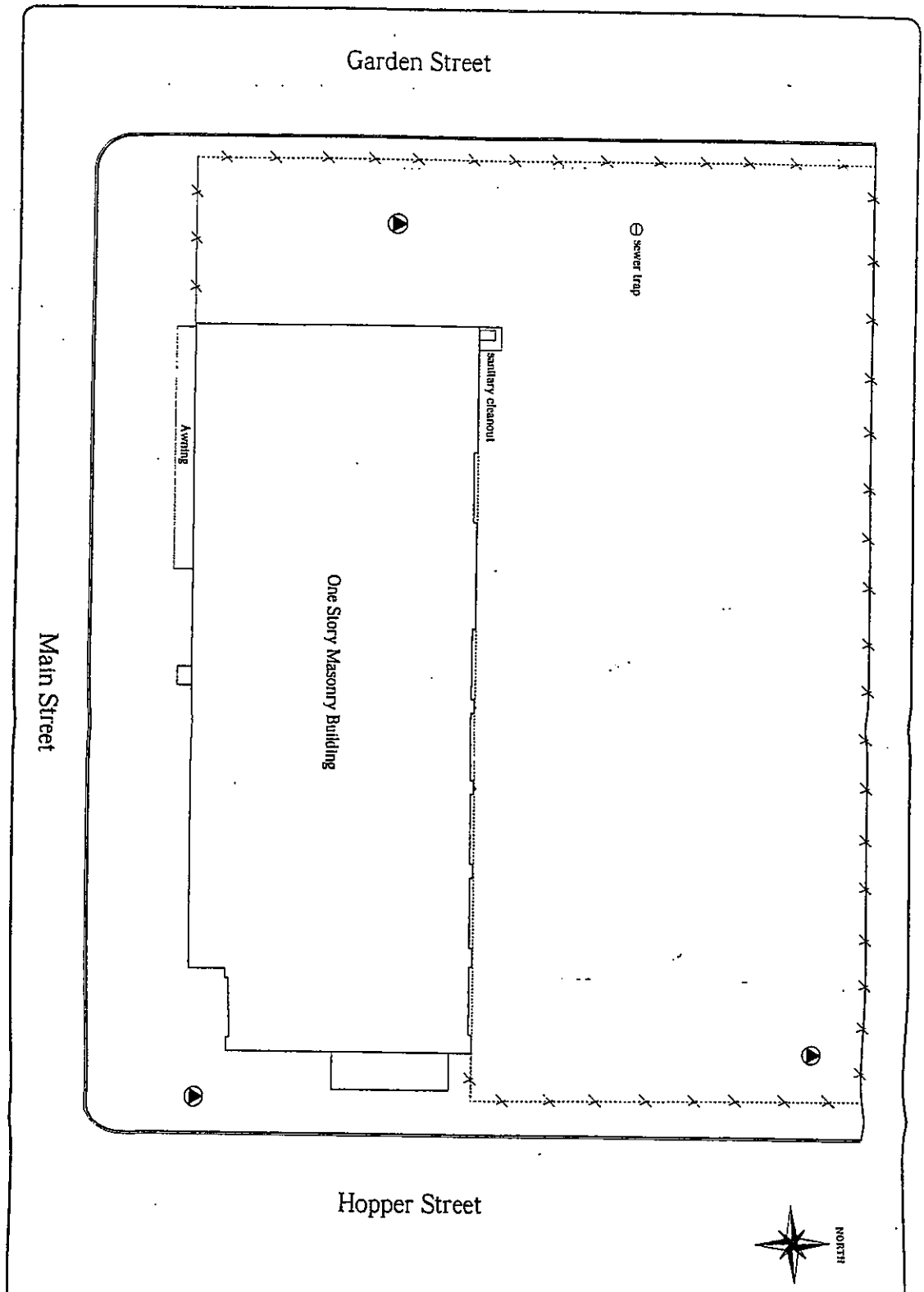
2.1 Site Description

The Site is located at 299 Main Street, Westbury, New York, and is designated by the Nassau County Tax Assessors Office as Section 11, Block 144, Lots 35-46. The Site is situated in the western section of the NCIA (see **Plate 1**) and encompasses an areal extent of approximately 35,700 square feet (see **Plate 2**). The NCIA is located in the unincorporated Village of Westbury, in the Town of North Hempstead, Nassau County, New York. The NCIA is comprised of individual properties with an aggregate area of approximately 170 acres. The NCIA is bordered by the Long Island Rail Road to the north, Old County Road to the south, Grand Boulevard to the west and Frost Street to the east.

The properties contained within the NCIA were mainly developed between the 1950s and 1960s. The NCIA is primarily composed of industrial and commercial properties. It is estimated that approximately two hundred industrial and/or commercial businesses operate within the NCIA (LMS, 1994). Numerous types of industrial operations are performed at these facilities. Such operations generally require the storage and handling of chlorinated and/or halogenated volatile organic chemicals (solvents, degreasers, etc.). Prior to the late 1970s and early 1980s, when public sewer services became available, the facilities within the NCIA discharged wastewater to individual on-site sanitary waste disposal systems (cesspools, seepage pits).

The Site is bordered by Main Street to the south, a salvage yard to the north, Garden Street to the west and Hopper Street to the east. The Site was initially developed circa 1956 with one single-story, steel framed, masonry building. Subsequently, the building was improved with several additions and alterations. Presently, the existing building has an approximate footprint of 9,450 square feet. The existing building is serviced with a natural gas fired heating system and was connected to the public sewer system by 1987 (Leamond, Haefner, Cauller and Stackelberg, 1991).

Plate 1: Site Location Map, Westbury, New York,



Impact Environmental
a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754
516 268 8600 TELEPHONE
516.268.1599 FACSIMILE

98-335
Plate 2: Site Map
Westbury, New York

Legend:
- groundwater probe node
- soil probe node
- monitoring well

scale: 1" = 20'

2632 RDC-01056

The Site was originally developed for light industrial applications. Such land uses have historically included automotive repair, automotive storage, automotive sales, automotive salvage, and bulk petroleum transportation. Based upon a review of reverse telephone directories, the former occupants of the Site were identified to include Mid-Island Transit, Crestwood Bus Service, Asphalt Petroleum, Island Transportation, Frank's Used Auto, Jarrid Limo Service, Sam-Ton Salvage, Scibelli Automotive and One Auto & Truck Center (COLE, 1971-1999). The Site is currently occupied by Dealer Quality Collision, an automotive collision repair shop.

In addition to those former Site operators identified from the telephone directories, 2632 Realty Development Corp. possessed records indicating the following.

Tenant	Period of Occupancy
Star Bus Company, Inc./Crestwood Bus Service, Inc.	Pre-1971
Island Transportation Corp.	1971 to 1981
Sam-Ton Salvage and Towing, Inc./Sam-Ton Salvage, Inc./Sam-Ton Foreign and American Auto Salvage, Inc.	1981-1993
Phil's Auto and Truck Repairs/One Stop Auto and Truck Repairs	1994 to 1997
Salvage Recovery Systems, Inc.	1997 to present

2632 Realty Development Corp. has never occupied or conducted operations at the Site.

2.2 Previous Investigations

2.2.1 New Cassel Industrial Area

In 1986, the Nassau County Department of Health (NCDH) conducted an investigation of contaminated aquifer segments in Nassau County, New York. This investigation was implemented to identify the most significant sources of groundwater contamination in the County, and to determine the extent and sources of the contamination. Based on the results of data obtained from this investigation, the environmental quality of the groundwater underlying the NCIA was determined to be substantially impaired, and required further study (NCDH, 1986) The aquifers of Long Island are utilized as a sole-source supply of public drinking water. As such, the detected groundwater contamination created a potential threat to the local public drinking water supply wells (Westbury and Bowling Green Water Districts).

As a result of the investigation, the NYSDEC classified the entire NCIA as a Class 2 Inactive Hazardous Waste Disposal Site in 1988. As such, all of the property owners within the NCIA became Potentially Responsible Parties (PRPs). In 1992, LMS was contracted by the NYSDEC to conduct additional investigative activities within the NCIA. The purpose of this investigation was to define the nature and extent of groundwater contaminants beneath the NCIA, identify potential point sources of contamination, and redefine the NCIA according to measured contamination (LMS, 1997). The objectives of this investigation were attained by executing a large-scale subsurface investigation in conjunction with a review of government agency records for individual properties within the NCIA. The information procured from the record review was compiled into a comprehensive database detailing individual property attributes. This included tax map information, addresses, past and current occupants, wastewater discharge history, recorded spills, historic environmental conditions and a historic chemical inventory.

Upon determining suspected contaminant sources, an investigation plan was developed. This plan consisted of the sampling and analysis of soil and groundwater from strategic locations throughout the NCIA. The design and implementation of this plan was to provide data that would delineate contaminant plume characteristics.

The investigation report completed by LMS in 1994 identified several areas exhibiting significant groundwater contamination within the NCIA (LMS, 1994). These contaminated areas were divided into three areas identified as the western, central and eastern sections. Said investigation report indicated that two apparently overlapping contaminant plumes were detected in the western section; three separate contaminant plumes were detected in the central section; and two separate contaminant plumes were detected in the eastern section. This data analysis was necessary to establish a graphical representation of contaminant plume boundaries, that was used to identify suspected contaminant sources. These investigative findings were the basis that enabled the NYSDEC to document PRPs associated with properties suspected as contaminant sources

or contributors, and to eliminate PRPs within areas exhibiting ambient groundwater quality conditions.

Consequent to documenting a registry of PRPs associated with individual IHWDSs, property owners petitioned to de-list (remove) their properties from the State registry of IHWDS. In response to these requests, the NYSDEC de-listed numerous sites from the registry. However, this agreement was stipulated under the provision that if additional investigations confirmed these properties to be a source of contamination, they would be re-listed (LMS, 1995).

In accordance with the stipulations reserved for PRPs de-listing their properties, the NYSDEC contracted LMS Engineers to conduct additional investigations within the NCIA. These investigations were specifically designed to document a more precise understanding of contaminant sources and plumes than reported in previous investigations. The methods for achieving this information were similar to previous investigations. In addition to a more detailed subsurface investigation, site inspections of individual facilities were conducted to further assess contaminant source potential. These additional investigations are documented in reports dated February 1995 and March 1997. Based on the data obtained from these investigations, a revised registry of facilities was documented. The classifications of these facilities vary depending on their individual status. In conclusion, LMS Engineers recommended that further investigations be conducted in highly contaminated areas, and that interim remedial measures be conducted on the identified source areas to remove any continuing source of contamination to the aquifer systems.

2.2.2 299 Main Street Site

Under the scope of the investigations in the 1994 and 1995 NYSDEC and LMS reports, a historic records inventory was compiled for properties within the western section of the NCIA. The records compiled pertained to matters regarding land use applications, former occupants', chemical storage inventory and wastewater disposal practices. The

information compiled revealed that historic land uses of the Site were industrious and that former occupants of the Site were involved with the automotive industry and bulk storage transportation. Records review identified that former occupants of the Site utilized and/or generated eighty gallons of TCE per year, five hundred gallons of methanol per year, five hundred-twenty gallons of mineral spirits per year and three thousand-seven hundred and ten gallons of waste oil per year. These chemical inventories were catalogued when Island Transportation and Asphalt Petroleum occupied the Site between 1971 and 1982. The estimated duration of occupancy at the Site appeared to have been derived from a review of the Cole reverse telephone directory. Prior to the connection to the public sewer system, historic wastewater discharge was directed to an on-site sanitary disposal system.

Additionally, the scope of the NYSDEC and LMS investigations included facility inspections. The Site was inspected in April 1994 by LMS. The inspection revealed that One Stop Auto Truck Centers occupied the Site since April of 1994 and operated as an automobile and truck service garage. The inspection indicated that the business did not utilize underground storage tanks. There were no floor drains identified within the building interior, although there was a grated drain along the garage doors. The outfall location of this drain was unknown,as the rear lot had recently been paved, covering over signs of old leaching pools. Several features identified at the Site suggested the use of underground chemical storage tanks.

Based on the investigative findings of the NYSDEC and LMS reports between 1992 and 1997 for the western section of the NCIA, it was determined that a contaminant plume of chlorinated organic compounds traversed the southeast corner of the Site. This contaminant plume was identified as the "Garden Street/Hopper Street Plume". According to the 1994 and 1995 reports, the analyte within the plume that was detected at the most significant concentrations was tetrachloroethene (PCE). The PCE detected was identified near the northeastern and southeastern corners of 542 Main Street (Al's Tool and Die). The concentrations of PCE detected at these locations elevated significantly with an increase of vertical depth into the aquifer. With regards to the Trichloroethene

(TCE) contamination detected in the "Garden Street/Hopper Street Plume", elevated concentrations were detected at locations near 86 Garden Street (Harmon Associates). Based on observed TCE concentrations and corresponding degradation products, it was concluded that two overlapping contaminant plumes exist for this analyte.

The reports summarize that a release of PCE has occurred in the vicinity or up-gradient of 542 Main Street and that the up-gradient extent of this PCE plume appeared to be in the vicinity of 110 Hopper Street. The reports identify potential sources for this PCE plume to include 110 Hopper Street and the properties at the southern end of tax map block 145 (559 Main Street). The reports also indicate that 542 Main Street, 534 Main Street and 95 Hopper Street are potential PCE sources. Therefore, based on the potential for multiple sources of PCE and TCE contamination, LMS recommended that the Garden Street/Hopper Street Plume area be listed as Class 2 or 2a. As such, 110 Hopper Street, 559 Main Street, 534 Main Street, 542 Main Street, 95 Hopper Street and 567 Main Street were identified as potential registry sites.

With specific regards to the Site, the 1995 report documented that groundwater and soil quality data secured up-gradient failed to detect target analytes (chlorinated PCE or TCE). Additionally, it was documented that down-gradient groundwater data was not significantly elevated in comparison to the up-gradient data. The 1995 report concludes that the data obtained on the Site did not support a correlation with the major contaminant plume, and therefore should not be included in the registry.

Although the 1995 report recommended that the Site should not be included in the registry, it remained listed as a potential registry site as evidenced in the 1997 Multi-Site PSA Task 4 Report. This most recent investigation involved the collection of additional data points in the Garden Street/Hopper Street plume area and specifically in the vicinity of the Site. Additional data points were secured at locations hydraulically up-gradient and down-gradient of the Site. The investigative findings determined that the PCE contamination detected in the Garden Street/Hopper Street plume was horizontally and vertically extensive. The highest concentrations of PCE were detected in the vicinity of

95 Hopper Street and in the northern sections of Swalm Avenue. However, based on the documented historic chemical use and an interpretation of the comprehensive data that had been compiled from all investigative activities, it was suggested that the Site was a contaminant source and has impacted groundwater quality. This was the basis for the Site listing on the registry as a Class 2 IHWDS.

2.3 Government Record Inventory

The background study of the Site was extended to include a review of applicable documentation from Local, State and Federal regulatory agencies. The data was reviewed to identify any potential on-site point and non-point pollution sources. Point pollution sources are those generated from a recognizable source to a specific location (e.g. an underground injection well, an underground storage tank, a settling lagoon). Non-point pollution sources are those generated from a non-recognizable source and non-specific location (e.g. surface spills to a permeable media, spills to a semi-permeable containment structure). All of the records were obtained pursuant to the Freedom of Information Act (FOIA). Copies of all applicable records obtained are presented in **Appendix A.2**.

In many cases, conflicting data was identified from the review of the Government records. Data that was determined to be in conflict with other data compiled under the scope of this FRI, or data determined to be erroneous is discussed in **Section 2.5** of this report.

2.3.1 Federal Records

FOIA obtained records received from the United States Environmental Protection Agency (USEPA) indicated that the Site was listed on the Comprehensive Environmental, Response, Compensation, and Liability Information System (CERCLIS). Said listing identified the Site as being part of the NCIA IHWDS (NY0001095363). The Site was not listed on the National Priority List (NPL) or the ERNS list.

The Site, as previously operated by Island Transportation, was identified as having been a RCRA hazardous waste generator (NYD020576898).

2.3.2 State Records

FOIA obtained records reviewed from the NYSDEC indicated that the Site was listed as an IHWDS (130043S). The Site is also listed on the Active Petroleum Spill Logs

(9309400 and 9706902) for the release of waste oil, antifreeze and other unknown petroleum products to the ground surface (no groundwater impact indicated) due to poor housekeeping practices.

The Site was not listed as a solid waste management facility. The site was not listed on the current State Pollutant Discharge Elimination Systems (SPDES) permit listing. The Site was not listed on either the Chemical or Petroleum Bulk Storage Listings (CBS/ PBS). The Site was not listed on the Major Oil Storage Facilities (MOSF) listing.

2.3.3 Local Records

FOIA obtained records reviewed from the Nassau County Department of Health (NCDH) indicated that the Site was listed on the Department's Industrial Chemical Survey. The survey, which was completed in 1977, indicated that the Site occupant (Island Transportation Corp.) utilized eighty gallons of TCE per year. The TCE was listed as being dispensed with an evaporator from a 275-gallon above ground storage/holding tank. The TCE was utilized to coat the inside of bituminous asphalt cement tank trucks on the east-side of the building. The same survey indicates that the Site included cesspools, which were on the west-side of the property north of the building, for septic and wastewater (detergent wash) disposal.

Inspection records on-file with the Department dated 1978 indicated that all wastes were handled in a way to minimize spillage into the floor drains. Inspection records on-file with the Department dated 1979 indicated that a floor drain was utilized within the eastern portion of the building (where TCE was stored and applied). The floor drain was identified to discharge to an exterior underground injection well north of the building. Additionally, the report detailed the on-site sanitary system to include three covers that were inferred by NCDH to correlate to three cesspools. A surface discharge of about one gallon of an unknown petroleum substance was noted on the southeast corner of the Site.

Inspection records on-file with the Department dated 1998 indicated that the Site utilized no on-site underground injection wells.

The NCDH files included a NYSDEC Part 360 application dated 1978 to hold and haul hazardous waste. Said permit was to replace a previously issued SPDES permit. A copy of the SPDES permit was included. Subsequently filed Part 360 reporting forms indicated that the facility terminated its use of TCE in 1979.

The NCDH files included a letter from the USEPA dated 1990 that indicated that the Site utilized underground injection wells for waste water disposal. The letter further advised that all injection wells utilized at the Site would have to be abandoned.

FOIA obtained records from the Nassau County Fire Commission indicated that the Site facilitated one ten-thousand gallon capacity underground diesel oil storage tank (installed in 1972), two four-thousand gallon capacity underground diesel oil storage tanks (installed in 1963), and one four-thousand gallon capacity underground gasoline storage tank (installed in 1966). The records indicated that the tanks were abandoned in-place in 1990.

FOIA obtained records from the Town of North Hempstead Building Department indicated that the Site was originally developed in 1956. An extension, which developed the property to its current configuration, was added to the building in 1966. A fire, which destroyed the west side of the building, occurred late in the 1980s.

The plans for the extension performed in 1966 included detailed scaled drawings of the interior drainage systems. Said systems included a floor drain in the eastern portion of the building that discharged to an exterior underground injection well located approximately nineteen feet north of the building, and a service pit further west that included a floor drain that discharged to a separate exterior underground injection well located approximately nineteen feet north of the building via a grease trap.

The Building Department records also contained information relating to the installation of one 4,000-gallon capacity underground gasoline storage tank. Said tank was proposed to be installed adjacent to two previously installed 4,000-gallon capacity underground diesel oil storage tanks.

Records on-file with the Town of North Hempstead Assessors Office as compiled by the law firm of Rivkin, Radler and Kremer indicated the following ownership history.

Prior Owner – New Owner	Date of Transfer
Michael Polezzo – Frank Scappatura Subsequently transferred to Frank Scappy Associates, Inc. f/k/a FSR Realty Corp.	1956
Frank Scappy Associates, Inc. f/k/a FSR Realty Corp. – Frank Scappaturra	1977
Frank Scappaturra – 2632 Realty Development Corp.	1994
2632 Realty Development Corp. - Nicolia Industries	1996
Nicolia Industries – 2632 Realty Development Corp.	1998

2.4 Geological Background Study

2.4.1 Subsurface Geology

The geology of Long Island consists of thick deposits of unconsolidated, water bearing sediments resting upon a relatively impermeable, crystalline bedrock surface. The sequence of events that shaped Long Island's geology is not known with certainty, but it probably began with the formation of the original basement rocks in early Paleozoic to Precambrian time more than 400 million years ago. These basement rocks were heated and compressed (metamorphosed) by folding and faulting, producing a rugged, mountainous topography. During the subsequent period ending with the late Cretaceous Epoch 100 million years ago, erosion reduced the land to a nearly planer surface that gently tilted to the southeast.

During the late Cretaceous Epoch (60-100 million years ago), streams brought sediments from the north and the west to the Long Island area on the continental margin, forming a permeable sand layer (Lloyd Sand Member of the Raritan Formation) and overlying clay member (clay member of the Raritan Formation) upon the bedrock surface. After a short period of erosion or non-deposition, thick, permeable beds of river delta clay, sand, and gravel were deposited on the Raritan Formation; these deposits comprise the Magothy Aquifer. Toward the close of the Late Cretaceous period (approximately 60 million years ago), a sand and clay unit (Monmouth Group) of low permeability was deposited in shallow marine waters in the area that now constitutes Long Island's south shore.

A long period of non-deposition, or possibly deposition followed by erosion, occurred after the Cretaceous era. Geologic activities during this time left few sedimentary traces, but streams flowing across Long Island cut deep valleys into the Magothy. It was not until late Pleistocene (Wisconsinian) glaciation- some 20 to 200 thousand years ago- that there were any significant additions to Long Island's geologic record. Valleys were filled and the other deposits were almost completely buried by glacial deposits. Prior to the southward movement of the Pleistocene ice sheets to Long Island, an extensive clay unit (Gardiners Clay) was deposited in shallow marine and brackish waters along the shores of what is now Suffolk County. This unit rested upon the Magothy and Monmouth Group, and acted as a confining layer. The northern portions of the Gardiners were subsequently eroded by advancing ice and glacial meltwaters, and Gardiners Clay beds are now found only in the south shore area.

In the area of the Site the bedrock exists at an elevation of approximately seven hundred feet below sea level. The top of the Raritan confining unit exists at an elevation of five hundred feet below sea level (Smolensky and Feldman, 1988). The top of the Magothy Aquifer exists at an elevation of approximately 30 feet above sea level. There is no confining layer with extensive horizontal continuity overlying the Magothy Aquifer. In many areas of Westbury and Hicksville there is no confining layer between the Magothy and Glacial Aquifers. They are only differentiated by their hydraulic conductivities (50

vs. 270 ft/day) (Franke and Cohen, 1972). Localized clay lenses are present within this area of the Magothy Aquifer, but their location and extent have not been delineated.

2.4.1.1 Topography

The Pleistocene glaciation created the hilly Ronkonkoma moraine along Long Island's "spine" and south fork, and the Harbor Hill Moraine along the North shore and the North fork. Erosion of these morainal deposits (as the glacier melted away from Long Island) created extensive outwash plains of sand and gravel in the intermorainal area and south to the Atlantic Ocean. These highly permeable deposits comprise the upper glacial aquifer and represent the majority of Long Island's surficial sediments. Some local confining clay units were also formed from glacial materials in intermorainal lakes and tidal lagoons. Since the end of glaciation, about 12,000 years ago, Holocene beach and marsh deposits have been formed along the marine edge, and within stream corridors and ponds.

The elevation of the Site, as presented on the United States Geologic Survey (USGS), Hicksville Quadrangle Map, approximates one hundred twenty (120) feet above sea level. The USGS Map, which was base dated 1943, field checked in 1967, and photorevised in 1979, did not depict a structure on the Site (the property is within an area in which only landmark buildings were mapped).

2.4.1.2 Soil Component Identification

Nassau County is divided into ten general soil units, or groups of soils geographically associated in a characteristic repeating pattern, according to the Soil Survey of Nassau County, New York (U.S. Department of Agriculture, U.S. Soil Conservation Service). The general soil component of the Site, as defined by this publication, is the *Urban Land Association*. This Association consists of dominantly nearly level or gently sloping areas that are covered by buildings, roads, sidewalks, and parking lots on plains and low hills.

The Soil Survey also describes detailed soil units that each represent an area on the landscape consisting of one or more soils for which the unit is named. The detailed

component of the Site is identified by this Survey as the *Urban Land-Hempstead Complex (Uh).* This soil type consists of urbanized areas and very deep, well-drained soils on nearly level plains. Slope ranges from 0 to 3 percent, and slope is less than 2 percent in most of the areas that are not near drainage-ways or depressions.

This unit is described as a soil complex because the urbanized areas and Hempstead soils are so intermingled that it was not practical to classify them separately. This soil complex is made up of about 75 percent urbanized areas, 20 percent Hempstead soils, and 5 percent other soils. The urbanized areas consist of buildings, roads, driveways, parking lots, and other man-made structures.

Typical sequence, depth and composition of the layers of Hempstead Series Soils are as follows:

Depth In Soil Profile	Soil Description
Surface to 11 inches	black silt loam
11 to 15 inches	dark brown silt loam
15 to 29 inches	yellowish brown silt loam
29 to 33 inches	strong brown very gravelly loamy sand
33 to 60 inches or more	very pale brown sand and gravel

2.4.1 Hydrology

Nassau County relies upon its underlying groundwater as a sole source for drinking water (aquifer). It is therefore necessary for regulatory agencies to monitor the quality of the water. To do this, a complex network of groundwater monitoring wells have been installed by various public and private agencies so that water samples can be acquired and analyzed. The complexity of the monitoring well system stems from Long Island's geologic history, which has different water bearing and retarding levels and zones.

2.4.1.1 Groundwater Characteristics

The Site lies within Hydrogeologic Zone II, The Deep Flow - Magothy Recharge Area (Nassau-Suffolk 208 Study - Water Management Zones in Nassau and Suffolk). Zone II is an area characterized by substantially impaired groundwater quality. The public water supply in the area is available from the Westbury Water District.

Regional groundwater flow direction in the area of the Site is anticipated to be towards the south with a slight western component. The water table is encountered at approximately 54 feet below existing grade.

2.4.1.2 Groundwater Quality

Groundwater quality throughout the NCIA has been impacted by a number of organic compound contaminant plumes. This is detailed on a regional and site basis in **Section 2.2** of this report.

2.5 Conflicts in Data Derived from Background Study

Conflicted data was handled in one of the following manners.

Confirmed erroneous data was not regarded.

Conflict issues were conservatively analyzed to determine if the scope of the FRI resolved questions regarding the their impact on the environmental quality of the Site.

Issues not properly considered are recommended for further consideration in **Section 9** of this report.

The following presents the relevant issues associated with each data conflict.

Data Conflict	Explanation of Conflict	FRI Modifications
1978 registry identifies three cesspools used for septic waste disposal as evidenced from the existence of three access covers to subsurface structures.	FRI investigative scope generates evidence of only one cesspool with one access cover. Second and third access cover determined to be former access to septic tank (modified to be the existing sewer clean-out).	No modifications made for the following reasons. • Former septic tank is a subject of the FRI investigation. • Former cesspool is a subject of the FRI investigation. • The FRI investigation included samples obtained on a grid pattern to address (statistically) unidentified pollution sources.
1978 registry identifies "8-9,000 gallon" cesspools for disposal of truck detergent wash.	FRI investigation has identified only four underground injection wells on the Site.	No modifications made for the following reasons. • Confusion as to the meaning of the registry comment as written (i.e. does it refer to nine cesspools with 8,000 gallon capacity or cesspools with a capacity of 8,000 to 9,000 gallons). • All former and existing underground injection wells identified on-site were the subject of the FRI investigation. • The FRI investigation included samples obtained on a grid pattern to address (statistically) unidentified pollution sources.

Data Conflict	Explanation of Conflict	FRI Modifications
Records from the Nassau County Office of the Fire Marshall indicate the presence of a fourth underground storage tank on the Site.	FRI investigation has identified only three underground storage tanks on the Site.	No modifications made for the following reasons. • The use of the three underground storage tanks found to be abandoned in-place on the Site was determined to have actuated a release of product to the Site. Consequently, the final recommendations presented in this report include the removal of all of the underground storage tanks situated on the Site. • Underground storage tank issues are not the focus of this investigation. • Contaminated media generated from virgin petroleum product releases from underground storage tanks are non-hazardous by definition (6 NYCRR Part 371). • The FRI investigation included samples obtained on a grid pattern to address (statistically) unidentified pollution sources.
NCDH records indicate that kerosene was stored and handled on the Site in the area of the abandoned petroleum storage tanks.	FRI investigation has identified only three underground storage tanks on the Site.	No modifications made for the following reasons. • The use of the three underground storage tanks found to be abandoned in-place on the Site was determined to have actuated a release of product to the Site. Consequently, the final recommendations presented in this report include the removal of all of the underground storage tanks situated on the Site. • Underground storage tank issues are not the focus of this investigation. • Contaminated media generated from virgin

		petroleum product releases from underground storage tanks are non-hazardous by definition (6 NYCRR Part 371). ▪ The FRI investigation included samples obtained on a grid pattern to address (statistically) unidentified pollution sources.
1979 NCDH records indicate the presence of a former storm water drywell north of the building. Said well was identified to be impacted by petrochemical contaminants.	FRI investigation failed to identify any evidence of this structure.	No modifications made for the following reasons. ▪ It is suspected that said drywell was considered in the scope of the FRI (pollution source PS-2). ▪ The FRI investigation included samples obtained on a grid pattern to address (statistically) unidentified pollution sources.
1979 NCDH records indicate that two of the abandoned storage tanks utilized at the Site were used to store waste oil.	NCFM records indicate that said tanks were used to store gasoline and diesel.	No modifications made for the following reasons. • NCFM is the agency delegated to regulate underground storage tanks in the County. • The work performed under the FRI would detect waste oil related contaminants.

3. SITE VISIT

Site visits were conducted from June 15, 1999 to September 1, 1999. The visits included interior and exterior inspections to identify any potential pollution sources. Remote and destructive survey work was also performed to identify subsurface pollution sources. The following provides the dates, the inspection team members and the work performed throughout the Site Visit aspect of the FRI.

Date	Inspection Team	Site Visit Type
June 15, 1999	Richard Parrish	Exterior Inspection
June 21, 1999 through June 24, 1999	Richard Parrish, Keith Franzen, Michelle Zimbieke	Remote Survey
July 20, 1999	Richard Parrish, Kevin Kleaka, Eric Krist	Interior Inspection and Destructive Survey
August 18, 1999	Richard Parrish, Kevin Kleaka	Destructive Survey
August 21, 1999	Richard Parrish, Kevin Kleaka	Exterior Inspection (modifications to sampling plan)
September 1, 1999	Richard Parrish, Kevin Kleaka	Interior Inspection, Exterior Inspection, Destructive Survey

3.1 Interior Inspection

In general, the building was found to consist of a one and partial two-story, steel framed, masonry block building with a 9,450 square foot surface area. The floor was constructed of a poured concrete slab. The interior partition walls were constructed with steel studs covered with 1/2" sheet rock. Natural gas service entered the building from the south side (along Main Street). Sanitary waste generated from the interior plumbing, which was limited to the west-side, traversed conduit that ran beneath the slab along the western-wall of the building. The waste presumably discharged to the sanitary clean-out (former septic tank)

During the inspection, small discontinuities in the floor surface were closely scrutinized to determine their structure and function. Attention was given to all steel conduits that could represent chemical storage tank vent or fill lines. Plumbing features were also closely inspected to determine building effluent paths. Features and discontinuities that were determined to be neither point nor non-point pollution sources were documented

(see **Plate 3** and Photographs 1 through 4). Such features included non-leaching dent pull cups and equipment mounting brackets utilized for automotive body repair apparatus.

There were three tentative pollution sources (TPSs) identified on-site during the interior inspection. Each of the sources was given an alpha index (starting at "A") progressing from west to east. Photographs of each of the structures that were identified are provided in **Appendix A.3** of this report.

Tentative Pollution Source A – Photograph 5

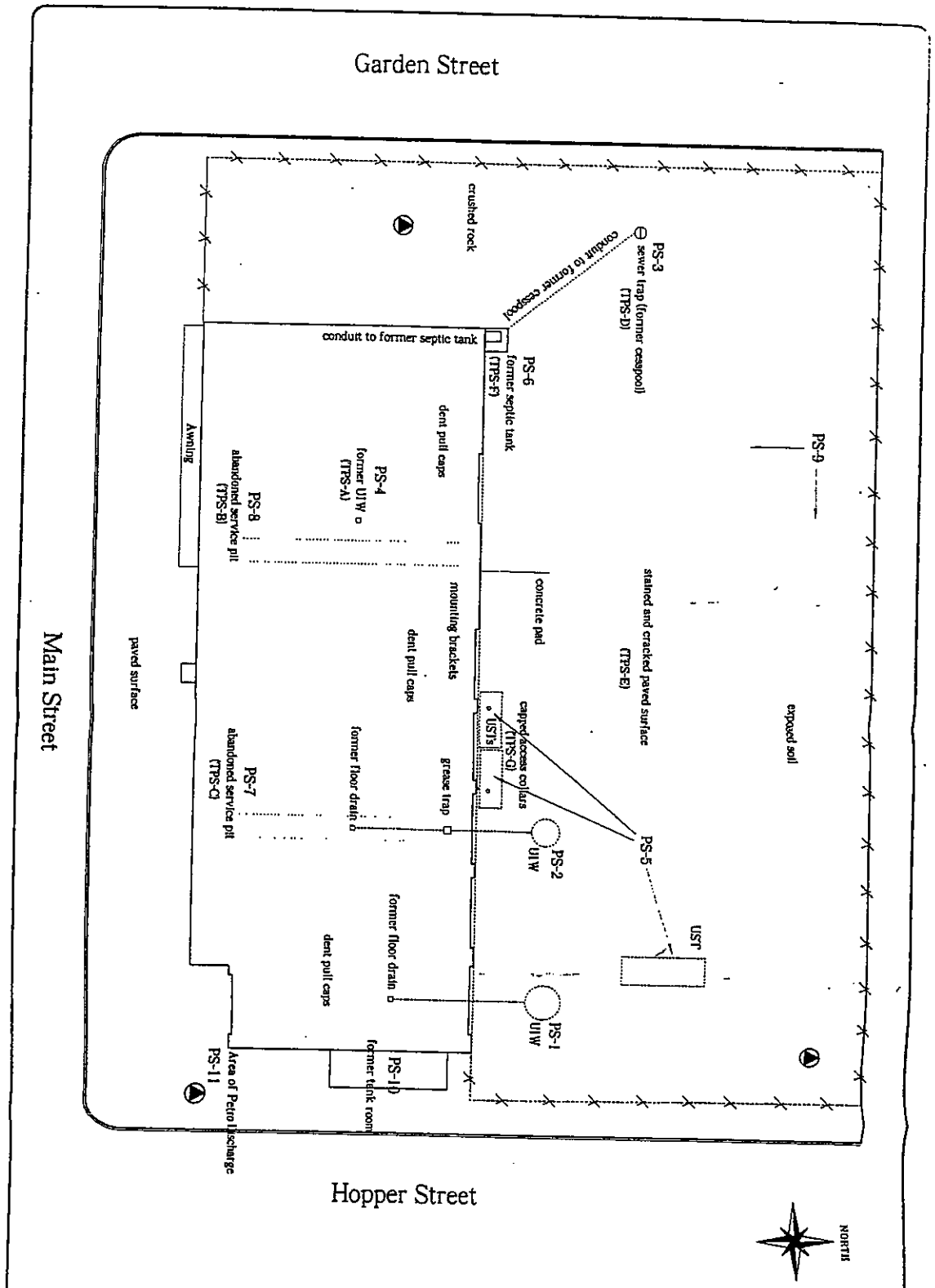
This structure consisted of a circular concrete patch within the floor. The feature had a diameter of approximately twelve inches. It was suspected that said feature represented an abandoned underground injection well or a floor drain leading to a remote underground injection well. Said feature was subjected to a destructive survey (see **Section 3.4**).

Tentative Pollution Source B – Photograph 6

This structure consisted of a large rectangular cut within the floor. The feature measured approximately forty feet in length (running north-south) and four feet in width (east-west). This appeared to be a former engine service pit (used to access the bottom of vehicle mounted engines) that was filled-in and capped with a concrete patch. There were a number of cut-outs and discontinuities within the cap that were potentially utilized as floor drains. Therefore, it was suspected that said feature, as defined by its function, represented an abandoned underground injection well (if it had an earthen invert) or a semi-permeable tank (if it had a concrete invert). Said feature was subjected to a destructive survey (see **Section 3.4**).

Tentative Pollution Source C – Photograph 7

This structure consisted of a large rectangular cut within the floor. The feature measured approximately forty feet in length (running north-south) and five feet in width (east-west). This appeared to be a former engine service pit that was filled-in and capped with a concrete patch. There were a number of cut-outs and discontinuities within the cap that



i.e.

Impact Environmental

a division of impact environmental consulting, inc.

1 Village Plaza
Kings Park, New York 11754
516.269.8600 Telephone
516.269.1600 Facsimile

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Plate 3: Pollution Source Map

Westbury, New York

Legend:
- ▲ groundwater probe node
- soil probe node
- monitoring well

scale: 1" = 20'

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were potentially utilized as floor drains. Therefore, it was suspected that said feature, as defined by its function, represented an abandoned underground injection well (if it had an earthen invert) or a semi-permeable tank (if it had a concrete invert). Said feature was subjected to a destructive survey (see **Section 3.4**).

Information gathered under the scope of the Government Records Inventory of this FRI regarding this source indicated that this feature had included a drain at its base that discharged to an exterior underground injection well via a grease trap (see **Section 2.3** of this report).

3.2 Exterior Inspection

The Site was determined to include twelve real property tax lots (35-46) that had an aggregate square footage of approximately 35,700. The Site exhibited low topographic relief (less than 1%). The surface area of the Site consisted of exposed soils (approximately 15%), asphalt driveways (approximately 45%), concrete pads (approximately 15%) and the existing building (approximately 25%).

There were four tentative pollution sources identified during the exterior inspection. Each of the sources was given an alpha index (starting with "D").

Tentative Pollution Source D

This feature consisted of a sub-grade access structure that housed the sewer trap. It was identified to be constructed of stacked masonry block, a pre-cast concrete dome and a cast iron access cover. The base of the structure was earthen and existed at a depth of approximately six feet below existing grade. This structure was determined to have formerly been an underground injection well (cesspool) as evidenced by its apparent age and construction. As such, it was identified as a confirmed point pollution source. It appears that said structure was converted to an access chamber for the sewer main trap.

Tentative Pollution Source E

The surface areas of the Site north of the building were noted to be stained by small discharges of chemical substances. It is likely that said stains were generated from the storage and handling of petrochemicals on the Site since its first development. The stained surfaces were permeable and/or semi-permeable. As such, the surface area of the Site was identified as a confirmed non-point pollution source.

Tentative Pollution Source F

This feature was determined to be a concrete septic tank that currently functioned as a sanitary clean-out. Said structure receives wastewater from the building interior and from an open grade structure situated outside of the western bay door (via a sump pump contained therein). The septic tank was constructed of semi-permeable concrete walls. As such, this was identified as a confirmed non-point pollution source.

Tentative Pollution Source G

These features were determined to be capped (with concrete) cast iron access collars to the abandoned underground storage tanks north of the building. As such, the tanks were identified as confirmed point pollution sources.

3.3 Remote Survey

A remote survey plan was performed over the entire exterior surface of the Site to identify any inaccessible TPSs. The survey was performed with a ground penetrating radar (GPR) unit. A complete copy of the survey can be found in **Appendix A.4** of this report.

An interpretation of the GPR imagery obtained from the Site revealed three anomalous features consistent with that of underground storage tanks. Another set of anomalous features was identified to be associated with a sanitary waste disposal system. These features are discussed below.

Three underground storage tanks were located adjacent to the north side of the building. The orientation of two of the tanks appeared to be such that their long axis ran parallel to the building (east-west). The long axis of the third tank ran perpendicular to the building. These tanks were identified as confirmed point pollution sources.

The sanitary waste disposal system appeared to include a conduit leading away from a former septic tank in a northwestern direction to a former cesspool. Scans performed in the area of the septic tank and cesspool failed to identify an overflow pool(s) for the cesspool. The imagery in these areas exhibited no anomalies, suggesting that the area contains undisturbed fill media. The septic tank and conduit were identified as confirmed non-point pollution sources.

3.4 Destructive Survey

A destructive survey was performed on Tentative Pollution Sources (TSPs) A, B and C to generate additional information with respect to their structure and function. The destructive work included using masonry saws, hydraulic hammers, pry bars and subsurface pilot probes to access and investigate each of the TSPs.

With respect to TSP-A, said feature was removed with a hydraulic hammer and pry bar to reveal a square structure with an earthen bottom. This was determined to have formerly functioned as an underground injection well. As such, it was identified as a confirmed point pollution source.

With respect to TSP-B, said feature was accessed with a hydraulic probing tool. The tool penetrated the feature to its base (6 feet below grade) which was determined to be solid (likely concrete). The feature was determined to contain standing water as evidenced by observations of liquid on the probe rods (see Photograph 9). This feature was determined to function as a semi-permeable storage tank. As such, it was identified as a confirmed non-point pollution source.

With respect to TSP-C, said feature was accessed with a masonry cutting saw and a hydraulic probing tool (see Photograph 8). The tool penetrated the feature to its base (7 feet below grade) which was confirmed to be solid (likely concrete). The medium used to backfill the pit was observed to be stained with a petrochemical substance (see Photograph 10). Said substance exhibited a gasoline-like odor. The feature was determined to contain four feet of standing water as evidenced by observations made on the probe rods (rods were wet). This feature was determined to function as a semi-permeable storage tank. As such, it was identified as a confirmed non-point pollution source.

In addition to the destructive survey work performed to provide information with respect to the TSPs revealed from the Site Visit, a second survey was performed respective of the Government Record Inventory (see **Section 2**). In particular, the two underground injection wells that were identified in Building Department Records as being connected to the two interior floor drains were further investigated. The survey involved using a hydraulic probing tool to detect the presence of the well structures (i.e. the block walls and domes) and to obtain subsurface pilot samples. This work was deemed prudent as site plans often vary from as-built conditions.

The survey work performed on the wells identified that each was located approximately fifteen feet north of the building as opposed to the nineteen feet scaled on the site plan. These facts were confirmed by the following.

Subsurface pilot probes installed to a depth of 8 feet at the locations of the injection wells as presented on the site plan (19 feet from the building) were found to consist of compacted undisturbed native soils. Pilot probe samples obtained from a depth of eight feet at the alternate locations (15 feet from the building) were found to contain uncompacted stained organic silts and fine sands indicative of sediment. Furthermore, a substantial void space was encountered at the eastern location, suggestive of an open cavity such as an injection well. Each of these injection wells was considered a confirmed point pollution source.

4. POLLUTION SOURCE SUMMARY

There were five point and six non-point pollution sources identified on-site from the data that were compiled in the Government Record Inventory (**2.2**), the Interior Site Visit (**3.1**), the Exterior Site Visit (**3.2**), the Remote Survey (**3.3**) and the Destructive Survey (**3.4**). Each of these sources was mapped (see **Plate 3**) and considered in the design and implementation of the Subsurface Investigation (see **Section 5**).

The following lists each pollution source, the location of the pollution source, the means in which the source was identified and a code that is used to describe the source throughout the rest of this report.

POINT POLLUTION SOURCES	LOCATION	HOW SOURCE WAS IDENTIFIED	POLLUTION SOURCE CODE
Underground Injection Well	North of the Eastern Wash Bay – Connected to Former Floor Drain	Gov't Record Inventory (2.2); Destructive Survey (3.4)	PS-1
Underground Injection Well	North of the Service Bay – Connected to Service Pit Via Grease Trap	Gov't Record Inventory (2.2); Destructive Survey (3.4)	PS-2
Former Cesspool	North of Westernmost Service Bay	Gov't Record Inventory (2.2); Exterior Inspection (3.2); Remote Survey (3.3)	PS-3
Former Interior Underground Injection Well	Within Building Interior	Interior Inspection (3.1); Remote Survey (3.3); Destructive Survey (3.4)	PS-4
Underground Petroleum Storage Tanks	North of the Building on Eastern Side of Site	Exterior Inspection (3.2); Remote Survey (3.3)	PS-5
NON-POINT POLLUTION SOURCES	LOCATION	HOW SOURCE WAS IDENTIFIED	
Former Septic Tank and Conduit	Adjacent to the Northwest Corner of Building	Gov't Record Inventory (2.2); Exterior Inspection (3.2); Remote Survey (3.3)	PS-6
Abandoned Service Pit – Easternmost	Building Interior	Gov't Record Inventory (2.2);Interior Inspection (3.1); Destructive Survey (3.4)	PS-7
Abandoned Service Pit – Westernmost	Building Interior	Interior Inspection (3.1); Destructive Survey (3.4)	PS-8
Exposed Soils, Stained and Cracked Pavements In Areas Used for the Storage and Handling of Petrochemicals	North of Building	Gov't Record Inventory (2.2); Site Visit (3.2)	PS-9
Concrete Floor Beneath the Former Above Ground TCE Storage Tank	Easternmost Portion of the Building	Gov't Record Inventory (2.2)	PS-10
Exposed Soil Subjected to Petrochemical Discharge	Adjacent to Southeast Corner of Building	Gov't Record Inventory (2.2)	PS-11

5. SUBSURFACE INVESTIGATION

Subsurface investigation tasks were performed to generate data on the environmental quality of the Site. The tasks included the sampling and laboratory analysis of soil and groundwater samples obtained from the Site. The tasks were performed over a period of 15 days from September 28, 1999 to October 28, 1999. The following lists the dates and corresponding activities performed as compiled from the Site Field Log (see **Appendix A.5**).

Date	Activities Performed
9/28/99	Pre-sampling launch meeting.
9/28/99	Utility mark-outs.
9/29/99	Final launch meeting. Survey of grid system.
9/30/99	Establishment of safety procedures. Soil sampling with Geoprobe.
10/1/99	Soil sampling with Geoprobe.
10/4/99	Soil sampling with Geoprobe.
10/12/99	Established security measures. Soil sampling with Geoprobe.
10/13/99	Soil sampling with Geoprobe.
10/14/99	Soil sampling with Geoprobe.
10/18/99	Groundwater monitoring wells installed.
10/19/99	Groundwater monitoring well installed. Measurement of water table. Groundwater sampling with Geoprobe.
10/20/99	Groundwater sampling with Geoprobe.
10/21/99	Groundwater sampling with Geoprobe.
10/22/99	Groundwater sampling with Geoprobe.
10/28/99	Groundwater sampling with Geoprobe. Monitoring well development and sampling.

All of the tasks were performed in conformance with the Health and Safety Plan approved in the FRI Work Plan.

The following sections detail the work that was performed to address each of the 11 Pollution Sources (PS) identified in **Section 4** of this report.

5.1 On-Site Point Pollution Sources

There were five point pollution sources identified from the Site Background Study (**Section 2**) and Site Visit (**Section 3**). Using a Geoprobe hydraulic probing tool, the following subsurface investigative activities were performed with respect to each of the sources. The analysis performed on each of the media samples is summarized in **Section**

5.4 of this report. Each of the sample locations is represented on **Plate 4**. Analytical results are presented in **Table 1**.

5.1.1 PS-1 (Underground Injection Well North of Eastern Wash Bay)

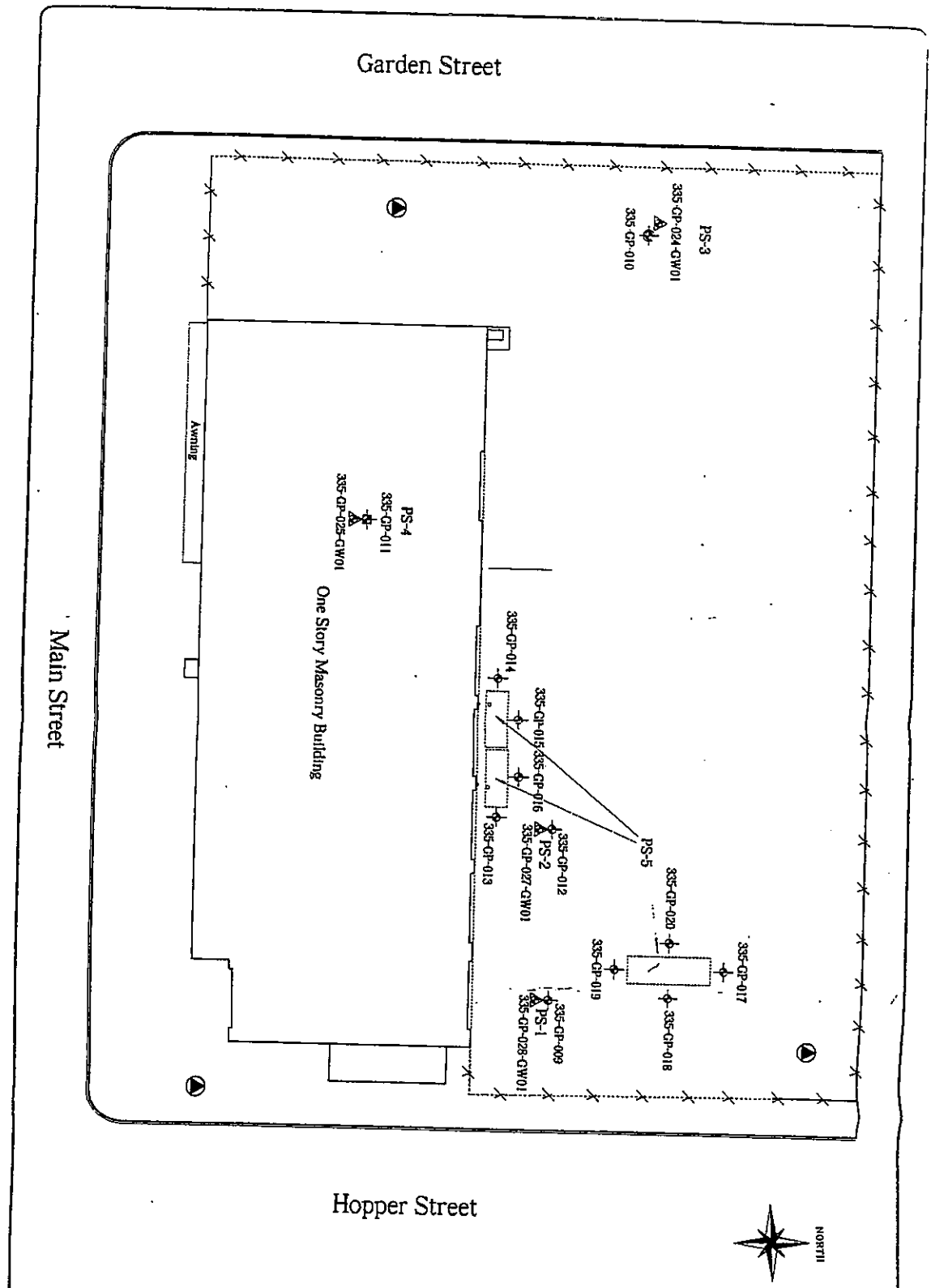
To evaluate the impact of this source on Site soil and groundwater quality, soil samples were secured from its center at three depths extending to forty-seven feet below existing grade (BEG). Said sampling location was designated GP-009. Samples secured from this location were secured at depths of 10 to 18 feet BEG, 30 to 32 feet BEG, and 45 to 47 feet BEG for subsequent laboratory analysis. Additionally, a groundwater sample, identified as sample GP-028-GW01, was secured from the saturated soil 54-58 feet below the center of the injection well.

5.1.2 PS-2 (Underground Injection Well North of Service Bay with Service Pit)

To evaluate the impact of this source on Site soil and groundwater quality, soil samples were secured from its center at three depths extending to forty-seven feet BEG. Said sampling location was designated GP-012. Samples secured from this location were secured at depths of 15 to 17 feet BEG, 30 to 32 feet BEG, and 45 to 47 feet BEG for subsequent laboratory analysis. Additionally, a groundwater sample, identified as sample GP-027-GW01, was secured from the saturated soil 54-58 feet below the center of the injection well.

5.1.3 PS-3 (Former Cesspool)

To evaluate the impact of this source on Site soil and groundwater quality, soil samples were secured from its center at three depths extending to forty-seven feet BEG. Said sampling location was designated GP-010. Samples secured from this location were secured at depths of 15 to 17 feet BEG, 30 to 32 feet BEG, and 45 to 47 feet BEG for subsequent laboratory analysis. Additionally, a groundwater sample, identified as sample GP-024-GW01, was secured from the saturated soil 54-58 feet below the center of the cesspool.



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Impact Environmental

a division of impact environmental consulting, inc.

1 Village Plaza
Kings Park, New York 11754
516.269.8800 TELEPHONE
516.269.1506 FACSIMILE

98-335

Plate 4: Point Source Investigation

Westbury, New York

Legend:
- ▲ groundwater probe node
- soil probe node
- monitoring well

scale: 1" = 20'

2632 RDC-01083

Table 1: Point Data Summary (1 of 7)

Volatile Organic Soil Analysis

Westbury New York

Site 01-30-043S

Sample ID	GP-009-SS10	GP-009-SS30	GP-009-SS45	GP-010-SS15	GP-010-SS30	GP-010-SS45	GP-011-SS15	GP-011-SS30	GP-011-SS45	GP-012-SS15	GP-012-SS30	GP-012-SS45
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:												
Dichlorodifluromethane	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloropropene	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U	U	U	U	U	U
2,2-Dichloropropane	U	U	U	U	U	U	U	U	U	U	U	U
2-Butanone	U	U	U	U	U	U	U	U	U	U	U	U
2-Chloroethyl Vinyl Ether	U	U	U	U	U	U	25	U	U	U	U	U
4-Methyl-2-Pentanone	U	U	U	U	U	U	U	U	U	U	U	U
Acetone	U	U	U	U	U	8.2	U	U	U	U	24	18
Acrolein	U	U	U	U	U	U	U	U	U	U	U	U
Acrylonitrile	U	U	U	U	U	U	U	U	U	U	U	U
Benzene	3800	U	U	U	U	U	U	U	U	U	U	U
Bromochloromethane	U	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U	U	U	U	U	U
Carbon Disulfide	U	U	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U	U	U	U	U	U
Chloroform	U	U	U	U	U	U	U	U	U	U	U	U
Chloromethane	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	43800E	8	3.8	U	U	U	13.0	U	U	U	U	U
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	U	U	U
Dibromoethane	U	U	U	U	U	U	U	U	U	U	U	U
Methylene Chloride	U	U	U	U	U	U	U	U	3.3	4.9	U	U
Toluene	89100E	400	8.6	U	3.4	2.9	30.0	U	U	8.9	U	U
Trans-1,2-Dichloroethene	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	U	U	U	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	U	U	U	U	U	U	U	U	U	U	U	U
Vinyl Acetate	U	U	U	U	U	U	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	U	U	U	U	U	U	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 1: Point Data Summary (2 of 7)

Volatile Organic Soil Analysis

Westbury New York

Site 01-30-043S

Sample ID	GP-009-SS10	GP-009-SS30	GP-009-SS45	GP-010-SS15	GP-010-SS30	GP-010-SS45	GP-011-SS15	GP-011-SS30	GP-011-SS45	GP-012-SS15	GP-012-SS30	GP-012-SS45
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:												
Tetrachloroethene	1200	4.8	U	U	U	U	U	U	U	U	U	U
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-Trichloropropane	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	62900E	U	7.5	U	2.5	U	13	U	4.9	4.6	8	U
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	110	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	160700E	810E	2.6	1400	U	U	4.2	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichloropropane	U	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
2-Chlorotoluene	9500	570E	U	U	U	U	U	U	U	U	U	U
2-Hexanone	U	U	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	9100	U	U	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene	14200	100	U	720	U	U	U	U	U	U	U	U
Bromobenzene	U	U	U	U	U	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	39800E	360E	2.0	U	U	U	6.1	U	U	U	U	U
Hexachlorobutadiene	U	U	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene	16000	180	U	U	U	U	U	U	U	U	U	U
m+p-Xylenes	154800E	710E	8.3	U	U	U	27	U	U	8	U	U
Napthanlene	47100E	U	U	720	U	U	5	U	U	U	U	U
n-Butylbenzene	U	U	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	U	U	U	U	U	U	U	U	U	U	U	U
o-Xylene	68900E	690E	3.3	U	3.7	3.1	8.5	U	U	2.5	U	U
sec-Butylbenzene	10900	U	U	U	U	U	U	U	U	U	U	U
Styrene	U	U	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	U	7	U	U	U	U	U	U	U	U	U	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 1: Point Data Summary (3 of 7)

Semi-Volatile Organic Soil Analysis

Westbury New York

Site 01-30-043S

Sample ID	GP-009-SS10	GP-009-SS30	GP-009-SS45	GP-010-SS15	GP-010-SS30	GP-010-SS45	GP-011-SS15	GP-011-SS30	GP-011-SS45	GP-012-SS15	GP-012-SS30	GP-012-SS45
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Semi-Volatiles:												
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
2,4-Dinitrotoluene	U	U	U	U	U	U	U	U	U	U	U	U
2,6-Dinitrotoluene	U	U	U	U	U	U	U	U	U	U	U	U
2-Chloronapthalene	U	U	U	U	U	U	U	U	U	U	U	U
2-Methylnaphthalene	1600	U	U	U	U	U	U	U	U	U	U	U
2-Nitroaniline	U	U	U	U	U	U	U	U	U	U	U	U
3-Nitroaniline	U	U	U	U	U	U	U	U	U	U	U	U
4-Chloroaniline	U	U	U	U	U	U	U	U	U	U	U	U
4-Chlorophenyl ether	U	U	U	U	U	U	U	U	U	U	U	U
Acenaphthene	U	U	U	U	U	U	U	U	U	U	U	U
Acenapthene	U	U	U	U	U	U	U	U	U	U	U	U
Bis(2-Chloroethoxy)methane	U	U	U	U	U	U	U	U	U	U	U	U
Bis(2-Chloroethyl)ether	U	U	U	U	U	U	U	U	U	U	U	U
Bis(2-Chloroisopropyl)ether	U	U	U	U	U	U	U	U	U	U	U	U
Dibenzofuran	U	U	U	U	U	U	U	U	U	U	U	U
Diethylphtalate	U	U	U	U	U	U	U	U	U	U	U	U
Dimethylphtalate	U	U	U	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	U	U	U	U	U	U	U	U	U	U	U	U
Hexachloroethane	U	U	U	U	U	U	U	U	U	U	U	U
Hexaclorocyclopentadiene	U	U	U	U	U	U	U	U	U	U	U	U
Isophorone	U	U	U	U	U	U	U	U	U	U	U	U
Naphthalene	U	U	U	U	U	U	U	U	U	U	U	U
Nitrobenzene	U	U	U	U	U	U	U	U	U	U	U	U
N-Nitroso-di-n-Propylamine	U	U	U	U	U	U	U	U	U	U	U	U

U: Indicates the comound was analyzed for, but was not detected.
J: Indicates an estimated value detected below the MDL.
E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 1: Point Data Summary (4 of 7)

Semi-Volatile Organic Soil Analysis

Westbury New York

Site 01-30-043S

Sample ID	GP-009-SS10	GP-009-SS30	GP-009-SS45	GP-010-SS15	GP-010-SS30	GP-010-SS45	GP-011-SS15	GP-011-SS30	GP-011-SS45	GP-012-SS15	GP-012-SS30	GP-012-SS45
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Semi-Volatiles:												
Fluorene	U	310	U	U	U	U	U	U	U	U	U	U
1,2-Diphenylhydrazine	U	U	U	U	U	U	U	U	U	U	U	U
3,3-Dichlorobenzidine	U	U	U	U	U	U	U	U	U	U	U	U
4-Bromophenyl-phenylether	U	U	U	U	U	U	U	U	U	U	U	U
4-Nitroaniline	U	U	U	U	U	U	U	U	U	U	U	U
Anthracene	U	U	U	U	U	U	U	U	U	U	U	U
Benzo-a-Anthracene	220	40	U	U	U	U	U	U	U	U	U	U
Benzo-a-Pyrene	U	J	U	U	U	U	U	U	U	U	U	U
Benzo-b-Fluoroanthene	U	J	U	U	U	U	U	U	U	U	U	U
Benzo-g,h,i-Perylene	U	U	U	U	U	U	U	U	U	U	U	U
Benzo-k-Fluoroanthene	U	J	U	U	U	U	U	U	U	U	U	U
Bis(2-Ethylhexyl)Phthalate	1900	110	U	1200	U	U	U	U	U	J	U	U
Butylbenzylphthalate	U	U	U	U	U	U	U	U	U	U	U	U
Carbazole	U	U	U	U	U	U	U	U	U	U	U	U
Chrysene	280	49	U	U	U	U	U	U	U	U	U	U
Dibenzo-a,h-Anthracene	U	U	U	U	U	U	U	U	U	U	U	U
Di-n-Butylphthalate	U	U	U	U	U	120	U	U	U	U	U	U
Di-n-Octylphthalate	U	U	U	42	U	U	U	U	U	U	U	U
Fluoranthene	2100	97	34	61	U	U	U	U	U	59	U	U
Hexaclorobenzene	U	U	F	U	U	U	U	U	U	U	U	U
Indeno(1,2,3-c,d)Pyrene	U	U	U	U	U	U	U	U	U	U	U	U
m,p-Cresol	U	U	U	U	U	U	U	U	U	U	U	U
N-Nitrosodiphenylamine	U	U	U	U	U	U	U	U	U	U	U	U
o-Cresol	U	U	U	U	U	U	U	U	U	U	U	U
Phenanthrene	U	370	35	110	U	U	U	U	U	U	U	U
Pyrene	1000	120	U	87	U	U	U	U	U	75	U	U

U: Indicates the comound was analyzed for, but was not detected.
J: Indicates an estimated value detected below the MDL.
E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 1: Point Data Summary (5 of 7)

Inorganic and TPH Soil Analysis

Westbury New York

Site 01-30-043S

Sample ID	GP-009-SS10	GP-010-SS15	GP-011-SS15	GP-012-SS15
Unit	Mg/Kg	Mg/Kg	Mg/Kg	Mg/Kg
Inorganics:				
Alumimium	993	609	712	U
Antimony	U	U	U	U
Arsenic	4.3	U	1.2	U
Barium	124	U	U	U
Beryllium	2.5	U	U	U
Cadmium	4.3	0.85	U	U
Calcium	1600	U	U	U
Chromium	U	3.1	12.9	U
Cobalt	U	U	U	U
Copper	90	17.8	6.2	U
Iron	4040	1800	3680	28.6
Lead	273	8.6	1.5	U
Magnesium	1260	U	U	U
Manganese	40	5.4	42.4	U
Mercury	U	U	U	U
Nickel	388	U	U	U
Potassium	U	U	U	U
Selenium	U	U	U	U
Silver	U	U	U	U
Sodium	U	U	U	2510
Thallium	U	U	U	U
Vanadium	1810	U	U	U
Zinc	62	35.2	4	U
Cyanide	U	U	U	U
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Total Petroleum Hydrocarbons:	3670	1520	41	U

U: Indicates the comound was analyzed for, but was not detected.
J: Indicates an estimated value detected below the MDL.
E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 1: Point Data Summary (6 of 7)

Volatile and Semi-Volatile Organic Soil Analysis

Westbury New York

Site 01-30-043S

Sample ID	GP-013-SS8	GP-013-SS12	GP-014-SS8	GP-014-SS12	GP-015-SS8	GP-015-SS12	GP-016-SS8	GP-016-SS12	GP-017-SS8	GP-017-SS12	GP-018-SS8	GP-018-SS12	GP-019-SS8	GP-019-SS12	GP-020-SS8	GP-020-SS12
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:																
1,2,4-Trimethylbenzene	U	U	5.3	74	U	960	12300	20500	330	12700	U	8700	5.8	19900	5	1400
1,3,5-Trimethylbenzene	U	5600	2.3	90	U	7100	6900	8000	390E	6600	2400	7100	3	6400	U	560E
Benzene	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	U	U	U	U	U	U	U	820	U	U	U	U	U	U	U	U
Isopropylbenzene	U	U	U	U	U	U	U	460	U	2100	U	U	U	610	U	U
m+p-Xylenes	U	1400	U	13	U	U	2800	13200	200	U	460	2000	2.7	6800	2.9	230
MTBE	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Napthalene	U	2000	U	U	U	U	2100	U	U	U	U	U	U	U	U	U
n-Butylbenzene	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	U	U	U	U	U	U	U	1700	U	U	U	U	U	1800	U	U
o-Xylene	U	1400	U	14	U	680	3900	8800	310E	2500	580	1900	2.1	4200	U	210E
sec-Butylbenzene	U	U	U	U	U	U	U	570	U	U	U	530	U	1700	U	U
TBA	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	U	10600	U	U	U	U	U	U	U	U	1200	U	U	U	U	U
Toluene	U	U	U	U	U	U	U	U	26	U	U	U	U	510	U	3.3
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Semi-Volatiles:																
Pyrene	U	150	U	U	120	U	170	120	230	230	480	U	U	310	U	120
Acenaphthene	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Acenaphthlyene	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Anthracene	U	U	U	U	U	U	U	U	U	200	U	U	U	U	U	U
Benzo(a)Anthracene	U	U	U	U	U	U	U	U	U	U	150	570	U	U	U	U
Benzo(a)Pyrene	U	U	U	U	U	U	U	U	U	U	130	440	U	U	U	U
Benzo(b)Fluoranthene	U	U	U	U	U	U	U	U	U	U	U	400	U	U	U	U
Benzo(g,h,I) Perylene	U	U	U	U	U	U	U	U	U	U	U	150	U	U	U	U
Benzo(k)Fluoranthene	U	U	U	U	U	U	U	U	U	U	140	460	U	U	U	U
Chrysene	U	U	U	U	U	U	U	U	U	U	160	550	U	U	U	U
Dibenz(a,h)Anthracene	U	U	U	U	U	U	U	U	U	U	U	490	U	46	U	U
Fluoranthene	U	U	U	U	U	U	U	U	U	160	350	1300	U	920	U	360
Fluorene	U	290	U	U	U	84	400	160	U	770	U	85	U	120	U	U
Indeno(1,2,3-cd) Pyrene	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Napthalene	U	910	U	U	U	U	1500	870	U	U	U	1300	U	2700	U	360
Phenanthrene	U	220	U	U	U	57	440	300	U	1300	320	1600	U	1400	U	610

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 1: Point Data Summary (7 of 7)

Volatile Organic Groundwater Analysis

Westbury, New York

Site 01-30-043S

Sample ID	GP-24-GW01	GP-25-GW01	GP-27-GW01	GP-28-GW01
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:				
1,1,1-Trichloroethane	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U
1,1-Dichloroethane	U	U	U	U
1,1-Dichloroethene	U	U	U	U
1,2-Dichlorobenzene	U	U	11	U
1,2-Dichloroethane	U	U	U	U
cis-1,2-Dichloroethene	U	U	31	U
1,2-Dichloropropane	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U
2-Chloroethyl Vinyl Ether	U	U	U	U
Benzene	U	U	2.8	U
Bromochloromethane	U	U	U	U
Bromodichloromethane	U	U	U	U
Bromoform	U	U	U	U
Bromomethane	U	U	U	U
Carbon Tetrachloride	U	U	U	U
Chlorobenzene	U	U	U	U
Chloroethane	U	U	U	U
Chloroform	U	U	U	U
Chloromethane	U	U	U	U
cis-1,3-Dichloropropene	U	U	U	U
Ethylbenzene	U	U	81	U
m+p Xylenes	U	U	98	U
Methylene Chloride	U	U	U	U
o-Xylene	U	U	75	U
Tetrachloroethene	U	U	U	U
Toluene	U	1.4	91	U
Trans-1,2-Dichloroethene	U	U	U	U
trans-1,3-Dichloropropene	U	U	U	U
Trichloroethene	U	U	U	U
Trichlorofluoromethane	U	U	U	U
Vinyl Chloride	U	U	J	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

5.1.4 PS-4 (Former Interior Underground Injection Well)

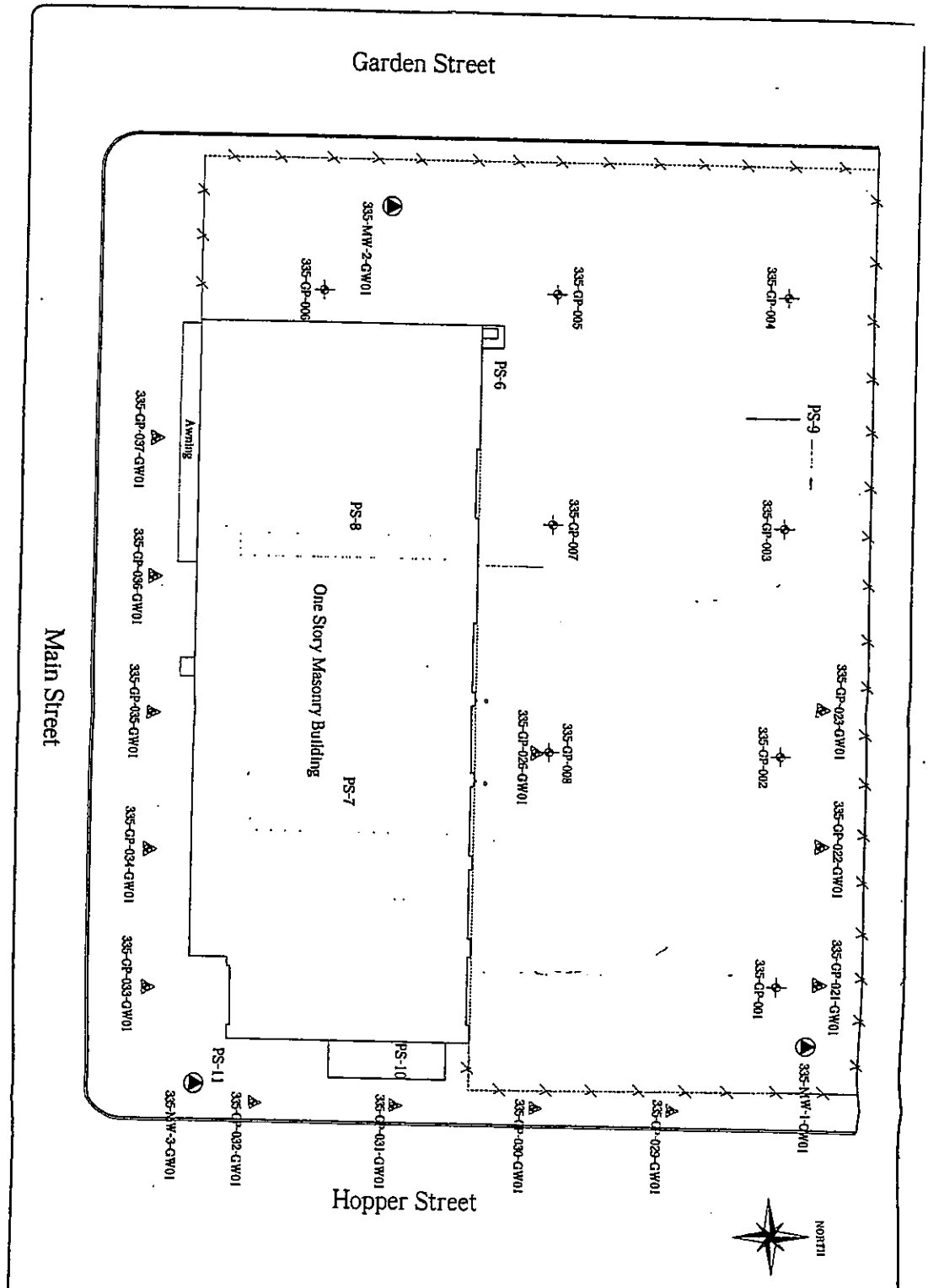
To evaluate the impact of this source on Site soil and groundwater quality, soil samples were secured from its center at three depths extending to forty-seven feet BEG. Said sampling location was designated GP-011. Samples secured from this location were secured at depths of 15 to 17 feet BEG, 30 to 32 feet BEG, and 45 to 47 feet BEG for subsequent laboratory analysis. Additionally, a groundwater sample, identified as sample GP-025-GW01, was secured from the saturated soil 54-58 feet below the center of the injection well.

5.1.5 PS-5 (Underground Storage Tanks)

To evaluate the impact of these sources on Site soil quality, soil samples were secured from locations adjacent to the walls of each tank from two depths. As two of the tanks were positioned end-to-end, and were immediately adjacent to the building, samples were obtained from only two of their four walls. The sampling locations installed around the tanks were designated GP-013, GP-014, GP-015, GP-016, GP-017, GP-018, GP-019 and GP-020. Samples secured from these locations were secured at depths of 8 to 10 feet BEG and 12 to 14 feet BEG for subsequent laboratory analysis.

5.2 On-Site Non-Point Pollution Sources

There were 6 non-point pollution sources identified from the Site Background Study (**Section 2**) and Site Visit (**Section 3**). Using a Geoprobe hydraulic probing tool and groundwater monitoring wells installed with a hollow stem auger, the following subsurface investigative activities were performed with respect to each of the sources. As many of the sources were investigated through a study of Site groundwater quality, many of the sample locations served to provide data on multiple sources. The analysis performed on each of the media samples is summarized in **Section 5.4** of this report. Each of the sample locations is represented on **Plate 5**. Analytical results are presented in **Table 2**.



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Impact Environmental

a division of impact environmental consulting, inc.

3 Village Plaza
Kings Park, New York 11754
[illegible] TELEPHONE
[illegible] FACSIMILE

98-335

Plate 5: Non-Point Source Investigation

Westbury, New York

Legend:
- ▲ groundwater probe node
- ⊕ soil probe node
- monitoring well

scale: 1" = 20'

2632 RDC-01092

Table 2: Non-Point Data Summary (1 of 6)

Volatile Organic Soil Analysis

Westbury New York

Site 01-30-043S

Sample ID	GP-001-SS10	GP-001-SS15	GP-001-SS30	GP-001-SS45	GP-001-SS60	GP-002-SS10	GP-002-SS15	GP-002-SS30	GP-002-SS45
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:									
Dichlorodifluromethane	U	U	U	U	U	U	U	U	U
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	U	U	U	U	U	U	U	U	U
1,1-Dichloropropene	U	U	U	U	U	U	U	U	U
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U	U
1,2,3-Trichloropropane	U	U	U	U	U	U	U	U	U
1,2,4-Triclorobenzene	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	U	U	U	U	U	U	U	U	U
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	U
1,3-Dichloropropane	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	U
2,2-Dichloropropane	U	U	U	U	U	U	U	U	U
2-Chlorotoluene	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene	U	U	U	U	U	U	U	U	U
Benzene	U	U	U	U	U	U	U	U	U
Bromobenzene	U	U	U	U	U	U	U	U	U
Bromochloromethane	U	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U	U	U
Chlorobenzene	U	U	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U	U	U
Chloroform	U	U	U	U	U	U	U	U	U
Chloromethane	U	U	U	U	U	U	U	U	U
Dibromochloromethane	U	U	U	U	U	U	U	U	U
Dibromoethane	U	U	U	U	U	U	U	U	U
Ethylbenzene	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	U	U	U	U	U	U	U	U	U
Isopropylbenzene	U	U	U	U	U	U	U	U	U
Methylene Chloride	U	U	U	U	U	U	U	U	U
Napthanlene	U	U	U	U	U	U	U	U	J
n-Butylbenzene	U	U	U	U	U	U	U	U	U
n-Propylbenzene	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	U	U	U	U	U	U	U	U	U
Styrene	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	U	U	U	U	U	U	U	U	U
Tetrachloroethene	U	U	U	U	U	U	U	U	U
Toluene	U	U	U	U	U	U	U	U	U
Trichloroethene	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	U	U	U	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	U	U	U	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 2: Non-Point Data Summary (2 of 6)

Volatile Organic Soil Analysis

Westbury, New York

Site 01-30-043S

Sample ID	GP-003-SS10	GP-003-SS15	GP-003-SS30	GP-003-SS45	GP-004-SS10	GP-004-SS15	GP-004-SS30	GP-004-SS45	GP-005-SS10
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:									
Dichlorodifluromethane	U	U	U	U	U	U	U	U	U
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	U	U	U	U	U	U	U	U	U
1,1-Dichloropropene	U	U	U	U	U	U	U	U	U
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U	U
1,2,3-Trichloropropane	U	U	U	U	U	U	U	U	U
1,2,4-Triclorobenzene	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	U	U	U	U	U	U	U	U	U
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	U
1,3-Dichloropropane	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	U
2,2-Dichloropropane	U	U	U	U	U	U	U	U	U
2-Chlorotoluene	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene	U	U	U	U	U	U	U	U	U
Benzene	U	U	U	U	U	U	U	U	U
Bromobenzene	U	U	U	U	U	U	U	U	U
Bromochloromethane	U	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U	U	U
Chlorobenzene	U	U	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U	U	U
Chloroform	U	U	U	U	U	U	U	U	U
Chloromethane	U	U	U	U	U	U	U	U	U
Dibromochloromethane	U	U	U	U	U	U	U	U	U
Dibromoethane	U	U	U	U	U	U	U	U	U
Ethylbenzene	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	U	U	U	U	U	U	U	U	U
Isopropylbenzene	U	U	U	U	U	U	U	U	U
Methylene Chloride	U	U	U	U	U	U	U	U	U
Napthanlene	U	U	U	U	U	U	U	U	U
n-Butylbenzene	U	U	U	U	U	U	U	U	U
n-Propylbenzene	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	U	U	U	U	U	U	U	U	U
Styrene	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	U	U	U	U	U	U	U	U	U
Tetrachloroethene	U	U	U	U	U	U	U	U	U
Toluene	U	U	U	U	U	U	U	U	U
Trichloroethene	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	U	U	U	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	U	U	U	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 2: Non-Point Data Summary (3 of 6)

Volatile Organic Soil Analysis

Westbury, New York

Site 01-30-043S

Sample ID	GP-005-SS15	GP-005-SS30	GP-005-SS45	GP-006-SS10	GP-006-SS15	GP-006-SS30	GP-006-SS45	GP-007-SS10
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:								
Dichlorodifluromethane	U	U	U	U	U	U	U	U
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U
1,1-Dichloroethane	U	U	U	U	U	U	U	U
1,1-Dichloropropene	U	U	U	U	U	U	U	U
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U
1,2,3-Trichloropropane	U	U	U	U	U	U	U	U
1,2,4-Triclorobenzene	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	U	U	28.0	U	U	U	U	U
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U
1,2-Dibromoethane	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	5.5	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	U	U	12.0	U	U	U	U	U
1,3-Dichlorobenzene	U	U	J	U	U	U	U	U
1,3-Dichloropropane	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	5.7	U	U	U	U	U
2,2-Dichloropropane	U	U	U	U	U	U	U	U
2-Chlorotoluene	U	U	U	U	U	U	U	U
4-Chlorotoluene	U	U	U	U	U	U	U	U
4-Isopropyltoluene	U	U	U	U	U	U	U	U
Benzene	U	U	U	U	U	U	U	U
Bromobenzene	U	U	U	U	U	U	U	U
Bromochloromethane	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U	U
Chlorobenzene	U	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U	U
Chloroform	U	U	U	U	U	U	U	U
Chloromethane	U	U	U	U	U	U	U	U
Dibromochloromethane	U	U	U	U	U	U	U	U
Dibromoethane	U	U	U	U	U	U	U	U
Ethylbenzene	U	U	U	U	U	U	U	U
Hexachlorobutadiene	U	U	U	U	U	U	U	U
Isopropylbenzene	U	U	U	U	U	U	U	U
Methylene Chloride	U	U	U	U	U	U	U	U
Napthanlene	U	U	J	U	U	U	U	U
n-Butylbenzene	U	U	U	U	U	U	U	U
n-Propylbenzene	U	U	U	U	U	U	U	U
sec-Butylbenzene	U	U	U	U	U	U	U	U
Styrene	U	U	U	U	U	U	U	U
tert-Butylbenzene	U	U	U	U	U	U	U	U
Tetrachloroethene	U	U	U	U	U	U	U	U
Toluene	U	U	U	U	U	U	U	U
Trichloroethene	U	U	U	U	U	U	U	U
Trichlorofluoromethane	U	U	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	U	U	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 2: Non-Point Data Summary (4 of 6)

Volatile Organic Soil Analysis

Westbury, New York

Site 01-30-043S

Sample ID	GP-007-SS15	GP-007-SS30	GP-007-SS45	GP-008-SS10	GP-008-SS15	GP-008-SS30	GP-008-SS45	Trip Blank
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:								
Dichlorodifluromethane	U	U	U	U	U	U	U	U
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U
1,1-Dichloroethane	U	U	U	U	U	U	U	U
1,1-Dichloropropene	U	U	U	U	U	U	U	U
1,2,3-Trichloropropane	U	U	U	U	U	U	U	U
1,2,4-Triclorobenzene	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	U	U	U	39900E	98400E	8.1	11400	U
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U
1,2-Dibromoethane	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	U	U	U	21200	40800E	J	3000	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U
1,3-Dichloropropane	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U
2,2-Dichloropropane	U	U	U	U	U	U	U	U
2-Chlorotoluene	U	U	U	J	1300	U	U	U
4-Chlorotoluene	U	U	U	J	1200	U	U	U
4-Isopropyltoluene	U	U	U	950	2600	U	J	U
Benzene	U	U	U	U	U	U	U	U
Bromobenzene	U	U	U	U	U	U	U	U
Bromochloromethane	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U	U
Chlorobenzene	U	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U	U
Chloroform	U	U	U	U	U	U	U	U
Chloromethane	U	U	U	U	U	U	U	U
Dibromochloromethane	U	U	U	U	U	U	U	U
Dibromoethane	U	U	U	U	U	U	U	U
Ethylbenzene	U	U	U	U	U	U	J	U
Hexachlorobutadiene	U	U	U	U	U	U	U	U
Isopropylbenzene	U	U	U	U	U	U	U	U
Methylene Chloride	U	U	J	U	U	U	J	U
n-Butylbenzene	U	U	U	U	U	U	U	U
n-Propylbenzene	U	U	U	U	1200	U	880	U
sec-Butylbenzene	U	U	U	J	2000	U	J	U
Styrene	U	U	U	U	U	U	U	U
tert-Butylbenzene	U	U	U	U	U	U	U	U
Tetrachloroethene	U	U	U	U	U	U	U	U
Toluene	U	U	U	U	U	U	U	U
Trichloroethene	U	U	U	U	U	U	U	U
Trichlorofluoromethane	U	U	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	U	U	U
Napthanlene	U	U	U	U	15800	U	2300	U
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 2: Non-Point Data Summary (5 of 6)

Volatile Organic Groundwater Analysis

Westbury, New York

Site 01-30-043S

Sample ID	GP-21-GW01	GP-22-GW01	GP-23-GW01	GP-26-GW01	GP-28-GW01	GP-29-GW01	GP-30-GW01	GP-31-GW01	GP-32-GW01	GP-33-GW01
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:										
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	7.5	1.1
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	U	U	U	U	U	U	U	U	2.7	U
1,1-Dichloroethene	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	U	1.6	U	U	37	1.1	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	4.3	U	U	7.2	U	18.5	46.0	40.5	562.4	96.2
1,2-Dichloropropane	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U
2-Chloroethyl Vinyl Ether	U	U	U	U	U	U	U	U	U	U
Benzene	U	U	U	2.9	U	U	4.6	1.9	U	1.4
Bromochloromethane	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	U	U	U	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U	U	U	U
Chloroform	U	U	U	U	U	U	U	U	U	U
Chloromethane	U	U	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	U	U	U	24	U	3	130E	U	U	U
m+p Xylenes	1.5	1.3	U	11	U	10	160E	2	U	U
Methylene Chloride	U	U	U	U	U	2	6.5	7.1	7.3	7.2
o-Xylene	1.1	U	U	7.1	U	5.6	150E	3.7	U	U
Tetrachloroethene	U	U	U	U	U	U	1.4	U	1.5	U
Toluene	2	U	U	1.9	U	11	96	U	U	U
Trans-1,2-Dichloroethene	U	U	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	U
Trichloroethene	U	U	U	U	U	5.7	1.5	4.7	97	17
Trichlorofluoromethane	U	U	U	U	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	U	U	U	U	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 2: Non-Point Data Summary (6 of 6)

Volatile Organic Groundwater Analysis

Westbury, New York

Site 01-30-043S

Sample ID	GP-34-GW01	GP-35-GW01	GP-36-GW01	GP-37-GW01	MW-1-GW01	MW-2-GW01	MW-3-GW01	GP-FB-GW-10/19	GP-FB-GW-10/20	GP-FB-GW-10/21	GP-TRIP BK
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:											
1,1,1-Trichloroethane	24	U	U	U	U	U	5.3	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	8.6	U	U	U	U	U	1.7	U	U	U	U
1,1-Dichloroethene	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	50	9.6	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	30.1	4	U	U	U	U	334.1	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U
2-Chloroethyl Vinyl Ether	U	U	U	U	U	U	U	U	U	U	U
Benzene	220E	8.2	U	U	U	U	U	U	U	U	U
Bromochloromethane	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	10	U	U	U	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U	U	U	U	U
Chloroform	U	U	U	U	U	U	U	U	U	U	U
Chloromethane	U	U	U	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	97	64	U	U	U	U	U	U	U	U	U
m+p Xylenes	220E	40	1.2	U	U	U	U	U	U	U	U
Methylene Chloride	8.6	U	7.7	7.7	U	U	U	U	U	U	U
o-Xylene	120E	51	U	U	U	U	U	U	U	U	U
Tetrachloroethene	1.6	U	U	U	U	U	3.8	U	U	U	U
Toluene	190E	41	1.3	U	U	U	U	U	U	U	U
Trans-1,2-Dichloroethene	8.5	U	U	U	U	U	4.4	U	U	U	U
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	5	U	U	U	U	U	88	U	U	U	U
Trichlorofluoromethane	U	U	U	U	U	U	U	U	U	U	U
Vinyl Chloride	3.8	2.6	U	U	U	U	U	U	U	U	U

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

5.2.1 PS-6 (Former Septic Tank and Conduit)

To evaluate the impact of this source on Site groundwater quality, one groundwater sample, identified as MW-2-GW01 was secured from a location hydraulically down-gradient of the source location.

5.2.2 PS-7 (Abandoned Service Pit – Easternmost)

To evaluate the impact of this source on Site groundwater quality, three groundwater samples, identified as GP-034-GW01, GP-035-GW01 and GP-036-GW01 were secured from locations hydraulically down-gradient of the source location. Additionally, three groundwater samples, identified as GP-021-GW01, GP-029-GW01 and GP-030-GW01 were secured from locations hydraulically up-gradient of the source location.

5.2.3 PS-8 (Abandoned Service Pit – Westernmost)

To evaluate the impact of this source on Site groundwater quality, three groundwater samples, identified as GP-035-GW01, GP-036-GW01 and GP-037-GW01 were secured from locations hydraulically down-gradient of the source location. Additionally, three groundwater samples, identified as GP-021-GW01, GP-022-GW01 and GP-023-GW01 were secured from locations hydraulically up-gradient of the source location.

5.2.4 PS-9 (Exposed Soils, Stained & Cracked Pavements)

To evaluate the impact of this source on Site soil and groundwater quality, soil samples were secured from eight locations on the site on a fifty foot square grid at four depth intervals extending to 47 feet BEG. Said sampling locations were designated GP-01, GP-02, GP-03, GP-04, GP-05, GP-06, GP-07 and GP-08. Samples secured from these location were secured at depths of 10 to 12 feet BEG, 15 to 17 feet BEG, 30 to 32 feet BEG, and 45 to 47 feet BEG for subsequent laboratory analysis.

5.2.5 PS-10 (Concrete Floor beneath the Former TCE Storage Tank)

To evaluate the impact of this source on Site groundwater quality, two groundwater samples, identified as GP-034-GW01 and GP-035-GW01 were secured from locations hydraulically down-gradient of the source location. Additionally, two groundwater

samples, identified as GP-030-GW01 and GP-031-GW01 were secured from locations hydraulically up-gradient of the source location.

5.2.6 PS-11 (Exposed Soil Subjected to Petrochemical Discharge)

To evaluate the impact of this source on Site groundwater quality, three groundwater samples, identified as MW-3-GW01, GP-033-GW01 and GP-034-GW01 were secured from locations hydraulically down-gradient of the source location. Additionally, two groundwater samples, identified as GP-031-GW01 and GP-032-GW01 were secured from locations hydraulically up-gradient of the source location.

5.3 Sample and Analysis Plan

All sampling and analysis methodology was performed in accordance with the approved FRI Work Plan. Deviations to the plan are noted as follows.

- The laboratory that was indicated to be used in the work plan was renamed to Chemtech. There were no technical or administrative changes associated with the name change.
- The laboratory did not report all of the 8260 target list analytes in the data summary reports. However, the data is provided on the laboratory quantitation report and was considered appropriately.
- With the approval of the NYSDEC, the Project Manager was changed from George Wright to Richard Parrish.
- With the approval of the NYSDEC, the QA/QC Officer was changed from Richard Parrish to Kevin Kleaka.
- The designated Site Safety Officer was changed from James Mulvey to Eric Krist.
- Minor modifications were made to the Health and Safety Plan to accommodate Site access issues encountered during the performance of the Site Visit and Subsurface Investigation.
- Some sampling locations were moved to accommodate access issues. All changes were approved by the NYSDEC.

5.4 Test Method Summary

5.4.1 FRI Target Volatile List

(USEPA Test Method 8260)

335-GP-001-SS10	335-GP-001-SS15	335-GP-001-SS30
335-GP-001-SS45	335-GP-001-SS60	335-GP-002-SS10
335-GP-002-SS15	335-GP-002-SS30	335-GP-002-SS45
335-GP-003-SS10	335-GP-003-SS15	335-GP-003-SS30
335-GP-003-SS45	335-GP-004-SS10	335-GP-004-SS15
335-GP-004-SS30	335-GP-004-SS45	335-GP-005-SS10
335-GP-005-SS15	335-GP-005-SS30	335-GP-005-SS45
335-GP-006-SS10	335-GP-006-SS15	335-GP-006-SS30
335-GP-006-SS45	335-GP-007-SS10	335-GP-007-SS15
335-GP-007-SS30	335-GP-007-SS45	335-GP-008-SS10
335-GP-008-SS15	335-GP-008-SS30	335-GP-008-SS45
335-GP-Trip Blank		

5.4.2 FRI Target Volatile, Semi-Volatile, Metal and TPH List

(USEPA 8260, 8270BN, 6010 and 8015)

335-GP-009-SS10	335-GP-011-SS15
335-GP-009-SS30	335-GP-011-SS30
335-GP-009-SS45	335-GP-011-SS45
335-GP-010-SS15	335-GP-012-SS10
335-GP-010-SS30	335-GP-012-SS30
335-GP-010-SS45	335-GP-012-SS45

5.4.3 FRI Target Volatile and Semi-Volatile List

(USEPA 8021 and 8270 STARS)

335-GP-013-SS8	335-GP-017-SS8
335-GP-013-SS12	335-GP-017-SS12
335-GP-014-SS8	335-GP-018-SS8
335-GP-014-SS12	335-GP-018-SS12
335-GP-015-SS8	335-GP-019-SS8
335-GP-015-SS12	335-GP-019-SS12
335-GP-016-SS8	335-GP-020-SS8
335-GP-016-SS12	335-GP-020-SS12

5.4.4 FRI Target Volatile List

(USEPA 624)

335-GP-021-GW01	335-GP-022-GW01	335-GP-023-GW01
335-GP-024-GW01	335-GP-025-GW01	335-GP-026-GW01
335-GP-027-GW01	335-GP-028-GW01	335-GP-029-GW01
335-GP-030-GW01	335-GP-031-GW01	335-GP-032-GW01
335-GP-033-GW01	335-GP-034-GW01	335-GP-035-GW01
335-GP-036-GW01	335-GP-037-GW01	335-GP-FB-10/19
335-GP-FB-10/20	335-GP-FB-10/21	335-GP-Trip Blank

6. RESULTS OF INVESTIGATION

6.1 Groundwater Characteristics

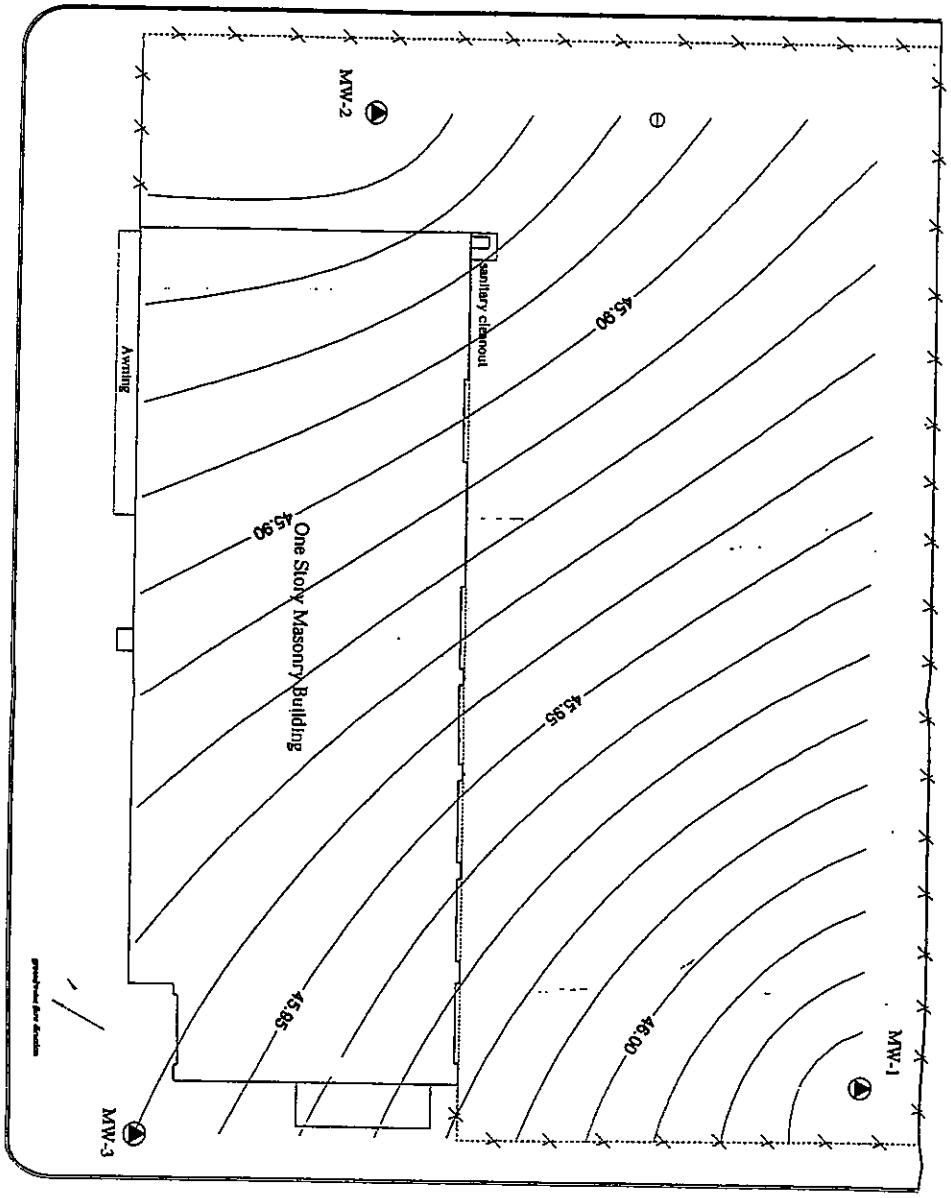
The elevation of groundwater was gauged at each monitoring well and recorded. The elevations were used to graphically define the planimetric surface of the water table beneath the Site. The elevations of the top of the casings were surveyed with respect to each other and were based on an arbitrary elevation of 100 feet. The groundwater elevations were based as a function of the depth to water and these elevations: The actual elevations of the tops of the casing were not determined due to the nearest benchmark being inaccessible.

Water-table potentiometric contours were constructed from the measurement of groundwater elevations acquired November 5, 1999, and are presented in **Plate 6**. Based on these contours, the hydraulic gradient was approximated to be 0.00439 ft/ft. The calculated normal to the gradient indicated a **south-southwest** groundwater flow direction.

6.2 Nature and Extent of Contamination

The purpose of this section is to provide a detailed discussion of the nature and extent of organic and inorganic contaminants detected in soil and groundwater at the Site. Discussions evaluating the significance of the contaminant concentrations detected are provided in **Section 8** of this report. **Table 3** provides a comparison of the detected contaminant concentrations against the applicable standards, criteria and guidances (SCGs). The applicable SCGs were based on the media and the contaminant type in accordance with the following.

Media	Contaminant	Applicable SCG
Water	Organics	NYSDEC Technical Operational Guidance Series (TOGS) 1.1.2.
Soil	Organics – Generated from the discharge of petrochemicals to the surface or to injection wells. Organics – Generated from the discharge of virgin petrochemicals from underground	NYSDEC Technical Administrative Guidance Memorandum HWR 95-4046. NYSDEC Spill Technology And Remediation Series (STARS) Memorandum 1.



Note: Groundwater elevations are based on an arbitrary reference elevation of 100 feet.
Groundwater contour intervals are displayed as 0.05 feet.
These contours are based on depth to water measurements taken November 5, 1999.

i.e.

Impact Environmental
a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754
516.266.8600 TELEPHONE
516.269.1549 FACSIMILE

98-335
Plate 6: Potentiometric Contour Map
Westbury, New York

Legend:
- groundwater probe node
- soil probe node
- monitoring well

scale: 1" = 20'

Table 3: Contaminant Concentration and Applicable SCGs (1of 5)

Volatile Organic Soil Analysis

Westbury, New York

Site 01-30-043S

Sample ID	GP-005-SS30	GP-005-SS45	GP-006-SS10	GP-006-SS15	GP-006-SS30	GP-006-SS45	GP-007-SS10	GP-007-SS15	GP-007-SS30	Applicable SCG
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:										
1,2,4-Trimethylbenzene	U	28.0	U	U	U	U	U	U	U	NA
1,2-Dichlorobenzene	U	5.5	U	U	U	U	U	U	U	7900
1,3,5-Trimethylbenzene	U	12.0	U	U	U	U	U	U	U	NA
1,4-Dichlorobenzene	U	5.7	U	U	U	U	U	U	U	NA

Sample ID	GP-007-SS45	GP-008-SS10	GP-008-SS15	GP-008-SS30	GP-008-SS45	Applicable SCG
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:						
Benzene	U	U	U	U	U	60
1,2,4-Trimethylbenzene	U	39900E	98400E	8.1	11400	NA
1,2-Dichlorobenzene	U	U	U	U	U	NA
1,3,5-Trimethylbenzene	U	21200	40800E	J	3000	NA
2-Chlorotoluene	U	J	1300	U	U	NA
4-Chlorotoluene	U	J	1200	U	U	NA
4-Isopropyltoluene	U	950	2600	U	J	NA
Ethylbenzene	U	U	U	U	J	5500
Isopropylbenzene	U	U	U	U	U	NA
Napthanlene	U	U	15800	U	2,300	13000
n-Propylbenzene	U	U	1200	U	880	880
sec-Butylbenzene	U	J	2000	U	J	NA
tert-Butylbenzene	U	U	U	U	U	NA
Tetrachloroethene	U	U	U	U	U	1400
Toluene	U	U	U	U	U	1500

Shaded box repersents an SCG excedence.

NA: Not Available

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits.

Table 3: Contaminant Concentration and Applicable SCGs (2 of 5)

Volatile Organic Groundwater Analysis

Westbury, New York

Site 01-30-043S

Sample ID	GP-21-GW01	GP-22-GW01	GP-23-GW01	GP-26-GW01	GP-28-GW01	GP-29-GW01	GP-30-GW01	GP-31-GW01	GP-32-GW01	GP-33-GW01	Applicable SCG
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:											
Methylene Chloride	U	U	U	U	U	2	6.5	7.1	7.3	7.2	5.0
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	7.5	1.1	5.0
1,1-Dichloroethane	U	U	U	U	U	U	U	U	2.7	U	5.0
cis-1,2-Dichloroethene	4.3	U	U	7.2	U	18.5	46	40.5	562.4	96.2	5.0
1,2-Dichlorobenzene	U	U	U	1.6	U	U	37	1.1	U	U	5.0
Benzene	U	U	U	2.9	U	U	4.6	1.9	U	1.4	0.7
Ethylbenzene	U	U	U	24	U	3	130E	U	U	U	5.0
m+p Xylenes	1.5	1.3	U	11	U	10	160E	2	U	U	10.0
o-Xylene	1.1	U	U	7.1	U	5.6	150E	3.7	U	U	5.0
Tetrachloroethene	U	U	U	U	U	U	1.4	U	1.5	U	5.0
Toluene	2	U	U	1.9	U	11	96	U	U	U	5.0
Trichloroethene	U	U	U	U	U	5.7	1.5	4.7	97	17	5.0

Sample ID	GP-34-GW01	GP-35-GW01	GP-36-GW01	GP-37-GW01	MW-1-GW01	MW-2-GW01	MW-3-GW01	Applicable SCG
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:								
Vinyl Chloride	3.8	2.6	U	U	U	U	U	5.0
1,1,1-Trichloroethane	24	U	U	U	U	U	5.3	5.0
1,1-Dichloroethane	8.6	U	U	U	U	U	1.7	5.0
cis-1,2-Dichloroethene	30.1	4	U	U	U	U	334.1	40.5
1,2-Dichlorobenzene	50	9.6	U	U	U	U	U	5.0
Benzene	220E	8.2	U	U	U	U	U	0.7
Clorobenzene	10	U	U	U	U	U	U	5.0
Ethylbenzene	97	64	U	U	U	U	U	5.0
m+p Xylenes	220E	40	1.2	U	U	U	U	5.0
Methylene Chloride	8.6	U	7.7	7.7	U	U	U	5.0
o-Xylene	120E	51	U	U	U	U	U	5.0
Tetrachloroethene	1.6	U	U	U	U	U	3.8	5.0
Toluene	190E	41	1.3	U	U	U	U	5.0
Trans-1,2-Dichloroethene	8.5	U	U	U	U	U	4.4	5.0
Trichloroethene	5	U	U	U	U	U	88	5.0

Shaded box repersents an SCG exceedence.

NA: Not Available

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

Table 3: Contaminant Concentration and Applicable SCGs (3 of 5)

Volatile Organic Soil Analysis

Westbury New York

Site 01-30-043S

Sample ID	GP-009-SS10	GP-009-SS30	GP-009-SS45	GP-010-SS15	GP-010-SS30	GP-010-SS45	GP-011-SS15	GP-011-SS30	GP-011-SS45	GP-012-SS15	GP-012-SS30	GP-012-SS45	Applicable SCG
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:													
Acetone	U	U	U	U	U	8.2	U	U	U	U	24	18	110
1,2,4-Trimethylbenzene	62900E	U	7.5	U	2.5	U	13	U	4.9	4.6	8	U	NA
1,2-Dichlorobenzene	U	110	U	U	U	U	U	U	U	U	U	U	7900
1,3,5-Trimethylbenzene	160700E	810E	2.6	1400	U	U	4.2	U	U	U	U	U	NA
2-Chloroethyl Vinyl Ether	U	U	U	U	U	U	25	U	U	U	U	U	NA
2-Chlorotoluene	9500	570E	U	U	U	U	U	U	U	U	U	U	NA
2-Methylnaphthalene	1600	U	U	U	U	U	U	U	U	U	U	U	NA
4-Chlorotoluene	9100	U	U	U	U	U	U	U	U	U	U	U	NA
4-Isopropyltoluene	14200	100	U	720	U	U	U	U	U	U	U	U	NA
Benzene	3800	U	U	U	U	U	U	U	U	U	U	U	60
cis-1,2-Dichloroethene	43800E	8	3.8	U	U	U	13.0	U	U	U	U	U	NA
Diethylphtalate	U	U	U	U	U	U	U	U	U	U	U	U	NA
Ethylbenzene	39800E	360E	2.0	U	U	U	6.1	U	U	U	U	U	5500
Isopropylbenzene	16000	180	U	U	U	U	U	U	U	U	U	U	NA
m+p-Xylenes	154800E	710E	8.3	U	U	U	27	U	U	8	U	U	1200
Methylene Chloride	U	U	U	U	U	U	U	U	3.3	4.9	U	U	100
Napthanlene	47100E	U	U	720	U	U	5	U	U	U	U	U	NA
o-Xylene	68900E	690E	3.3	U	3.7	3.1	8.5	U	U	2.5	U	U	1200
sec-Butylbenzene	10900	U	U	U	U	U	U	U	U	U	U	U	NA
Tetrachloroethene	1200	4.8	U	U	U	U	U	U	U	U	U	U	1400
Toluene	89100E	400	8.6	U	3.4	2.9	30.0	U	U	8.9	U	U	1500
Semi-Volatiles:													
Fluorene	U	310	U	U	U	U	U	U	U	U	U	U	350000
Benzo-a-Anthracene	220	40	U	U	U	U	U	U	U	U	U	U	300
Benzo-a-Pyrene	U	J	U	U	U	U	U	U	U	U	U	U	11000
Benzo-b-Fluoroanthene	U	J	U	U	U	U	U	U	U	U	U	U	1100
Benzo-k-Fluoroanthene	U	J	U	U	U	U	U	U	U	U	U	U	1100
Bis(2-Ethylhexyl)Phthalate	1900	110	U	1200	U	U	U	U	U	J	U	U	435000
Chrysene	280	49	U	U	U	U	U	U	U	U	U	U	400
Di-n-Butylphthalate	U	U	U	U	U	120	U	U	U	U	U	U	8100
Di-n-Octylphthalate	U	U	U	42	U	U	U	U	U	U	U	U	120000
Fluoranthene	2100	97	34	61	U	U	U	U	U	59	U	U	1900000
Phenanthrene	U	370	35	110	U	U	U	U	U	U	U	U	220000
Pyrene	1000	120	U	87	U	U	U	U	U	75	U	U	665000

Shaded box repersents an SCG excedence.

NA: Not Available

U: Indicates the comound was analyzed for, but was not detected.

J; Indicates an estimated value detected below the MDL.

Table 3: Contaminant Concentration and Applicable SCGs (4 of 5)

Inorganic and TPH Soil Analysis

Westbury New York

Site 01-30-043S

Sample ID	GP-009-SS10	GP-010-SS15	GP-011-SS15	GP-012-SS15	Applicable SCG	Background Levels
Unit	Mg/Kg	Mg/Kg	Mg/Kg	Mg/Kg	Mg/Kg	Mg/Kg
Inorganics:						
Alumimium	993	609	712	U	SB	33000
Antimony	U	U	U	U	SB	NA
Arsenic	4.3	U	1.2	U	7.5 or SB	12
Barium	124	U	U	U	300 or SB	600
Beryllium	2.5	U	U	U	0.16 or SB	1.75
Cadmium	4.3	0.85	U	U	10 or SB	1
Calcium	1600	U	U	U	SB	35,000
Chromium	U	3.1	12.9	U	10 or SB	40
Cobalt	U	U	U	U	30 or SB	60
Copper	90	17.8	6.2	U	25 or SB	50
Iron	4040	1800	3680	28.6	2000 or SB	550,000
Lead	273	8.6	1.5	U	SB	500
Magnesium	1260	U	U	U	SB	5000
Manganese	40	5.4	42.4	U	SB	5,000
Mercury	U	U	U	U	0.1	0.2
Nickel	388	U	U	U	13 or SB	25
Potassium	U	U	U	U	SB	43000
Selenium	U	U	U	U	2 or SB	3.9
Silver	U	U	U	U	SB	NA
Sodium	U	U	U	2510	SB	8000
Thallium	U	U	U	U	SB	NA
Vanadium	1810	U	U	U	150 or SB	300
Zinc	62	35.2	4	U	20 or SB	50
Cyanide	U	U	U	U	NA	NA
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Total Petroleum Hydrocarbons:	3670	1520	41	U	NA	NA

Shaded box repersents an SCG excedence.

NA: Not Available

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

Table 3: Contaminant Concentration and Applicable SCGs (5 of 5)

Organic Soil Analysis

Westbury New York

Site 01-30-043S

Sample ID	GP-013-SS8	GP-013-SS12	GP-014-SS8	GP-014-SS12	GP-015-SS8	GP-015-SS12	GP-016-SS8	GP-016-SS12	GP-017-SS8	GP-017-SS12	GP-018-SS8	GP-018-SS12	GP-019-SS8	GP-019-SS12	GP-020-SS8	GP-020-SS12	Applicable SCG
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:																	
Ethylbenzene	U	U	U	U	U	U	U	820	U	U	U	U	U	U	U	U	100
1,2,4-Trimethylbenzene	U	U	5.3	74	U	960	12300	20500	330	12700	U	8700	5.8	19900	5.1	1400E	100
1,3,5-Trimethylbenzene	U	5600	2.3	90	U	7100	6900	8000	390E	6600	2400	7100	3.3	6400	U	560E	100
isopropylbenzene	U	U	U	U	U	U	U	460	U	U	U	U	U	610	U	U	100
m+p-Xylenes	U	1400	U	13	U	U	2800	13200	200	2100	460	2000	2.7	6800	2.9	230	200
n-Propylbenzene	U	U	U	U	U	U	U	1700	U	U	U	U	U	1800	U	U	100
o-Xylene	U	1400	U	14	U	680	3900	8800	310E	2500	580	1900	2.1	4200	U	210E	100
Sec-Butlylbenzene	U	U	U	U	U	U	U	570	U	U	U	530	U	1700	U	U	100
tert-Butylbenzene	U	10600	U	U	U	U	U	U	U	U	1200	U	U	U	U	U	100
Toulene	U	U	U	U	U	U	U	U	26	U	U	U	U	510	U	3.3	100
Semi-Volatiles:																	
Anthracene	U	U	U	U	U	U	U	U	U	200	U	U	U	U	U	U	1,000
Benzo[a]anthracene	U	U	U	U	U	U	U	U	U	U	150	570	U	U	U	U	NA
Benzo[a]pyrene	U	U	U	U	U	U	U	U	U	U	130	440	U	U	U	U	NA
Benzo[b]fluoranthene	U	U	U	U	U	U	U	U	U	U	U	400	U	U	U	U	NA
Benzo[g,h,i]perylene	U	U	U	U	U	U	U	U	U	U	U	150	U	U	U	U	NA
Benzon[k]fluoranthene	U	U	U	U	U	U	U	U	U	U	140	460	U	U	U	U	NA
Chrysene	U	U	U	U	U	U	U	U	U	U	160	550	U	46	U	U	NA
Fluorene	U	290	U	U	U	84	400	160	U	770	U	490	U	920	U	360	1000
Fluouranthene	U	U	U	U	U	U	U	U	U	160	350	1300	U	120	U	U	1000
Indeno[1,2,3-cd]pyrene	U	U	U	U	U	U	U	U	U	U	U	85	U	U	U	U	NA
Napthalene	U	910	U	U	U	U	1500	870	U	U	U	U	U	2700	U	360	200
Phenanthrene	U	220	U	U	U	57	440	300	U	1300	320	1300	U	1400	U	610	1000
Pyrene	U	150	U	U	120	U	170	120	230	230	480	1600	U	310	U	120	1000

Sample ID	GP-24-GW01	GP-25-GW01	GP-27-GW01	GP-28-GW01	SCG
Unit	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Volatiles:					
Benzene	U	U	2.8	U	0.7
1,2-Dichlorobenzene	U	U	11	U	5.0
Ethylbenzene	U	U	81	U	5.0
m+p Xylenes	U	U	98	U	5.0
o-Xylene	U	U	75	U	5.0
Toluene	U	1.4	91	U	5.0

Shaded box repersents an SCG exceedence.

NA: Not Available

U: Indicates the comound was analyzed for, but was not detected.

J: Indicates an estimated value detected below the MDL.

E: Indicates the analyte concentration exceeds the instrument calibration limits

	storage tanks.	
Soil	Inorganics	NYSDEC Technical Administrative Guidance Memorandum HWR 95-4046 and NYSDEC Background Concentrations of 20 Elements in Soils with Special Regard for New York State.

The FRI soil and groundwater data indicated that the most prevalent contaminants existing on the Site are gasoline and diesel related target analytes, such as 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, Isopropyltoluene, ethylbenzene, napthalene, toluene and xylenes.

Chlorinated organic solvent related target analytes such as 1,1,1 trichloroethane, tetrachloroethene, trichloroethene, 1,1 dichloroethane, trans–1,2 dichloroethane and vinyl chloride were also detected. These compounds belong to a group of chemicals known as halogenated aliphatics. These compounds, when released to the environment, will degrade through biotic (hydrogenolysis) and abiotic (dehydrohalogenation) processes. The following index identifies each halogenated aliphatic that was detected and its corresponding transformation compounds.

Trichloroethene (TCE)
Tetrachloroethene (PCE)
1,1,1-Trichloroethene (TCA)
1,1-Dichloroethane (1,1-DCA)
Vinyl Chloride (VC)
cis-Dichloroethene (cis-DCE)
1,1-Dichloroethene (1,1-DCE)

The transformation processes are summarized with the diagram below. The arrows relate to the rate at which the processes occur (more arrows represents a greater period of time).

TCE ↦cis *or* trans-DCE *or* 1,1-DCE ↦↦ VC
PCE ↦↦ TCE ↦ cis or trans-DCE *or* 1,1-DCE ↦↦↦ VC
TCA ↦ 1,1-DCA↦↦↦VC

6.2.1 Soil Contamination:

The majority of the soil contamination detected on-site was proximal to the three abandoned underground petroleum storage tanks and within the underground injection well formerly connected to the eastern wash bay (PS-1). The soil samples secured from around the tanks (locations GP-013 through GP-020) and from the grid sample in the area of the tanks (location GP-008) were all contaminated with gasoline and diesel related target analytes (including their transformation analytes). The soil samples generated the highest contaminant concentrations at a depth of 12 feet BEG. Said depth corresponds to the base of the storage tanks. The highest single concentration of any organic analyte detected from these sample locations was 20,500 parts per billion (ppb) of 1,2,4-trimethylbenzene (location GP-016 at a depth of 12 feet BEG). The concentrations of target analytes detected within samples secured from 7 of the 8 probes sited around the storage tanks were elevated above the applicable SCGs.

With respect to UIW PS-1, the soil samples secured from its center (location GP-009) were contaminated with chlorinated organic, and gasoline and diesel related target analytes. The highest single concentration of any chlorinated organic analyte detected from this sample location was 43,800 ppb of cis-1,2-dichlroroethene.The highest single concentration of any gasoline and diesel related analyte detected from this sample location was 160,700 ppb of 1,3,5-trimethylbenzene. These concentrations decreased to below that of the applicable SCGs in the samples obtained at 30 and 45 feet BEG. The inorganic analysis of the sample secured from UIW PS-1 at 10 feet BEG detected elevated concentrations of beryllium, cadmium, copper, nickel, vanadium and zinc. The concentrations of both organic and inorganic analytes were above the applicable SCGs at 10 feet BEG only.

With respect to UIW PS-2, the soil sample secured from its center (location GP-012) at a depth of 15 feet BEG contained low concentrations (less than 10 ppb) of target gasoline and diesel related analytes. There were no target analytes detected in any of the samples secured from this location below 15 feet BEG. The inorganic analysis of the sample

secured from UIW PS-2 at 15 feet BEG detected concentrations of heavy metals that were below the applicable SCGs.

With respect to former cesspool PS-3, the soil sample secured from its center (location GP-010) at a depth of 15 feet BEG contained low concentrations (less than 1400 ppb) of target gasoline and diesel related analytes. These concentrations decreased with depth in the samples obtained at 30 and 45 feet BEG. The concentrations of these target analytes in each of the samples obtained from the location were below the applicable SCGs. The inorganic analysis of the sample secured from former cesspool PS-3 at 15 feet BEG detected concentrations of heavy metals that were below the applicable SCGs.

With respect to interior UIW PS-4, the soil sample secured from its center (location GP-011) at a depth of 15 feet BEG contained low concentrations (less than 30 ppb) of target gasoline and diesel related analytes. These concentrations decreased in the samples obtained at 30 and 45 feet BEG. The concentrations of these target analytes in each of the samples obtained from this location were below the applicable SCGs. The inorganic analysis of the sample secured from UIW PS-4 at 15 feet BEG detected concentrations of heavy metals that were below the applicable SCGs.

With respect to the non-point source soil samples obtained on a grid, the soil samples secured from these locations (GP-001 through GP-008) at depths of 10, 15, 20 and 45 feet BEG failed to detect any target analytes with two exceptions. The first exception involved samples from location GP-008 that, as stated above, were proximal to the underground petrochemical storage tanks. The second exception was the analysis of the sample secured from location GP-005 at 45 feet BEG. The analysis detected low concentrations of four gasoline and diesel related target analytes at low concentrations (less than 28 ppm). The concentrations of these analytes were below the applicable SCGs.

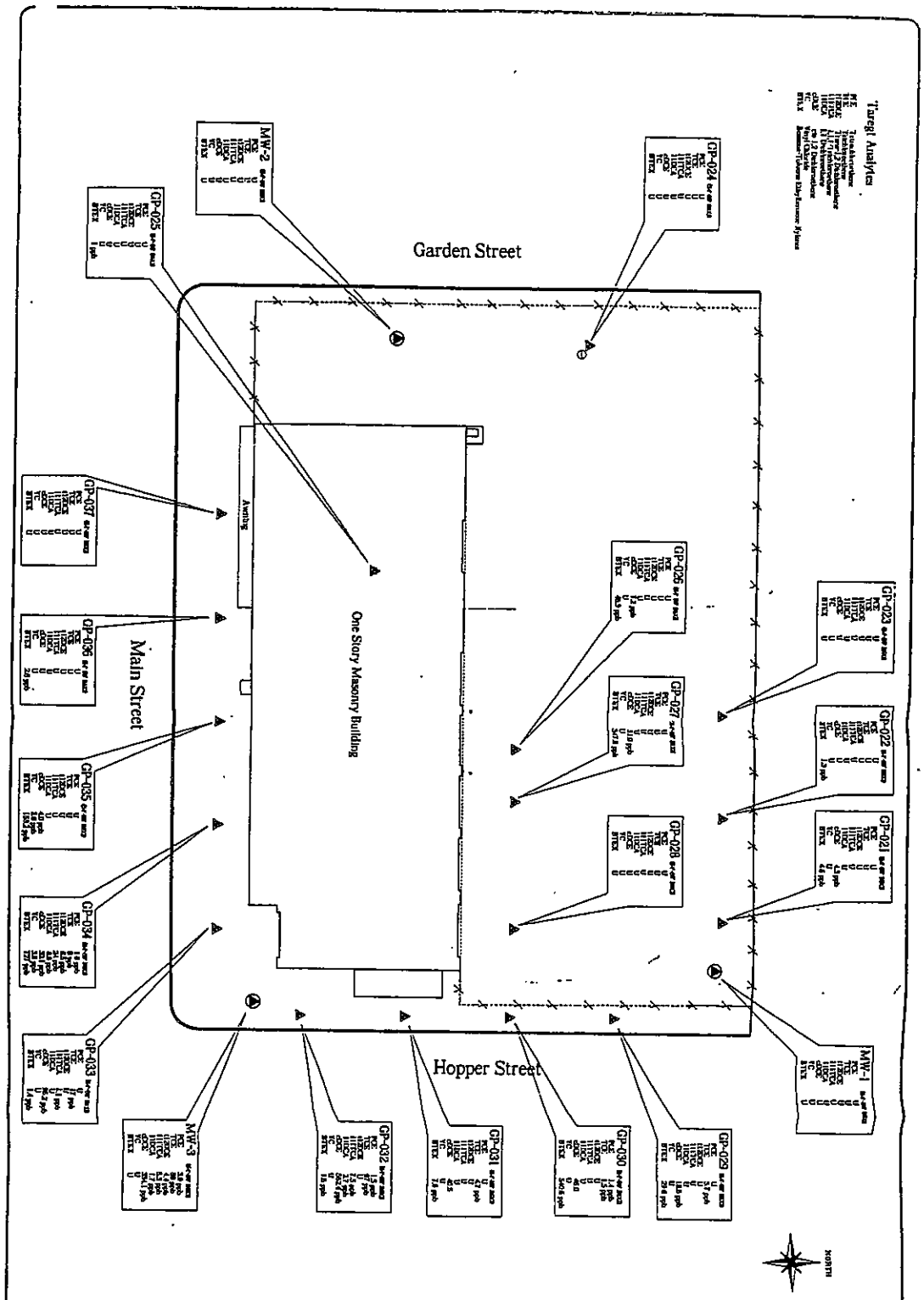
6.2.2 Groundwater Contamination

In general, the detected groundwater contaminants were limited to the southeast portion of the Site. However, an isolated area of contamination was detected north of the building beneath the three underground petroleum storage tanks (see **Plate 7**). The groundwater samples secured from the southeast portion of the Site (locations GP-029 through GP-037 and MW-3) were contaminated with both chlorinated organic, and gasoline and diesel related target analytes. The isolated area north of the building was contaminated with gasoline and diesel related target analytes.

The highest single concentration of any chlorinated target analyte detected in the southeast corner of the Site was 562.4 ppb of cis-1,2 dichloroethene (location GP-032). This concentration, as well as ten others from five other sample locations, was in excess of the applicable 5 ppb SCG value. With the exception of one sample location (GP-034), the concentrations of the target chlorinated organic analytes that were above ambient were predominantly higher entering the Site than exiting. This fact is as follows.

Analyte	Incoming Concentrations/Outgoing Concentrations [ppb]					
Sample Location	GP-032/GP-033	MW-3/GP-033	GP-031/GP-034	GP-030/GP-035	GP-029/GP-036	GP-021/GP-025
PCE	1.5/U	3.9/U	U/1.6	1.4/U	U/U	U/U
TCE	97/17	88/17	4.7/5	1.5/U	5.7/U	U/U
t-1.2 DCE	U/U	4.4/U	U/8.5	U/U	U/U	U/U
c-1.2 DCE	562.4/96.2	334.1/96.2	40.5/30.1	46/4	18.5/U	4.3/U
1,1,1 TCA	7.5/1.1	5.3/1.1	U/24	U/U	U/U	U/U
1.1 DCA	2.7/U	1.7/U	U/8.6	U/U	U/U	U/U
VC	U/U	U/U	U/3.8	U/2.6	U/U	U/U

The highest concentration of a gasoline and diesel related target analyte detected within laboratory calibration standards in the southeast corner of the Site was 96 ppb of toluene (location GP-030). This concentration, as well as twenty-three others from five other sample locations, was in excess of the applicable 5 ppb SCG value (with exception of the SCG of benzene, which is 0.7 ppb). The concentrations of the target gasoline and diesel related analytes were higher exiting the Site than entering.



Impact Environmental
a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754
516.268.8800 TELEPHONE
516.268.1589 FACSIMILE

98-335
Plate 7: Target Analyte Concentration Map
Westbury, New York

Legend:
- groundwater probe node
- soil probe node
- monitoring well

scale: 1" = 15'

7. DATA USABILITY SUMMARY REPORT

This Data Usability Summary Report (DUSR) was prepared to provide an evaluation of analytical data obtained from the collection of subsurface soil and groundwater samples from the Site. The primary objective of this DUSR was to determine if the data obtained met the applicable criteria for data quality assurance. The DUSR was developed by reviewing each of the NYSDEC ASP B deliverables provided by the selected laboratory (Chemtech, New Jersey). To determine the validity and usability of the data obtained from the Site, a series of technical questions were raised pertaining to specific quality assurance and control (QA/QC) requirements defined under the specified test methods. The questions were as follows.

	Deliverable Lab Code:					
	13826	13827	13946	13649	13701	L53220
(~ Not Applicable)						
• Were all chain of custody records present and completed?	Y	Y	Y	Y	Y	Y
• Were the analyses performed as per methods requested?	Y	Y	Y	Y	Y	Y
• Was the data package complete as defined under requirements for NYSDEC ASP B deliverables?	Y	Y	Y	Y	Y	Y
• Were the required holding times met for all matrices and analytical parameters?	Y	Y	Y	Y	Y	Y
• Were samples correctly preserved?	Y	Y	Y	Y	Y	Y
• Was sample preparation correctly documented?	Y	Y	Y	Y	Y	Y
• Was % moisture less than 50% for all soil samples?	Y	Y	Y	Y	~	~
• Were the calibrations performed at the required frequency?	Y	Y	Y	Y	Y	Y
• Were the initial calibration within the acceptable criteria?	Y	Y	Y	Y	Y	Y
• Were the method blanks free of contamination?	Y	Y	Y	Y	Y	Y
• Were the field blanks free of contamination?	~	~	~	~	~	Y
• Were the trip blanks free of contamination?	~	~	~	~	Y	Y
• Were system monitoring compounds within acceptable limits?	Y	Y	Y	Y	Y	N
• Did internal standards meet acceptable criteria?	N	N	Y	Y	Y	Y
• Were matrix spike/matrix spike duplicate (MS/MSD) analyzed at the correct frequency?	Y	Y	Y	Y	Y	Y
• Did the MS/MSD meet the percent recovery (%R) and relative percent difference (RPD) acceptable criteria?	Y	Y	Y	Y	Y	Y
• Was the matrix spike blank sample (MSB) analysis performed at the correct frequency?	Y	Y	Y	Y	Y	Y
• Did the MSB meet the percent recovery (%R) criteria?	Y	Y	Y	Y	Y	Y
• Did the result for any field duplicate samples meet expected precision requirements?	Y	Y	Y	Y	Y	Y
• Were any discrepancies noted when review of raw data (chromatograms) was performed?	N	N	N	N	N	Y
• Were results reported in correct units and soil samples corrected for % moisture?	Y	Y	Y	Y	~	~

Deviations that did not meet requirements are described as follows.

The solid matrix samples GP-009-SS10 and GP-010-SS15 from the semi-volatile fraction (deliverables package code # 13826ASP) were not acceptable for surrogate recovery. The recoveries have been flagged accordingly, and no further action is recommended. Additionally, the solid matrix samples GP-009-SS10 and GP-010-SS15 did not meet the requirements for internal standard areas. It is not anticipated that either of these factors have significantly affected the quality of the data results, and no further action is recommended. Furthermore, the results obtained from these samples are not relevant to key FRI goals.

The solid matrix samples GP-015-SS8, GP-16-SS8, GP-16-SS12, GP-18-SS8, GP-18-SS12 and GP-19-SS12 from the semi-volatile fraction and sample GP-017-SS8 from the volatile fraction (deliverables package code #13827ASP) did not meet the requirements for internal standard areas. It is not anticipated that these factors have significantly affected the quality of the data results, and no further action is recommended. Furthermore, the results obtained from these samples are not relevant to key FRI goals.

The aqueous matrix sample GP-032-GW01 from the volatile fraction (deliverables package code # L5320ASP) was noted to report an undetected concentration value (U) for the analyte *trans*-1,2-Dichloroethene. Upon review of the raw data, it was noted that a concentration value of 5.3 ppb was detected for this analyte. This matter taken into consideration and no further action is recommended.

The aqueous matrix sample GP-034-GW01 from the volatile fraction (deliverables package code # L5320ASP) was not acceptable for system monitoring compound recovery. It appeared that matrix interference was encountered with the Toluene-d8 surrogate. This surrogate recovery exceeded the upper QC limits on the initial and duplicate runs (76% above upper limit), and therefore the corresponding target analyte concentrations are suspected to be bias positive. It is anticipated that this factor has affected the quality of the data results (bias positive or high). Accordingly, it is

recommended that this sample be re-acquired and analyzed to confirm data accuracy and validity.

8. CONCLUSIONS

8.1 Overview

The presence of halogenated aliphatic compounds, which include chlorinated organic compounds such as trichloroethene (TCE), tetrachloroethene (PCE) and 1,1,1 trichloroethane (TCA), in groundwater are typically the result of direct discharges of industrial wastes via point and non-point sources and not the result of biochemical degradation (LMS, 1995). When TCE, PCE and TCA are present, significant products of degradation can be *cis*-1,2-dichloroethylene (cis-DCE) and 1,1-dichloroethane (1,1-DCA). TCE, PCE and TCA can be degraded to varying degrees through both biotic (hydrogenolysis) and abiotic (dehydrohalogenation) processes in the environment.

PCE will undergo hydrogenolysis to produce TCE; however, TCE will more rapidly degrade to cis-DCE. Because the transformation rates for TCE to degrade to cis-DCE are much faster that the rates for cis-DCE to degrade, it is more likely that cis-DCE will be detected in the environmental rather than TCE, as a result of biochemical degradation. cis-DCE has been shown to degrade to vinyl chloride (VC), however, the transformation rate is very slow.

TCA normally undergoes hydrogenolysis to produce 1,1-DCA. 1,1-DCA has also been found to degrade to VC; however, the transformation rate is very slow. There is no evidence that TCA will degrade to 1,2-DCA.

It should be noted that any of the compounds detected could be present as a product (solvent) impurity rather than as the result of a biotic transformation in the environment.

With respect to the gasoline and diesel related contaminants, the majority of biotic transformation occurs as biodegradation. Biodegradation is the decomposition of an analyte by micro-organisms such as bacteria, fungi and yeast. The end products of biodegradation are water, carbon dioxide and energy. Accordingly, very few of the

gasoline and diesel related analytes are transformed to other compounds. The aging of gasoline and diesel related analytes in the environment typically yield concentration reductions. These reductions are not always proportional to the original products composition.

8.2 Point Pollution Sources

None of the point pollution sources for chlorinated organic solvents identified under the scope of this FRI have impacted the environmental quality of groundwater. This is demonstrated by the following facts.

- Based on the information compiled in the Site Background Study and Site Visit aspect of this FRI, there was no direct evidence that chlorinated organic solvents were ever discharged to the Site via a point pollution source.

- The soil beneath point pollution sources PS-2, PS-3 and PS-4 were tested and found to contain nominal concentrations of chlorinated target analytes (below the applicable SCGs).

- The soil beneath point pollution source PS-1 was tested and found to contain concentrations of chlorinated target analytes above the applicable SCGs. However, it was found that the concentrations were below detection limits or below that of ambient background at 45 feet BEG (5 feet above the water table).

- The groundwater beneath each point pollution source was tested and found to be free of any detectable concentrations of chlorinated organic target analytes.

With respect to gasoline and diesel related contaminants, all of the data compiled under the scope of this FRI suggests that the operation of the former underground storage tanks has impacted local soil and groundwater quality. The majority of the contaminants detected exist near the base of the tanks, at a depth of approximately 12 feet BEG.

Furthermore, petrochemical contamination was detected in each of the four underground injection wells (PS-1, PS-2, PS-3 and PS-4). However, only the concentrations at pollution source PS-1 at a depth of 10 feet BEG were elevated above the applicable SCGs.

8.3 Non-Point Pollution Sources

The data compiled from the analysis of the non-point source investigative data is complex in that it requires interpretation. As indicated in **Section 6.2** of this report, the FRI investigation data eliminated several of the non-point pollution sources as having impacted Site groundwater quality. Specifically, the investigation eliminated PS-6 (the septic tank and conduit), PS-7 (the western service pit) and PS-9 (the stained permeable surface areas) as having impacted Site groundwater quality. This was determined, as groundwater beneath and down gradient of each of these sources was not contaminated with target organic analytes.

The FRI derived data suggests that non-point source PS-8 (the eastern service pit), PS-10 (the former PCE storage tank room) and PS-11 (the area of a petrochemical discharge to the permeable surface) did impact Site groundwater quality. A detailed discussion of each source follows.

8.3.1 PS-8 (Eastern Service Pit)

Groundwater quality hydraulically down gradient of pollution source PS-8 was impacted with gasoline related target analytes. These results suggest that PS-8 is the source for said contaminants; however, it is possible that these contaminants are associated with the leaking underground storage tanks (see **Sections 6.2 and 8.2**). More than likely, the source of the contaminants in groundwater is a combination of the two pollution sources.

8.3.2 PS-10 (Former TCE Storage Tank Room)

The investigation performed with respect to this pollution source is complicated by the presence of a regional chlorinated organic groundwater contaminant plume that traverses the southeast corner of the Site (LMS, 1995). For this reason, the mere presence of chlorinated organic target analytes in the groundwater is not conclusive of this pollution source having impacted Site groundwater quality. Rather, contaminant concentrations up and down gradient of these sources must be compared to determine if this pollution source has contributed to the regional contaminant plume. This is done by comparing incoming against outgoing groundwater quality to detect a net increase. As indicated in **Section 6.2** of this report, the groundwater entering the site near PS-10 as represented by sample GP-031-GW-01, has lower concentrations of chlorinated organic target analytes than the groundwater exiting the Site as represented by sample GP-034-GW01. These results suggest that PS-10 is impacting Site groundwater quality; however, the following factors contradict this supposition.

- The quality control analysis of the sample data package submitted for this FRI indicated that quantitative results generated from the analysis of sample GP-034-GW01 were skewed high (see **Section 7**).

- The highest net concentration increase between any two analytes (hydraulically up versus down grade) is 24 ppb. The average increase of all of the analytes was 7.8 ppb.

- The net increase is not observed between adjacent up and down gradient sample locations with concentrations over ambient background (GP-030/GP-035, GP-032/GP-033 & MW-3/GP-033).

These issues cast significant doubt upon the interpretation that PS-10 has impacted Site groundwater quality. As such, this FRI can only conclude that PS-10 is potentially impacting Site groundwater quality.

8.3.3 PS-11 (Area of Petrochemical Discharge to the Permeable Surface)

The investigation performed with respect to this pollution source is also complicated by the presence of the aforementioned regional chlorinated organic groundwater contaminant plume. Again, the mere presence of chlorinated organic target analytes in the groundwater is not conclusive of this pollution source having impacted Site groundwater quality. Rather, contaminant concentrations up and down gradient of these sources must be compared to determine if this pollution source has contributed to the regional contaminant plume.

As indicated in **Section 6.2** of this report, the groundwater entering the site near PS-11 as represented by sample GP-032-GW-01, is contaminated with higher concentrations of chlorinated organic target analytes than the groundwater exiting the Site as represented by sample GP-033-GW01. These results suggest that PS-11 is not impacting Site groundwater quality.

8.4 Areas of Concern

The following represents areas of concern from all point and non-point pollution sources.

- Abandoned underground storage tanks (PS-5)
- Underground Injection Well North of Eastern Wash Bay (PS-1)
- Eastern Abandoned Service Pit (PS-8)
- Former TCE Storage Tank Room (PS-10)

9. RECOMMENDATIONS

See **Plate 8** for an overview map of the Site indicating the prescribed recommendations for the following areas of concern.

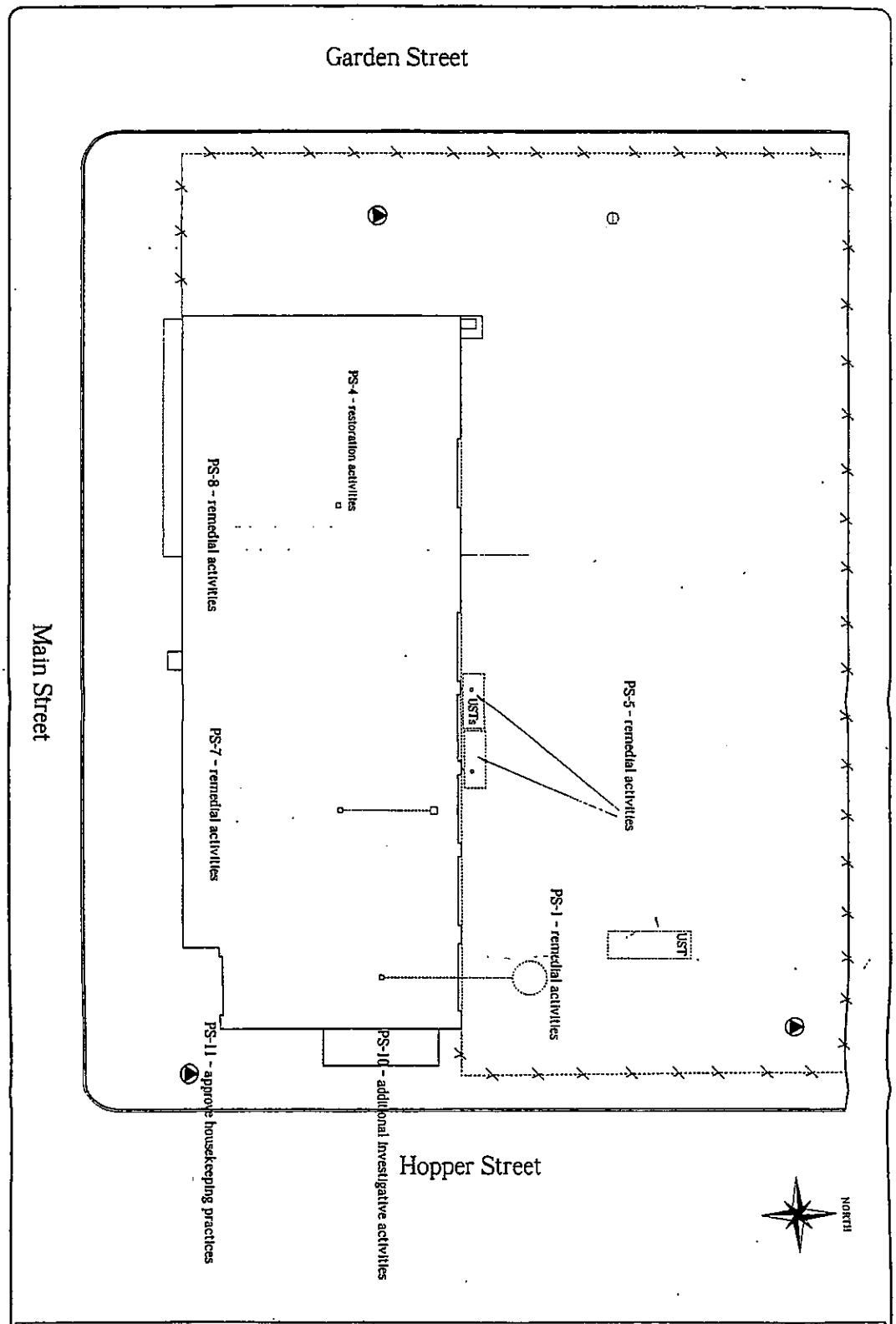
The three abandoned underground storage tanks should be removed and the gasoline and diesel contaminated source media that exists at approximately 12 feet BEG should be excavated for off-site disposal. A fourth tank was identified to have existed at one time in the Government Records Inventory aspect of this FRI. Based on the results of the Remote Survey performed under the scope of this FRI, it is believed that it was removed from the Site. All remedial activities associated with these tasks should be performed under the supervision of the NYSDEC, Environmental Remediation Division.

The underground injection well located on the east side of the Site, north of the existing building, (PS-1) should be subjected to remedial activities. Said activities should include accessing the structure and removing the contaminated media contained therein. All remedial activities associated with this injection well should be performed under the supervision of the NYSDEC, Environmental Remediation Division.

The abandoned service pits located within the building interior should be subjected to remedial activities. Said activities should include accessing the structures and removing the contaminated media and petrochemical storage structures (grease trap) contained therein. All remedial activities associated with the pits should be performed under the supervision of the NYSDEC, Environmental Remediation Division.

The interior underground injection well investigated under the scope of this FRI should be re-sealed (it was opened during the FRI Site Visit).

Additional investigative activities should be performed to confirm or refute if pollution source PS-10 has impacted Site groundwater quality. Such work should include the



Impact Environmental
a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754

98-335
Plate 8: Areas of Concern Map
Westbury, New York

Legend:
groundwater probe node
soil probe node
monitoring well
scale: 1" = 20'

acquisition of subsurface soil samples beneath the floor of the room formerly used to house an above ground TCE storage tank.

Proper housekeeping practices by the Site occupants should be followed to minimize the release of chemical substances to the interior and exterior surface areas. These practices should be approved by the NYSDEC so that the active petroleum spill incidents can be closed.

The NYSDEC Inactive Hazardous Waste Disposal Site site-code should be changed from a "2" to a "2A" until such time as the additional information recommended above can be obtained and reported to the NYSDEC.

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Appendix A.1 through A.5
Focussed Remedial Investigation Report

Regarding:

299 Main Street Site
Westbury, New York
(Site Code 1-30-043S)

September 2000

IMPACT ENVIRONMENTAL

a division of impact environmental consulting, inc.

1 VILLAGE PLAZA, KINGS PARK, NEW YORK 11754 ❖ 631.269.8800 TELEPHONE ❖ 631.269.1599 FACSIMILE ❖ IMPACTENVIRONMENTAL.COM

Appendix A.1

NEW YORK STATE SUPERFUND CONTRACT

PRELIMINARY SITE ASSESSMENT REPORT

REVISED DRAFT

Volume I

Report Text
Appendices A-C
(Report in 5 volumes)

New Cassel Industrial Area Site
North Hempstead, Nassau County

Site No. 130043

Work Assignment No. D002676-2.2

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road
Albany, New York 12233

October 1994

Prepared By:

LAWLER, MATUSKY & SKELLY ENGINEERS
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

File No. 650-027

CHAPTER 1

EXECUTIVE SUMMARY

The New Cassel Industrial Area (NCIA) is located in the unincorporated village of Westbury, in the Town of North Hempstead, Nassau County, New York. Approximately 200 industrial or commercial businesses occupy this 170-acre site. The Nassau County Department of Health (NCDOH) in conjunction with a private consulting firm conducted a subsurface investigation of the NCIA in 1985 to evaluate groundwater quality in the vicinity of this site and several others in the county identified as possessing groundwater contamination problems. The study identified fairly extensive halogenated volatile organic contamination of groundwater beneath the site, and recommended further study. NCDOH also petitioned the New York State Department of Environmental Conservation (NYSDEC) to classify the site as a hazardous waste site. The site was listed as a Class 2 by NYSDEC in 1988.

Since the site was listed, numerous owners of property within the site have petitioned NYSDEC to segregate and remove their properties from the Class 2 list. NYSDEC has qualifiedly delisted all properties for which they received delist petitions. The qualification included in the delisting notifications was that if the pending site investigation revealed evidence that these properties were the cause of the contamination, they would be relisted.

Lawler, Matusky & Skelly Engineers (LMS) was contracted by NYSDEC to conduct a preliminary site assessment (PSA) for the NCIA. This report presents the findings of the first six tasks of the PSA. Task 1 consisted of a file review and procurement from the various town, county, and state agencies holding information pertinent to the site. Task 2 consisted of compilation of a comprehensive database summarizing the information gathered in Task 1. Task 3 consisted of the collection and analysis of groundwater samples from 56 monitoring wells already located at the site. Task 4 consisted of the analysis of samples collected from 40 groundwater probes located strategically throughout the site. The Geoprobe locations were sampled from multiple depths to provide vertical contaminant distribution information. This task also included preparation of a draft report presenting the results of Tasks 1 to 4 along with LMS' recommendations for additional work. Task 5 consisted of a second phase of groundwater probes and suspected source area sampling along with selected facility inspections. Task 6 is the preparation of this report

The analytical data generated from the sampling have been reduced and used to generate contaminant plume maps. Several groundwater volatile organic compound (VOC) contaminant plumes were delineated during the assessment, and the properties potentially contributing to

each of these plumes have been identified. The contaminant plume distributions have been analyzed with respect to current and previous property usage for the entire site, incorporating chemical use and spill information gathered from extensive file review.

The PSA results have identified several areas exhibiting significant groundwater contamination within the NCIA. The bulk of the contamination is centered in three areas within the site: one in each of the western, central, and eastern sections. In each of these contaminated areas separate plumes based on the contaminants, the concentrations, and sources can be subdivided. LMS has detected two plumes in the western section, three in the central section, and two in the eastern section. Beyond these plume areas, the remaining area of the NCIA appears to be relatively uncontaminated.

Following the objectives stated in Chapter 2, LMS recommends that the NCIA site be removed from the hazardous site listing and that seven separate sites be added to the list. The delisting of the whole site would delist/remove the clean blocks/lots listed below; the relisting of the seven plume areas would then list only the major contaminated areas.

It is not clear what classification all seven plumes can be given, however. All plume areas have documented significant impact to the environment - the contaminant concentrations in an aquifer connected to a drinking supply aquifer are orders of magnitude higher than drinking standards and are a serious threat. But the second criterion for listing a site, documentation of a release or presence of hazardous wastes, has not been demonstrated in all plumes. The plume areas can be divided into the following categories:

- Documented Sole Sources. These plumes have one documented source and a relatively clearly defined contaminant plume that results from the sole source. These sites can be listed as Class 2, listing the facility where the source was discovered as the site. Two plumes, 570 Main Street and 125 State Street, are recommended for this category.

- Documented Multiple Sources. These plumes have good documentation that a number of sources were responsible for the contaminant plume. However, a number of other facilities within the plume area were also likely contributors to the contamination based on historical information, but documented data do not exist. These plumes can be listed as Class 2 sites as documented sources were recorded. LMS recommends that the source facilities and all the potential or suspected facilities within the plume be included as the site. One plume, Arkwin/Tishcon, is recommended for this category.

- Suspected Multiple Sources. These plumes have good historical information that a number of facilities within the plume were the likely source; however,

documented data do not exist to date. LMS does not know whether the historical data are sufficient to document hazardous waste. We recommend two alternatives: (1) research the existing data files in more detail so as to find documented hazardous waste at one or more facilities, thereby listing the plume area as a Class 2 site (similar to above); or (2) list as Class 2a and research and investigate the potential sources in detail. These plumes, Garden Street/Hopper Street, Sylvester Street/Kinkel Street, and GP-1/-39, are recommended for this category.

- No Sources. These plumes have no documentation or other evidence to support the release of hazardous waste as found in the groundwater. Simply stated, we found no sources. We recommend these sites be classified 2a and additional investigations be conducted to find the source. One plume, Block 328, is recommended for this category.

CHAPTER 2

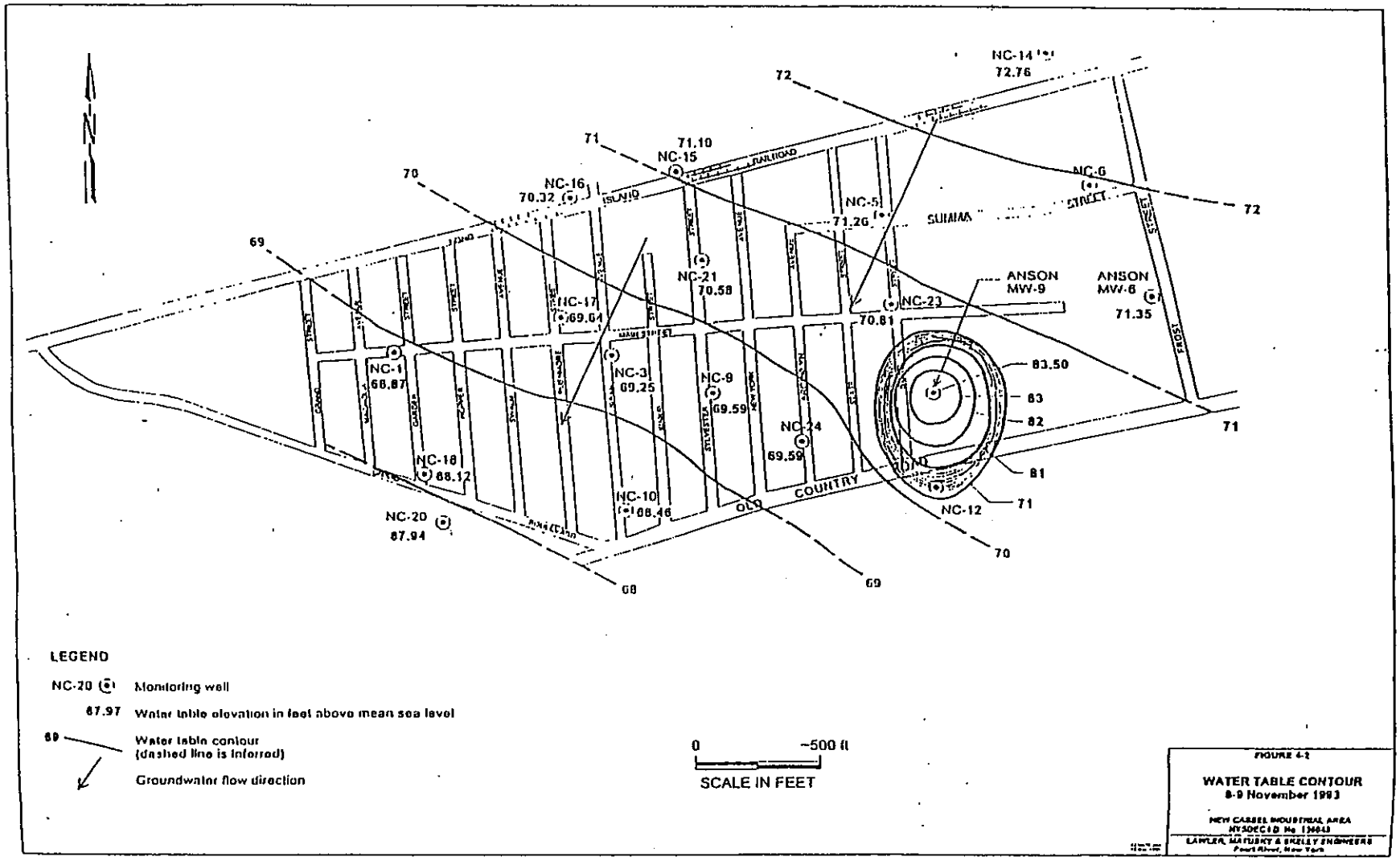
OBJECTIVES

The overall objectives of the preliminary site assessment at the New Cassel Industrial Area were to:

- Delineate the contaminant plumes under the site. It has been documented that the groundwater under the site is contaminated with VOCs; however, whether there were a number of plumes, whether the plumes were connected, and/or whether there were areas with no contamination was not known.

- Locate the source of the contaminants. The whole site was listed as a Class 2 site, meaning that all of the property owners were potentially responsible parties (PRPs), even though many site operations may never have released any contaminants. The purpose of this investigation was to document the use, release, or spillage of contaminants and as best as possible correlate the resultant contamination with delineated plumes, i.e., find the most likely PRPs.

- Redefine the site according to measured contamination. The investigation and remediation of a 170-acre site with 200 PRPs is difficult. Results of the PSA narrowed the site to a number of measured and documented plumes with known or recorded sources. Sites documented as plume sources can remain on the hazardous list, and be scheduled for remedial investigations and feasibility studies and/or remedial measures. The uncontaminated areas of NCIA can be delisted.


NC-14
72.76
72
71
71.10
NC-15
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NC-16
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NC-5
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NC-21
70.58
ANSON
MW-9
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MW-6
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NC-17
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NC-23
70.81
NC-1
68.87
NC-3
69.25
NC-9
69.59
83.50
83
82
NC-24
69.59
71
NC-18
68.12
81
NC-10
68.46
NC-12
71
NC-20
67.94
70
68
69
LEGEND
NC-20 Monitoring well
67.97 Water table elevation in feet above mean sea level
69 Water table contour (dashed line is inferred)
Groundwater flow direction
0 ~500 ft
SCALE IN FEET
FIGURE 4-2
WATER TABLE CONTOUR
8-9 November 1993
NEW CASSEL INDUSTRIAL AREA
LAWLER, MATUSKY & SKELLY ENGINEERS

TABLE 4-2 (Page 3 of 3)

LIST OF PROPERTIES WHICH RECIEVED SITE INSPECTIONS

New Cassel Indrustrial Area

BLOCK & LOT NUMBERS	ADDRESS	OWNER	OCCUPANT	SECTION
70, 16-17, 54-55	80-86 Magnolia Ave.	80 Magnolia Avenue Co. 80 Magnolia Ave. Westbury, NY 11590	Alltec Inc.	Western
70, 40-42	81 Garden St.	Eighty-1 Garden St. Rlty 390 Willis Avenue Roslyn Hieghts, NY 11577	Warehouse ?	Western
144, 31-50	299 Main St.	F. Scappatura 1015 Old Country Road Westbury, NY 11590	One Stop Auto and Truck Center	Western
73, 1-12, 63-75	570 Main St.	Foray Construction Co. 570 Main St. Westbury, NY 11590	Castle Collision and Vacant - Formerly IMC Magnetics	Western
70, 43-44	87-89 Garden St.	Frank A. Miceli 1159 Fernwood Dr. Valley Stream , NY 11580	Rapid Rivet and Fastener Corp.	Western
70, 35-39	75 Garden St.	Grimace Realty Corp. 514 Grand Blvd. Westbury, NY 11590	Island Poly Bag and Supply	Western
71, 5-8	542 Main St.	H. Greenberg 155 Argyle Rd. Brooklyn, NY 11218	Al's Tool and Die	Western

Cast No. HS4546 PROPERTY XLS Table 10/12/94 10:16:01 AM

80-86 Magnolia Avenue. Alltec Inc., which sells and services power washers, has been on-site for three years (Appendix B, Photo 30). The occupants are unaware of past uses: the building had apparently been vacant for some time. Soaps and cleaners are stored but no solvent-based cleaners. Alltec had no knowledge of any leach pools on-site. Several suspected pools were identified to the rear and front of the building, but the owner objected to any sampling so the presence of former leach pools could not be verified.

299 Main Street. One Stop Auto and Truck Centers has occupied this address since April 1994 (Appendix B, Photos 21 and 22). A full service auto and truck garage, the firm currently has no underground storage. There were no floor drains within the garage, although there was a grated drain along the garage doors. Where this drain discharges is unknown as the rear lot has been recently paved, covering over signs of old leach pools (Appendix B, Photo 23). The site was formerly a junkyard (Sam-Ton Salvage) for approximately 20 years. Several features at the site suggest that there once was underground storage at the site (Appendix B, Photo 24). Heavy BTEX contamination was noted in a soil sample just above the water table in GP-22 located near this address.

570 Main Street. Castle Collision is located in the southern portion of the building at this address; the northern portion is vacant. Castle Collision is a full service auto body repair and painting garage. The site was formerly in use by IMC Magnetic, which manufactured precision pumps for the aircraft industry. When IMC Magnetic moved to Haupaug, New York, a number of leaching pools, septic tanks, and floor drains were abandoned.

Apparently these disposal locations were in use until 1990 when the site was hooked into the county sewer system. The site is currently under closure; IMC's environmental consultant, Anson Environmental, during its closure investigation, identified three source areas on-site that are grossly contaminated with VOCs and metals. These source areas remain in place awaiting NYSDEC approval of an IRM proposed by Anson Environmental. Area 1 is a series of leach pools and a septic tank located near the corner of Main and Rushmore streets. Laboratory testing of the septic tank showed concentrations of PCE at 94,300 ppb and chromium at 27,000 ppb. Area 2, located near the corner of Swalm and Main streets, consists of two connected leach pools that apparently received discharges from the floor drains. Laboratory sampling of these two leach pools showed extremely high concentrations of toluene, xylene, methyl chloride, PCE, TCE, TCA, cadmium, chromium, and lead. In leach pool 2B PCE concentrations were 13.9% (1.39×10^8 ppb), indicating the presence of dense, non-aqueous phase liquid (DNAPL) in the pores of the sediments located within this pool. Area 3, located in an alley between the building and the southern property boundary, consists of a septic tank and two leach pools. Elevated levels of chromium were found in the septic tank (ST3, 50,000 ppb) and both leach

CHAPTER 6

CONCLUSIONS

6.1 OVERVIEW

Chlorinated solvents in groundwater typically degrade (dechlorinate) in the presence of microbiotic activity. During degradation one or more of the chlorine ions present in a solvent molecule is replaced with a hydrogen ion. Of the chlorinated compounds detected in samples analyzed at the site, trichloroethylene (TCE), tetrachloroethylene (PCE), and 1,1,1-trichloroethane (1,1,1-TCA) are typically the parent or source chemicals that are available commercially and are used widely in industry as cleaners and degreasers. These compounds will typically undergo biochemical degradation, in which chlorine atoms are replaced by hydrogen, forming the various dichloroethenes and dichloroethanes.

Specifically, PCE and TCE will degrade to form either cis- or trans-1,2-DCE or 1,1-DCE. It is possible for PCE to first degrade to TCE, which will then degrade to one of the dichloroethylenes; however, it has been LMS' experience that this process does not typically occur. Similarly, while it is theoretically possible for the DCE isomers to degrade to vinyl chloride (VC), this process is not observed very often. Rather, VC is typically present in the subsurface as a result of a direct discharge.

The compound 1,1,1-TCA degrades to 1,1-dichloroethane (1,1-DCA); it does not typically degrade to 1,2-dichloroethane (1,2-DCA). This fact is supported by the virtual lack of detection of this latter compound in the samples analyzed. The low concentrations of 1,2-DCA detected in a few samples is probably due to impurities in the various chemicals present in the groundwater samples.

Correlation of the soil and groundwater data with information assembled during Tasks 1 and 2 has facilitated the preparation of integrated chemical use/spill and contamination maps. The site has been divided into three sections - western, central, and eastern - for convenience. The western section consists of all properties west of Urban Avenue, including those along the west side of Urban Avenue. The central section consists of all properties east of Urban Avenue and west of Bond Street, including those along the east side of Urban Avenue and the west side of Bond Street, respectively. The eastern section consists of the properties east of Bond Street, including those along the east side of Bond Street. The sections are shown in Figure 6-1 along with the Nassau County tax block numbers. Large-scale drawings of the integrated chemical

use/spill and contamination maps of each of the sections are found on Plates 1 to 9 (Volume II at the back of this report).

The three maps prepared for each section show the contaminant distribution in groundwater for depth intervals at 55-75, 75-85, and 85-95 ft (Figures 6-2 through 6-27). The legend for each of these maps (Figures 6-2 through 6-27) is found on Table 6-1. The properties represented on the map have been variously shaded to indicate recorded usage or spillage of the target compounds or, where applicable, suggested target compound usage based on known site operations (cases in which no chemical usage information was available for the property).

6.2 WESTERN SECTION OF SITE

The western section of the site is a triangular region bounded on the east by Urban Avenue, on the north by the Long Island Rail Road, and on the south by Grand Boulevard. Two apparently overlapping groundwater contaminant plumes were detected in the middle portion of this section; delineation of the two plumes is based on the data available. Other than the two plumes mentioned above, pronounced groundwater contamination beneath this portion of the site was not detected. Figures 6-2 through 6-7 present the plume maps.

6.2.1 Garden Street/Hopper Street Plume

A plume was detected starting at monitoring points GP-22 and -62 and extending downgradient past GP-105 and HARMON-MW-1 (Figure 6-2). The upgradient extent of this plume appears to be near 110 Hopper Street, but no monitoring points are located in this area to confirm this. In the two most upgradient points within this plume the total PCE concentrations increased with depth (Figures 6-2 and 6-3). In GP-22 total PCE increased from 74 to 680 ppb. In GP-62 total PCE increased from 297 to 1710 ppb. A similar trend was seen in GP-95, increasing in concentration from 399 to 13,923 ppb. The plume exhibits moderate to heavy TCE contamination in its mid-position (GP-105 and -106, HARMON-MW-1, and GP-24). At the water table (52 ft) concentrations of 1,2-DCE and TCE were 2300 and 660 ppb, respectively, in HARMON-MW-1. In GP-105 and -106 the shallow samples (taken from 63-65) exhibited much less DCE and TCE than HARMON-MW-1. However, with depth at GP-106 TCE (2000 ppb) and PCE (2200 ppb) were much greater than GP-105 or HARMON-MW-1. The inference is that the contaminant distribution in this area represents potentially overlapping plumes, with the appearance of PCE at depth being the marker compound. It is believed that the PCE may have originated from a newer spill of PCE associated with the 570 Main Street plume. This hypothesis is supported by the contaminant distribution in GP-24, which exhibits more PCE

breakdown products, including VC*. GP-24 is believed to be more representative of an older historical spill within the plume area.

Heavy BTEX contamination was also detected in soil samples collected from the 10-ft interval just above the water table in GP-22. Groundwater was moderately contaminated with toluene and xylenes (approximately 200 ppb), with a slight increase in concentration with depth. Low levels of benzene and o-xylene (50 ppb total) were detected in the 68-70 ft sample from GP-24. The BTEX soil and groundwater contamination at GP-22 indicates some type of petroleum spill in the vicinity of GP-22. A low-level plume has migrated via groundwater at least as far as GP-24.

In summary, a release of PCE has occurred in the vicinity or upgradient of GP-62 and -95. The DCE contamination detected in GP-24, HARMON MW-1, and GP-105 and -106 may be related to this spill as it is a breakdown product of PCE. GP-22 is monitoring residual PCE that has not migrated downgradient and degraded to DCE. VC appears to be forming in the vicinity of GP-24 as a result of degradation of DCE. The elevated PCE found in GP-106 may indicate that this plume and the 570 Main Street plume overlap in this area.

Possible sources for the PCE spill include the facilities at 110 Hopper Street and the properties at the southern end of Block 145, which use the address 559 Main Street. None of these facilities are on record as using any of the chlorinated solvents, although the operations at these site suggest that use of these materials is possible.

Alternatively, the chlorinated solvent contamination at GP-24 and HARMON-MW-1 may be the result of a source located between them and GP-22 (i.e., 534/542 Main Street/95 Hopper Street). Under this scenario GP-22 is monitoring an isolated (chlorinated solvent) spill as well as a BTEX spill and the contamination detected at GP-24, HARMON-MW-1, GP-105 and -106 is related to a separate spill of PCE or possibly DCE and VC. DCE is manufactured commercially, although its uses are not typically those found at the site, except possibly as an additive to lacquer-type paint (Verschueren 1983). The VC at GP-24 could be present as an impurity in discharged DCE or as a result of degradation of discharged DCE. The facility at

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*It is theoretically possible for DCE to degrade to VC (Fetter 1993), although this process is not usually observed. The presence of VC in groundwater is usually better explained as the result of a direct discharge of VC, or as an impurity in discharged PCE or TCE solvent. However, industrial sources of VC are usually limited to plastics (PVC) manufacturing facilities (Howard 1990). Since there are no such facilities in the vicinity, and VC was not detected at GP-22 as an impurity in the PCE/TCE source, the most probable cause for the VC detected at GP-24 is degradation of the DCE present.

95 Hopper Street uses various paints, both lacquer and enamel, in the manufacturing process that takes place there.

6.2.2 570 Main Street Plume

A second plume was detected below this portion of the site, to the east of the plume described above (Figures 6-5 to 6-7). The source of this plume appears to be the former IMC Magnetics facility located just upgradient of GP-20. The eastern edge of this plume appears to proceed to the southwest from Main Street between NYT MW-2 and GP-99, then between N-11847 and GP-37. The downgradient edge of the plume appears to be between N-11850 and NC-20; this is tentative based on these two shallow monitoring points. The western extent of this plume is not as obvious as the plume appears to overlap with the plume to west.

PCE and TCE were detected in GP-20; both increased in concentration with depth. PCE, TCE, and 1,1,1-TCA were detected at moderate levels in GP-23; all decreased in concentration with depth. The typical breakdown products were not detected in appreciable concentrations.

Based on the vertical distribution of PCE and TCE in GP-20, it appears that both this point, GP-23, and GP-99 are monitoring the same plume of total PCE. The hypothesis is that a "slug" of DNAPL is migrating downward through the groundwater near 570 Main Street. This accounts for the increasing concentrations with depth at GP-20. It is not known whether the DNAPL is PCE or TCE. Chemical usage and closure testing at 570 Main Street suggest it may be PCE and the noted TCE concentrations are the result of PCE breakdown. The measured concentrations in GP-23 and -99 would then be accounted for as lateral migration from the DNAPL.

In summary, a PCE or TCE spill has occurred in the vicinity or upgradient of GP-20. The most obvious source candidate is 570 Main Street, where there was a documented release of these compounds. Recent (1993) closure work at this site identified several areas of apparently heavy contaminant discharge to on-site septic systems and floor drains. Extremely high concentrations of toluene, xylenes, 1,1,1-TCA, PCE, and methyl chloride as well as chromium and cadmium were detected in samples collected from septic systems and floor drains (see Section 5.2.3, 570 Main Street). A septic system and leach pool system located on the northeast (area 2) and northwest (area 1) corners of the property, respectively, and another septic system (area 3) at the south end of the property were found to be heavily contaminated, as were samples collected from floor drains located within the building. An IRM for the site is awaiting NYSDEC approval.

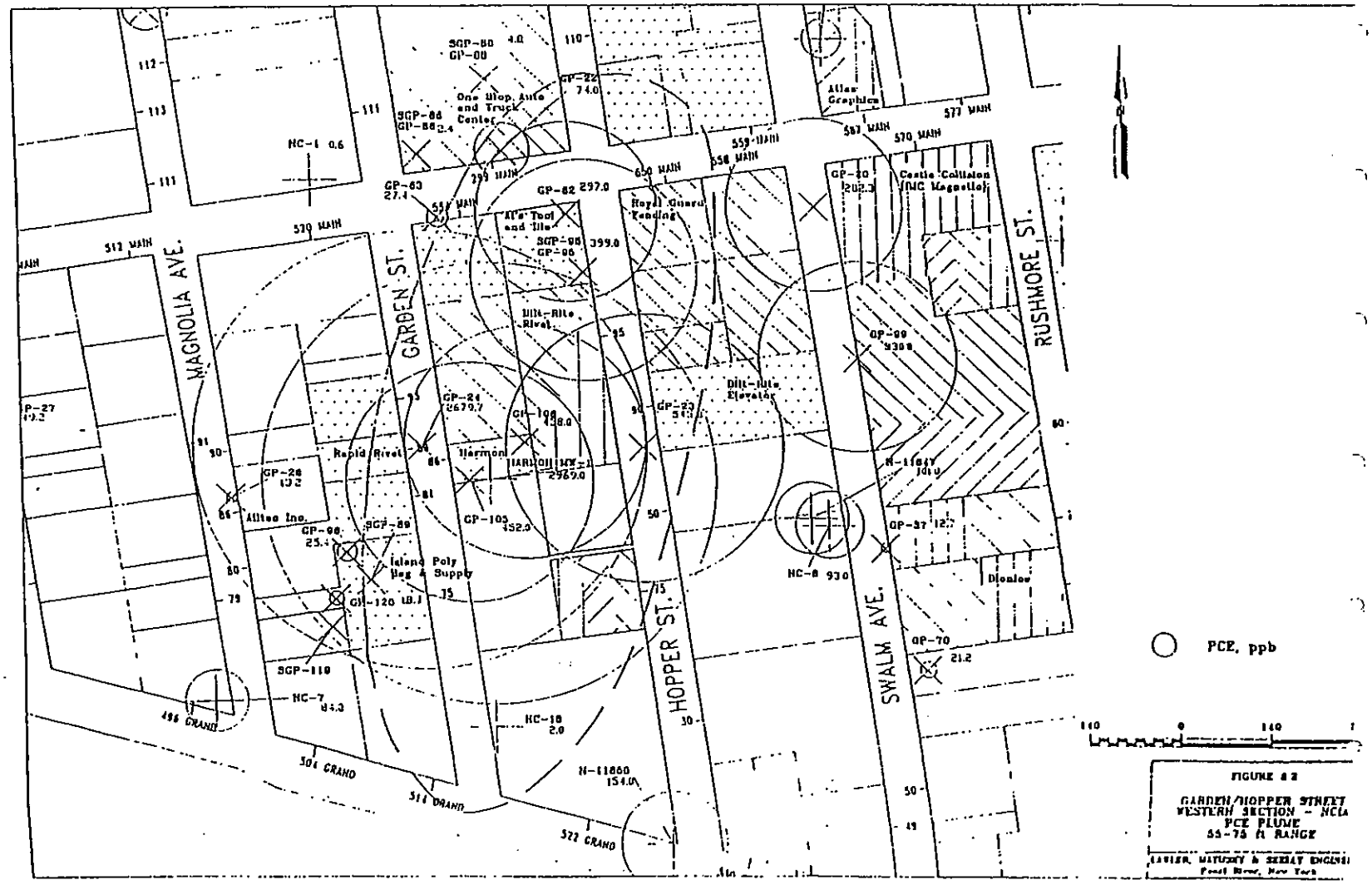
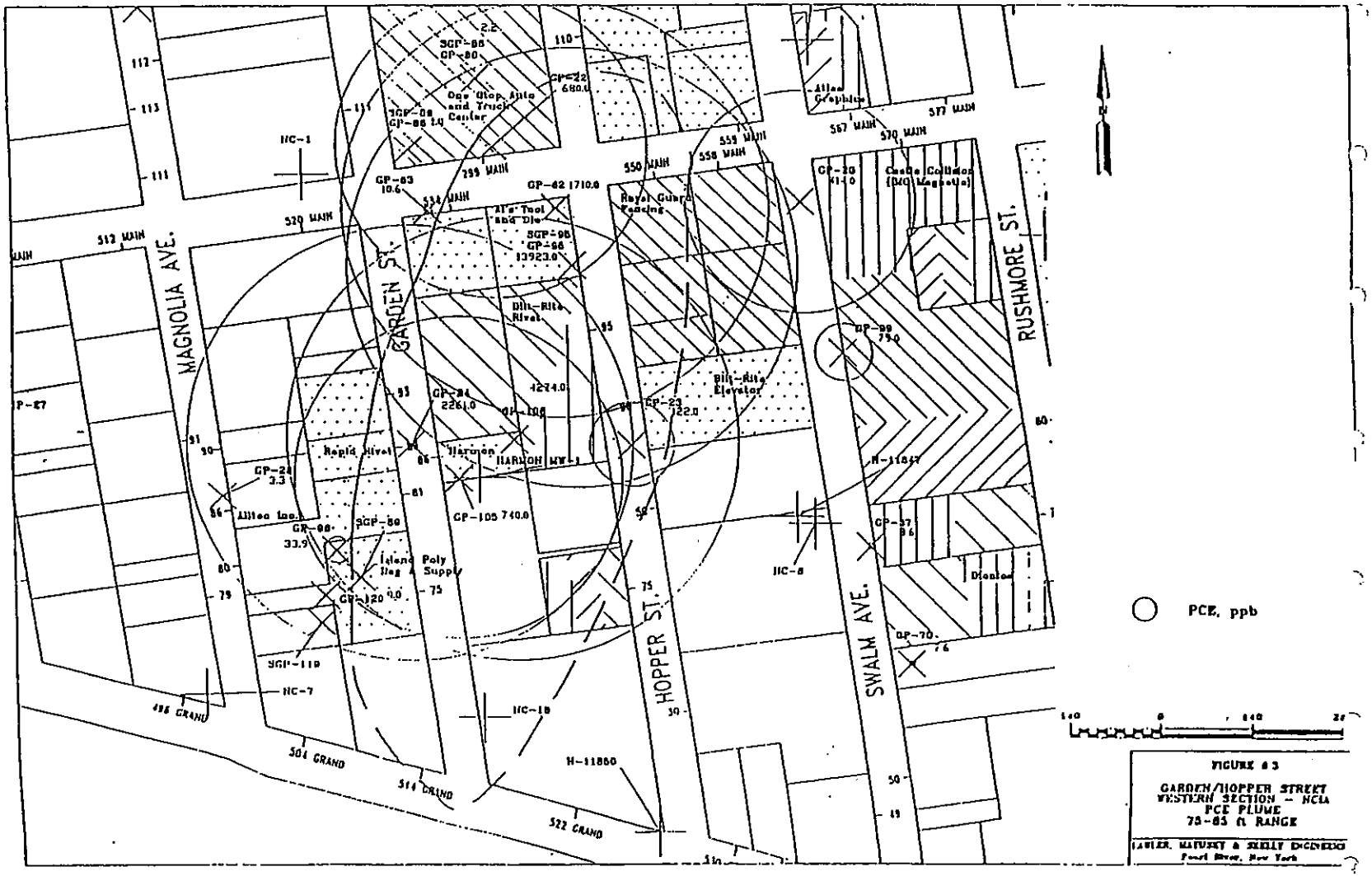
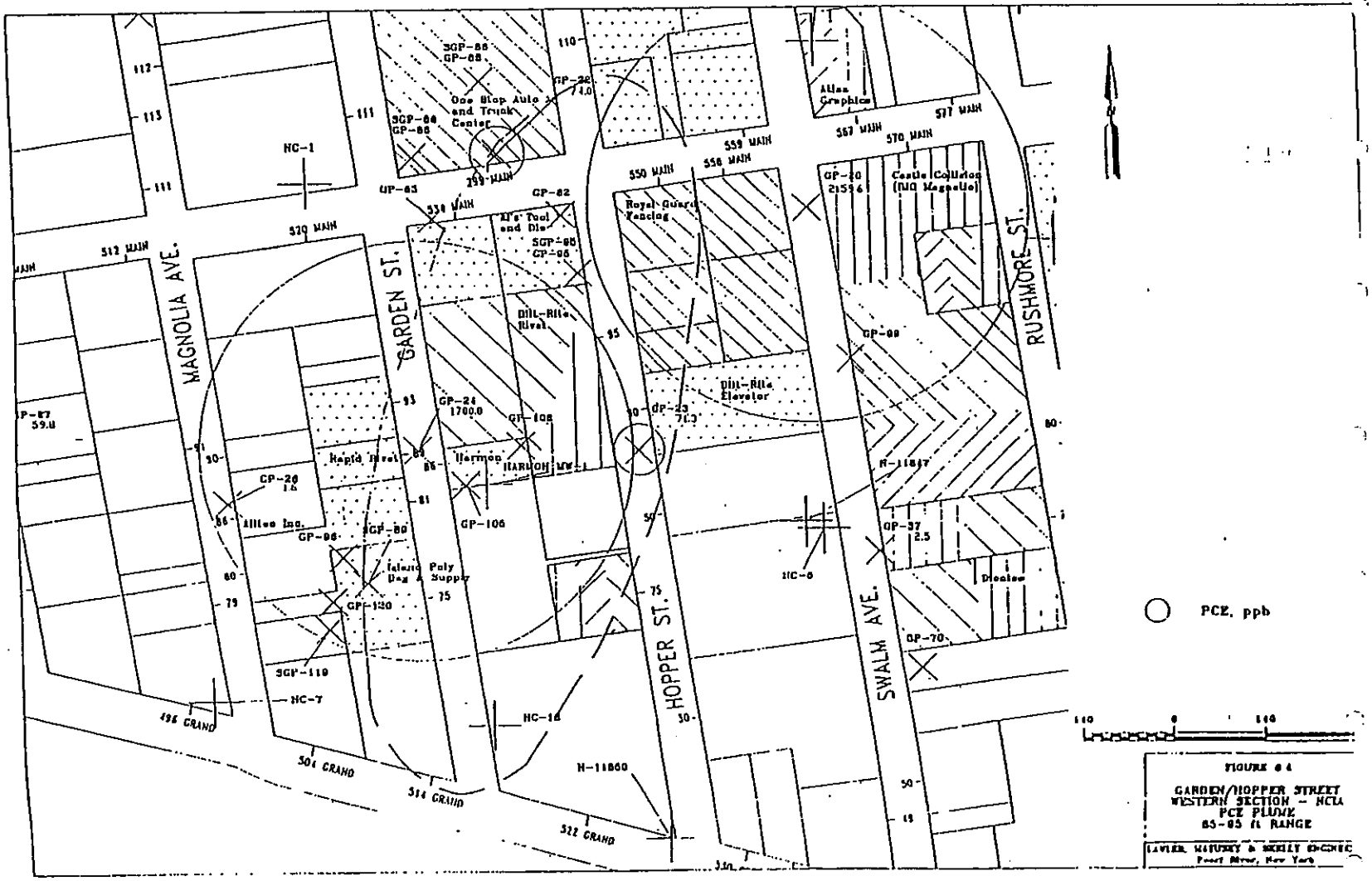


FIGURE 8.2
GARDEN/HOPPER STREET
WESTERN SECTION - NCIA
PCE PLUME
55-75 ft RANGE
LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York


MAGNOLIA AVE.
GARDEN ST.
HOPPER ST.
SWALM AVE.
RUSHMORE ST.
One Stop Auto and Truck Center
Atlas Graphics
Castle Collision (MC Magnetic)
Royal Guard Fencing
Bilt-Rite Rivet
Bilt-Rite Elevator
Rapid Rivet
Harmon
HARMON MW-1
Alliteo Inc.
Island Poly Neg & Supply
Dionice
NC-1
NC-7
NC-8
NC-18
H-11860
H-11847
GP-22 680.0
GP-63 10.6
GP-62 1710.0
GP-24 2261.0
GP-23 122.0
GP-105 740.0
GP-99 79.0
GP-37 8.6
GP-70
GP-24 3.3
GP-98 33.9
GP-120 9.0
SGP-89
SGP-119
512 MAIN
520 MAIN
534 MAIN
299 MAIN
550 MAIN
558 MAIN
559 MAIN
567 MAIN
570 MAIN
577 MAIN
496 GRAND
504 GRAND
514 GRAND
522 GRAND
PCE, ppb
FIGURE 8.3
GARDEN/HOPPER STREET
WESTERN SECTION - NCIA
PCE PLUME
75-85 ft RANGE
LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York


MAGNOLIA AVE.
GARDEN ST.
HOPPER ST.
SWALM AVE.
RUSHMORE ST.
One Stop Auto and Trunk Center
Atlas Graphics
Castle Collision (IMO Magnetic)
Royal Guard Fencing
Dilt-Rite Rivet
Dilt-Rite Elevator
Rapid Rivet
Harmon
Allies Inc.
Island Poly Bag & Supply
Dionise
NC-1
NC-6
NC-7
HC-18
H-11860
H-11847
GP-20
GP-22
GP-23
GP-24
GP-26
GP-37
GP-63
GP-70
GP-82
GP-86
GP-88
GP-89
GP-96
GP-99
GP-106
GP-108
GP-120
SGP-88
SGP-89
SGP-96
SGP-119
512 MAIN
520 MAIN
534 MAIN
550 MAIN
558 MAIN
559 MAIN
567 MAIN
570 MAIN
577 MAIN
299 MAIN
496 GRAND
504 GRAND
514 GRAND
522 GRAND
PCE, ppb
FIGURE # 4
GARDEN/HOPPER STREET
WESTERN SECTION - NCIA
PCE PLUME
85-95 ft RANGE
LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York

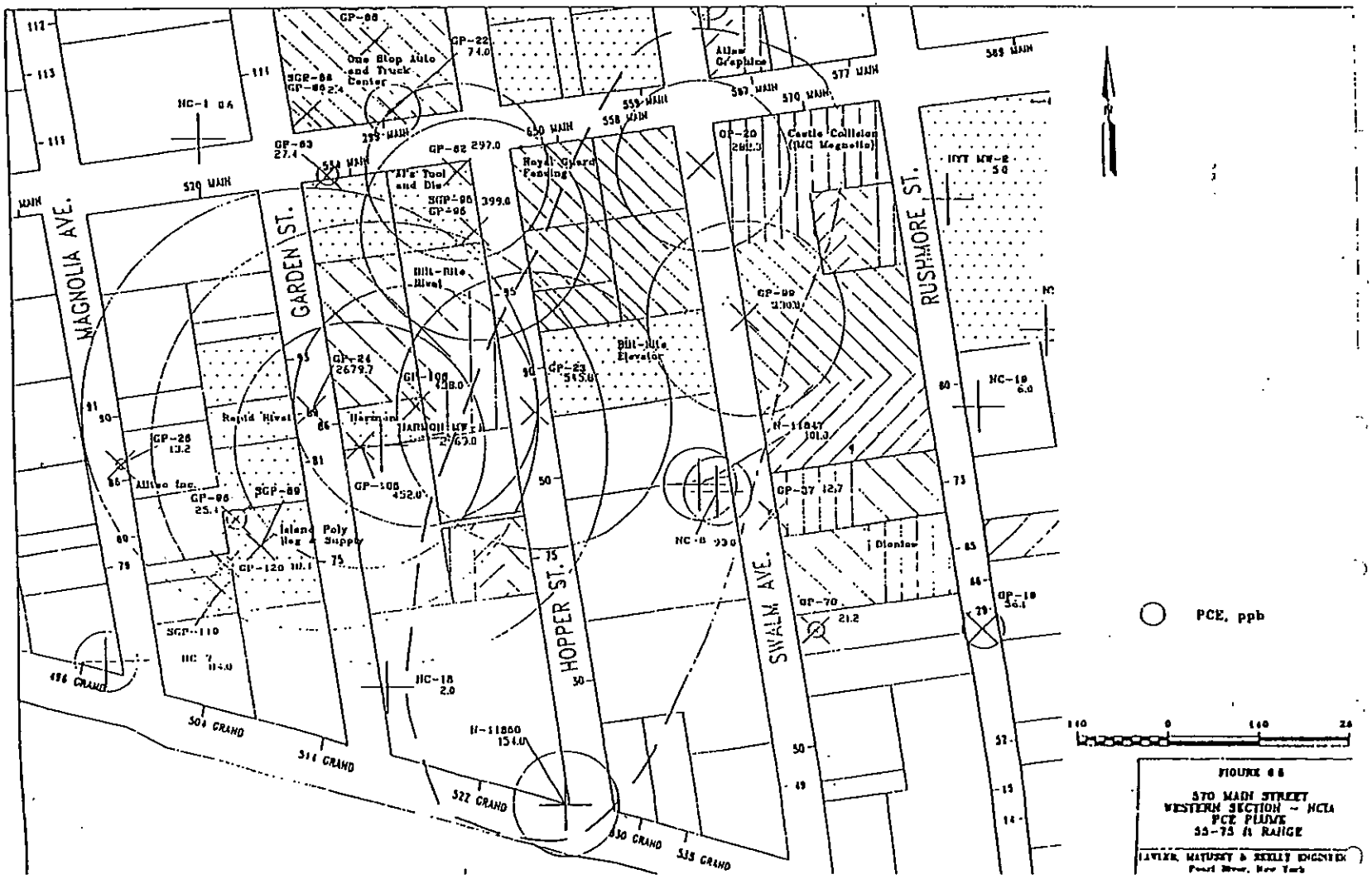


FIGURE 6.6

570 MAIN STREET
WESTERN SECTION - HCIA
PCE PLUME
55-75 ft RANGE

LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York

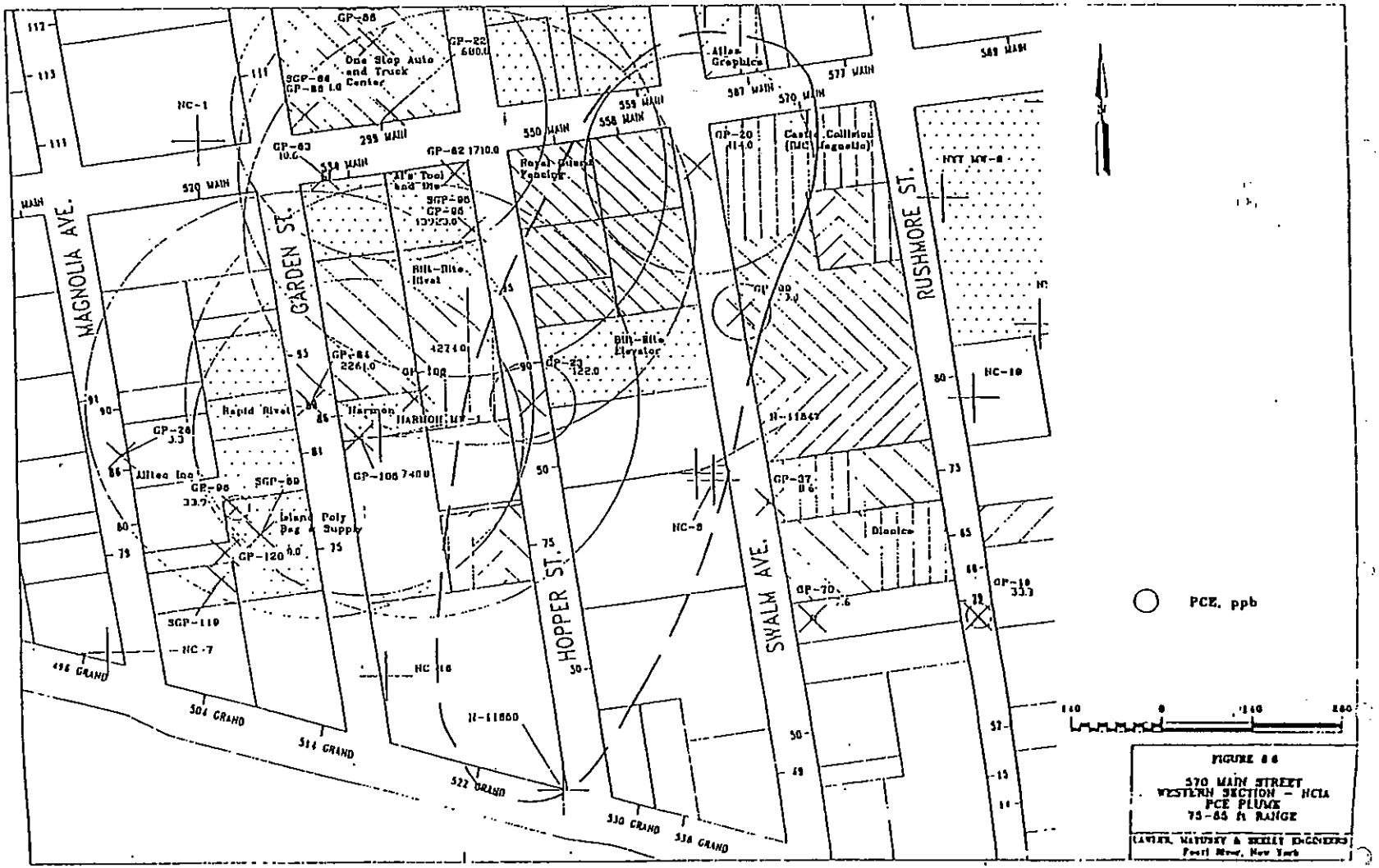


FIGURE 8.6

570 MAIN STREET
WESTERN SECTION - HCIA
PCE PLUME
75-85 ft RANGE

LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York

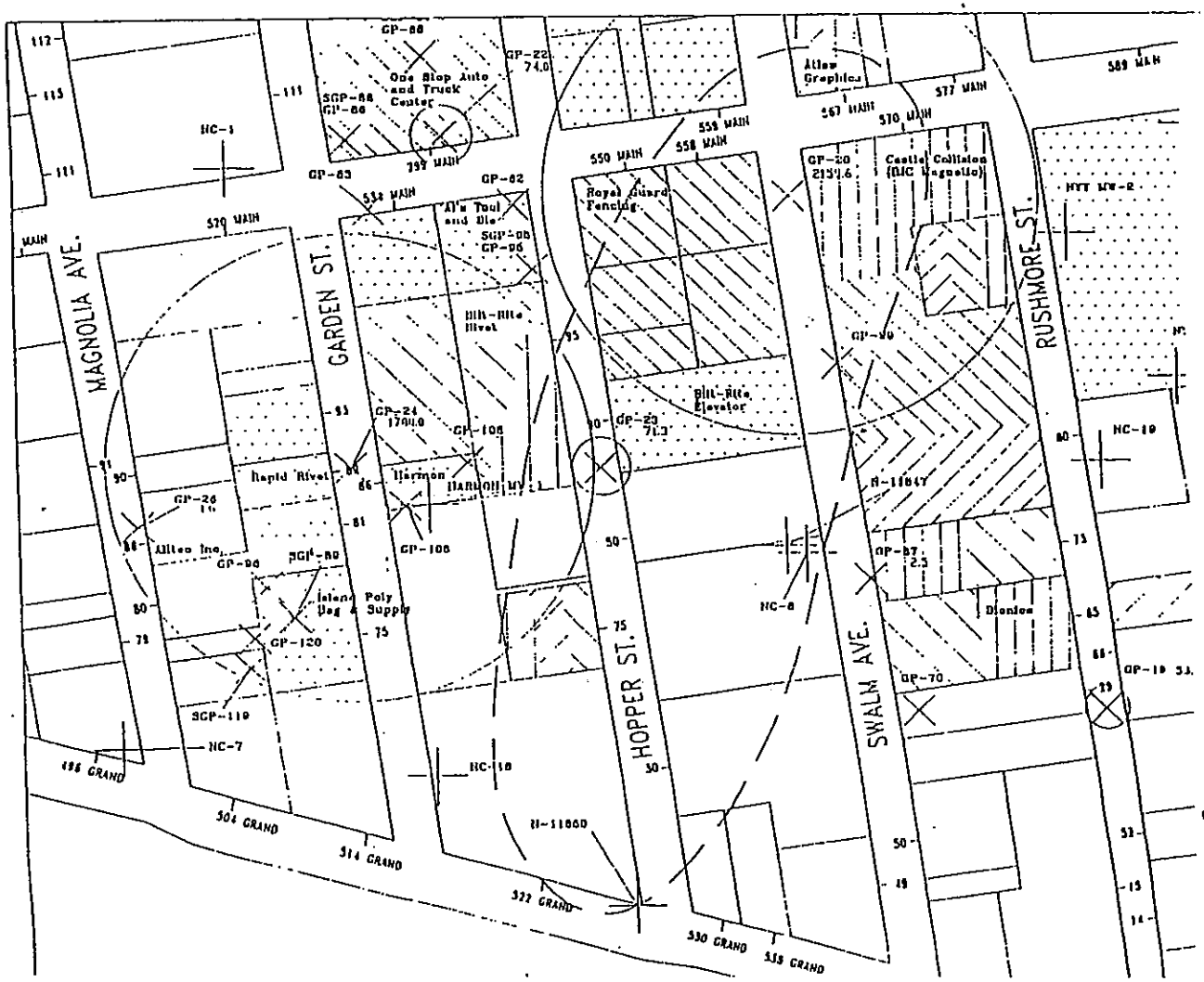


FIGURE 6.7

570 MAIN STREET
WESTERN SECTION - HCIA
PCE PLUME
85-96 A RANGE

LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl Street, New York

CHAPTER 7

RECOMMENDATIONS

The PSA results have identified several areas exhibiting significant groundwater contamination within the NCIA. As illustrated in Figure 7-1, the bulk of the contamination is centered in three areas within the site - one in each of the western, central, and eastern sections. In each of these contaminated areas separate plumes based on the contaminants, the concentrations, and sources can be subdivided. LMS has detected two plumes in the western section, three in the central section, and two in the eastern section. Beyond these plume areas, the remaining area of the NCIA appears to be relatively uncontaminated.

Following the objectives stated in Chapter 2, LMS recommends that the NCIA site be removed from the hazardous site listing and that seven separate sites be added to the list. The delisting of the whole site would delist/remove the clean blocks/lots listed below, and the relisting of the seven plume areas will then list only the major contaminated areas. It should be noted that while no evidence of significant groundwater contamination below these areas was recorded, some contamination may exist at a deeper depth within the aquifer. It is, however, unlikely that these areas are the source of the contamination.

It is not clear what classification the seven plumes can be given. All plume areas have documented significant impact to the environment - the contaminant concentrations in an aquifer connected to a drinking supply aquifer are orders of magnitude higher than drinking standards and are a serious threat. But the second criterion for listing a site, documentation of a release or presence of hazardous wastes, has not been demonstrated in all plumes. The plume areas can be divided into the following categories:

- Documented Sole Sources. This plume (125 State Street) has one documented source and a relatively clearly defined contaminant plume that results from the sole source. This site can be listed as a Class 2, listing the facility where the source was discovered as the site.

- Documented Multiple Sources. These plumes (e.g., Arkwin/Tishcon) have good documentation that a number of sources were responsible for the contaminant plume. However, a number of other facilities within the plume area were also likely contributors to the contamination, based on historical information but no documented data. These plumes can be listed as Class 2 sites as documented sources were recorded. LMS recommends that the source facilities and the potential or suspected facilities within the plume be included as the site. If individual PRP facilities obtain data documenting that they were not a source,

FIGURE 7.1

SITE-WIDE – NCIA
DATA SUMMARY
55–75 ft DEPTH RANGE

LAWLER, MATUSKY & SKELLY ENGINE
Pearl River, New York

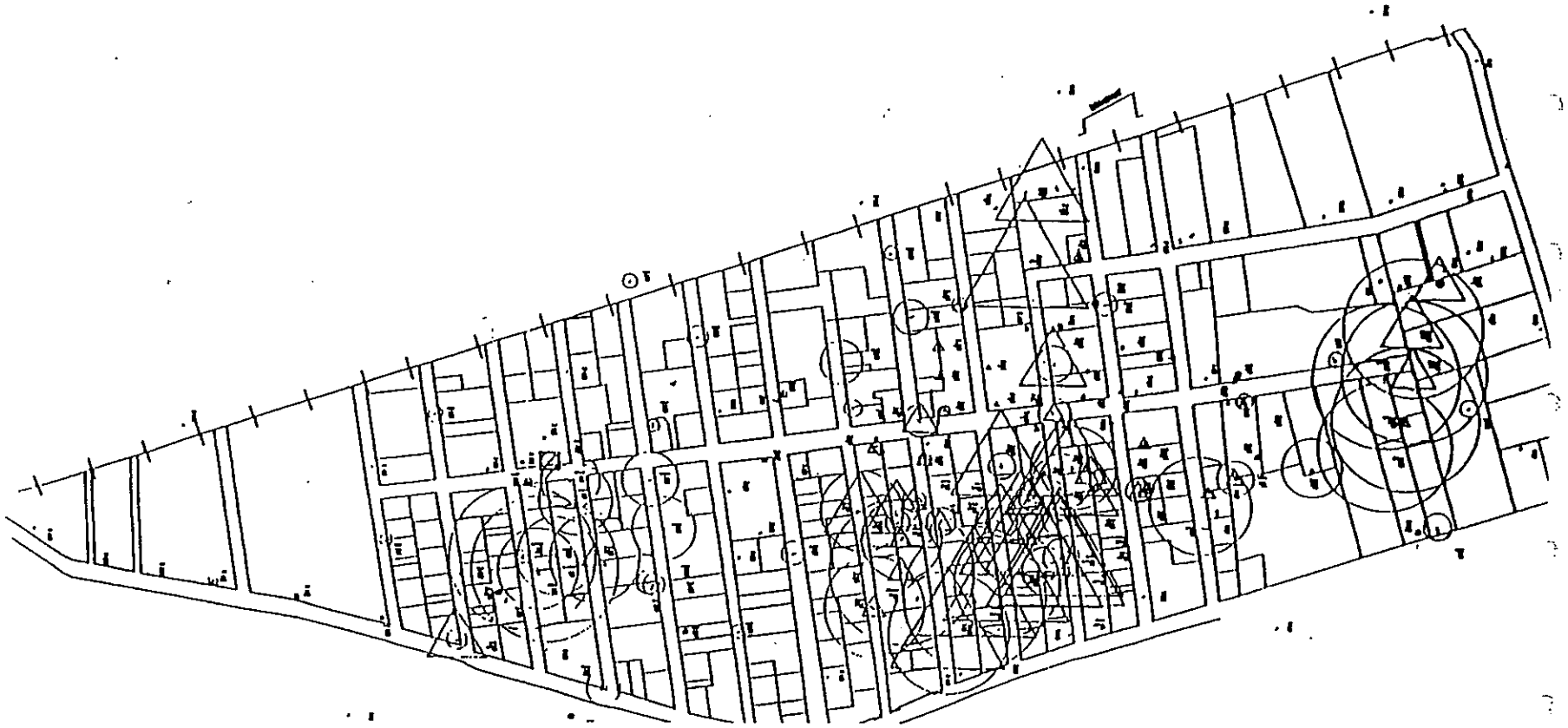
N

PCE

TCA

BTEX

NOTE:
NOT TO SCALE



these facilities can be delisted as petitioned; however, the "site" will still remain because of the known PRPs.

- Suspected Multiple Sources. These plumes (e.g., Garden Street/Sylvester Street) have good historical information that a number of facilities within the plumes were likely the source; however, documented data do not exist to date. LMS does not know whether the historical data are sufficient to document hazardous waste. We recommend two alternatives: (1) research the existing data files in more detail so as to find "documented" hazardous waste at one or more facilities, thereby listing the plume area as a Class 2a site (similar to above); or (2) list as Class 2a and go back to research and investigate the potential sources in detail.

- No Sources. These plumes (e.g., Block 328) have no documentation or other evidence to support the release of hazardous waste as found in the groundwater. Simply stated, we found no sources. We recommend these sites be classified 2a, and additional investigations be conducted to find the source.

7.1 WESTERN SECTION

In this section of NCIA two apparently overlapping contaminant plumes were detected; for the most part they are south of Main Street and between Rushmore and Garden streets. One of the plumes (the 570 Main Street plume) appears to have a well-defined source property; the other (Garden Street/Hopper Street plume) may have several source properties.

7.1.1 Garden Street/Hopper Street Plume

This plume is primarily composed of TCE and its breakdown products. It was detected in GP-22, -62, and -105, and HARMON-MW-1. In general, it appears that concentrations increase with depth. PCE from a separate source or overlap from the 570 Main Street plume was also detected in several of the monitoring points. It appears that a release of target compounds has occurred in the vicinity or upgradient of GP-62. Since source areas were not documented but there are a number of potential sources based on historical data, we label this plume area as suspected multiple sources and it can be listed as either Class 2 or 2a. The following properties should be included as in the listed site: 110 Hopper Street (Tax Block 145, lots 31 to 37), 559 Main Street (Tax Block 145, lots 38 to 45), 534 Main Street (Tax Block 71, lots 1 to 4), 542 Main Street (Tax Block 71, lots 5 to 8), 95 Hopper Street (Tax Block 71, lots 9 to 15 and 50 to 58), and 567 Main Street (Tax Block 145, lot 66).

FILE REVIEW DATABASE

WESTERN SECTION

New Cassel Industrial Area

TAX LOT	ADDRESS	CURRENT OCCUPANT	PREVIOUS SITE USAGE	WASTEWATER DISCHARGE HISTORY	HISTORIC CHEMICAL/WASTE INVENTORY	CONTAMINATION SOURCE POTENTIAL RANKING
	Town is Westbury ZIP is 11590		back to 1971 determined from review of Coles Directory 1972-1992		Information is from NCDOH BLR Hazardous Chemical/Waste Storage Locations databases run dates 3/87, 2/88, 6/88,9/89 Note these databases are not always current; see Island transport below Island moved out 1982, records do not reflect this	
BLOCK 144– TWO SEPARATE PROPERTIES				no record		
11,144,27-54	299 Main St.	SAM-TON SALVAGE (USED CAR PARTS)(since 1982) This property was observed to be vacant during October 1993. There had been a fire that destroyed the interior of the building.The business moved to 96 Urban Ave.The building is being repaired. -ALSO, Scibelli Automotive occupies a building in the NE corner of the property	Island Transportation and Asphalt Petroleum occupied between 1972 and 1982; as of 1971 Mid-Island Transit and Crestwood Bus Service occupied the property	During Geoprobe Investigation heavy BTEX contamination was discovered in soils just above the water table; moderate groundwater contamination	ISLAND TRANSPORTATION (1971-82) methanol-500 gal TCE -60 gal mineral spirits-520 gal Waste Org.-non-halog. –3710gal lacquers, lacquer thinners Auto repainting observed during Geoprobe investigation	–HIGH– (BTEX)
.11,144,55-61	1 Hopper St.	Nassau-Suffolk Recycling	no record 1992;Occupied by Baldwin Collision 1989-1991; no record 1983-1988;Frank's Frgn Auto 1981-1982;Nassau Auto Wrckng 1971-1980.			–MODERATE– lacks downgradient monitoring point data
BLOCK 145 – SEVEN SEPARATE PROPERTIES						
11,145,20-25	132 Hopper	Frank & Sons Auto Wrecking	A & F Auto Wrecking 1971-1992		no record in NCDOH chem invent	–LOW–
11,145,26-30	120 Hopper St.	EZ-EM Co & RAC Mechanical RAC since 1981	Occupied by Royal Athletic Supply between 1975 and 1980, no record prior to 1975.		ROYAL ATHLETIC paint-55000 gal	GP-21 is downgradient; NO –LOW–
11,145,31-37, 41, 65	110 Hopper St.	Flexitherm Corp. since 1990	Occupied by Contemporary Packaging,1972-1976. No record 1976-1989,and prior to 1972		CONTEMPORARY PCKGNG IPA-1300 gal ethanol-22000gal PA-1300 gal Waste Ink-24000 lbs Waste Non-halo solvents-2200 gal	–MODERATE 7– prop is upgrad. of GP-22 (heavy BTEX) a boring between the two would provide confirmation

NEW YORK STATE SUPERFUND CONTRACT

SITE INVESTIGATION REPORT

New Cassel Industrial Area Site
North Hempstead, Nassau County

Site No. 130043

Work Assignment No. D002676-2.2

DATE: February 1995

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
Langdon Marsh, *Commissioner*

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., P.E., *Director*

By:
Lawler, Matusky & Skelly Engineers

NEW YORK STATE SUPERFUND CONTRACT

SITE INVESTIGATION REPORT

FINAL

New Cassel Industrial Area Site
North Hempstead, Nassau County

Site No. 130043

Work Assignment No. D002676-2.2

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road
Albany, New York 12233

February 1995

Prepared By:

LAWLER, MATUSKY & SKELLY ENGINEERS
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

File No. 650-028

CHAPTER 1

EXECUTIVE SUMMARY

The New Cassel Industrial Area (NCIA) is located in the unincorporated village of Westbury, in the Town of North Hempstead, Nassau County, New York. Approximately 200 industrial or commercial businesses occupy this 170-acre site. The Nassau County Department of Health (NCDOH), in conjunction with a private consulting firm, conducted a subsurface investigation of the NCIA in 1985 to evaluate groundwater quality in the vicinity of this and several other sites in the county found to possess groundwater contamination problems. The investigation identified fairly extensive halogenated volatile organic contamination of groundwater beneath the site, and recommended further study. NCDOH also petitioned the New York State Department of Environmental Conservation (NYSDEC) to classify the site as a hazardous waste site, which it did (Class 2) in 1988.

Subsequently, numerous owners of property within the site have petitioned NYSDEC to isolate and remove their properties from the Class 2 list. NYSDEC has delisted many of the properties for which it received delist petitions with the qualification that if the pending site investigation showed these properties to be the source of the contamination, they would be relisted.

Lawler, Matusky & Skelly Engineers (LMS) was contracted by NYSDEC to conduct a site investigation for the NCIA. This report presents the findings of this investigation. Task 1 consisted of a file review of information pertinent to the site from various town, county, and state agencies. During Task 2 a comprehensive database summarizing the information gathered in Task 1 was compiled. During Task 3 groundwater samples were collected for analysis from 56 monitoring wells already located at the site. Samples collected from 40 groundwater probes located strategically throughout the site were analyzed in Task 4. The Geoprobe locations were sampled from multiple depths to provide vertical contaminant distribution information. This task also included preparation of a draft report presenting the results of Tasks 1 through 4 along with LMS' recommendations for additional work. Task 5 consisted of a second phase of groundwater probes and suspected source area sampling along with selected facility inspections. Tasks 6 and 7 constitute preparation of this report and additional file investigations.

The data generated from the sampling have been analyzed and used to generate contaminant plume maps. Several groundwater volatile organic compound (VOC) contaminant plumes were delineated during the assessment, and the properties potentially contributing to these plumes have been identified. The contaminant plume distributions have been analyzed with respect to

current and previous property usage for the entire site, incorporating chemical use and spill information gathered from extensive file review.

The investigation has identified several areas exhibiting significant groundwater contamination within the NCIA. The bulk of the contamination is centered in three areas within the site: one in each of the western, central, and eastern sections. In each of these contaminated areas separate plumes based on the contaminants, concentrations, and sources can be subdivided. LMS has detected two plumes in the western section, three in the central section, and two in the eastern section. Beyond these plume areas, the remaining area of the NCIA appears to be relatively uncontaminated.

Following the objectives stated in Chapter 2, LMS recommends that the NCIA site be removed from the Registry of Inactive Hazardous Waste Sites and that individual sites with documented hazardous waste disposal be added to the registry. Other sites are recommended as suspected hazardous waste sites because the data suggest that they are potentially adding to the measured contaminant plumes but hazardous waste disposal has yet to be documented. The delisting of the whole site would delist or remove all sites in the NCIA that had no hazardous waste disposal and no significant groundwater contaminants. The tax blocks are listed in Chapter 7 by section.

LMS recommends that the following sites be restored to the registry. The documentation and data supporting these recommendations are presented in Chapter 7.

Western Section

- **Castle Collision** (IMC Magnetics), 570 Main Street (Tax Block 73, lots 1-12, 63-75)
- **Atlas Graphics**, 567 Main Street (Tax Block 164, lot 66)

Central Section

- **Tishcon Corporation**, 125 State Street (Tax Block 181, lot 84)
- **Arkwin Industries**, 648-656 Main Street (Tax Block 78, lots 1-8), 662-670 Main Street (Tax Block 79, lots 1-8), 66 Brooklyn Avenue (Tax Block 79, lots 266-270)
- **Tishcon Corporation**, 30-36 New York Avenue (Tax Block 78, lots 78, 19-21), 31-33 Brooklyn Avenue (Tax Block 79, lots 79 and 56-58), 29 New York Avenue (Tax Block 77, lots 47-50)

- **Industrial Mets** (Tishcon), 68 Kinkel Street (Tax Block 76, lots 9-12)
- **Metpar Steel Products**, 95 and 97-99 State Street (Tax Block 161, lots 41, 42, and 5-8)

It is recommended that the following sites be considered suspected hazardous waste sites. They will require additional investigation to determine whether hazardous waste was disposed of on-site and impacted the groundwater:

Western Section

- **Flexitherm Corporation**, 110 Hopper Street (Tax Block 145, lots 31-37)
- **IET Labs**, 534 Main street (Tax Block 71, lots 1-4)
- **Al's Tool and Die**, 542 Main Street (Tax Block 71, lots 5-8)
- **Harmon Associates**, 86 Garden Street (Tax Block 71, lots 16-17)
- **Bilt-Rite Steel-Buck**, 95 Hopper Street (Tax Block 71, lots 9-15 and 50-58), and **Bilt Rite Elevator**, 90 Hopper Street (Tax Block 72, lots 14-17 and 59-62)

Central Section

- **Glassblock Warehouse**, 38 Kinkel Street (Tax Block 76, lots 22-29)
- **Micro-Ray Corporation**, 49 Sylvester Street (Tax Block 76, lots 66-68)
- **Doak Dermatologies**, 62 Kinkel Street and 67 Sylvester Street (Tax Block 76, lots 13-15 and 69-72)
- **Arkwin Industries**, 33 Sylvester Street (Tax Block 76, lots 57-65)

Eastern Section

- **Nationwide Paint** (?[1]), 750 Main Street (Tax Block 328, lot 178)
- **Eastern Main Street**
- **Utility Manufacturing Company**, 700 Main Street (Tax Block 320, lot 176), list as 2a
- **Former Wonder King Chemical**, 710-712 Main Street (Tax Block 328, lot 188), list as 2a

---

[1]Reported former use of this address; the exact name, however, could not be verified.

along the northern and western property boundary. Several drums of what appeared to be waste oil or diesel were noted to the rear of the property. Although not verified, one or more leach pools is believed to exist in the western (rear) alley.

87-89 Garden Street. Rapid Rivet and Fastener Corporation has been on-site for seven years (Appendix B, Photo 28). The company, which ships and distributes specialty rivets and fasteners, is a dry operation and does not use or store any chemicals. The space is leased and information on past uses and disposal histories is limited. A single floor drain noted inside the building was reportedly installed to accept storm water that occasionally seeps into the building. Other than toward the front or inside the building, there are no areas where a leach pool could be located. The building covers most of the lot and there are no alleys.

80-86 Magnolia Avenue. Alltec Inc., which sells and services power washers, has been on-site for three years (Appendix B, Photo 30). The occupants are unaware of past uses: the building had apparently been vacant for some time. NCDH records indicate that Impetus Industries (AEC Corporation) was formerly located at this address. Soaps and cleaners are stored but no solvent-based cleaners. Alltec had no knowledge of any leach pools on-site. Several suspected pools were identified to the rear and front of the building, but the owner objected to any sampling so the presence of former leach pools could not be verified.

299 Main Street. One Stop Auto and Truck Centers has occupied this address since April 1994 (Appendix B, Photos 21 and 22). A full-service auto and truck garage, the firm currently has no underground storage. There were no floor drains within the garage, although there was a grated drain along the garage doors. Where this drain discharges is unknown as the rear lot has been recently paved, covering over signs of old leach pools (Appendix B, Photo 23). The site was formerly a junkyard (Sam-Ton Salvage) for approximately 20 years. Several features at the site suggest that there once was underground storage at the site (Appendix B, Photo 24). Heavy BTEX contamination was noted in a soil sample just above the water table in GP-22 located near this address. NCDOH records indicate Island Transport formerly occupied the site and reportedly used 80 gal/year of trichloroethylene (TCE).

570 Main Street. Castle Collision is located in the southern portion of the building at this address; the northern portion is vacant. Castle Collision is a full-service autobody repair and painting garage. The site was formerly in use by IMC Magnetics, which manufactured precision pumps for the aircraft industry. When IMC Magnetic moved to Hauppaug, New York, a number of leaching pools, septic tanks, and floor drains were abandoned. NCDOH

CHAPTER 6

CONCLUSIONS

6.1 OVERVIEW

The presence of halogenated aliphatic compounds, such as TCE, PCE, and TCA, in groundwater are typically the result of direct discharges of industrial wastes (e.g., degreasers and cleaning solvents) to the ground surface and not the result of biochemical degradation. This is the most probable source of these contaminants detected in groundwater samples collected from the site. When TCE, PCE, and TCA are present significant products of degradation can be cis-1,2-dichloroethylene (cis-DCE) and 1,1,-dichloroethane (1,1-DCA). It has been found that halogenated aliphatic compounds, which include chlorinated solvents, can be degraded to varying degrees through both biotic (hydrogenolysis) and abiotic (dehydrohalogenation) processes.

PCE will undergo hydrogenolysis to produce TCE; however, TCE will more rapidly degrade into cis-DCE. Because the transformation rates for TCE to degrade to cis-DCE are much faster than the rates for cis-DCE to degrade, it is more likely that cis-DCE will be detected in the environment rather than TCE, as a result of biochemical degradation. This would probably account for the cis-DCE detected at the site. cis-DCE has been shown to degrade to vinyl chloride (VC) and/or chloroethane (CA); however, the transformation rates are very slow and these compounds are typically not detected in the environment as a result of biochemical degradation.

TCA normally undergoes hydrogenolysis to produce 1,1-DCA and would appear to account for the presence of this compound in samples collected from the site. 1,1-DCA has also been found to degrade to VC and/or CA; however, it is unlikely they would be detected because of the very slow transformation rates discussed earlier. There is no evidence that TCA will degrade to 1,2-dichloroethane (1,2-DCA), and the presence of 1,2-DCA in samples collected from the site may be indicative of impurities that exist in many of the commercial solvents used. This is also true of the breakdown products discussed earlier, many of which can be found in varying quantities as impurities in the solvents purchased by commercial businesses.

Correlation of the soil and groundwater data with information assembled during Tasks 1 and 2 facilitated the preparation of integrated chemical use/spill and contamination maps. The site has been divided into three sections - western, central, and eastern - for convenience (Figure 6-1). The western section consists of all properties west of Urban Avenue, including those

along the west side of Urban Avenue. The central section consists of all properties east of Urban Avenue and west of Bond Street, including those along the east side of Urban Avenue and the west side of Bond Street, respectively. The eastern section consists of the properties east of Bond Street, including those along the east side of Bond Street.

The three maps prepared for each section show the contaminant distribution in groundwater for depth intervals at 55-75, 75-85, and 85-95 ft (Figures 6-2 through 6-27). The plumes are defined as area where the total PCEs, TCAs, and BTEX compounds exceeded 100 ppb. The legend for each of these maps (Figures 6-2 through 6-27) is found on Table 6-1. Note: The contaminant concentrations and plumes illustrated on these figures are total PCEs (PCE + TCE + DECs + VC), total TCAs (1,1,1-TCA + DCA); and total BTEXs (BTEX + chlorobenzene). The properties represented on the map are variously shaded to indicate recorded usage or spillage of the target compounds or, where applicable, suggested target compound usage based on known site operations (cases in which no chemical usage information was available for the property). Large-scale maps of each section have also been prepared. These plates are found in the supporting documentation.

6.2 WESTERN SECTION

The western section of the site is a triangular region bounded on the east by Urban Avenue, on the north by the Long Island Rail Road, and on the south by Grand Boulevard. Two apparently overlapping groundwater contaminant plumes were detected in the middle portion of this section; delineation of the two plumes is based on the data available. Other than the two plumes mentioned above, pronounced groundwater contamination beneath this portion of the site was not detected. Figures 6-2 through 6-7 present the plume maps.

6.2.1 Garden Street/Hopper Street Plume

A plume was detected starting at monitoring points GP-22 and -62 and extending downgradient past GP-105 and HARMON-MW-1 (Figure 6-2). The upgradient extent of this plume appears to be near 110 Hopper Street, but no monitoring points are located in this area to confirm this. In the two most upgradient points within this plume the total PCE concentrations increased with depth (Figures 6-2 and 6-3). In GP-22 total PCE increased from 74 to 680 ppb. In GP-62 total PCE increased from 297 to 1710 ppb. A similar trend was seen in GP-95, increasing in concentration from 399 to 13,923 ppb. The plume exhibits moderate to heavy TCE contamination in its mid-position (GP-105 and -106, HARMON-MW-1, and GP-24). At the water table (52 ft) concentrations of 1,2-DCE and TCE were 2300 and 660 ppb, respectively, in HARMON-MW-1. In GP-105 and -106 the shallow samples (taken from 63-65 ft) exhibited

much less DCE and TCE than HARMON-MW-1. However, with depth at GP-106 TCE (2000 ppb) and PCE (2200 ppb) were much greater than GP-105 or HARMON-MW-1. The inference is that the contaminant distribution in this area represents potentially overlapping plumes, with the appearance of PCE at depth being the marker compound. It is believed that the PCE may have originated from a newer spill of PCE associated with the 570 Main Street plume. This hypothesis is supported by the contaminant distribution in GP-24, which exhibits more PCE breakdown products, including VC.* GP-24 is believed to be more representative of an older historical spill within the plume area.

Heavy BTEX contamination was also detected in soil samples collected from the 10-ft interval just above the water table in GP-22. Groundwater was moderately contaminated with toluene and xylenes (approximately 200 ppb), with a slight increase in concentration with depth. Low levels of benzene and o-xylene (50 ppb total) were detected in the 68-70 ft sample from GP-24. The BTEX soil and groundwater contamination at GP-22 indicates some type of petroleum spill in the vicinity of GP-22. A low-level plume has migrated via groundwater at least as far as GP-24.

In summary, a release of PCE has occurred in the vicinity or upgradient of GP-62 and -95. The DCE contamination detected in GP-24, HARMON MW-1, and GP-105 and -106 may be related to this spill as it is a breakdown product of PCE. GP-22 is monitoring residual PCE that has not migrated downgradient and degraded to DCE. VC appears to be forming in the vicinity of GP-24 as a result of degradation of DCE. The elevated PCE found in GP-106 may indicate that this plume and the 570 Main Street plume overlap in this area.

Possible sources for the PCE spill include 110 Hopper Street. Although this address is not on record as using any of the chlorinated solvents, the operations at this site suggest that use of these materials is possible.

Alternatively, the chlorinated solvent contamination at GP-24 and HARMON-MW-1 may be the result of a source located between them and GP-22 (i.e., 534/542 Main Street/95 and 90 Hopper Street). Under this scenario GP-22 is monitoring an isolated (chlorinated solvent) spill

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*It is theoretically possible for DCE to degrade to VC (Fetter 1993), although this process is not usually observed. The presence of VC in groundwater is usually better explained as the result of a direct discharge of VC, or as an impurity in discharged PCE or TCE solvent. However, industrial sources of VC are usually limited to plastics (PVC) manufacturing facilities (Howard 1990). Since there are no such facilities in the vicinity, and VC was not detected at GP-22 as an impurity in the PCE/TCE source, the most probable cause for the VC detected at GP-24 is degradation of the DCE present.

as well as a BTEX spill and the contamination detected at GP-24, HARMON-MW-1, and GP-105 and -106 is related to a separate spill of PCE or possibly DCE and VC. DCE is manufactured commercially, although its uses are not typically those found at the site, except possibly as an additive to lacquer-type paint (Verschueren 1983). The VC at GP-24 could be present as an impurity in discharged DCE or as a result of degradation of discharged DCE. The facility at 95 Hopper Street uses various paints, both lacquer and enamel, in the manufacturing process that takes place there.

6.2.2 570 Main Street Plume

A second plume was detected below this portion of the site, to the east of the plume described above (Figures 6-5 to 6-7). The source of this plume appears to be the former IMC Magnetics facility located just upgradient of GP-20. The eastern edge of this plume appears to proceed to the southwest from Main Street between NYT MW-2 and GP-99, then between N-11847 and GP-37. The downgradient edge of the plume appears to be between N-11850 and NC-20; this is tentative based on these two shallow monitoring points. The western extent of this plume is not as obvious as the plume appears to overlap with the plume to west.

PCE and TCE were detected in GP-20; both increased in concentration with depth. PCE, TCE, and 1,1,1-TCA were detected at moderate levels in GP-23; all decreased in concentration with depth. The typical breakdown products were not detected in appreciable concentrations.

Based on the vertical distribution of PCE and TCE in GP-20, it appears that this point, GP-23, and GP-99 are monitoring the same plume of total PCE. The hypothesis is that a "slug" of DNAPL has migrated downward through the groundwater near 570 Main Street. This accounts for the increasing concentrations with depth at GP-20. It is not known whether the DNAPL is PCE or TCE. Chemical usage and closure testing at 570 Main Street suggest it may be PCE and the noted TCE concentrations are the result of PCE breakdown or a separate upgradient TCE source. The measured concentrations in GP-23 and -99 would then be accounted for as lateral migration from the DNAPL.

In summary, a PCE or TCE spill has occurred in the vicinity or upgradient of GP-20. The most obvious source candidate is 570 Main Street, where there was a documented release of these compounds. Closure work at this site in 1993 identified several areas of apparently heavy contaminant discharge to on-site septic systems and floor drains. Extremely high concentrations of toluene, xylenes, 1,1,1-TCA, PCE, and methyl chloride as well as chromium and cadmium were detected in samples collected from septic systems and floor drains (see Section 5.2.3, 570 Main Street). A septic system and leach pool system located on the northeast (area 2) and

CHAPTER 7

RECOMMENDATIONS

The site investigation results have identified several areas exhibiting significant groundwater contamination within the NCIA. As illustrated in Figure 7-1, the bulk of the contamination is centered in three areas within the site - one in each of the western, central, and eastern sections. In each of these contaminated areas separate plumes based on the contaminants, the concentrations, and sources can be subdivided. LMS has detected two plumes in the western section, three in the central section, and two in the eastern section. Beyond these plume areas, the remaining area of the NCIA appears to be relatively uncontaminated.

Following the objectives stated in Chapter 2, LMS recommends that the NCIA site be removed from the hazardous site listing and that individual properties that appear to be the sources of the contaminant plumes be relisted as individual sites. Delisting of the whole site would delist or remove the blocks/lots with little or no contamination; relisting of individual properties would put back specific, named sites that will require remediation or additional investigations. It should be noted that while no evidence of significant groundwater contamination was noted in many areas, some contamination may exist at greater depths within the aquifer. It is unlikely, however, that these areas are the source of the contamination.

According to Title 13, Article 27, of the State Environmental Conservation Law, the Registry of Inactive Hazardous Waste Sites must include all known hazardous waste sites. To be included in the registry, it must be confirmed that hazardous wastes were disposed of or are present on the site. Sites with confirmed hazardous wastes are then classified according to the effects of that contamination on the environment or human health. Classification 2 is for sites for which there is information sufficient to determine that they pose a significant threat to the public health or environment; Classification 2a is for sites with insignificant information to make a significant threat determination; Class 3 is for sites that do not pose a significant threat. Sites without documentation of hazardous waste disposal are not included on the registry; however, they may be investigated further if it is suspected that hazardous wastes were disposed of.

At the NCIA site past studies and this investigation have documented a significant impact to the environment and threat to the public health: measured contaminant concentrations in an aquifer connected to a drinking supply aquifer are orders of magnitude higher than drinking water standards. This investigation has narrowed the impacted area to seven major plumes and identified individual facilities/properties on-site within these areas that may be the source of the

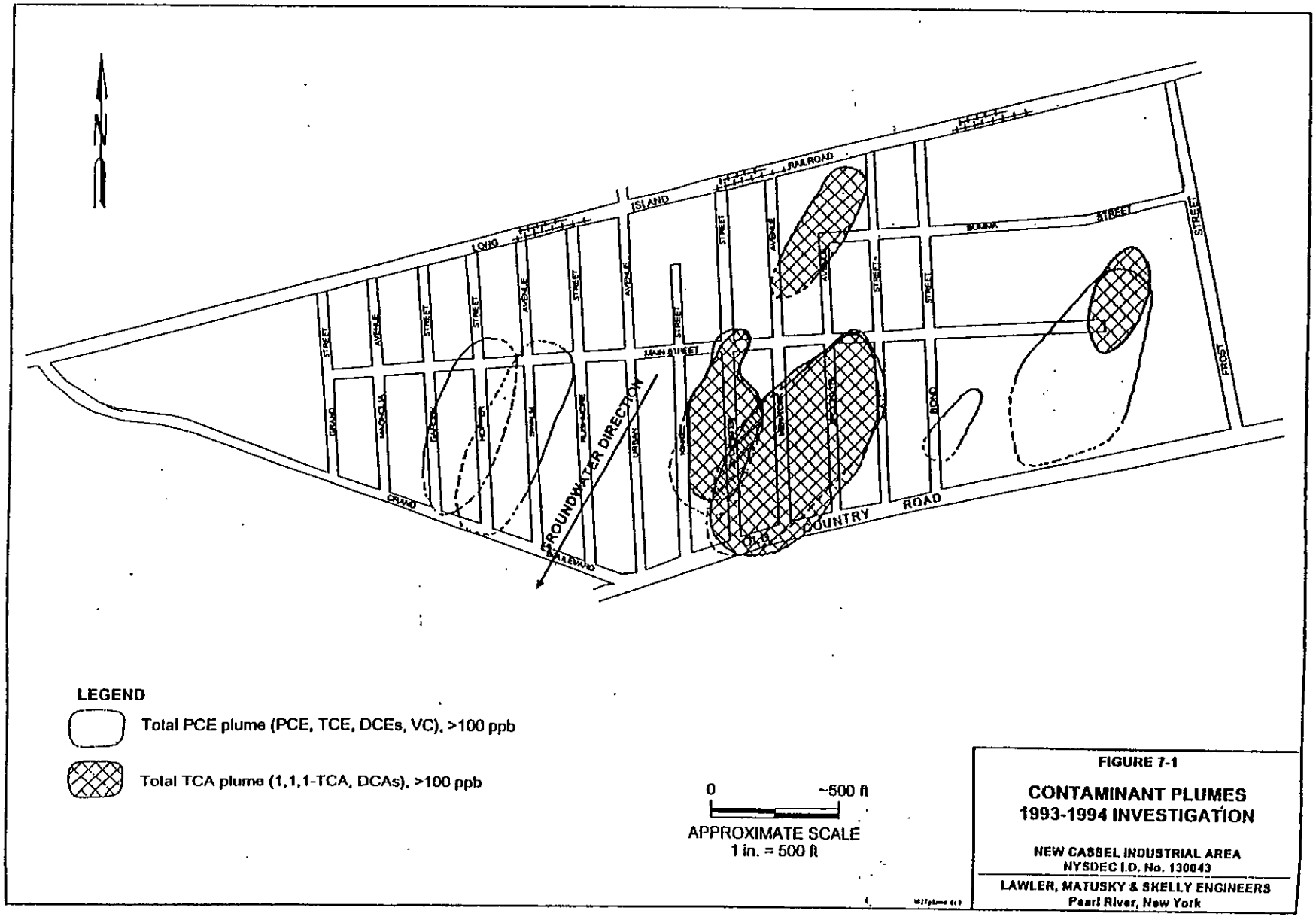

FIGURE 7-1

CONTAMINANT PLUMES 1993-1994 INVESTIGATION

NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043

LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York

contamination. Documentation of hazardous waste disposal related to the contaminated plume at these sites was developed as follows:

- Suspected sites were identified either by existing or past site use, file data, or location within a highly contaminated plume area.

- Through additional file or report research or information obtained during site inspections and/or site sampling, documentation of chemical usage and source data was obtained. Chemical usage documents the chemical and amounts used currently or (more importantly) in the past at the sites. Past usage is particularly important because prior to the late 1970s and 1980s the entire NCIA used septic systems for waste disposal. Source data refer to sampling data that indicate the presence of contaminant chemicals on-site, usually in old seepage pits.

- The monitoring well and Geoprobe data were analyzed for each site to determine upgradient and downgradient contaminant concentrations. In general, if the downgradient concentrations were three times the upgradient concentrations of the same contaminant, then it would appear that the site was responsible for a release of that contaminant.

- If the chemical usage or source data correlate with the plume data, i.e., the same or related chemicals, then it is reported that hazardous waste disposal documentation exists for that site and the site should be relisted on the registry.

A summary of the analysis for each suspected site is presented on Table 7-1. Interpretation and recommendations for each site are presented below, grouped according to section and plume areas.

7.1 WESTERN SECTION

In this section of NCIA two apparently overlapping contaminant plumes were detected; for the most part they are south of Main Street and between Rushmore and Garden streets. One of the plumes (the 570 Main Street plume) appears to have a well-defined source property; the other (Garden Street/Hopper Street plume) may have several source properties.

7.1.1 Garden Street/Hopper Street Plume

This plume is primarily composed of TCE and its breakdown products. It was detected in GP-22, -62, and -105 and HARMON-MW-1. In general, it appears that concentrations increase with depth. PCE from a separate source or overlap from the 570 Main Street plume was also detected in several of the monitoring points. It appears that a release of target compounds has occurred in the vicinity or upgradient of GP-62. The properties that fall within this plume area and our recommendations are as follows:

- **One Stop Auto and Truck Center**, 299 Main Street (Tax Block 145, lots 37-44). This is the only address within this plume area that has a documented use of a target compound. A former use at the site, Island Transport, reportedly used 80 gal of TCE per year. Several groundwater (GP-86 and -88) and soil (SGP-86 and -88) samples did not identify a source of chlorinated compounds. BTEX compounds were found. The downgradient point (GP-22) was not significantly elevated in comparison to the upgradient point (GP-88). The data do not support a correlation with the major contaminant plume; therefore, it is recommended that this site not be included in the registry at this time.

- **Flexitherm Corporation**, 110 Hopper Street (Tax Block 145, lots 31-37). This address is located at the very upgradient edge of this plume. The chemical usage history indicates chemicals are used at the address, but they are not chlorinated compounds. This address should be considered a suspected hazardous waste site and additional investigation may be needed.

- **IET Labs**, 534 Main Street (Tax Block 71, lots 1-4). This address is located near the upgradient edge of this plume. The chemical usage history and past uses at this address do not indicate that this address is the source. The downgradient sampling point, GP-24, does, however, exhibit high concentrations. This address should be considered a suspected hazardous waste site and additional investigations may be needed.

- **Al's Tool and Die**, 542 Main Street (Tax Block 71, lots 5-8). This address is also located near the upgradient edge of the plume and is just east of 534 Main Street. Again, the chemical use history does not indicate that this address is the source, but the downgradient point (GP-24) does exhibit high concentrations. This address should be considered a suspected hazardous waste site and additional information may be needed.

- **Harmon Associates**, 86 Garden Street (Tax Block 71, lots 16-17). This address is currently used by Harmon Associates as office space. There is no documented chemical usage. The downgradient sample, HARMON MW-1, does exhibit elevated concentrations of DCE (2300 ppb) and TCE (660 ppb). This address should be considered a suspected hazardous waste site based on the high downgradient concentrations.

- **Bilt-Rite Steel-Buck**, 95 Hopper Street (Tax Block 71, lots 9-15 and 50-58), and **Bilt-Rite Elevator**, 90 Hopper Street (Tax Block 71, lots 14-17 and 59-62). These two addresses also exhibit high downgradient vs upgradient concentrations. Both use large quantities of paints and thinners, but the file review information does not specify types. These addresses should be considered as suspected hazardous waste sites based on high downgradient concentrations.

7.1.2 570 Main Street Plume

This total PCE plume falls roughly between NYT MW-2 and GP-99, then between N-11847 and GP-37. Along its western extent it likely overlaps with the Garden Street/Hopper Street plume. Two properties appear to be the source of this plume.

- Former IMC Magnetics facility, 570 Main Street (Tax Block 73, lots 1-12 and 63-75). This property, which currently houses **Castle Collision**, was used by IMC Magnetics for a number of years. IMC Magnetics reportedly used up to 810 gal of TCE per year. Three separate source areas and a number of floor drains have been observed at the site. These source areas contain elevated levels of target compounds and metals (TCA concentrations up to 668 ppb and PCE concentrations up to 14%). The upgradient sampling point (NC-17) for this property did not detect TCE or PCE, while the downgradient sample contained TCE at 220 ppb and PCE at 55 ppb. This address should be listed as a hazardous waste site. An IRM should also be conducted to remove the most heavily contaminated source areas that may be impacting the groundwater.

- **Atlas Graphics**, 567 Main Street (Tax Block 164, lot 66). This address has a reported use of 312 gal/year of TCE by Atlas Graphics and a documented discharge of TCE to a cesspool in 1977. The downgradient point (GP-20) showed elevated concentrations of TCE (220 ppb) and PCE (55 ppb), while the upgradient sample showed concentrations of TCE at 38 ppb and PCE at 12 ppb. This address is recommended to be listed as a hazardous waste site.

7.1.3 Clean Areas in Western Section

Based on data collected during the site investigation, a large portion of the western section can be delisted as these areas are free of significant VOC groundwater contamination. These areas include the addresses that fall within Block 330 (460, 468, and 482 Grand Boulevard); Blocks 69 and 141 (area between Grand Street and Magnolia Avenue); Block 143; Block 144 north of 299 Main Street; Blocks 145, 164 (except lot 66), 174, and 178 north of the properties along Main Street; Block 74, and Block 174.

TABLE 5-13

GEOPROBE CHLORINATED HYDROCARBONS DATA SUMMARY (OCTOBER 1993)

85 - 95 ft Range
New Cassel Industrial Area

Sample Point I.D.	Actual Sample Depth (ft)	Vinyl chloride	1,1-DCE	1,2-t-DCE	1,1-DCA	1,2-c-DCE	1,1,1-TCA	1,2-DCA	TCE	PCE
GP-4	85-87	ND	ND	ND	7.1	ND	9.3	ND	4.2	7.4
GP-9	88-90	ND	ND	ND	ND	ND	ND	ND	1.3	65.0
GP-10	85-87	ND	280.0	ND	93.0	18.0	900.0	4.8	150.0	62.0
GP-11	85-87	ND	25.0	ND	98.0	1.7	146.0	ND	38.0	14.0
GP-13	87-89	ND	2.2	ND	5.1	ND	2.3	ND	2.2	7.8
GP-15	88-90	ND	4.0	ND	ND	ND	8.3	ND	10.0	11.0
GP-16	85-87	ND	ND	ND	ND	ND	ND	ND	86.0	ND
GP-18	88-90	ND	ND	ND	ND	ND	5.1	ND	ND	ND
GP-19	88-90	ND	ND	ND	ND	4.8	2.0	ND	8.3	40.0
GP-20	88-90	ND	ND	ND	ND	9.6	3.1	ND	2000.0	150.0
GP-21	88-89	ND	ND	ND	ND	ND	ND	ND	ND	1.2
GP-22	88-90	ND	ND	ND	ND	11.0	ND	ND	17.0	46.0
GP-23	88-90	ND	ND	ND	ND	1.3	3.6	ND	49.0	21.0
GP-24	88-90	1000.0	ND	ND	ND	700.0	ND	ND	ND	ND
GP-25	88-90	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-26	88-90	ND	ND	ND	ND	ND	ND	ND	ND	1.6
GP-27	88-90	ND	ND	ND	ND	5.8	5.4	ND	26.0	28.0
GP-30	86-88	ND	14.0	ND	220.0	8.5	150.0	ND	3.4	25.0
GP-31	88-90	ND	ND	ND	ND	ND	15.0	ND	48.0	21.0
GP-32	88-90	ND	190.0	ND	180.0	4.6	2300.0	7.5	32.0	5300.0
GP-33	88-90	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-34	88-90	ND	ND	ND	ND	ND	ND	ND	ND	1.6
GP-36	88-90	ND	ND	ND	ND	ND	1.1	ND	ND	2.2
GP-37	88-90	ND	ND	ND	1.1	1.1	ND	ND	ND	1.4

All data in µg/l.
ND - Not detected.
Disk No HS4946 OLD DATA XLS Geoprobe 85 95 ft 10/10/94 4 28 46 PM

TABLE 5-5 (Page 1 of 2)

GEOPROBE CHLORINATED HYDROCARBONS DATA SUMMARY (OCTOBER 1993)

65 - 75 ft Range
New Cassel Industrial Area

Sample Point I.D.	Actual Sample Depth (ft)	Vinyl chloride	1,1-DCE	1,2-t-DCE	1,1-DCA	1,2-c-DCE	1,1,1-TCA	1,2-DCA	TCE	PCE
P-1	73-75	ND	ND	ND	ND	ND	ND	ND	ND	ND
P-2	73-75	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-1	68-70	ND	ND	ND	ND	380.0	5.7	ND	76.0	220.0
GP-2	66-68	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3	70-72	ND	ND	ND	ND	ND	3.9	ND	16.0	1.0
GP-4	73-75	ND	ND	ND	1.1	2.7	50.0	ND	140.0	2.2
GP-5	68-70	ND	1.3	ND	1.2	ND	1.3	ND	ND	1.9
GP-6	72-74	ND	98.0	ND	90.0	8.9	800.0	ND	3.5	42.0
GP-7	72-74	ND	ND	ND	ND	ND	11.0	ND	5.6	7.6
GP-8	69-71	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-9	66-68	ND	ND	ND	ND	1.5	ND	ND	2.1	70.0
GP-10	65-67	ND	540.0	ND	150.0	20.0	3200.0	ND	92.0	84.0
GP-11	65-67	ND	100.0	ND	27.0	5.9	460.0	1.1	23.0	12.0
GP-12	68-70	ND	520.0	2.5	210.0	ND	1200.0	ND	440.0	62.0
GP-13	70-72	ND	ND	ND	ND	ND	ND	ND	ND	2.0
GP-14	66-68	ND	20.0	ND	150.0	76.0	360.0	ND	22.0	25.0
GP-15	68-70	ND	66.0	ND	27.0	44.0	93.0	ND	470.0	89.0
GP-16	65-67	ND	ND	ND	ND	ND	ND	ND	14.0	1.1
GP-17	72-74	ND	1.6	ND	4.1	20.0	2.1	ND	4.3	77.0
GP-18	68-70	ND	ND	ND	ND	ND	ND	ND	ND	92.0
GP-19	68-70	ND	ND	ND	ND	3.1	1.6	ND	ND	53.0
GP-20	68-70	ND	ND	ND	ND	7.3	2.8	ND	220.0	55.0
GP-21	68-70	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-22	68-70	ND	ND	ND	ND	13.0	ND	ND	11.0	50.0
GP-23	68-70	ND	21.0	ND	ND	4.8	130.0	ND	240.0	280.0

All data in µg/l.
ND - Not detected.
Data: HS4948 OLD-DATA.XLS Geoprobe 65-75 ft 10/12/94 10:57:51 AM

2632 RDC-01167

NEW YORK STATE SUPERFUND CONTRACT

MULTISITE PSA TASK 4 REPORT

New Cassel Industrial Area Site
North Hempstead, Nassau County

Hopper/Main Street Site	Site No. 130043J
E-Z-EM Site	Site No. 130043N
Tops Appliance City Site	Site No. 130043O
Swalm Avenue Site	Site No. 130043P
Sylvester Street Site	Site No. 130043Q
New Cassel Data Review Sites	Site No. 130043

Work Assignment No. D002676-12B-1

DATE: March 1997

Report • Appendix A

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
John Cahill, *Acting Commissioner*

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., P.E., *Director*

By:

Lawler, Matusky & Skelly Engineers LLP

CHAPTER 1

EXECUTIVE SUMMARY

The New Cassel Industrial Area (NCIA) is located in the unincorporated Village of Westbury in the Town of North Hempstead, Nassau County, New York (Figure 1-1). Approximately 200 industrial or commercial businesses occupy this 170-acre site (Figure 1-2). Due to extensive halogenated volatile organic compound (VOC) contamination of groundwater beneath the site, the New York State Department of Environmental Conservation (NYSDEC) classified the entire industrial area as a hazardous waste site in 1988.

Lawler, Matusky & Skelly Engineers LLP (LMS) was contracted by NYSDEC in 1992 to conduct a site investigation of the NCIA. The objectives of the site investigation were to delineate the contaminant plumes under the site, locate the source of the contaminants, and redefine the site according to measured contamination.

The initial investigations conducted in 1993 and 1994 identified several areas exhibiting significant groundwater contamination within the NCIA (LMS 1994). Potentially responsible parties for the two central section plumes and one of the western section plumes were identified; those facilities were listed as Class 2 on the New York State Registry of Inactive Hazardous Waste Disposal Sites. The remaining four sites within the plume regions were designated as potential registry sites requiring additional investigation. The original all-encompassing New Cassel site was removed from the registry, thereby delisting all sites except those relisted.

LMS was assigned to conduct a multisite Preliminary Site Assessment (PSA) in 1995 on the remaining four sites that required additional investigation. The objectives of the multisite PSA were to further delineate the contaminant plumes at the four sites, locate the sources of the contaminants, and assess the threat of each source to the environment. Based on the multisite PSA investigation data five properties were recommended for inclusion on the Registry of Inactive Hazardous Waste Sites, 15 properties were determined to be not included on the registry, and 12 properties were determined to be potential registry sites.

To resolve the status of the 12 remaining properties that were included in potential registry sites and address data gaps for several properties in the industrial area, Task 4 multisite PSA investigation activities were conducted. The investigation included additional file reviews, facility inspections, soil and groundwater probes, and on-site mobile laboratory analysis. The data generated from the Task 4 multisite PSA investigation documented usage of hazardous waste, identified on-site sources, and further delineated the plumes. Based on the data, the following classification of facilities within the four sites are recommend:

- **Class 2 Hazardous Waste Sites:**

299 Main Street	One Stop Auto & Truck Center
118-138 Swalm Avenue	Liqui-Mark Corporation
Vacant Lot (Block 145, Lots 38, 39, 40) at Corner of Hopper & Main Streets	Former Junkyard

- **Remain as Class 2 Hazardous Waste Sites:**

29 New York Avenue	Former Tishcon Facility

- **Class 4 Hazardous Waste Sites:**

750 Summa Avenue	E-Z-EM

- **Remain as Potential Registry Sites Pending the Identification of an Upgradient Source:**

95 Hopper Street	Bilt-Rite Steel Buck
542 Main Street	Al's Tool & Die
49 Sylvester Street	Micro-Ray Corporation
33 Sylvester Street	Arkwin Industries
36 Sylvester Street	Tishcon Corporation

- **Sites That Should not Appear on the Registry:**

550 Main Street	Royal Guard Fence
717-765 Main Street	E-Z-EM
776-790 Summa Avenue	NYCE Liberty Tempest
69 Sylvester Street	T. Sarro Salvage
750 Main Street	Tops Appliance City --
1099 Old Country Road	Tops Appliance City
1226 Old Country Road	Westbury Toyota
110 Hopper Street	Express Steel
111-117 Swalm Street	Harco Trucking - Harmon Associates

The Task 4 PSA investigation resulted in three properties recommended for listing as Class 2 sites, confirmation of one property as a Class 2 site, one property recommended as a Class 4 site, the determination that nine properties should not appear on the registry, and the determination that five properties should remain as potential registry sites. A designation as a potential registry site was retained for these five properties after discussions with NYSDEC. The groundwater at these five properties exhibit significant contamination. However, it appears that the contamination is from an identified Class 2 site upgradient of the properties. Once the

2632 RDC-01170

5.3.3 NYSDEC Remedial Investigation at 68 Kinkel Street

The sampling results from the NYSDEC remedial investigation at 68 Kinkel Street site investigation include sample data for soils and groundwater. This investigation was conducted under NYSDEC supervision in 1996. A detailed discussion of the investigation and results can be found in the remedial investigation report (ABB 1996). Results relevant to the multisite PSA area plotted on the plume maps in Chapter 6 showing individual point locations and measured PCE- and TCA-related contaminants. This data set was also used as primary data to determine the status of the remaining potential registry sites.

5.3.4 Task 4 Multisite PSA Groundwater Probe Results

The results of the mobile laboratory VOC analyses performed on the groundwater probe samples collected by LMS during Task 4 of the multisite PSA are found on Tables 5-1, 5-2, and 5-3. The data are segregated into three depth ranges: samples from the water table to 65 ft below ground surface (Table 5-1), 65 to 85 ft below ground surface (Table 5-2), and 85 ft or greater (Table 5-3). The results are plotted on plume maps in Chapter 6 showing individual point locations and measured PCE- and TCA-related contaminants mapped for each depth range. The PCE-related contaminants are the sum of the individual measured concentrations of PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and 1,1,1-DCE, and vinyl chloride. The TCA-related contaminants mapped in Chapter 6 are the sum of the individual measured concentrations of 1,1,1-TCA 1,1-DCA, and 1-2 DCA.

5.3.4.1 *Hopper/Main Street Site.* Within the Hopper/Main Street PSA area a total of 13 groundwater probes were installed. The highest concentration of PCE-related contaminants were found at the greatest depth sampled (greater than 85 ft); however, very high concentrations were also found at 65 to 85 ft north of Main Street. The highest concentrations of PCE-related contaminants were found at point GP-167 (85 ft +) located south of 95 Hopper Street. At GP-167 PCE-related contaminants were found at 3820 ppb (820 ppb TCE, 3000 ppb PCE). North of Main Street in the Swalm Avenue site concentrations of PCE-related contaminants in excess of 1000 ppb were found at shallow depth (water table to 65 ft). Low concentrations (less than 20 ppb) of TCA-related contaminants were also found in the Garden/Hopper Street area.

5.3.4.2 *E-Z-EM Site.* Within the E-Z-EM PSA area a total of seven groundwater probes were taken during the Task 4 PSA field investigation. Low concentrations of TCA-related contaminants were found in all the points completed in this area with the exception of GP-204, which had results of "not detected" (ND) at all three depth ranges. No PCE-related contaminants above 100 ppb were detected in the points completed at the E-Z-EM site. The

5.4.4 Task 4 Multisite PSA Soil Probe Results

The results of the soil probes installed during Task 4 of the multisite PSA are summarized in Table 5-4. In general, the contaminant levels in the soils are much lower than the groundwater. It is believed that many of the VOCs have migrated away or were lost during sampling due to the sandy, porous nature of many of the soil samples.

5.4.4.1 *Hopper/Main Street Site.* A single soil probe was conducted in this PSA area; the results of this probe (SGP-238) showed xylene at low concentrations in the a 10- to 11-ft sample.

5.4.4.2 *E-Z-EM Site.* A total of eight soil probes with multiple sampling depths were collected at this PSA area. Soil probe sample concentrations were all ND; no target compounds were found in the soils at this PSA area.

5.4.4.3 *Tops Appliance City Site.* Two soil probes (SGP-227 and SGP-254) were completed in this PSA area. Low concentrations of toluene were detected in a sample from SGP-227 (4-5 ft). The remaining sample depths from the two probes did not indicate the presence of target compounds above the detection limit.

5.4.4.4 *Swalm Avenue Site.* A total of four soil probe locations were completed in the Swalm Avenue PSA area, all at 118-138 Swalm Avenue. Target compounds were detected in three of the four points completed. Concentrations range from ND in SGP-200 (11-12 ft and 14-15 ft) to 0.570 ppb PCE at SGP-198 (18-19 ft). TCE, toluene, and methylene chloride were also detected at low concentrations in several of the soil probe samples.

5.4.4.5 *Sylvester Street Site.* A total of seven soil probe locations were completed in the Slyvester Street site PSA area, all at or near 29 New York Avenue. Target compounds were detected in two of the seven probe locations. Concentrations ranged from ND in SGP-221, SGP-222, SGP-245, SGP-249, and SGP-246 to 245 mg/kg of TCA-related contaminants in SGP-247 (8-10 ft). In addition to the VOC analysis, SVOC analysis was conducted by a base laboratory on SGP-247. The results showed 4-methylphenol and bis(2-ethylnexyl)phthalate at concentrations below the quantitation limit (Table 5-5). Vitamin E was also noted in this sample at high concentrations. The anaytical data provided by the laboratory for this sample are found in Appendix C.

CHAPTER 6

CONCLUSIONS

This chapter presents the conclusions of the Task 4 multisite PSA investigation. The data collected at each of the remaining potential registry sites, the impacted or plume areas, a discussion of each facility, and a determination of whether each facility has discharged a hazardous waste and caused a significant environmental impact are presented. The chapter is divided according to the remaining PSA site areas. For each site the groundwater plume and soil data compiled from all the data sources are presented. The plume maps show individual point locations and measured PCE- and TCA-related contaminants for each depth range. The PCE-related contaminants are the sum of the individual measured concentrations of PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, and VC. The TCA-related contaminants are the sum of the individual measured concentrations of 1,1,1-TCA, 1,1-DCA, and 1,2-DCA. Each data set is distinguished by a different font on the figure. If a sample point on a map does not have a reported contaminant value next to it, either no sample was collected at that particular depth or a sample was collected but the contaminant being plotted was not analyzed in the sample.

According to Title 13, Article 27, of the State Environmental Conservation Law, the New York State Registry of Inactive Hazardous Waste Disposal Sites must include all known hazardous waste sites. To be included on the registry, it must be confirmed that hazardous wastes were disposed of on the site or are present on the site. Sites with confirmed hazardous wastes are then classified according to the effects of that contamination on the environment or human health. Classification 2 is for sites for which there is information sufficient to determine that they pose a significant threat to the public health or environment. Classification 2a is for sites with insufficient information to make a significant threat determination. Classification 3 is for sites that do not pose a significant threat. Sites without documentation of hazardous waste disposal are not included on the registry; however, they may be investigated further if it is suspected that hazardous wastes were disposed of at the site.

Past studies and this investigation at the NCIA site documented that the site poses a significant impact to the environment or is a public health concern; measured contaminant concentrations in an aquifer connected to a water supply aquifer are orders of magnitude higher than drinking water standards. The facility discussions correlate the relationship of hazardous waste usage or disposal at the facility with the measured contaminant plume. Documentation of hazardous waste disposal related to the contaminant plume at these sites considered the following factors:

- Suspected sites were identified by existing or past site use, file data, or location within a highly contaminated plume area.

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- Through additional file or report research or information obtained during site inspections and/or site sampling, documentation of chemical usage and source data were obtained. "Chemical usage" documents the chemical and amounts used currently or (more importantly) in the past at the sites. Past usage is particularly important because prior to the late 1970s and 1980s the entire NCIA used septic systems for waste disposal. "Source data" refers to sampling data that indicate the presence of contaminant chemicals on-site, usually in old seepage pits.

- The monitoring well and Geoprobe data were analyzed for each site to determine upgradient and downgradient contaminant concentrations. In general, if the downgradient concentrations were three times the upgradient concentrations of the same contaminant, then it would appear that the site was responsible for a release of that contaminant.

- Hazardous waste disposal documentation considered chemical usage or source data, particularly if chemical usage correlated with the plume data, i.e., consisted of the same or related chemicals.

6.1 HOPPER/MAIN STREET SITE

6.1.1 Groundwater Plume

The PCE-related contaminant-impacted area of the Hopper/Main Street PSA site is laterally and vertically extensive (Figures 6-1, 6-2, and 6-3), appearing to extend from the water table to depths greater than 85 ft below grade. PCE is the primary PCE-related contaminant; high levels of TCE and DCE were found, as well as trace to moderate levels of VC. The plume appears to extend from the northern end of Swalm Avenue downgradient to just south of 75 Garden Street. The relative size of the impacted area appears to be constant with depths up to 85 ft below ground surface.

The TCA-related contaminant-impacted area of the Hopper/Main Street Site is negligible compared to that of the PCE-impacted area (Figures 6-4, 6-5, and 6-6). The primary contaminant is almost exclusively 1,1,1-TCA, which was found at very low concentrations in two locations (GP-228 and GP-229). None of the points samples exceeded 100 ppb TCA-related compounds with the exception of GP-167 at the deepest depth, which contained 240 ppb TCA-related compounds.

6.1.2 Soil Contamination

Soil sampling at the Hopper/Main Street site was performed at one point in 1996 (SGP-238, see Figure 6-7). A total of 15 points have been installed and sampled in this area since 1993. Samples were collected from two discrete depth intervals at each point. No PCE- or TCE-

related compounds were detected in the samples collected. Benzene, toluene, ethylbenzene, and xylene (BTEX) compounds were detected in the sample from 10-11 ft but were not detected from 17-19 ft. Total xylenes were detected at a concentration of 0.028 mg/kg at 10-11 ft.

6.1.3 Facility Discussion

95 Hopper Street (Block 71, Lot 5 to 8)

95 Hopper Street was previously occupied by Bilt Rite Steel Buck Corporation. Apparently Bilt Rite Steel Buck abandoned the property in late 1995 or early 1996; occupants prior to Bilt Rite were not found in the detailed file review. Bilt Rite had documented use of many chemicals at this site: naphtha, toluene, xylol chromate, lead, xylene, ethylbenzene, polyester resin, and metals. According to NCDOH records, an authorized waste hauler removed F003 waste (spent nonhalogenated solvent inclusive of but not limited to xylene, ethylbenzene, and methanol) from this address. Groundwater samples were taken immediately downgradient of this facility (GP-165, GP-167, GP-171, GP-182, and GP-238). Many of these groundwater samples contained high concentrations of PCE-related compounds, averaging greater than 200 ppb (Figure 6-1, Figure 6-2, and Figure 6-3). This property is within the PCE-related contaminant plume; elevated concentrations of TCA-related compounds were not found (Figure 6-4, Figure 6-5, Figure 6-6). The upgradient samples available during the last phase of the PSA investigation were limited. During Task 4 additional upgradient probe locations were completed; these probes indicate that Bilt Rite Steel Buck does not appear to be the source of the groundwater contamination found in the area. A comparison of the upgradient and downgradient sampling locations does not clearly show that the property exhibits contaminant concentrations three times greater in the downgradient position than in the upgradient position (Figure 6-1, Figure 6-2, and Figure 6-3). At the shallow depth the only upgradient/downgradient pair that shows contamination three times greater in the downgradient position is GP-192/GP-238. In GP-192 the total PCE-related compounds are 387 ppb (cis-DCE 210 ppb; TCE 110 ppb; and PCE 67 ppb) (Figure 6-1). In GP-238 the total PCE-related compounds totaled 1330 ppb (cis-DCE 1000; TCE 330) (Figure 6-1). It is possible the site is responsible for the cis-DCE, but it appears unlikely based on no documented usage of this type of compound and the presence of similarly elevated cis-DCE concentrations in other upgradient points (GP-194). The elevated concentrations of PCE-related compounds in the deeper depths would appear to also be attributable to a source upgradient of this property.

The downgradient samples in the three depth ranges do not clearly show concentrations of target compounds that are three times the concentration of the upgradient samples. In addition no on-site source or documented use of chlorinated solvents was found for this property. However,

299 Main Street (Block 144, Lots 37 to 44)

299 Main Street, occupied by One Stop Auto and Truck Center, was developed some time between 1950 and 1962 and consists of a garage with a number of bays and office space. To the north of the building is a large fenced storage yard. The property was formerly used as a junkyard and a transportation company. Island Transport Corporation used large quantities of BTEX-related compounds and approximately 275 gal of TCE from July to December 1978 (LMS 1996) to wash trucks.

The probes completed during the site investigation indicated that in upgradient areas PCE-related contaminants were not detected above 100 ppb (GP-85). At a downgradient position, PCE-related contaminants were found at 680 ppb in the intermediate depth sample (GP-22). Soil samples collected at SGP-86 and SGP-88 did not show any target compounds. A soil sample collected at GP-22 contained both PCE- and TCA-related compounds in a 49-51 ft sample (Figure 6-7); however, since the soil sample was taken very close to the watertable it is not known whether the contamination is truly indicative of the levels of soil contamination. PCE-related contaminants were found at 1.73 mg/kg and TCA-related contaminants at 0.092 mg/kg. In addition, total BTEX-related contaminants were found at 85.63 mg/kg in this soil sample. These levels would tend to indicate an on-site source.

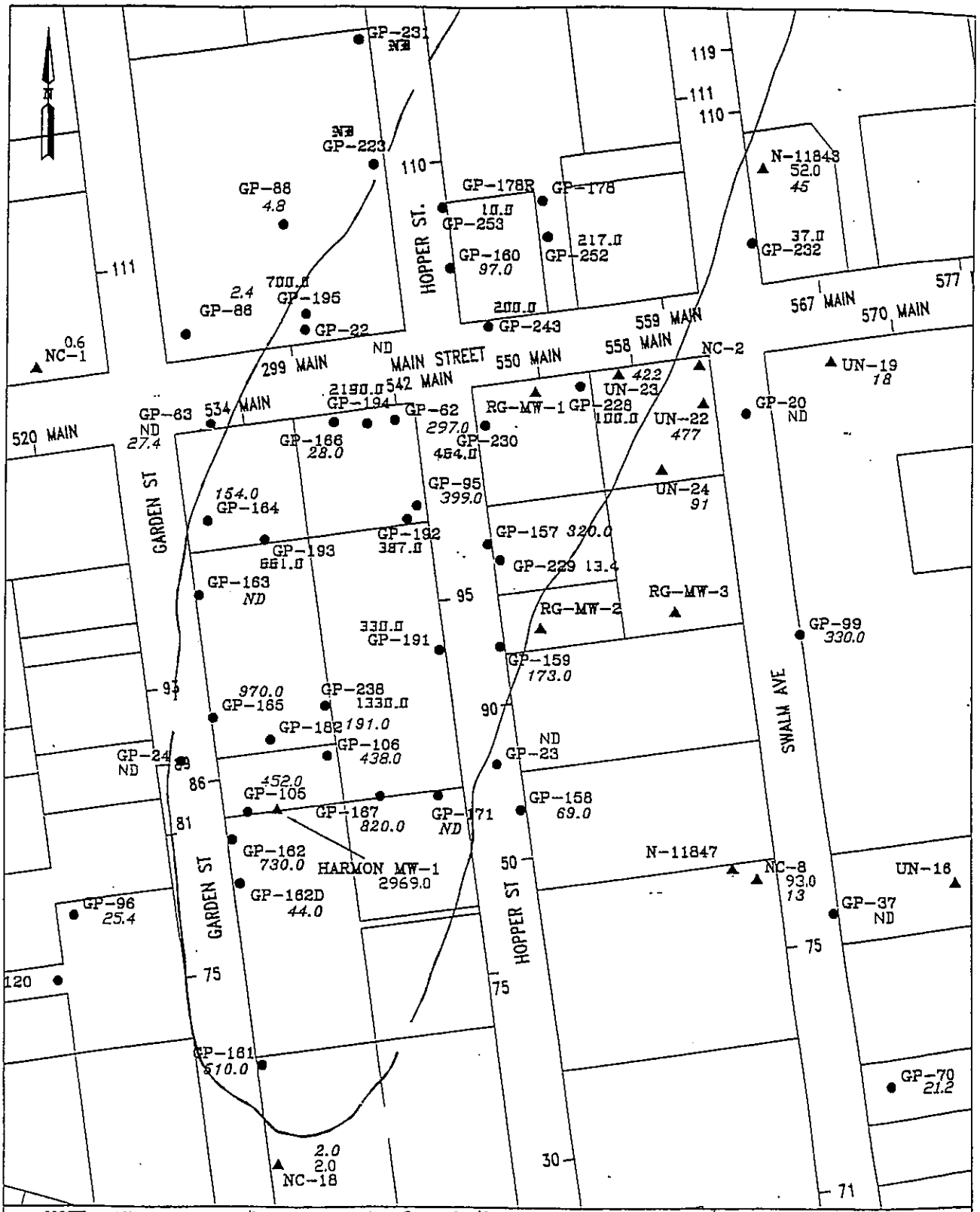
Although this site has a documented use of target compounds (TCE), an on-site source and an environmental impact was not fully documented during the previous phase of the PSA. To document an environmental impact three additional upgradient and two additional downgradient probes were completed (Figure 6-1, Figure 6-2, Figure 6-3, Figure 6-4, Figure 6-5, and Figure 6-6). The results of these probes clearly indicate that this property is contributing to the groundwater contamination in the Garden/Hopper Street area. The three upgradient probes (GP-231, 223, and 253) do not show any target compounds above 100 ppb. The downgradient points GP-193, GP-194, and GP-195 clearly show elevated PCE-related contaminant concentrations at the three depth ranges (Figure 6-1, Figure 6-2, and Figure 6-3). In GP-194 (water table to 65 ft) the PCE-related contaminants total 2190 ppb (1700 ppb cis-1,2-DCE and 490 ppb TCE) (Figure 6-1). It was also noted that the individual contaminants change and become more numerous just downgradient of this property. Upgradient of the site the only contaminant noted in the groundwater is PCE, while downgradient TCE, DCE, and VC are found along with the PCE (Figure 6-6a). In GP-195 the total PCE-related contaminants are 700 ppb at the shallow depth; of this 700 ppb total, 250 ppb is cis-1,2-DCE and 450 VC (Figure 6-6a). The source of these different contaminants is likely located on this property or possibly the property just to the east, while the PCE-related contaminants at depth are from an upgradient source. Based on a documented history of chemical usage, a documented on-site

source, and a demonstrated environmental impact to groundwater, this property should be included on the registry.

Lot at the Northeast Corner of Hopper and Main Street (Block 145, Lots 38, 39, and 40)

This vacant lot was used as a junkyard; there are no permanent structures on the lot. Past uses of this property are unknown; this is a small lot and it appears unlikely that it has been used as anything other than a junkyard. The groundwater below this property has been impacted by PCE-related contaminants at all three depth ranges (Figure 6-1, Figure 6-2, and Figure 6-3); TCA-related contaminants were not detected at this property (Figure 6-4, Figure 6-5, and Figure 6-6). The PCE found at the intermediate depth at the two upgradient probe locations (GP-178R and GP-252) (Figure 6-2) is likely from the 118-138 Swalm Street site. The downgradient points on this property show a trend similar to that of those points downgradient of 299 Main Street. At this property individual contaminants change and become more numerous just downgradient of this property. Upgradient of the property the only contaminant noted in the groundwater is PCE, while downgradient TCE and DCE are found along with the PCE (Figure 6-6a). In GP-230, a downgradient point, the total PCE-related contaminants are 464 ppb at the shallow depth; of the 464 ppb total, 260 ppb is cis-1,2-DEC and 170 ppb TCE. The source of these different contaminants is likely on this property or the property just to the west. In addition to the PCE from the upgradient source, additional contaminants are found, including cis-1,2-DCE and TCE at a shallow depth (Figure 6-6a). In GP-194 at the shallow depth, total PCE-related contaminants are 2190 ppb (1700 ppb cis-1,2-DCE and 490 ppb TCE). This property or the property to the west is the apparent source for this contamination.

Documented on-site usage of target compounds could not be verified but is likely based on past site uses (junkyard). Just downgradient of this property the contaminant concentrations in the groundwater increase and the number of individual contaminants also increases immediately downgradient. Based on the size of the property and the number of samples taken around this property, it is a likely source of the noted groundwater contamination. The presence of an on-site source could not be verified because access to the property was denied by the current owner. This property should appear on the registry of inactive hazardous waste sites to allow remedial investigations to locate any possible on-site source areas.



NOTE: All data in ug/l.

Scale in Feet

140 0 140

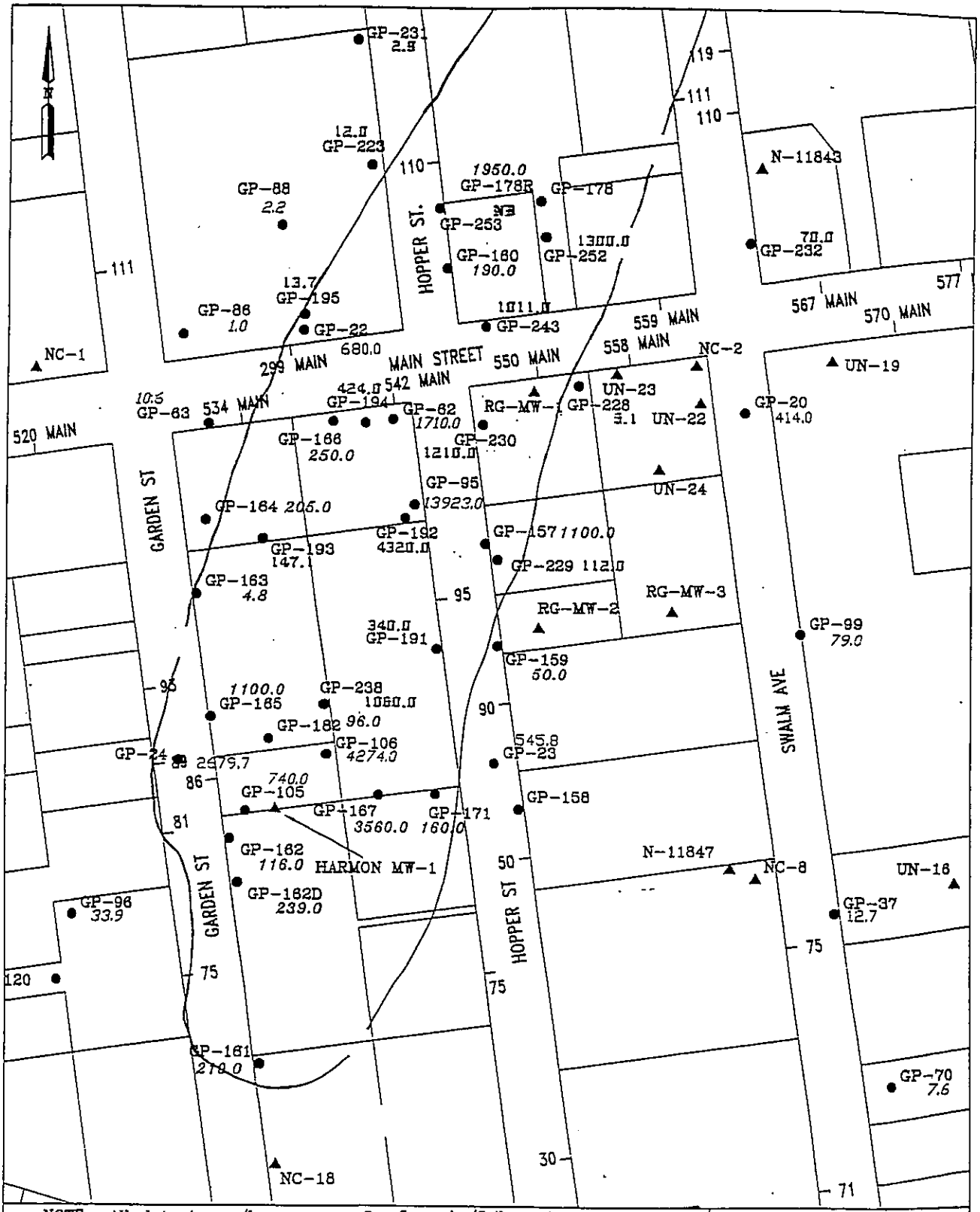
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.1
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
PCE IN GROUNDWATER
WATER TABLE TO 65 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

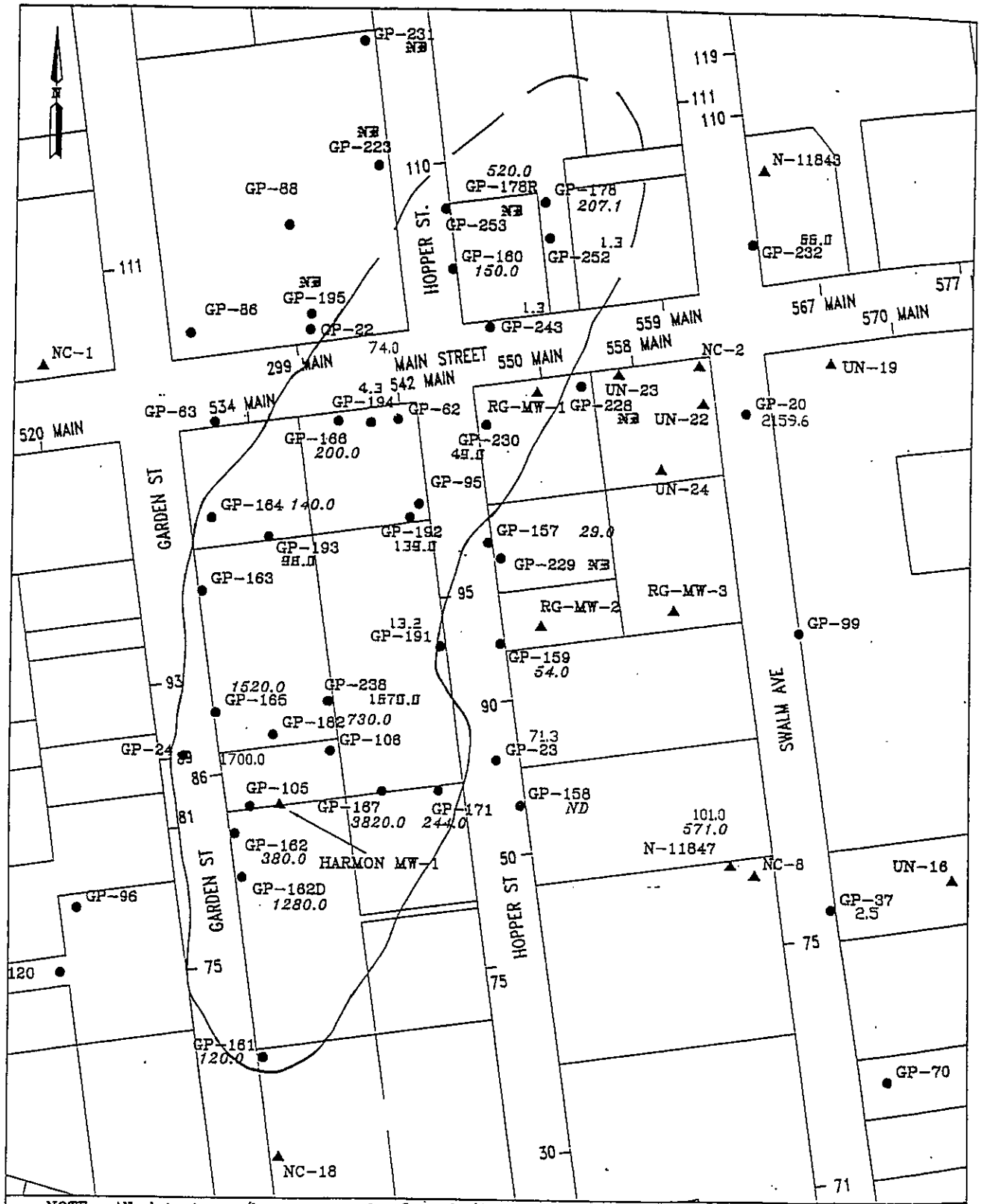
● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.2
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
PCE IN GROUNDWATER
65 TO 85 FT



NOTE: All data in ug/l.

Scale in Feet

140 0 140

● - Geoprobe/Soil Sample Location

▲ - Monitoring Well Sample Location

120 1993 Sample Data
120 1994 Sample Data
120 1995 Sample Data
120 1996 Sample Data

Lawler, Matusky & Skelly Engineers, LLP

FIGURE 6.3
HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST, AND 95 HOPPER ST
PCE IN GROUNDWATER
85 FT +

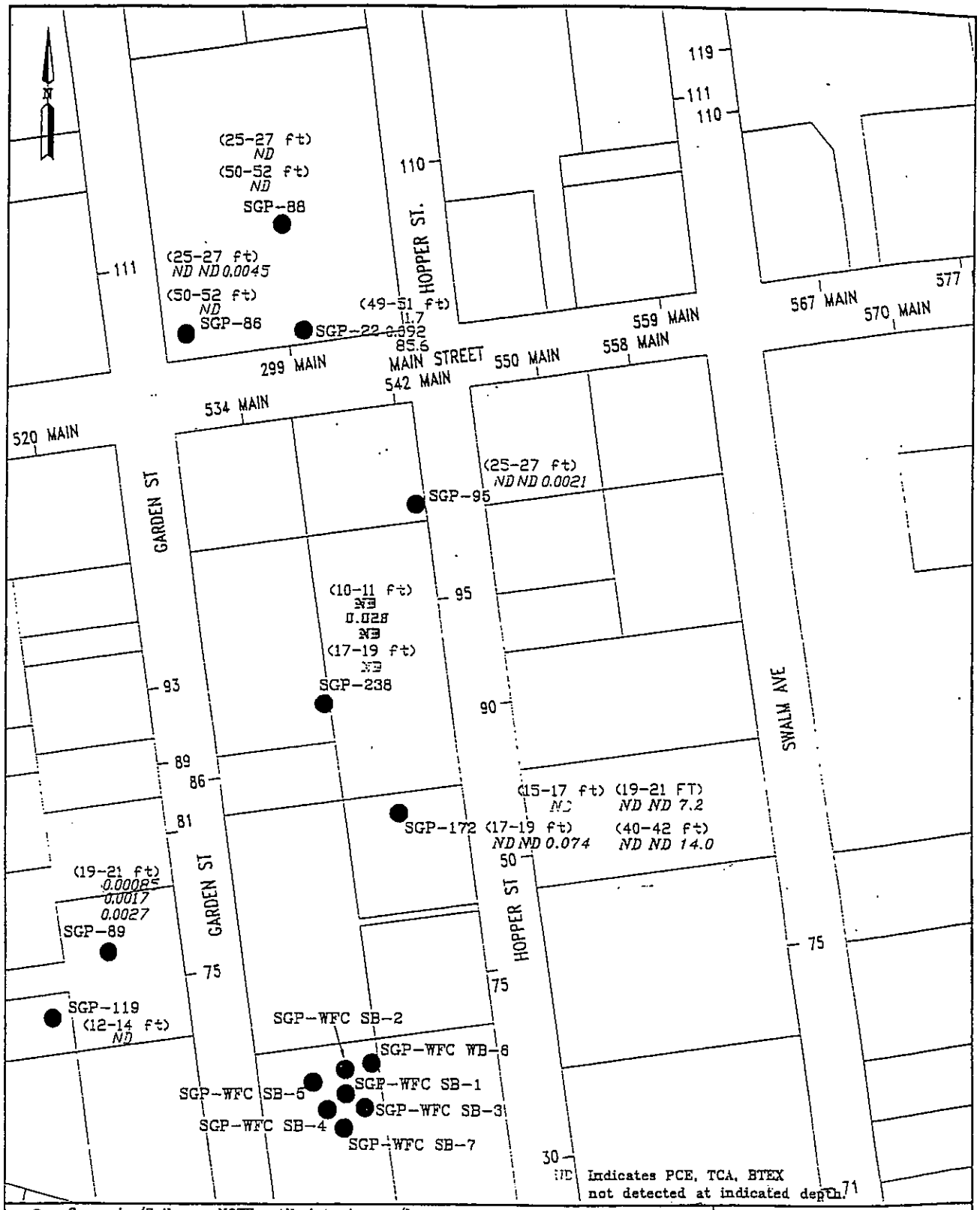


FIGURE 6.7

HOPPER/MAIN ST SITE
542, 550, AND 299 MAIN ST,
AND 95 HOPPER ST
SUBSURFACE SOILS DATA

CHAPTER 7

RECOMMENDATIONS

Based on the conclusions of Task 4 of the multisite PSA investigation, presented in Chapter 6, LMS recommends the following classification of facilities within the remaining potential registry sites and data review sites in the NCIA.

7.1 HOPPER/MAIN STREET SITE

95 Hopper Street - Bilt-Rite Steel Buck

- Documented usage of hazardous waste
- No source
- Groundwater plume documented as emerging from site
- Recommendation - this property should remain a potential registry site until an upgradient source for the on-site groundwater contamination is determined.

542 Main Street - Als Tool and Die

- No documented usage
- No source
- In general, upgradient groundwater concentration greater than downgradient, but one sample had high concentration (13,900 ppb) over cesspool area.
- Recommendation - this property should remain a potential registry site until an upgradient source for the on-site groundwater contamination is determined.

550 Main Street - Royal Guard Fence

- Documented usage of degreasers
- No source
- Groundwater plume documented as emerging from site
- Recommendation - this property should not appear on the registry of hazardous waste sites.

299 Main Street - One Stop Auto and Truck Center

- Documented usage of hazardous waste
- Target compounds detected in soils from 49-51 ft
- Groundwater plume was documented as emerging from site
- Recommendation - this property should be listed on the registry of hazardous waste sites.

2.2.2 542 Main Street

This building has been occupied by Al's Tool and Die, Inc., a metal parts fabricator, since approximately 1968. No prior ownership is known. There is no documentation of any chemical usage at this site, other than an annual usage of 5 gallons of water soluble cutting oil. Metal shavings generated were taken to a scrap dealer.

2.2.3 550 Main Street

Owned by Royal Guard Fence Company since the 1950's, this site contains three underground fuel storage tanks and an aboveground waste oil storage tank. Two 2,500 gallon underground fuel tanks were installed in 1994 and a 4,000 gallon underground tank was installed in 1978. The 4,000 gallon underground gas tank failed a Petrotite systems test in 1989. It was cited in 1991 by the NC Fire Inspector for being out of service without removal or abandonment. NYSDEC spills records indicate that fuel spills from tanks of unspecified amounts occurred in 1989, 1993, and 1996. The spill in 1989 was due to a crack in the tank fill pipe and entered the groundwater.

There are three dry wells located in the pavement and one interior floor drain documented at this address. Sewer hookup was made in 1983. Prior to that, sewage was discharged to an on-site septic system (1954-1983). Chemical usage at this site is limited to minimal amounts of cutting oil, muriatic acid, and paint thinners (EEA 1992). Scrap metal is removed from the site.

2.2.4 299 Main Street

The western portion of the existing building at 299 Main Street was erected between 1950 and 1962 with the eastern portion added between 1962 and 1970. Since April 1994, One Stop Auto and Truck Center occupied this address. Island Transportation Corporation (ITC), a trucking company, occupied the property from at least 1963 until 1983. During its operations, it generated 400 to 500 gal/month of waste lube oil and used 40 gal/month of safety solvent #5. The liquid and solid waste was removed by authorized waste haulers, and the wash room waste was collected in two on-site cesspools. Additionally, Sam Ton Salvage, a junkyard, used this address from before 1970 until 1993. The company apparently occupied the rest of the Block 144 but used 299 Main Street as its address. In 1993, Sam Ton Salvage moved to 96 Urban Avenue.

In January 1963, two 4,000 gallon underground diesel fuel tanks were installed by ITC (NCFC 1980b). One 4,000 gallon underground gasoline tank was installed by ITC in 1966 and one 10,000 gallon underground diesel tank was installed in 1972. ITC used Trichloroethylene (TCE) to wash asphalt residues from its tank trailers prior to 1980. Approximately 275 gallons were used during a period from July to December 1978 (NCDOH 1979a). The TCE was reclaimed on-site and reused. ITC replaced the TCE with Dubois Chemical Spra-Jel (NCDOH 1979b). The chemical constituents of Spra-Jel are as follows:

Petroleum solvent, kerosene cut

Appendix A.2

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER ➤ NYD020576898

ISLAND TRANSPORTATION CORP
299 MAIN STREET
WESTBURY NY 11590

INSTALLATION ADDRESS ➤ 299 MAIN STREET
WESTBURY NY 11590

EPA Form 8700-12B (4-80)

11/07/80

Please print or type with ELITE type *(12 characters/inch)* in the unshaded areas only.

Form Approved OMB No. 158-S79016
GSA No. 0246-EPA-OT

EPA U.S. ENVIRONMENTAL PROTECTION AGENCY
NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTRUCTIONS: If you received a preprint label, affix it in the space at left. If any of tl information on the label is incorrect, draw a lir through it and supply the correct informatic in the appropriate section below. If the label complete and correct, leave Items I, II, and I below blank. If you did not receive a preprinte label, complete all items. "Installation" means single site where hazardous waste is generate treated, stored and/or disposed of, or a tran porter's principal place of business. Please refi to the INSTRUCTIONS FOR FILING NOTIF CATION before completing this form. Tr information requested herein is required by la *(Section 3010 of the Resource Conservation an Recovery Act).*

INSTALLATION'S EPA I.D. NO.	NYD020576898
I. NAME OF INSTALLATION	~~ISLAND TRANSPORTATION CORP~~
II. INSTALLATION MAILING ADDRESS	~~[illegible]~~ 299 Main St Westbury N.Y. 11590
III. LOCATION OF INSTALLATION	~~[illegible]~~ 299 Main St Westbury N.Y. 11590

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER	APPROVED	DATE RECEIVED (yr., mo., & day)
F NY0020576898 T/N C 31		800730

I. NAME OF INSTALLATION

ISLAND TRANSPORTATION CORP

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 3 299 MAIN STREET

CITY OR TOWN	ST.	ZIP CODE
4 WESTBURY	NY	11590

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 5 ~~SAME~~ 299 MAIN STREET

CITY OR TOWN	ST.	ZIP CODE
6 ~~SAME~~ WESTBURY	NY	11590

IV. INSTALLATION CONTACT

NAME AND TITLE *(last, first, & job title)*	PHONE NO. *(area code & no.)*
2 SELDES HOWARD SAFETY DIRECTOR	516-334-5400

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: 8 PETER FIORETTI SR

DETACH

B. TYPE OF OWNERSHIP *(enter the appropriate letter into box)*
F = FEDERAL
M = NON-FEDERAL
M

VI. TYPE OF HAZARDOUS WASTE ACTIVITY *(enter "X" in the appropriate box(es))*

- [ ] A. GENERATION
- [X] B. TRANSPORTATION *(complete Item VII)*
- [ ] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION *(transporters only – enter "X" in the appropriate box(es))*

- [ ] A. AIR
- [ ] B. RAIL
- [X] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER *(specify)*:

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION *(complete item C)*

C. INSTALLATION'S EPA I.D. NO.

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

EPA Form 8700-12 (6-80)

2632 RDC-01186

"IF IT FLOWS WE HAUL"

ISLAND TRANSPORTATION CORP.

Petroleum and Petroleum Products

299 EDISON AVENUE • WEST BABYLON, N. Y. 11704

MC ICC #116849
D.O.T.N.Y.MT-7249
P.U.C.-CONN. C-363

Office:	W. Babylon Term.:	Greenpoint Term.:	New Jersey Term.:	Conn. Term.:
(516) 694-4800	(516) 694-4497	(212) 383-3221	(201) 541-8091	(203) 239-4494

Special Letter

May 5, 1983

NYD02057689

Dr. Dick Baker,
Permits Administration Branch
U.S. Environmental Protection Agency
Region 11, 26 Federal Plaza
New York, New York 10278

Gentlemen:

Island Transportation Corp. wrote to the NYS-DEC on February 16, 1983, explaning that it appeared unnecessary to fill out the facility annual hazardous waste report, and that we had moved to a new location. Since that time, Jere Austin of the NYS-DEC, Stony Brook office, made an inspection of our operation on April 13, 1983 and recommended that I write to your office to explain that our hold to haul hazardous waste permit might be used sometime in the future and should not be cancelled.

Please advise me as to the status of our present permit, #30-H-56. Our E.P.A. I.D. Number is NY-D020576H9A, and our previous permit to store and remove under N.Y.S. Pollutat Discharge Elimination System was #NY-0140155.

Very truly yours,
Island Transportation Corp.

Timothy E. Cropper

Timothy E. Cropper
Vice President

TC:imc
enc.

MAY 10 12 52 PM '83
ENVIRONMENTAL PROTECTION AGENCY
NEW YORK, N.Y. 10007

"IF IT FLOWS WE HAUL"

ISLAND TRANSPORTATION CORP

Petroleum and Petroleum Products

299 EDISON AVENUE • WEST BABYLON, N. Y. 11704

MC ICC #118848
D.O.T.N.Y.MT-7248
P.U.C.-CONN. C-380

Office: (516) 694-4800 | W. Babylon Term.: (516) 694-4497 | Greenpoint Term.: (212) 383-3221 | New Jersey Term.: (201) 541-8091 | Conn. Term.: (203) 239-4494

February 16, 1983

NYS-DEC
TSD Annual Report
P. O. Box 15628
Albany, New York 12212

Gentlemen:

Island Transportation Corp. has moved from 299 Main Street, Westbury, N.Y. to 299 Edison Avenue, West Babylon, New York. Enclosed please find our previous permit and EPA I.D. number. In conversation with your Albany office, it appears that it is unnecessary for us to fill out the facility annual hazardous waste report, if this is so, would you remove us from your reporting requirement. Our operation is explained under comments on form OMB #2050-005.

Thank you.

Very truly yours,
Island Transportation Corp.

Timothy Cropper
Vice President of
Maintenance

TC:imc
enc.

MAY 10 12 52 PM '83
ENVIRONMENTAL PROTECTION AGENCY
NEW YORK, N.Y. 10007

Do not make entries in shaded areas

OMB # 2050-0035 Expires: 3-31-85

ENVIRONMENTAL PROTECTION AGENCY

FACILITY ANNUAL HAZARDOUS WASTE REPORT

This report is for the calendar year ending December 31, 1982 ANNUAL REPORT

AFFIX LABEL HERE

Please print/type with elite type (12 characters per inch)

GENERAL INSTRUCTIONS: If you received a preprinted label attached to the mailing envelope in which this form was enclosed, affix it in the space provided. If any of the information on the label is incorrect, draw a line through it and provide the correct information in the appropriate section below. If the information is correct and complete, leave Sections I, II, and III below blank. If you did not receive a preprinted label, complete all sections. REFER TO THE SPECIFIC INSTRUCTIONS CONTAINED IN THIS BOOKLET BEFORE COMPLETING THIS FORM. The information requested in this report is required by law (Section 3004 of the Resource Conservation Recovery Act).

MAIL TO:
NYS-DEC
TSD Annual Report
P.O. Box 15628
Albany, New York 12212

I. FACILITY EPA I.D. NUMBER

T/A C

F 1 2 13 14 15 1

II. NAME OF FACILITY

30 ISLAND TRANSPORTATION CORP 69

III. FACILITY MAILING ADDRESS

15 16 3129 EDISON AVENUE 45

Street or P.O. Box

15 16 WEST BABYLON 41 42 NY 47 11704 51

City or Town State Zip Code

MAY 10 12 53 PM '83
PERMITS ADMIN. BRANCH
RECEIVED
ENVIRONMENTAL PROTECTION AGENCY
NEW YORK, N.Y. 10007

IV. LOCATION OF FACILITY (if different than section III above)

15 16 5122 0 WELLWOOD AVENUE 45

Street or Route number

15 16 WEST BABYLON 41 42 NY 47 11704 51

City or Town State Zip Code

V. FACILITY CONTACT

15 16 CROPPER TIMOTHY 45

Name (last and first)

46 516-694-4800 55

Phone No. (area code & no.)

VI. COST ESTIMATES FOR FACILITIES

$ 16 , 19 , 22 Cost Estimate for Facility Closure

$ 25 , 28 , 31 Cost Estimate for Post Closure Monitoring and Maintenance (disposal facilities only)

VII. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Timothy Cropper, V.P.Maintenance

Print/Type Name | Title | Signature of Authorized Representative | Date Signed

EPA Form 8700-13A/S (Revised 10-82)

Tear out here

2632 RDC-01189

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER → NYD002057698

ISLAND TRANSPORTATION CORP
799 MAIN STREET
WESTBURY NY 11590

INSTALLATION ADDRESS → 799 MAIN STREET
WESTBURY NY 11590

EPA Form 8700-12A (4-80)

10 12 53 PM '83

PROTECTION

2632 RDC-01190

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Info request
Other than on 2007

15 JUN 1983

Mr. Timothy E. Cropper
Vice President
Island Tranportation Corp.
299 Edison Avenue
West Babylon, New York 11704

Subject: Your letter of May 5, 1983
EPA ID No.: NYD020576898

Dear Mr. Cropper:

23

Your letter of May 5, 1983 indicates that your organization moved to a new location and that your EPA ID Number is NYD0205761H9A. This letter is to require from you a new Notification of Hazardous Waste Activity form for your new location.

Your original number, which your letter incorrectly referenced, was assigned only to your old location; it is not tranferrable. Enclosed you will find a blank notification form. Please complete and sign the form within 14 days of your receipt of this letter. In addition, if you do know who will be moving into your old location, it would be appreciated if you also notify us of this either in writing or by phone.

...DMS
6/21/83

Tom Taccone of my staff at (212) 264-9880 will answer any questions you may have on this matter.

Sincerely yours,

Richard A. Baker
Chief
Permits Administration Branch
Office of Policy & Management

Enclosure

2PM:PA:Taccone:JA:6/13/83

CONCURRENCES

SYMBOL	2PM:PA	2PM:PA	2PM:PA					
SURNAME	Taccone	Zambratto	Baker					
DATE	6/14/83	DJZ 6-13-83	6/15/83					

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

2632 RDC-01191

"IF IT FLOWS WE HAUL"

ISLAND TRANSPORTATION CORP.

Petroleum and Petroleum Products

299 MAIN STREET • WESTBURY, N.Y. 11590

MC ICC 0118648
D.O.T.N.Y.MT-7248
P.U.C.-CONN. C-383

Office: (516) 334-5400 • Westbury Term. (516) 334-5440 • Greenpoint Term. (212) 383-3221 • New Jersey Term. (201) 541-8091 • Conn. Term. (203) 239-4494

NYD020576898

~~NYD05~~

Eliminate
ALREADY NOTIFIED

notified date
8 0 0 7 2 0

February 27, 1981

U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, NY 10278

Re: NYT000029553

MAR 4 1 [illegible] AM '81
ENVIRONMENTAL PROTECTION AGENCY
NEW YORK, N.Y. 10007

Att: Mr. Julio Morales=Sanchez, Director
Enforcement Division

Gentlemen:

Please be aware that Island Transportation Corp. has filed with the E.P.A. as required by law and has already been issued E.P.A. Identification No. NYD020576898 for Hazardous Waste Activity, a copy of which is attached.

Perhaps there is an error in that your letter was addressed to me personally rather than to Island Transportation Corp.

Please contact me if further clarification of this matter is necessary.

Yours truly,

Peter Fioretti, Jr.
Vice-President

PF:ms

DGA

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER ➤ NYD072057698

ISLAND TRANSPORTATION CORP
299 MAIN STREET
WESTBURY NY 11590

INSTALLATION ADDRESS ➤ 299 MAIN STREET
WESTBURY NY 11590

EPA Form 8700-12A (4-80)

ENVIRONMENTAL PROTECTION AGENCY NEW YORK, N.Y. 10007

NOTICE**NOTICE**NOTICE

TO ENSURE ACCURATE PROCESSING, YOUR RESPONSE TO THIS LETTER MUST INCLUDE THE TWELVE DIGIT NUMBER PRINTED ON THE MAILING LABEL OF THIS LETTER.

NYT000029553

FIORETTI PETER

299 MAIN STREET
WESTBURY

NY 11590

ENVIRONMENTAL PROTECTION AGENCY
NEW YORK, N.Y. 10007
MAR 4 11 30 AM '81

Dear Sir:

The United States Environmental Protection Agency (EPA) regulates the handling of hazardous wastes under the Resource Conservation and Recovery Act (RCRA) 42 U.S.C. §6901 et seq. Under Section 3010 of RCRA, 42 U.S.C. §6930, parties handling certain quantities of hazardous wastes (these wastes are characterized and listed in regulations which were published in the Federal Register of May 19, 1980, 45 FR 33084 et seq. and July 16, 1980, 45 FR 47832 et seq.) are required to notify EPA of their activities. Facilities handling wastes defined by the May 19, 1980 regulations were required to notify by August 18, 1980. Facilities handling wastes defined by the July 16, 1980 regulations were required to notify by October 14, 1980. We have not yet received a notification from you or your company.

Section 3007 of RCRA, 42 U.S.C. §6927, allows EPA to request certain information of parties who handle hazardous wastes. Based upon information available to this Agency, we believe that you or your company handles such hazardous wastes. Therefore, in order to determine the extent of your hazardous waste activity, and to determine whether you should have notified EPA pursuant to §3010, we require that you answer the questions posed below. Your reply should be completed and signed by a responsible official of your firm and returned to us within 21 days of the date of this letter. If you have already notified EPA of your hazardous waste activity, please respond, indicating your prior notification and listing your EPA Identification Number, if available.

Please answer the following questions:

1) Do you handle any "hazardous wastes," as this term is defined in RCRA and the regulations promulgated under RCRA (regulations published in the Federal Register on May 19, 1980; July 16, 1980; October 30, 1980; November 12, 1980; November 17, 1980 and November 25, 1980)?

2) If you do handle such wastes, what is the greatest quantity of hazardous wastes that you handle in any one month?

3) If you do handle any hazardous wastes, please identify them by type, characteristics, components, or by the process that produces these wastes.

4) How do you handle these wastes (i.e. do you generate, transport, treat, store or dispose of them)?

47-15-15(7/82)

RCRA INSPECTION FORM

Report Prepared for:

Generator ☑

Transporter ☑

HWM (TSD) facility ☐

Copy of report sent to the facility ☐

(4)

PERMITS ADMIN. BRANCH
RECEIVED
APR 29 2 56 PM '83
ENVIRONMENTAL PROTECTION
NEW YORK, N.Y. 10007

Location Code:
47 2000

Facility Information

Name: Island Transportation Corp

Address: 299 Edison Ave
West Babylon NY 11704

EPA ID#: NYD 020 576 898

Date of Inspection: April 13, 1983

Participating Personnel

State or EPA Personnel: Jere Austin
NYS DEC

Facility Personnel: Timothy Crapper
VP - Maint. & Equip.

RECEIVED
APR 18 1983
BUREAU OF
HAZARDOUS WASTE OPERATIONS
DIVISION OF SOLID WASTE

Report Prepared by Name: J. Austin

Agency: NYS DEC

Telephone #: (516) 751 7900

Approved for the Director by: James H. Neil
Regional Solid Waste Engineer
Region 1 - NYSDEC

Summary of Findings

Facility Description and Operations

Facility is a trucking company. Maintenance shop generates waste lube oil, approx. 400 to 500 gals / 30 days. Waste oil is removed approx. 30 day intervals.

Two parts-cleaning machines are serviced by Safety-Klean Corp. which removes about 10 gal per machine every two weeks. Solvent is "Safety solvent #5".

Describe the activities that result in the generation of hazardous waste.

Two parts cleaning machines in maintenance shop using Safety-Kleen Safety solvent #5. Spent solvent removed at two week intervals (approx 10 gal / machine)

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

Quantity and storage time qualifies Facility as an exempt generator

Environmental Protection Agency Internet

Internet

RCRA information is now available on the Internet. The address is http://www.epa.gov and if you have any questions, please contact the RCRA Hotline telephone number at 1-800-424-9346.

Another feature posted on the Internet by EPA HQ's is the Final National Biennial Reports with Data Files for all BRS reporting years, found at:

http://www.epa.gov/epaoswer/hazwaste/data. The Preliminary 1997 National Report is posted on the Internet and the address is:

http://www.epa.gov/epaoswer/hazwaste/data/pbr97/97pbr.htm. Also, available on the Internet is a public access on-line query engine for environmental databases found at:

http://www.rtk.net

In the near future, the public will have electronic access to RCRA facility-specific information which will also include some flat file reports. The RCRA reports will soon be available on the Freedom of Information Act (FOIA) Web Page. The FOIA Web Page will replace the Region 2 Bulletin Board System. The Bulletin Board System is out of date.

NYSDEC Spill Logs

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
8604508	10/14/86	10/30/86	MOBIL	6060 BRUSHHOLLOW ROAD	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
GASOLINE	0	Tank Test Failure	Gas Station	Groundwater
GASOLINE	0	Tank Test Failure	Gas Station	Groundwater

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
8605013	11/6/86	3/11/89	ISLAND POLYETHYLENE	75 GARDEN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	0	Other	Comm/Indust	Groundwater
#2 FUEL OIL	0	Other	Comm/Indust	Groundwater

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
8605257	11/17/86	11/16/87	PETRO	522 GRAND BLVD	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	0	Tank Test Failure	Gas Station	Groundwater
#2 FUEL OIL	0	Tank Test Failure	Gas Station	Groundwater

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
8606479	1/19/87	1/21/87	PERILLO BROS OIL	1058 GRAND BLVD	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	5	Human Error	Tank Truck	On land
#2 FUEL OIL	5	Human Error	Tank Truck	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
8701680	5/29/87	6/4/87	LILCO	GRAND BLVD & GARDEN ST	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
NON PCB OIL	1	Equipment Failure	Comm/Indust	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9706313	8/25/97	8/29/97		GARDEN STREET/MAIN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
UNKNOWN MATERIAL	0	Abandoned Drum	Unknown	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9706902	2/12/96		ONE STOP AUTO & TRUCK CTR	299 MAIN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
ANTIFREEZE	0	Housekeeping	Comm/Indust	On land
WASTE OIL	0	Housekeeping	Comm/Indust	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9707483	9/24/97		NORTH HEMPSTEAD HOUSING	899 BROADWAY	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	0	Tank Test Failure	Non-Comm/Inst	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9708907	10/30/97	11/27/97	MORRIS RESIDENCE	225 GARDEN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	2	Human Error	Commercial Vehicle	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9710428	3/1/96			HOPPER STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
UNKNOWN HAZARDOUS MATERIAL	0	Unknown	Unknown	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9710721	12/19/97	1/28/98	ACME BUS	1 BRUSHHOLLOW ROAD	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
ANTIFREEZE	0	Deliberate	Comm/Indust	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9307861	9/28/93		TWN NO HEMPSTEAD HWY GARA	970 BRUSHHOLLOW ROAD	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
GASOLINE	0	Other	Non-Comm/Inst	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9308133	10/4/93		ZAMPINI RESIDENCE	702 URBAN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	5	Equipment Failure	Private Dwelling	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9308228	10/6/93	5/16/97	LARIOS RESIDENCE	1124 BROADWAY	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
#2 FUEL OIL	0	Equipment Failure	Private Dwelling	On land

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9308336	10/8/93	7/5/95	ROYAL GUARD FENCE	550 MAIN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
GASOLINE	0	Tank Test Failure	Comm/Indust	Air

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9309079	10/26/93	10/28/93	ROYAL GUARD FENCE CO	550 MAIN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
GASOLINE	0	Tank Test Failure	Comm/Indust	Groundwater

Spill #	Spill Date	Clean Date	Spill Name	Street Address	City	County
9309400	11/2/93		SAMTON SALVAGE	299 MAIN STREET	WESTBURY	Nassau

Material Spilled	Qty (gal)	Spill Cause	Spill Source	Resources Affected
UNKNOWN PETROLEUM	0	Housekeeping	Comm/Indust	On land

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent : Quality Collision
Address: 299 Main Street
Westbury

Ins

COMMENTS

DATE

10/20/98 I visited Quality Collision formerly Sam Tom Towing and Salvage. I spoke with the receptionist. The receptionist told me that repair work is done on premises. My view of the establishment was limited as the receptionist told me that she was not allowed to take me into the repair area. I will revisit at another time and try to make contact with the owner/operator.
J Mergenelli

11/30/98 I visited 299 Main St in Westbury I viewed the interior and I found no floor drains
J Mergenelli

SDS RS
RS
JDF 7/18
DI
file

AUG 10 1990

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Frank Scibelli
President
Sam-Ton Towing and Salvage
299 Main Street
Westbury, New York 11590

Re: Class V UIC Permit Application/Closure Request
Sam-Ton Towing and Salvage
299 Main Street
Westbury, New York 11590

Dear Mr. Scibelli:

The U.S. Environmental Protection Agency (EPA) administers the Underground Injection Control (UIC) program as mandated by Part C of the Safe Drinking Water Act (SDWA), 42 United States Code (USC) §300f et seq., as amended. Section 1422 of the SDWA, 42 USC §300h-1, requires EPA to administer the UIC program in states that do not have approved state programs, as is the case in New York. The regulations associated with the program are contained in 40 Code of Federal Regulations (CFR) Parts 124, 144, 145, 146, and 147.

A recent inspection of the above-referenced facility, indicates that fluids are being injected into the ground by means of wells. Under 40 CFR §144.3, the wells, two type 5X28's (see Enclosure 1, Class V well types), are considered Class V wells and subject to the requirements of the UIC program. EPA records indicate that the injection activity is unauthorized.

40 CFR §144.12(a) states that no owner or operator shall conduct any injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or may otherwise adversely affect the health of persons. 40 CFR §144.12(d) states that when the director of the UIC program learns that a Class V well may cause a violation, he may take such actions as may be necessary to prevent the violation. This may include requiring the operator to obtain an individual UIC permit or closure of the well.

The hydrogeologic structure underlying the facility has high potential for allowing contamination of ground water. Consequently, the facility's Class V wells may cause a violation of primary drinking water regulations or otherwise adversely affect the health of persons. Therefore, it is necessary that action be taken to bring the wells into compliance with the SDWA. To achieve compliance, you must either obtain a permit to operate the wells or close the wells.

If you would like to continue using the wells, you must submit a permit application to EPA. The permit application must be in accordance with 40 CFR Part 144 Subpart D and the application must demonstrate that the conditions of 40 CFR §144.12(a) are satisfied. **If the application does not satisfy the requirements of 40 CFR §144.12(a) and 40 CFR Part 144 Subpart D, it will be denied and closure of the wells will be necessary.** Be advised that issuance of a federal UIC permit does not exempt the facility from State or local law and that, therefore, any injection activity may be prohibited at the State or local level, regardless of the fact that a federal UIC permit has been issued to you. Instructions for filing a federal UIC permit are enclosed.

Due to stringent injectate quality standards the cost of treatment would be substantial and it is EPA's experience that most Class V operators choose to close the wells rather than attempt to obtain a federally issued UIC permit. Therefore **EPA strongly recommends that you choose to close the wells.** Before you close the wells you must submit a closure plan to EPA and receive EPA's approval of that plan. Enclosed are instructions for UIC closure plans.

Failure to submit a closure plan or permit application <u>within 30 days of receipt of this letter</u> and continued unauthorized injection into the wells may result in an enforcement action pursuant to Section 1423 of the SDWA, 42 USC 300h-2, <u>et seq</u>. including, but not limited to, the imposition of a civil penalty of not more than $25,000 for each day of violation. In addition to, or in lieu of a civil penalty, willful violations may result in imprisonment for up to 3 years or a fine in accordance with Title 18 of the USC. As an alternative to civil enforcement, an Administrative Order may be issued which assesses a civil penalty of not more than $10,000 for each day of violation for any past or current violations, up to a maximum penalty of $125,000, or which requires compliance with such regulation or other requirement, or both.

If you have any questions concerning this matter, you may contact Dermott Courtney of my staff at (212) 264-6897. Please send all submissions to:

Frank C. Brock, Chief
Underground Injection Control Section
U.S. Environmental Protection Agency
26 Federal Plaza, Room 845
New York, NY 10278

Your cooperation in this matter is encouraged.

Sincerely yours,

Kevin Bricke
Acting Director
Water Management Division

Enclosures

cc: S. Silvers, Nassau County Department of Health

S+R issued 4/14/78

0140155

INDUSTRIAL CHEMICAL SURVEY
BUREAU OF WATER POLLUTION CONTROL
Nassau County Department of Health
240 Old Country Road, Mineola, N.Y. 11501
Tel. 535-2404

#00058

Part I

Company Name: Island Transportation Corp.		SIC (if known) Code: 4210	
Company Mailing Address: 299 Jericho St, Westbury			Zip: 11590
Plant Name (if different): —	Contact Name: Timothy Cropper		Tel.: 334-5400
Plant Address: —	Village: Westbury	Water Distr.:	Code: Zip:
Principal Business of Plant: trucking		No. Employees at this Facility: 375	

Part II

COMPLETE LIST OF CHEMICALS USED (See attached)

PART III - DISCHARGE INFORMATION

WATER

1. Does your plant discharge liquid wastes to a municipally owned sanitary sewer system? ☐ Yes ☑ No
   If yes, name of system: cesspool
2. Is your facility permitted to discharge liquid wastes under a State (SPDES) or Federal (NPDES) permit? ☐ Yes ☑ No
   If yes, enter Permit No. ☐☐☐☐☐☐☐
3. Do you discharge liquid industrial wastes in any other manner? ☑ Yes ☐ No
   If yes, explain: detergent wash from trucks into 8-9000 gal cesspools
4. If any of the above are yes:
   a. Do you discharge process or chemical wastes, i.e., water used in manufacturing, including direct contact cooling water and scrubber water? ☐ Yes ☐ No
   b. Do you discharge non-contact cooling water? ☐ Yes ☐ No
   c. Do you discharge sanitary wastes? ☐ Yes ☐ No

AIR

1. Does your facility have sources of possible emissions to the atmosphere? ☐ Yes ☑ No
2. Enter location and facility code as shown on your Air Pollution Control Application for Permits & Certification (if applicable) ☐☐☐☐☐☐☐☐☐☐
3. Heating System: ☐ None ☐ Boiler ☑ Space Heater | Type of Fuel: ☐ Electric ☐ Gas ☑ Oil #2 | Incinerator: ☐ Yes ☑

SOLID & CONCENTRATED LIQUID WASTES

1. List name and address of firm (incl. yourself) removing wastes other than office and cafeteria refuse (industrial scavenger)

Name	Name
Address	Address

2. List location(s) of landfills owned and used by your Facility | Active | Inactive
   a.
   b.

PEST

Does this facility manufacture, produce, formulate or repackage pesticides? ☐ Yes ☑ No

Signature (owner, partner, or officer): [signature] Date: 9-15-77

Name (printed or typed): Tim Cropper Title: Vice-Pres.

Inspector's Name: DB RZ Date of Inspection: 9/15/77

USTRIAL C MICAL SURVEY-BUREAU OF WATER POLLUTION
Nassau County partment of Health

Name of Company: Island Transportation | Code | Water Dist: Westbury | Code

PART II - CHEMICALS USED (include gases and oils)

INSTRUCTIONS: Complete all information for those chemicals your facility has used, stored, distributed, or otherwise disposed of since January 1, 1977. Do not include chemicals used only in analytical laboratory work.

Name of Chemical/Trade Name, Supplier and Address	Code	Avg. Annual Usage	Gal	Lbs	Use of Chemical	Final Disposition of Chemical
Trichlorethylene (drawn from 275 gal holding tank)		80	✓		Vapor degreaser cleaning inside of tankers	- evaporation + recirculation of cleaning fluids within tank truck
Methanol		5-600	✓		fuel system additive for trucks + tractors added to Service Stations tanks	- evaporative loss [per truck uses 6oz/wk]
Safety-Kleen (Emmanuel S Mintz 99.9%)		1400	✓		parts cleaner	picked up + delivered by Safety Kleen (some evaporation)

RECOMMENDED ACTION

OR
FFICE
SE
NLY

2 ☐ Immediate Abatement
3 ☐ Sample
4 ☒ SPDES Application
5 ☐ Refer To: _____
6 ☐ Re-inspection
7 ☐ No Action
9 ☐ Other (specify)

2632 RDC-01207

NASSAU COUNTY HEALTH DEPARTMENT
PERMIT COMPLIANCE INSPECTION REPORT

Name, Address and Phone of Permittee
Island Transport.
249 M. Street
Westbury, N. 11590

Permit #NY0140155 Effective Date 4/14/78 Expiration Date 4/13/78

Company Representative & Title Bill Regan — Super. - [illegible]

Permit Verification	Yes	No	N.A.
Name and location correct	/		
Changes:			
Purchase records in order			/
Removal of waste material records in order			/
Name & Number of scavenger & waste pick-up			/
Changes in scavenger pick-up			/
Final destination of waste known			/
Destination All Pedestrian			
Re: 2841.5 lbs Trichlor. March, 28, 1978			
Chemical Storage Area			
Waste contained in sealable leakproof containers.....		/	
Containers labeled		/	
Storage area relatively secure			/
Spill prevention appears adequate.....	/		
Cleanup apparatus or material on premises.....	/		
Records of spill occurrences.....		/	
Date of last spill		/	
Reported to this department		/	
Comments: Storage area for oils and such fairly saturated. This was in [illegible] Must expect a little oil around.			
Operation			
Changes in operation or chemical usage since last inspection		/	
Comments:			
Sludges & solids adequately disposed of in production in area	/		
Production area kept relatively free of chemical spillage into floor drain			

Compliance Schedule Special Requirements	Yes	No	N.A.
Permittee under complicance schedule.....			
Status of compliance.....			
All records and reports required by this department sent by prescribed date.....			

Prescribed date [illegible]

Date sent N/A

Comments:

Gave them a few days to [illegible] [illegible] on each side of [illegible]

Signature Inspector [illegible] Date [illegible]

Signature Company Agent Bill [illegible] Date [illegible]

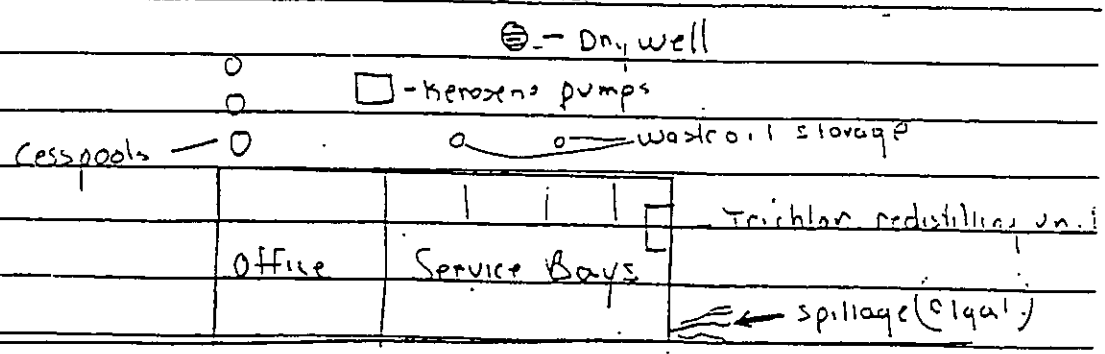
ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent: Island Trans
Address: Main St. Westbury

Inspector: Gene M.

DATE	COMMENTS
1/11/79	Arrived at Island Transport at approx 3:00. Spoke to Tim Cropper, Maintenance Head. Inspected oil storage, and trichlor redistillation unit. Both stopping. Can be expected in this operation, however, some chemical is leaking out of corner of shop at S.E. corner. Informed him to clean up area. We proceeded to the west area of maintance lot. Mr Cropper pointed out 3 cesspools in sequence. See diagram. He also pointed out a drywell in the middle of the lot. This was under a tanker filled with gasoline. It was also frozen over with oily water. Sample not accessible. Informed Mr Cropper & will [illegible] at some future date.

Gene Marleas



Main St

2632 RDC-01210

MASSACHUSETTS DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES & RESEARCH
ENVIRONMENTAL HEALTH LABORATORY

RESULTS OF EXAMINATION

REPORTING LAB: TRACE ORGANICS

LAB ACCESS NO.: 900891

SOURCE: ISLAND TRANSPORTATION

MATRIX: WATER

DATE SAMPLED: 8/21/79

DATE RECEIVED: 8/21/79

DATE COMPLETED: 8/21/79

PARAMETER	ppb(ug/l.)
BENZENE	359
TOLUENE	768
XYLENE	3003
* ALIPHATIC HYDROCARBON	1571

ADDITIONAL HIGHER MOLECULAR WEIGHT HYDROCARBONS PRESENT

AUG 23 1979

* C4 - C10 based on n-hexane

ENVIRONMENTAL
HEALTH
Continuation Sheet
Kansas County Health Department

334-540

Owner or Agent: Island Transportation Corp.
Address: 299 Main Street Westbury

Inspector: HW

DATE | COMMENTS (Maintenance & Equipment)

30 August 1979. Field Contact - Timothy E. Cropper V.P.
Results of sample taken on 8/21/79 - discussed with Tim Cropper.
Further advised Mr. Tim Cropper that results of another certified sample would have to be submitted to NCHD by Island Transportation Corp. to ascertain whether conditions have improved.
Herbert Welch NCHD.
Sanitarian II

13 Sept 1979 Field Contact - Wm. Ryan (Plant Maintenance Foreman).
Spoke with Bill Ryan regarding waste water discharge into street (via pipe) from truck wash area; Will discuss problem further with Tim E. Cropper V.P. (Maintenance & Equipment).
Further advised Mr. Ryan regarding the DuBois Chemical product "SPRA-JeL" - being just as deleterious to ground water integrity as 1,1,1 Trichloro.
Herbert Welch NCHD
Sanitarian II

5. SLUDGE DISPOSAL If sludge is created as a result of processing or treatment, what is ultimate disposal point?

6. DISCHARGE DATA (Continued) (See Instructions) ATTACH SKETCH SHOWING OUTFALL LOCATIONS

OUTFALL NO.		TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)
One	☐ Proposed ☐ Replacement ☒ Existing ☐ Expansion	Biodegradeable Detergent	None

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
10 Gal Day	10 Gal/Day	☐ Continuous ☒ Intermittent ☐ Batch	☐ Yes ☒ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Twelve Months per year	Five Days per week	Seven Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☒ Yes ☐ No	Unknown	– Ft.	Unknown	Unknown

OUTFALL NO.		TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)
	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion		

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

OUTFALL NO.		TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)
	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion		

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

7. COMMENTS:

8. I hereby affirm under penalty of perjury that information provided on this form and any attached supplemental forms is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

APPLICANT'S SIGNATURE (See Instructions)	Date	Printed Name	Title
X [signature]	1/25/[illegible]	[illegible] E. Cropper	Vice Pres. Maintenance

SEMI-ANNUAL WASTE REPORT

Company: Island Transportation Corp. Date: January 15, 1979

Permit#: NY - #0140155 Reporting Period: Previous 6 months

Item	Reporting Requirement	
1. Waste generating chemicals and/or solvents purchased during reporting period.	Name	Quantity
Solvents	Safety Kleen Corp. P.O. Box 768 Mineola, N.Y. 11501	10 gal./week approximately
Tricholoroethylene	Pride Solvents & Chemical Co., Inc. 86 Lamar Street West Babylon, N.Y. 11704	275 gal. approximately

2. Waste Removal

Attach copies of manifests or receipts from registered industrial waste scavenger. Must include nature, name and amount of waste, date removed, registration number, and name of scavenger.

General Waste Oil Co., Inc.
Huntington. New York 11746

3. Final Disposal Site for Waste (obtain information from scavenger)

New Jersey Waste Oil Refinery

4. Occurrence of Accidental Spills (include date, nature, and approximate amount spilled)

None

Signed Timothy E. Grogan

Title Vice-President Maintenance

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Land Resources Management	Name: Island Transportation corp.	Permit Number: 0140155
Nassau County Department of Health	Address: 299 Main Street, Westbury, N.Y. 11590	Report Period: June 80-Dec.80

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp.	10 Gal/Wk.
		P.O. Box 768 Mineola, N.Y. 11501	Approximately

RECEIVED
JAN 23 1981
NCDH
BLRM

continued on reverse

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Wastewater Management

Nassau County Department of Health

Name	Permit Number
Island Transportation Corp.	014C155
Address	Report Period
299 Main St., Westbury, NY 11590	Jan-June 198[illegible]

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp	10 Gal./Wk.
		P.O. Box 768 Mineola, NY 11501	Approximately

RECEIVED
JUL 16 1990
NCDH
BWWC

continued on reverse

ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent : Island Transportation

Address: 599 Main St Westbury

Inspector

DATE	COMMENTS
11/11/80	Visited Island Transportation & spoke to Mr. [illegible] I explained the 360 program with him & discussed the applications to be returned to this office
	[illegible]

EH 109a 1/58

PERMIT COMPLIANCE INSPECTION REPORT

Bureau of Land Resources Management

Nassau County Department of Health

Facility Name: ISLAND TRANSPORTATION CORP

Address: 299 MAIN ST WESTBURY

Company Representative: TIMOTHY CROPPER

Title:

Phone:

Changes in Name, Address, Rep.

Permit No. 30-11-86

☒ New ☐ Renewal

Effective Date of Permit: 1/2/81

Expiration Date of Permit: 1/20/82

Item	Yes	No	N/A
1. Waste Storage and Handling			
A. Adequate Spill Control?			
B. No obvious infraction of Fire Code?			
C. Proper waste containers?			
D. Proper Storage of incompatible wastes?			
E. Waste containers properly labeled?			
F. Proper drum stack size and aisles?			
G. Containers off ground and not leaking?			
H. Waste stored in secure area?			
2. Registered Industrial Waste Scavenger?			
Name			
DEC #			
☐ Different scavenger since last report			
3. Records			
A, B, C Proper waste inventory records?			

Item	Yes	No	N/A
3. Records (Cont'd.)			
D. Record of spills & notification of N.C.H.D.?			✓
E. Record of special sampling results?			✓
4. Records kept a minimum of 3 years?			
5. Reports submitted on time?		✓	
6. Waste storage in conformance with permit?			
Quantities O.K.? Drums			✓
1(500GAL) underground Tanks			
Maximum storage time O.K.?			
7. Sampling in conformance with permit?			
8. Is compliance schedule met as required by permit?			
9. Overall Inspection Rating			
☐ Satisfactory			
☐ Non-Compliance ☐ Major ☒ Minor			

Date	Item	Comments
		WASTE REPORT DUE FOR 1ST HALF OF 1981
		VISITED ISLAND TRANSPORTATION + FOUND THE FACILITY TO BE CLOSED
		THE ENTIRE STORAGE YARD HAS BEEN CLEANED & ALL TRUCKS ARE GONE FROM
		IT APPEARS THAT THIS FACILITY IS OUT OF BUSINESS.

Signature of Inspector: A. Fulsom

Date 11/23/81

Signature of Company Representative:

Date

FH 702 9/80

2632 RDC-01218

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N. Y., 11501

FRANCIS T. PURCELL
County Executive

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Deputy Commissioner
for Environmental Health

October 31, 1980

Mr. Morris Bruckman, P.E.
New York State Department of
Environmental Conservation
SUNY-Bldg. 40
Stony Brook, New York 11790

Re: Island Transportation
Part 360 Application & Permit

Dear Mr. Bruckman:

Please find enclosed an application for a Part 360 permit to replace the SPDES hold and haul permit for the above facility. We have reviewed the application and found it to be complete.

Consequently, a draft permit has been drawn up and enclosed. This permit requires a facility number, your signature and an issuance date.

If you have any questions, please contact me at 535-2404.

Very truly yours,

L. Sama
Public Health Engineer
Bureau of Land Resources Mgmt.

LS:ceg
Encl.

-20-2 (8/77) NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FACILITY NO. [illegible]

PERMIT

EXPIRATION DATE [illegible]

Under the Environmental Conservation Law, Article 27, Title 7, Part 360

☐ CONSTRUCTION ☐ INITIAL ISSUE ☐ REISSUANCE
☐ OPERATION ☐ RENEWAL ☐ MODIFICATION

PERMIT ISSUED TO	ADDRESS OF PERMITTEE	TELEPHONE NO.
[illegible]land Transportation Corp.	299 Main St., Westbury, NY 11590	516-334-5400

LOCATION OF PROJECT Town	County	Environmental Conservation Regional Office
[illegible]	[illegible]	[illegible] Stony Brook, NY 11790

DESCRIPTION OF PROJECT	ON-SITE SUPERVISOR

GENERAL CONDITIONS

1. The permittee shall file in the office of the Environmental Conservation Region specified above, a notice on intention to commence work at least 48 hours in advance of the time of commencement and shall also notify said office promptly in writing of the completion of the work.
2. The permitted work shall be subject to inspection by an authorized representative of the Department of Environmental Conservation who may order the work suspended if the public interest so requires.
3. As a condition of the issuance of this permit, the applicant has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.
4. All work carried out under this permit shall conform to the approved plans and specifications. Any amendments must be approved by the Department of Environmental Conservation prior to their implementation.
5. The permittee is responsible for obtaining any other permits, approvals, easements and rights-of-way which may be required for this project.
6. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with Part 360 and the special conditions. Any variances granted by the Department of Environmental Conservation to Part 360 must be in writing and attached hereto.

SPECIAL CONDITIONS

ISSUE DATE	ISSUING OFFICER	SIGNATURE
	[illegible]	X [illegible]

Facility # 30 H 56

Permit Conditions for Operation
of a Waste Generating Facility

1. The following minimum standards will apply for storing and handling wastes:

   a. There should be adequate spill control in the storage area; i.e. an impervious storage pad or floor, bermed to facilitate containment of spills. Stormwater shall be directed to prevent entry into the pad.

   b. Building and fire codes should be met where required.

   c. Wastes should be stored in leakproof containers which are compatible with the waste materials. The containers should not be corroded or leaking and should be tightly closed.

   d. Wastes which deleteriously react with each other must not be stored directly adjacent or mixed together.

   e. Waste containers should be labeled, numbered and distinctly coded and identified as to contents in accordance with Department of Transportation Regulations 49CFR, Part 172.

   f. Waste drums should not be stacked more than two high and aisles should be provided so that all drums are accessible and clearly visible for inspection.

   g. Waste drums should be stored off the ground a minimum of 2 inches to facilitate detection of bottom leaks.

   h. Wastes should be stored in a secured area.

2. Removal of wastes should be only by registered industrial scavenger.

30 H 50

3. Records should be kept on premises and made available to Personnel from the Department of Environmental Conservation or its agents upon request. The following should be included:

   a. Quantity and type waste generated.

   b. Waste container inventory and identification including starting date of collection.

   c. Waste removals by scavenger including container I.D. numbers and scavenger I.D. numbers and final disposal site.

   d. Spills - Notification of DEC (751-7900) and/or Health Department (535-2404) should be made immediately.

   e. Sampling results

4. All records shall be kept a minimum of three years.

5. A report shall be filed on an approved form by the fifteenth day of the following months each year:

   February and August

   Reports shall be filed with the Nassau County Department of Health.

6. Limits on maximum storage time and quantities of wastes stored on the site shall be _____.

   Less than 90 days for one 500 gal. underground tank.

7. Samples shall be collected and analyzed as follows:

   N.A.

30 H 56

8. Compliance Schedule

The waste storage area is to be modified to conform with Item 1a of permit conditions within 12 weeks of the effective date of the permit. All other conditions to be complied with no later than four weeks after EDP.

NOTICE OF PERMIT

for:

- [ ] CONSTRUCTION
- [ ] INITIAL ISSUE
- [ ] REISSUANCE
- [x] OPERATION
- [ ] RENEWAL
- [ ] MODIFICATION

has been issued to: ISLAND TRANSPORTATION CORP.

address: 299 MAIN STREET, WESTBURY, NEW YORK 11590

for a project described as: HOLD TO HAUL HAZARDOUS WASTE

under the Environmental Conservation Law,
Article 27, Title 5, Part 360 (Solid Waste Management Facilities)

NOTE:
- This Notice of Permit must be posted on the project site in such a manner that it is protected from weather and is in a location readily visible to the public.
- A copy of the Permit with the general and special conditions noted thereon will be shown to anyone upon request.

Morris Bruckman

Issuing Officer : MORRIS BRUCKMAN, P.E.

BLDG.#40, SUNY, STONY BROOK, NEW YORK 117

Address

30-H-56	1/21/81	1/20/82
Permit No.	Issue Date	Expiration Date

New York State
Department of Environmental Conservation

47-12-2 (6/77)

2632 RDC-01224

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR APPROVAL [illegible] OPERATE A SOLID WASTE MANAGEMENT FACILITY

FOR STATE USE ONLY

PROJECT NO.	DATE RECEIVED
[illegible]	[illegible]

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

1. OWNER'S NAME: PETER PIOR[illegible]	2. ADDRESS (Street, City, State, Zip Code): [illegible]	3. Telephone No.: [illegible]
4. OPERATOR'S NAME: SAME	5. ADDRESS (Street, City, State, Zip Code): [illegible]	6. Telephone No.: [illegible]
7. ENGINEER'S NAME: NONE	8. ADDRESS (Street, City, State, Zip Code): [illegible]	9. Telephone No.: [illegible]
10. ON-SITE SUPERVISOR: [illegible] CROPPER	11. ADDRESS (Street, City, State, Zip Code): 116 RUDER AVE. DIX HILLS NY. 11746	12. Telephone No.: 516.643.4577

13. HAS THE INDIVIDUAL NAMED IN ITEM 10 ATTENDED A DEPARTMENT SPONSORED OR APPROVED TRAINING COURSE?
☐ Yes Date Course Title Location ☒ No

14. PROJECT/FACILITY NAME	15. COUNTY IN WHICH FACILITY IS LOCATED	16. ENVIRONMENTAL CONSERVATION REGION
ISLAND TRANSPORTATION CORP.	NASSAU	NO MAP

17. TYPE OF PROJECT FACILITIES: ☐ Composting ☐ Transfer ☐ Shredding ☐ Baling ☐ Sanitary Landfill ☐ Incineration ☐ Pyrolysis ☐ Resource Recovery-Energy ☐ Resource Recovery-Materials ☒ Other TRUCKING COMPANY

18. HAS THIS DEPARTMENT EVER APPROVED PLANS AND SPECIFICATIONS AND/OR ENGINEERING REPORTS FOR THIS FACILITY? ☐ Yes Date ☒ No

19. LIST WASTES NOT ACCEPTED
NONE

20. BRIEFLY DESCRIBE OPERATION

PETROLEUM PRODUCT TRANSPORTER WITH REPAIR FACILITY FOR OWN TRACTOR TRAILERS

EST

21. IF FACILITY IS A SANITARY LANDFILL, PROVIDE THE FOLLOWING INFORMATION:
a. Total useable area: (Acres) Initially Currently
b. Distance to nearest offsite, downgradient (water supply well) Feet
c. No. of groundwater monitoring wells Upgradient Downgradient

22. INDICATE WHICH ATTACHMENTS, IF ANY, ARE INCLUDED WITH THIS APPLICATION:
☐ Form 47-19-2 or SW-7 ☐ Operations Plan & Report ☐ USGS Topographic Map ☐ Record Forms ☐ Other
☐ Construction Certificate ☐ Boring Logs ☐ Water Sample Analysis ☐ None

23. CERTIFICATION:
I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

10/21/80 [illegible]
Date Signature and Title

FIELD COPY

2632 RDC-01225

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501

RALPH G. CASO
County Executive
JOHN J. DOWLING, M.D., M.P.H.
Commissioner
FRANCIS V. PADAR, P.E.
Asst. Deputy Commissioner
Div. of Environmental Health

November 15, 1977

New York State Department of
Environmental Conservation
Pollutant Discharge Elimination
System Section
50 Wolf Road
Albany, New York 12233

Attention: Mr. George Hansen

Gentlemen:

In accordance with the UPA effective November 1, 1977, we have sent SPDES applications to five industrial firms, list attached.

Also sent and attached here were:

1. the cover letter used
2. the list of fees taken from UPA
3. the Project Permit Requirement Questionaire.

A copy of the organic chemical survey for each company is also enclosed for your refrence in evaluating the applications when returned to you.

Very truly yours,

L. Sama
SPDES Coordinator
Bureau of Water Pollution Control

LS/lhg
enc.

Facility ID No. : NY 0140155

Effective Date : June 12/78

Expiration Date : June 11/81

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
PERMIT FOR THE STORAGE AND REMOVAL OF
POTENTIALLY HAZARDOUS WASTES
(NO DISCHARGE PERMITTED)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972, (33 U.S.C. Sec. 1251 et. seq.).

is authorized to store wastes for removal by authorized industrial scavenger from the facility described below:

in accordance with the monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to store and have wastes removed shall expire on midnight of the expiration date shown above and the permitee shall not discharge wastes after the expiration date unless this permit has been renewed, or written authorization is given by the Department. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the Department no later than 180 days prior to the expiration date.

By Authority of R.D.Cusumano,P.E. - Director, Wastewater Management
Designated Representative of Commissioner of the
Department of Environmental Conservation

June 5, 1978
Date

R D Cusumano
Signature

DRAFT

Facility ID No. : NY 0140155

Effective Date : April 14, 1978

Expiration Date : April 13, 1981

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
PERMIT FOR THE STORAGE AND REMOVAL OF
POTENTIALLY HAZARDOUS WASTES
(NO DISCHARGE PERMITTED)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisio of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972, (33 U.S.C. Sec. 1251 et. seq.).

Island Transportation

is authorized to store wastes for removal by authorized industrial scavenger from the facility described below:

299 Main Street
Westbury, N. Y. 11590

in accordance with the monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to store and have wastes removed shall expire on midnight of the expiration date shown above and the permitee shall not discharge wastes after the expiration date unless this permit has been renewed, or written authorization is given by the Department. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the Department no later than 180 days prior to the expiration date.

By Authority of R.D.Cusumano,P.E. - Director, Wastewater Management
Designated Representative of Commissioner of the
Department of Environmental Conservation

April 14, 1978
Date

R D Cusumano
Signature

DRAFT

Facility ID No. NY 0140155

During the period beginning EDP and lasting until EDP + 3 years the wastes from the permitted facility shall be controlled and monitored by the permittee as specified below:

All industrial wastes shall be collected in sealable leakproof holding tanks or drums. The storage vessels shall be suitable for and utilized and maintained in a manner to minimize corrosion and other damage and to prevent discharges onto the ground or discharged into the groundwater or surface waters of the State. Wastes shall be removed by a licensed industrial waste scavenger only. It shall be the responsibility of the permit holder to determine whether the scavenger employed is licensed by the State. The following records and manifests shall be maintained on the premises of this facility:

1. Amount of waste producing chemicals or solvents purchased during the reporting period.

2. Nature, name and amount of waste removed.

3. Date and method of removal. Copy of receipts or manifests.

4. Registration number and name of scavenger.

5. Final disposal site for waste.

6. Occurance of accidental spills.

Copies of records are required to be submitted to:

Bureau of Wastewater Management
Nassau County Health Department
240 Old Country Road
Mineola, New York 11501

Such records should be submitted by the last day of January and July of each year, covering collection for July to December and January to June respectively, if wastes total more than 100 gallons/year. Where wastes are less than 100 gallons/year only one submission need be made and that on the last day of January covering the previous calender year's collection.

Compliance Schedule

The permit holder shall have until May 14, 1978 to make any necessary preparations for meeting the permit requirements, as described on page 3, (if required).

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR APPROVAL TO OPERATE A SOLID WASTE MANAGEMENT FACILITY

FOR STATE USE ONLY

PROJECT NO.	DATE RECEIVED
DEPARTMENT ACTION ☐ Approved ☐ Disapproved	DATE

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

1. OWNER'S NAME: PETER FIORETTI	2. ADDRESS (Street, City, State, Zip Code): 299 MAIN ST. WESTBURY N.Y. 11590	3. Telephone No.: 516-334-5400
4. OPERATOR'S NAME: SAME	5. ADDRESS (Street, City, State, Zip Code):	6. Telephone No.:
7. ENGINEER'S NAME: NONE	8. ADDRESS (Street, City, State, Zip Code):	9. Telephone No.:
10. ON-SITE SUPERVISOR: TIMOTHY CROPPER	11. ADDRESS (Street, City, State, Zip Code): 116 RYDER AVE. DIX HILLS NY. 11746	12. Telephone No.: 516-643-4572

13. HAS THE INDIVIDUAL NAMED IN ITEM 10 ATTENDED A DEPARTMENT SPONSORED OR APPROVED TRAINING COURSE?
☐ Yes Date Course Title Location ☒ No

14. PROJECT/FACILITY NAME	15. COUNTY IN WHICH FACILITY IS LOCATED	16. ENVIRONMENTAL CONSERVATION REGION
ISLAND TRANSPORTATION CORP.	NASSAU	NO MAP

17. TYPE OF PROJECT FACILITIES: ☐ Composting ☐ Transfer ☐ Shredding ☐ Baling ☐ Sanitary Landfill ☐ Incineration ☐ Pyrolysis ☐ Resource Recovery-Energy ☐ Resource Recovery-Materials ☒ Other TRUCKING COMPANY

18. HAS THIS DEPARTMENT EVER APPROVED PLANS AND SPECIFICATIONS AND/OR ENGINEERING REPORTS FOR THIS FACILITY? ☐ Yes Date ☒ No

19. LIST WASTES NOT ACCEPTED
NONE

20. BRIEFLY DESCRIBE OPERATION

PETROLEUM PRODUCT TRANSPORTER WITH REPAIR FACILITY FOR OWN TRACTOR, TRAILERS

21. IF FACILITY IS A SANITARY LANDFILL, PROVIDE THE FOLLOWING INFORMATION:
a. Total useable area: (Acres) Initially _____ Currently _____
b. Distance to nearest offsite, downgradient, water supply well _____ Feet
c. No. of groundwater monitoring wells Upgradient _____ Downgradient _____

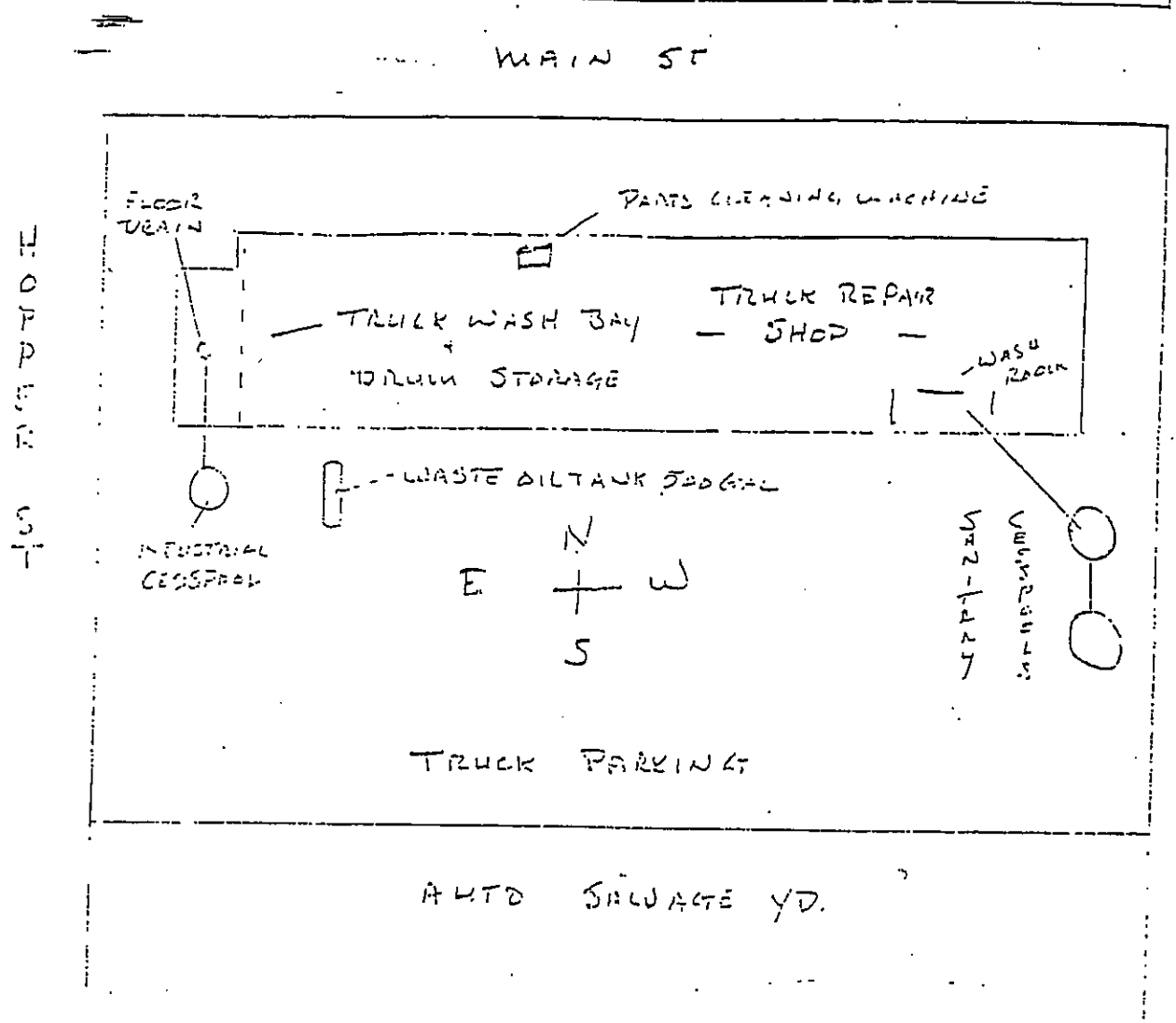
22. INDICATE WHICH ATTACHMENTS, IF ANY, ARE INCLUDED WITH THIS APPLICATION:
☐ Form 47-19-2 or SW-7 ☐ Operations Plan & Report ☐ USGS Topographic Map ☐ Record Forms MATERIAL FLOW SKETCH
☐ Construction Certificate ☐ Boring Logs ☐ Water Sample Analysis ☐ None ☐ Other PLAT SKETCH

23. CERTIFICATION:
I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

10/21/80 Timothy Cropper V.P. Maint.

2632 RDC-01230

MATERIAL FLOW SKETCH
ISLAND TRANSPORTATION CORP. f.6



MATERIAL FLOW DESCRIPTION

1. TRUCKS WASHED WITH DETERGENT IN EAST BAY - DRAINAGE INTO UNDERGROUND POOL.

2. SAFETY-CLEAN CORP. REMOVES LIQUID + SOLID WASTE @ 20 GAL PER WEEK RATE (APPROX)

3. ENGINE WASTE OIL REMOVED BY GENERAL WASTE OIL CO.

HASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N. Y., 11501

FRANCIS T. PURCELL
County Executive

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.S.E.
Director of Environmental Health

1/22/80.

Island Transportation
2900 Main St.
Westbury, N.Y. 11590
Att: Mr. T. Cropper

Gentlemen:

As stated in the permit (NY# 014 0155) issued to you for the storage and the removal of industrial chemical and/or solvent wastes, you are required to report periodically on the nature of these activities.

Please complete the attached report for the period July-Dec. 1979, and return it to this office within 30 days.

If you have any questions, please feel free to call me at 535-2404

Very truly yours,

Larry Sama
Public Health Engineer
Bureau of Wastewater Management

Encl.

EH 707 1/80

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Wastewater Management

Nassau County Department of Health

Name	Permit Number
Island Transportation Corp.	011b155
Address	Report Period
299 Main St. Westbury, N.Y. 11590	7/9/79 - 1/28/

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp.	10 Gal./Wk.
		P.O. Box 768 Mineola, N.Y, 11501	Approximately

RECEIVED
JAN 30 1980
NCDH
BWWC

SEMI-ANNUAL WASTE REPORT

Company: Island Transportation Corp. Date: July 9, 1979

Permit#: NY #0140155 Reporting Period: Previous 6 months

Item	Reporting Requirement	
1. Waste generating chemicals and/or solvents purchased during reporting period.	Name	Quantity
Solvents	Safety Kleen Corp. P.O. Box 768 Mineola, N.Y. 11501	10 gal./week approximately
Trichloroethylene	Discontinued use	

2. Waste Removal

Attach copies of manifests or receipts from registered industrial waste scavenger. Must include nature, name and amount of waste, date removed, registration number, and name of scavenger.

General Waste Oil Co., Inc.
Huntington, New York 11746

3. Final Disposal Site for Waste (obtain information from Scavenger)

New Jersey Waste Oil Refinery

4. Occurrence of Accidental Spills (include date, nature, and approximate amount spilled)

None

Signed Timothy E. Krogman

Title Vice-President, Maintenance

THOMAS S. GULOTTA
COUNTY EXECUTIVE
JOSEPH G. BOSLET, JR.
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
899 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553

August 1989
Insp. No. GS-96-111

ISLAND TRANSPORTATION OR CURRENT RESIDENT
299 MAIN ST
NEW CASSEL, NEW YORK 11590

TO WHOM IT MAY CONCERN:

Article III of the Nassau County Fire Prevention Ordinance, Section 3.6.3.1.2 requires that all existing underground steel storage tanks be replaced in accordance with the following schedule:

All steel tanks placed into service after February 23, 1961 and before February 23, 1976 shall be replaced, removed or permenantly abandoned by February 23, 1990.

The following is a list of tanks at your location which our records indicate require replacement, abandonment or removal:

SIZE	CONTENTS	INSTALLATION DATE
10K	DIESEL	2/15/72
4K	DIESEL	1/1/63
4K	DIESEL	1/1/63
4K	GASOLINE	5/1/66

If you have any questions please feel free to call this office at (516) 566-5832.

Very truly yours,

David M. Bartow
Supervising Fire Inspector
Industrial Division

1679C

FMIGS96 00111

PERMIT NO. 02795

STATE OF NEW YORK
COUNTY OF NASSAU
OFFICE OF FIRE MARSHAL

TR

FLAMMABLE/COMBUSTIBLE LIQUID STORAGE TANK REGISTRATION

LOCATION: ISLAND TRANSPORTATION CORP. 299 MAIN ST. NEW CASSEL, NY 11590

ISSUED TO: NAME ISLAND TRANSPORTATION CORP.
ADDRESS 299 MAIN ST
NEW CASSEL, NY 11590

DATE ISSUED: 08/31/86
EXPIRE DATE: 09/30/91

TANK	SIZE	PRODUCT	DATE INSTALLED	DATE TESTED	CONSTRUCTION
HB01	10K	3 01993 01	02/15/72	09/11/80	STL
HB02	4K	3 01993 01	01/01/63	09/11/80	STL
HB03	4K	3 01993 01	01/01/63	09/11/80	STL
HB04	4K	3 01203 00	05/01/66	09/11/80	STL

****

ASSISTANT FIRE MARSHAL

THOMAS S. GULOTTA
COUNTY EXECUTIVE
JOSEPH G. BOSLET, JR.
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
888 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553

TO: NASSAU COUNTY FIRE MARSHAL

FM KEY # 65-96-111

FROM: ~~A. VOLINO & SONS, INC.~~
~~P.O. BOX 128~~
~~CARLE PLACE, N.Y. 11514~~

CONCERNING TANKS AT:
SAM TOU SALVAGE CO.
199 MAIN ST. WESTBURY N.Y

The following flammable /combustible liquid storage tanks at the above location have been:

T - Placed temporarily out-of-service (if permitted), or

(P) - Permanently abandoned in place, of

R - Removed from the premises:

(indicate one of the above letters under "STATUS" for each tank.)

	TANK TYPE*	TANK SIZE	CONSTRUCTION	STATUS	DATE WHEN DONE
1	U/G	10,000	STEEL	P	7-18-90 ✓
1	U/G	4000	"	P	7-19-90 ✓
1	U/G	4000	"	P	7-20-90 ✓
1	U/G	4000	"	P	7-23-90 ✓

* NOTE: If the tank type is unknown, indicate either A/G (aboveground) or U/G (underground). If more than 8 tanks use an additional sheet.

All work as indicated above has been done in accordance with the applicable Sections of Article III of the Nassau County Fire Prevention Ordinance.

A. Volino & Sons Inc
Name

Pat Volino
Signature

County of NASSAU
State of New York
Sworn to before me this
24th day of July 1990

Joseph Siniscalchi
Notary Signature

JOSEPH SINISCALCHI
NOTARY PUBLIC, State of New York
No. 30-3687900
Qualified in Nassau County
Commission Expires March 30, 1991

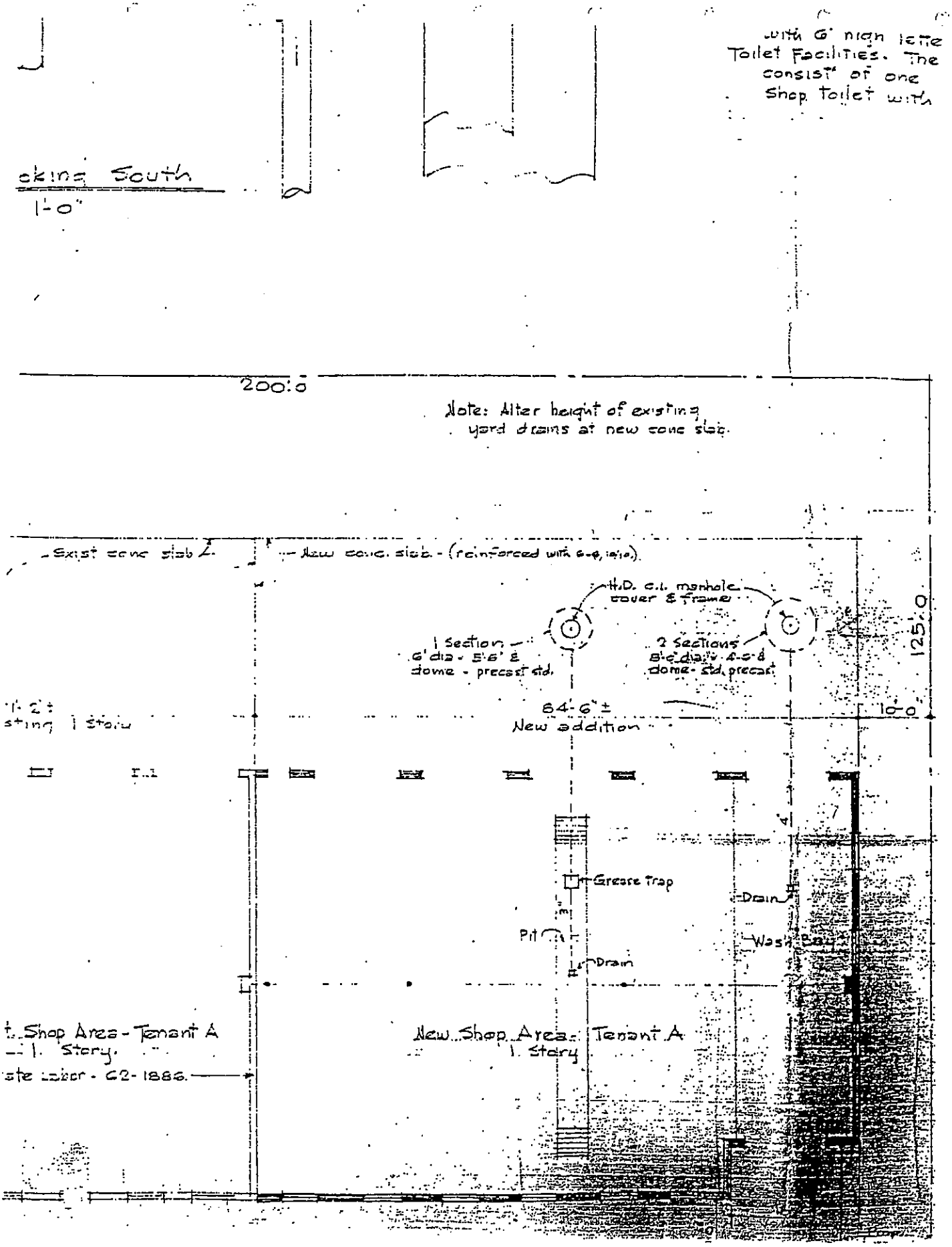
Notary Stamp

JOSEPH SINISCALCHI
NOTARY PUBLIC, State of New York
No. 30-3687900
Qualified in Nassau County
Commission Expires March 30, 1991

08A1C / 110788

INVESTIGATION - 566-5979 & SCHOOL - 566-5824 & INDUSTRIAL - 566-5818 & INSTITUTIONAL - 566-5818 & GENERAL INSPECTION - 566-5826

2632 RDC-01237

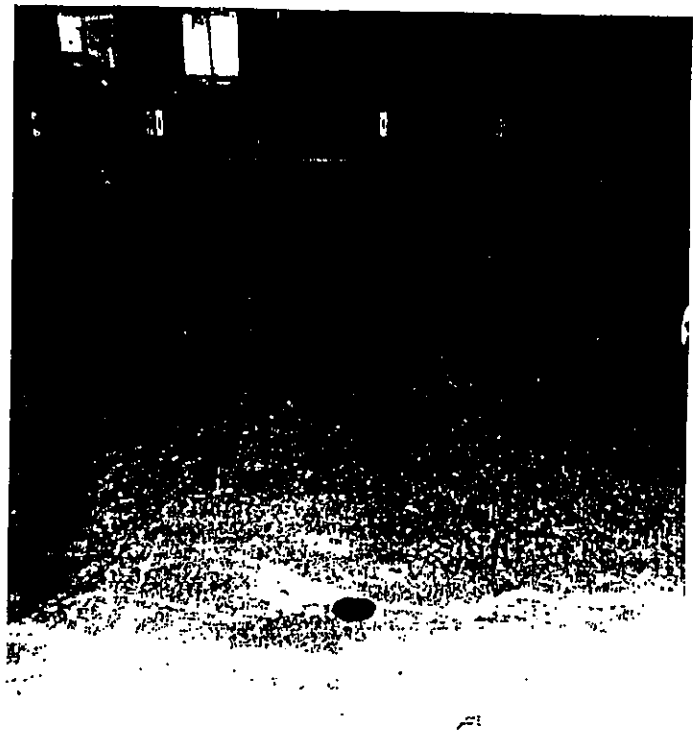


2632 RDC-01238

Appendix A.3

Photograph Log (1 of 5)
299 Main Street Site #1-30-0435S

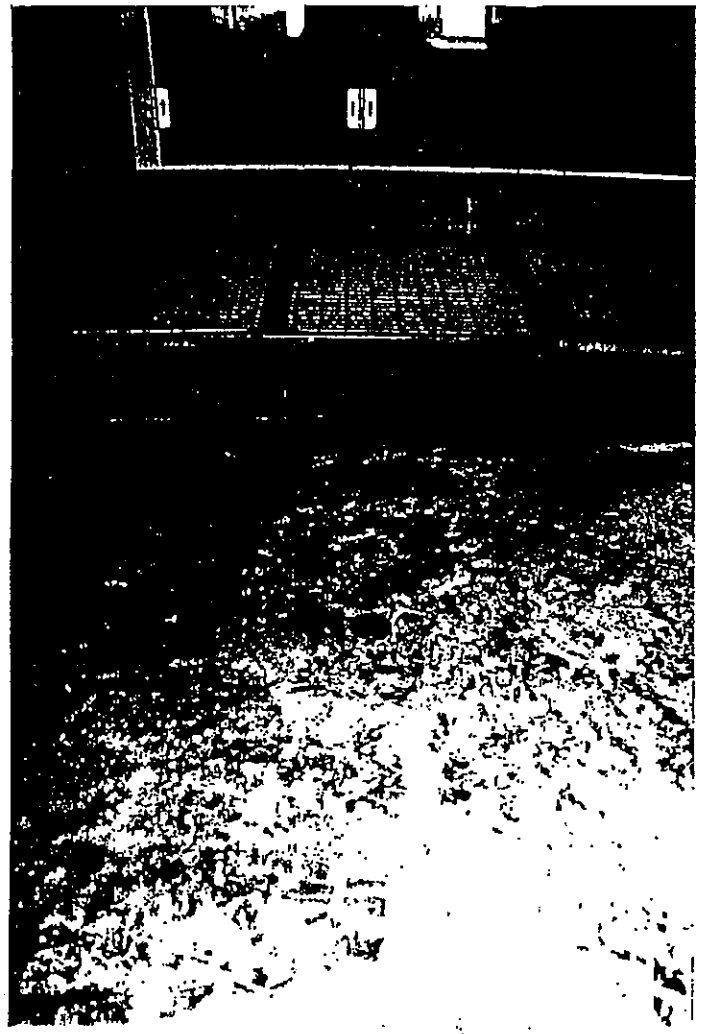
Photograph 1



Photograph 2

Photograph Log (2 of 5)

299 Main Street Site #1-30-0435S



Photograph 3

Photograph 4

Photograph Log (3 of 5)

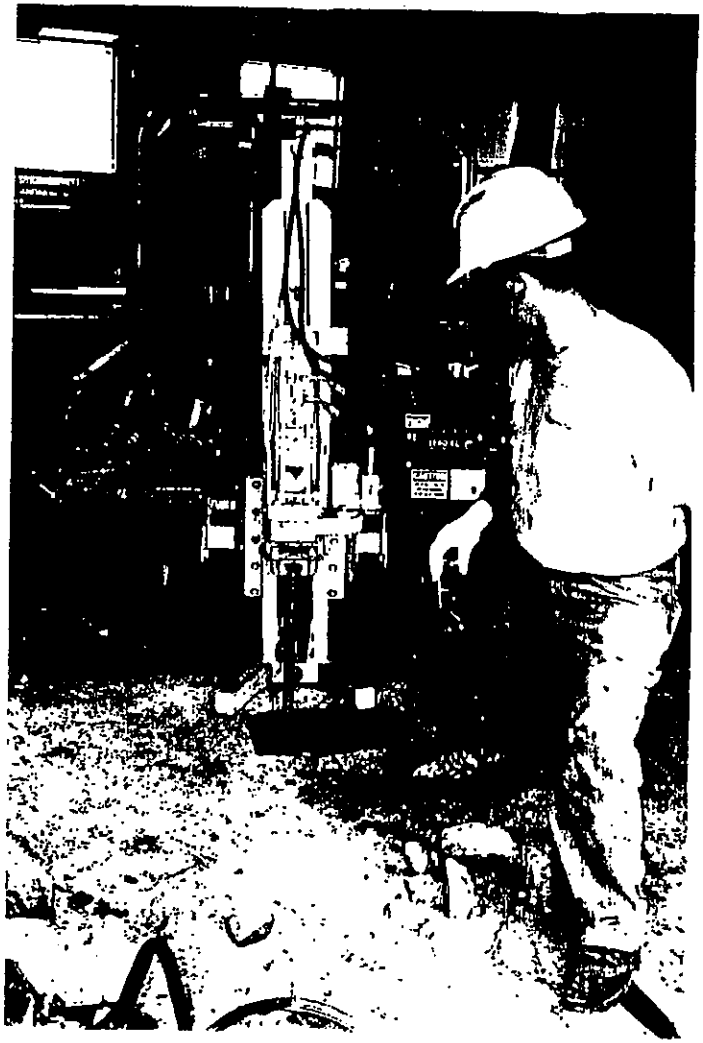
299 Main Street Site #1-30-0435S

Photograph 5

Photograph 6

Photograph Log (4 of 5)
299 Main Street Site #1-30-0435S

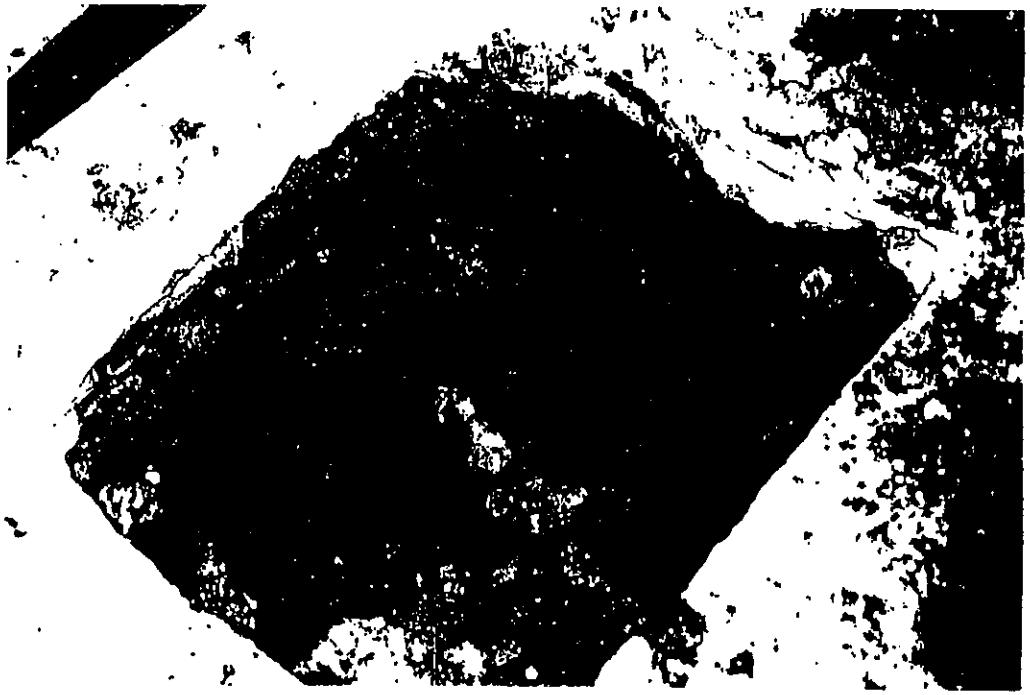
Photograph 7



Photograph 8

Photograph Log (5 of 5)
299 Main Street Site #1-30-0435S

Photograph 9



Photograph 10

Appendix A.4

Impact Environmental
a division of impact environmental consulting, inc.
1 Village Plaza
Kings Park, New York 11754
516.269.8800 telephone
516. 269.1599 facsimile

Remote Survey

Focussed Remedial Investigation/Feasibility Study

July 15, 1999

Conducted at:

Site No. 1-30-043S
299 Main Street
Westbury, New York

Client:

2632 Realty Development Corp.
Westbury, New York

User:

New York State Department of Environmental Conservation
Division of Environmental Remediation
50 Wolf Road
Albany, New York

Remote Survey

Focussed Remedial Investigation/Feasibility Study

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299 Main Street
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Albany, New York

TABLE OF CONTENTS

Section		Page #
1.0	PURPOSE & SCOPE	4
2.0	SITE DESCRIPTION	5
2.1	TOPOGRAPHY	5
2.2	SITE HISTORY	5
3.0	SURVEY PLAN	6
3.1	REMOTE SURVEY	6
3.1.1	*GPR Procedures*	7
4.0	PRESENTATION OF IMAGERY	8
5.0	EVALUATION OF RESULTS	10

PLATES

Plate #1: Site Location Map, Wesbury, New York
Plate #2: GPR Scan Map, Wesbury, New York

APPENDICES

Appendix A: SIR-2 Operations Manual

REPORT HOLDER	NUMBER OF REPORTS ISSUED
NYSDEC Bureau of Eastern Remedial Action	1
NYSDEC Division of Environmental Remediation	4
NYSDEC Bureau of Environmental Exposure Investigation	2
NYSDEC Region 1, Office of the Commissioner	1
NYSDEC, Division of Environmental Enforcement	1
2632 Realty Development Corp.	1
Rivken, Radler & Kremer	1
Impact Environmental Consulting, Inc. Corporate Records	1

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1.0 Purpose & Scope

This investigation was performed to identify the presence of any exterior routes or mechanisms that would function through design or default to allow for the release or injection of hazardous substances to the subsurface soil of the site located at 299 Main Street, Westbury, New York, herein identified as the subject property.

The investigative protocols used for this assessment were based upon the following documents: 1) United States Environmental Protection Agency's A Compendium of Superfund Field Operations Methods; and 2) the Geophysical Survey Systems, Inc. SIR System-2 Operation Manual.

- **Site Description**
- **Survey, Sampling and Analysis Plan**
- **Presentation of Imagery**
- **Evaluation of Results**

Presented herein are the results of the Focussed Remedial Investigation/Feasibility Study Remote Survey conducted by Impact Environmental Consulting, Inc. on the subject property [see *Plate #1: Project Location Map, Wesbury, New York*]. The subject property is identified by the New York State Department of Environmental Conservation as Number 1-30-043S.

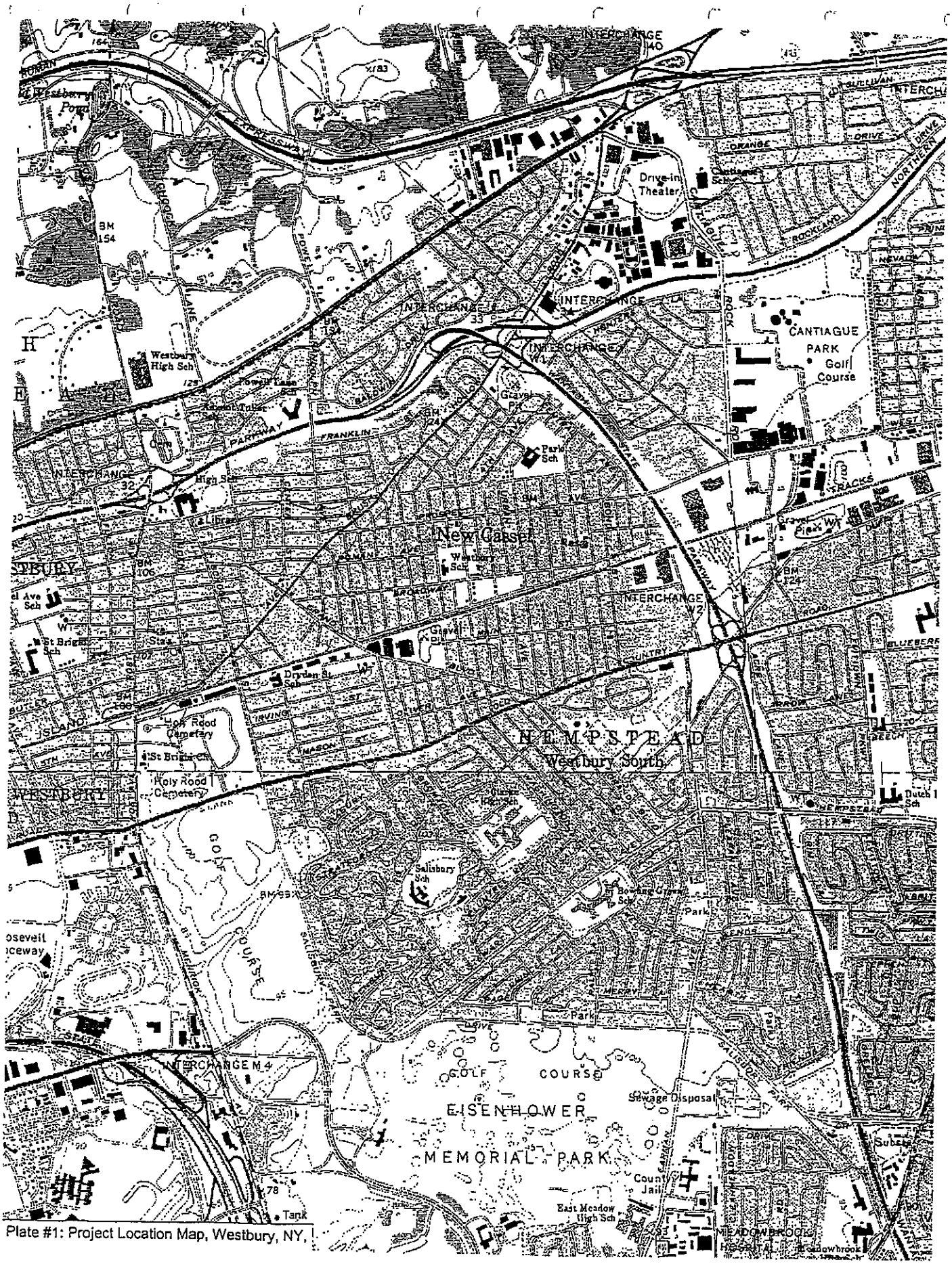


Plate #1: Project Location Map, Westbury, NY,

2.0 Site Description

2.1 Topography

The areal extent of the subject property was approximately 25,000 square feet. The subject property contained one single-story, masonry building with an approximate footprint of 11,500 square feet. The surface area of the subject property consisted of asphalt parking areas, concrete walkways, and exposed soil. The subject property exhibited low topographic relief (less than three percent slopes).

2.2 Site History

The subject property was initially developed sometime between 1950 and 1962 and consists of a garage with a number of bays and office space. Island Transportation Company (ITC) a truck transit company formerly utilized the property. ITC used trichloroethylene (TCE) to wash asphalt residues from its trucks prior to 1980. A Nassau County Department of Health (NCDH) inspection in 1978 recorded the storage of 2,841 pounds of TCE at the subject property. Additionally, the inspection identified the presence of oil staining in a storage area. In 1979 the NCDH discovered that ITC was discharging wastewater from its truck cleaning operations to the adjacent street.

A subsequent operator of the subject property, Sam-Ton Towing and Salvage (STS) was sited by the United States Environmental Protection Agency in 1990 for operating an unpermitted Class V Underground Injection Well (UIW). On November 2, 1993 a fire occurred at STS and at least seven drums of unknown contents spilled during fire suppression activities.

Currently, the subject property is utilized as an automobile body shop. Currently, there are no known on-site routes or mechanisms for the migration of contaminants to the subsurface soil at the subject property.

3.0 Survey Plan

A survey plan was designed to identify any routes or mechanisms for the migration of contaminants released at the subject property. Potential routes and mechanisms included underground storage tanks, underground injection wells, sub-grade storage vaults and buried portable storage containers (drums). The survey was performed with a ground penetrating radar (GPR) unit.

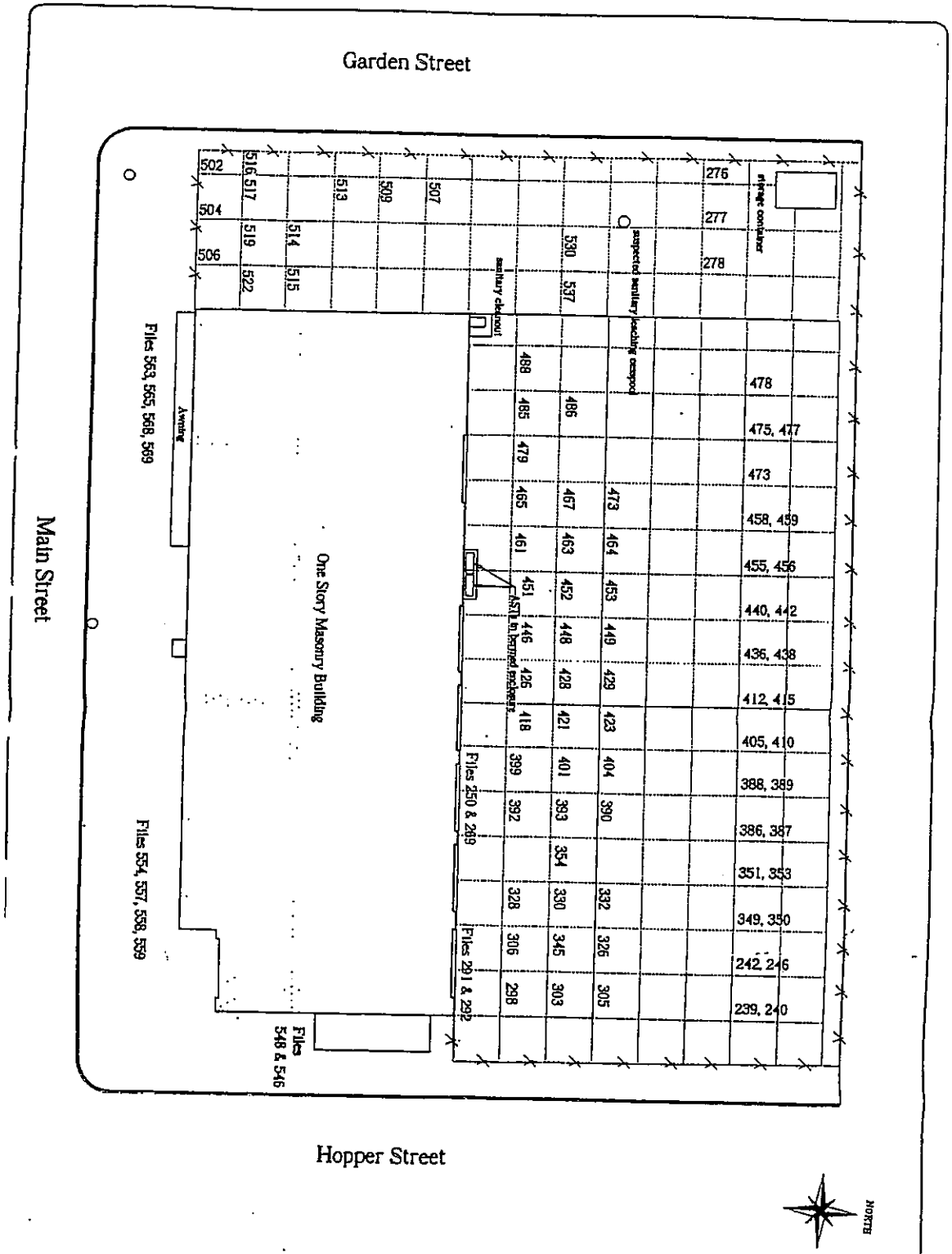
3.1 Remote Survey

A remote survey of the exterior of the subject property was performed during the week of June 21, 1999. An interpretation of GPR imagery obtained from the subject property exhibited three anomalous features consistent with that of underground storage tanks. Another set of anomalous features was identified to be associated with a sanitary waste disposal system. One anomalous feature identified from the scans yielded imagery that could not be interpreted with respect to construction or function. Each of the features is discussed in detail below and mapped on Plate #2: GPR Scan Map, Westbury, New York. References contained within each discussion pertain to GPR image files that are presented in section 4.0 of this report.

Three underground storage tanks (USTs) were located adjacent to the north side of the building (see Scan Files 250, 269 and 345). The orientation of two of the USTs appeared to be such that their long axis ran parallel to the building (east-west). The long axis of the third UST ran perpendicular to the building. Based on the apparent tank dimensions, their individual capacities were estimated at being between one and three-thousand gallons.

The sanitary waste disposal system appeared to include a conduit leading away from a former septic tank in a northwestern direction to a former cesspool (see Scan File 530). Scans performed in the area of the septic tank and cesspool failed to identify an overflow pool(s) for the cesspool. The imagery in these areas exhibited no anomalies, suggesting that the area contains undisturbed fill media (see Scan File 276 and 277). The former cesspool was identified to have been modified to facilitate the connection of the building to the public sewer system.

The unidentified anomaly was situated immediately north of the building near the former fuel dispenser island (see Scan File 291). The feature appears too small to represent a UST. It could represent metallic apparatus associated with the pump system.



Impact Environmental
a division of Impact environmental consulting, Inc.
1 Village Plaza
Kings Park, New York 11754
Telephone
Facsimile

98-335
Plate 2: GPR Scan Map
New Cassel, New York

Legend:
- groundwater probe node
- soil probe node
- monitoring well

scale: 1" = 20'

REDUCED 64%

4.0 Presentation of Imagery

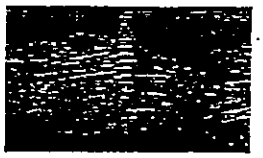
The following index identifies the GPR Scan Files and their respective interpretations. Following the index are printed graphic files downloaded from the GPR.

Scan File Code	Interpretation of Image	Reasons for Interpretation
276	No anomalies	No dielectric change
277	No anomalies	No dielectric change
530	Conduit	Parabolic curve, low radius
250	UST	Parabolic curve
269	UST	Parabolic curve
291	Unknown anomaly	-
345	UST	Parabolic curve

File 276

File 277

File 530



File 250

File 269

File 291

File 345

5.0 Evaluation of Results

Five features were identified to exist in the subsurface of the subject property. Each of these features has the potential to impact the environmental quality of the subject property by providing a means for the contamination of saturated and unsaturated subsurface soil with hazardous substances. Therefore, each of these features will have to be further investigated in future Focussed Remedial Investigation/Focussed Feasibility Study activities. Said activities will be proposed in an addendum to the approved Work Plan.

IMPACT ENVIRONMENTAL CONSULTING, INC.

Richard S. Parrish, *P.G., C.E.I.*
Senior Geologist

Keith Franzen
Engineer

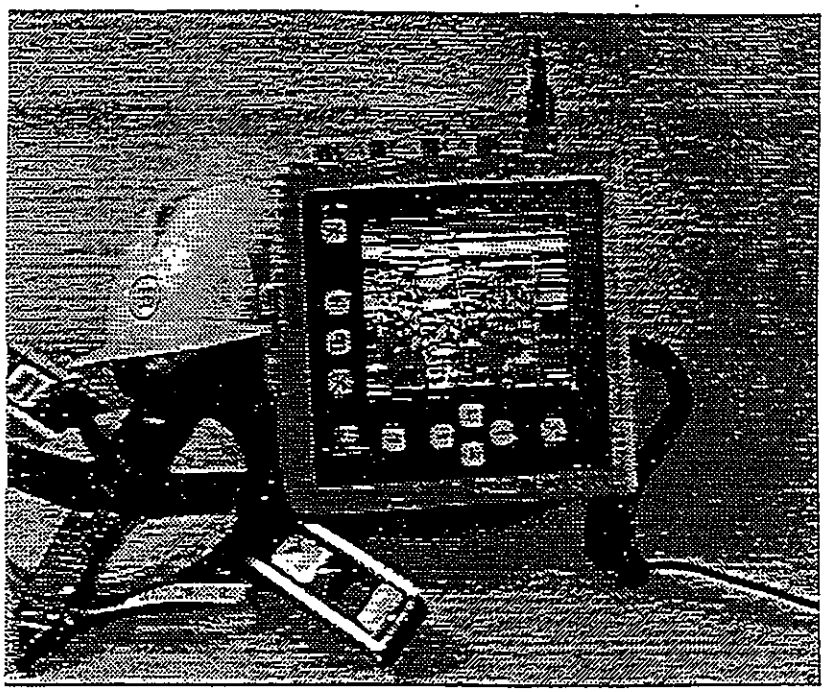
APPENDIX A

SIR-2 Operation Manual

2632 RDC-01257

SIR® SYSTEM-2

OPERATION MANUAL



Rev A - May, 1996

Geophysical Survey Systems, Inc.
13 Klein Drive, P.O. Box 97
North Salem, NH 03073-0097
Phone: (603) 893-1109 / FAX: (603) 889-3984 / E-mail: gssisales@aol.com

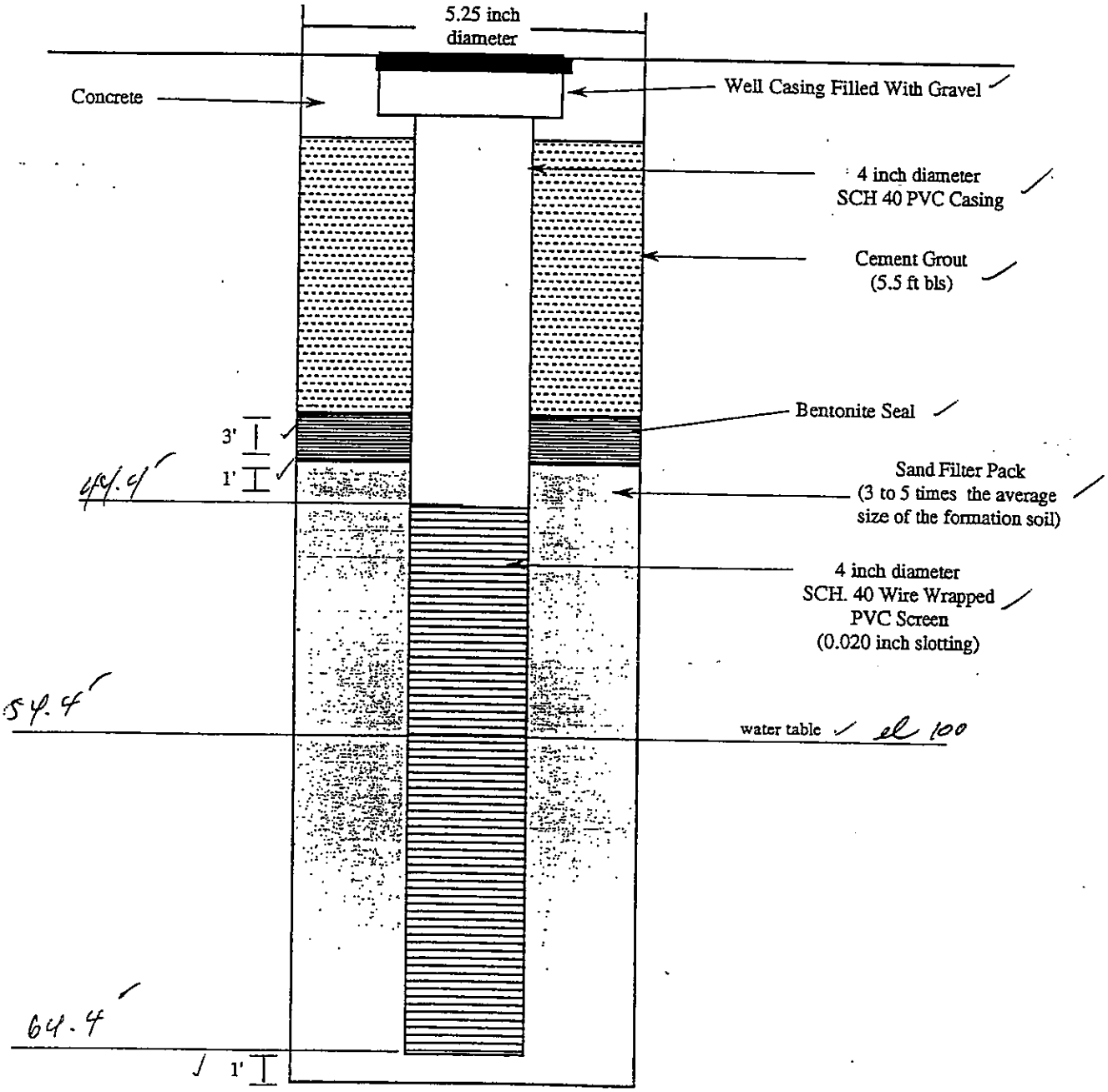
Manual #:D70-140A

Appendix A.5

WELL LOG

Site Location:	299 MAIN ST., NORTHBURY	Installer:	KENNEDY + NICOLE
Job Number:	98-335	Installation Method:	Hollow Stem AUGER
Client:	IMPACT	Date Begin/End:	10/18/99
Client Contact:	L. KURALA	Surface Elevation:	4.86 (N)
Boring Code:	MW-1	Depth to Water:	54.4'
Location Description:	NORTHEAST C/O SITE	Total Depth:	65.4'
Geologist:	K. PATNISH	Page #:	1 OF 1

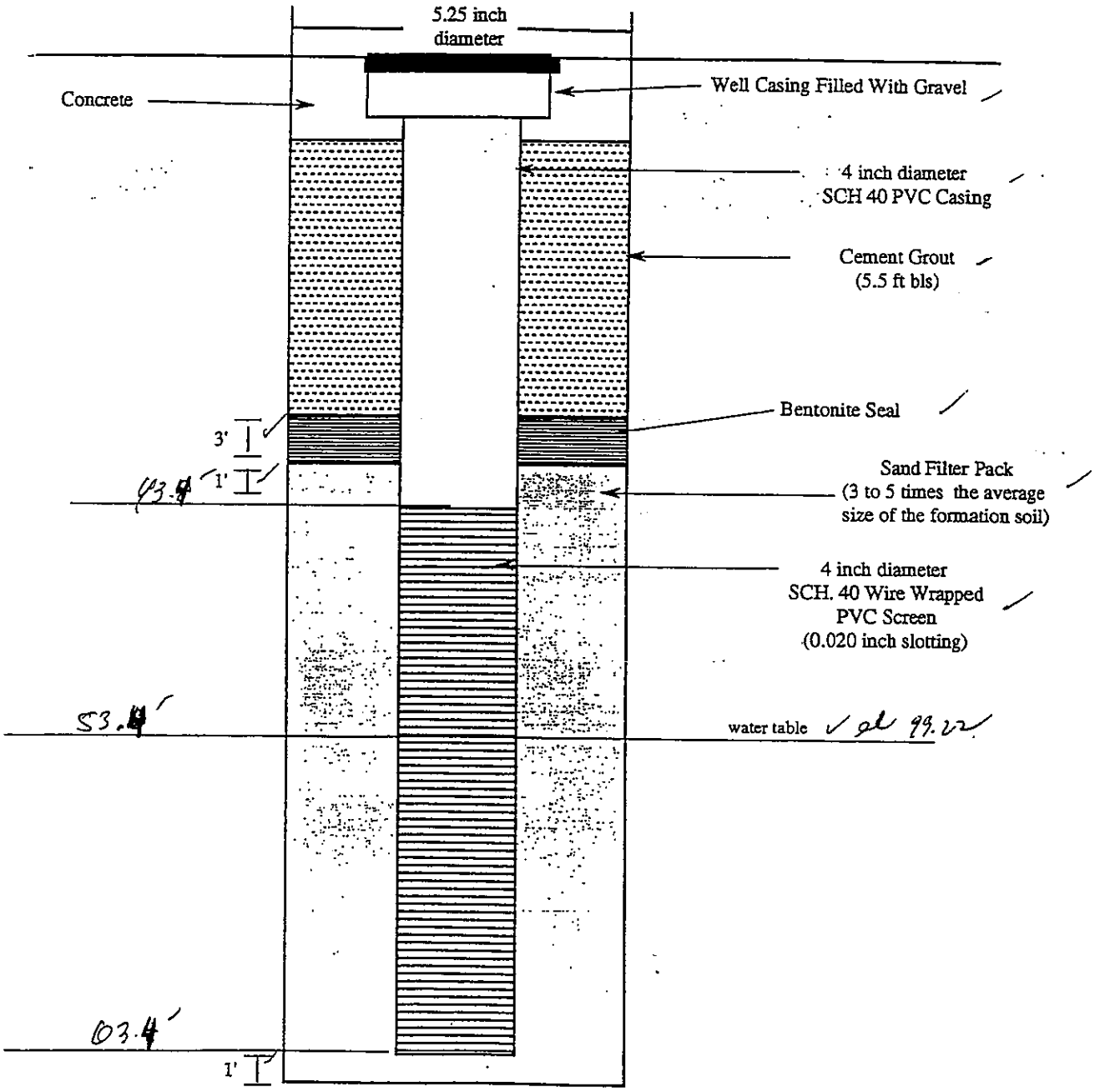
FOUR INCH WELL CONSTRUCTION



WELL LOG

Site Location:	299 MAIN ST., WESTBURY	**Installer:**	[illegible] & NICOLE
Job Number:	98-335	**Installation Method:**	Hollow STEM AUGER
Client:	IMPACT	**Date Begin/End:**	10/19/99
Client Contact:	K [illegible]	**Surface Elevation:**	
Boring Code:	MW-2	**Depth to Water:**	53.4'
Location Description:	WESTERN BOUNDARY OF SITE	**Total Depth:**	64.8'
Geologist:	R. [illegible]	**Page #:**	1 OF 1

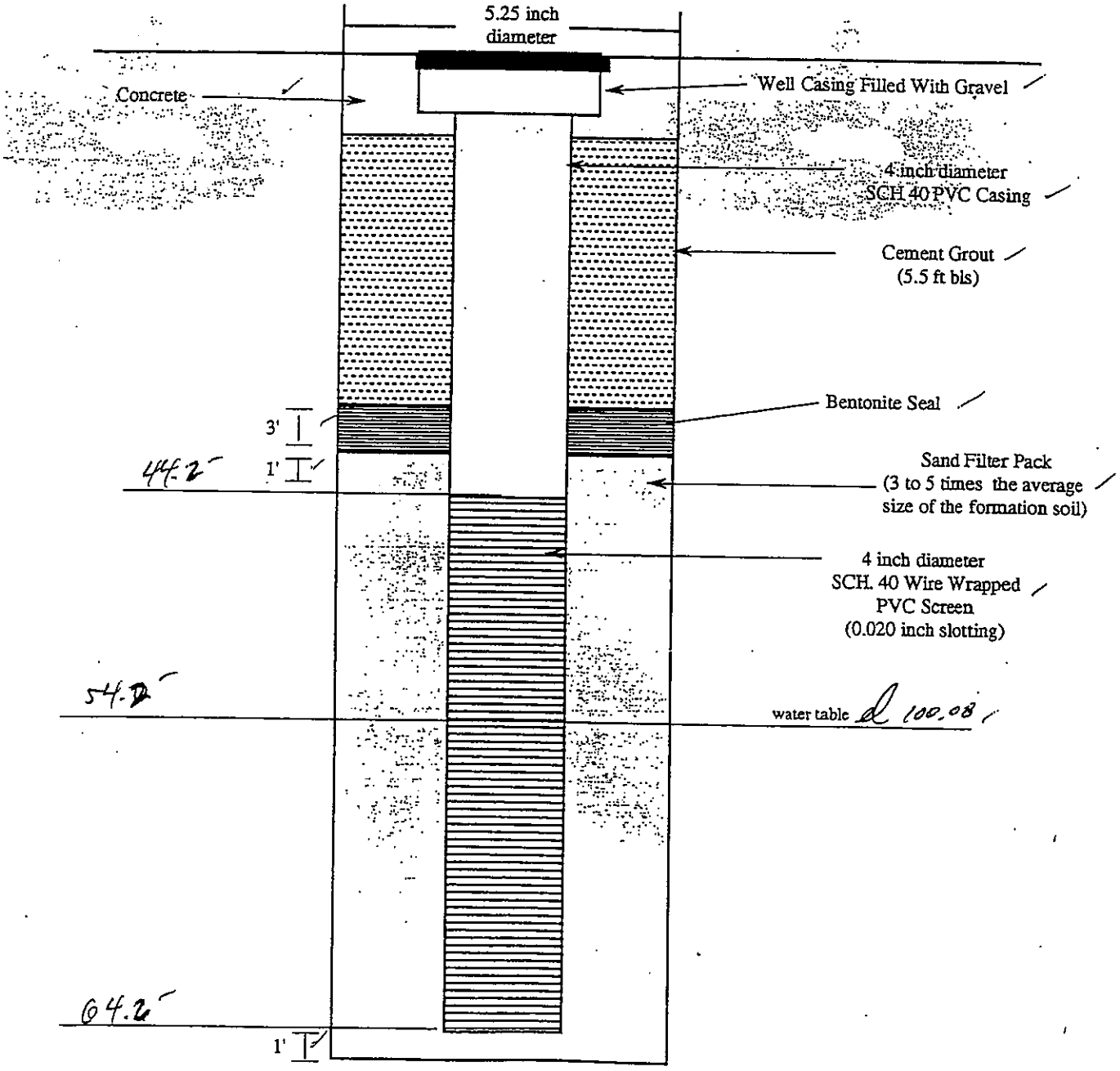
FOUR INCH WELL CONSTRUCTION



WELL LOG

Site Location:	299 MAIN ST., WESTBURY	Installer:	FENLEY + NICOLE
Job Number:	98-335	Installation Method:	HOLLOW STEM AUGER
Client:	IMPACT	Date Begin/End:	10/19/99
Client Contact:	R. [illegible]	Surface Elevation:	4.78 NORMALIZED
Boring Code:	MW-3	Depth to Water:	54.2
Location Description:	SOUTH, EAST [illegible] SITE	Total Depth:	65.6
Geologist:	R. [illegible]	Page #:	1 OF 1

FOUR INCH WELL CONSTRUCTION



Record

National® Brand ACCOUNT BOOKS 9¾ x 7"		
Patina Blue Granite Grain Covers		
Item No.	Pages	Ruling
Item No. 56-301	80	Record
Item No. 56-302	"	2 Column
Item No. 56-303	"	3 Column
Item No. 56-304	"	4 Column
Item No. 56-306	"	6 Column
Item No. 56-308	"	8 Column
Item No. 56-312	"	12 Column

Assorted Colors Granite Grain Covers		
Item No. 56-401	80	Record
Item No. 56-402	"	2 Column
Item No. 56-403	"	3 Column
Item No. 56-404	"	4 Column
Item No. 56-406	"	6 Column
Item No. 56-408	"	8 Column
Item No. 56-412	"	12 Column
Item No. 56-431	"	Single Entry Ledger

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Product Guarantee

Avery is committed to providing you with quality products, and will gladly replace any product which does not provide complete satisfaction. We also welcome your comments and suggestions. Please send your correspondence with product code to:

Avery Division, Consumer Service Center
P.O. Box 129
Brea, CA 92822-0129

1

9/28/99 Meeting w/ Richard Parrish
11:30am. Keith Franzen
Eric Twist
Kevin Kleaka

- Discussion of project specifications + procedures

9/28/99 Utility mark-outs called in for
2:00pm the site
Case Reference # 2710427

28 Sept 99
KK

9/29/99 Arrived on-site at 8AM - K. Meaka
E. Krist
R. Phillips

- Discussed additional materials needs for the project

9/29/99 Meeting w/ Facility owner: Jim Cardali
641-6614 (cell)
997-2424 (office)

9:01AM - schedule ✓
- sampling location ✓
- designated work areas ✓

Personnel w/ key to gate

: Gene, Jim

Facility Employees:

~~Gene~~ Jean-Charles, Robes
Seymour, Ronald
Romero, Juan ~~Romero~~
Gonzalez, Gerardo

* each employee was briefed on safety issues + procedures.
- employees were made aware of the activities to commence on the property, what to do in case of emergency (egress) and to stay clear of all work areas.

Cont Page 3

9:30 Begin establishing grid coordinate system.

1:06pm Completion of grid layout. Including grid soil points, point source soil points, temporary GW points + monitoring well locations.

UST perimeters (x2) were re-marked, soil UST points were sited adjacent to tanks (x2) near bld. Four soil UST points surrounding as per FRI.

One UST (10,000 gal suspected) was not re-marked due to the marking point being washed away. A GPR scan may be necessary to re-establish UST location and sampling points.

1:15 Two egress location were marked as "EXIT".
① NE gate → Hopper St.
② NW Bay Door → Main St.

Left site @ 1:15pm

29 Sept 99
KK

Cont Page 4

9/30 Arrived on-site at 8:30 AM. Set up sample table, clean area, disposal area and safety equipement (air horn, fire extinguisher). R. Pontuel, B. Kurst, K. Klenka

9AM Calibration of PID to a span gas of iso-butylene (100ppm). Ambient air sample secured and failed to detect any response. No additional ambient air samples are recommended today based on PID reading (0.0ppm)

9:10AM Commencement of drilling (Geoprobe) on northeastern portion of the site on a soil grid sampling location

9:20AM Sample 335-GP-001-SS10 was received. (X-Ref pg 1 in Master sample log (MSL)

9:36AM Sample 335-GP-001-SS15 was received (x-Ref pg-1 in MSL)

10:06 Sample 335-GP-001-SS30 was received. (x-ref pg-2 in MSL)

10:27 Geoprobe operator, Eric Kurst, indicated that the advancement of the probes was greatly reduced @ 40' BEG. No Refusal, but just slow advancement

Con't Page 5

Geoprobe operator sampling methodology for keeping track of probe depth. Operator indicated that he lays out all probe rods appropriate for specific depth, as well as, keeping record in his head of depth advancement.

10:55AM Sample 335-GP-001-SS45 was received (x-ref pg 2 in MSL)

11:55AM Sample 335-GP 001-SS60 was received (x-ref pg. 3 in MSL)

12:20pm Advancement of GW screen to determine gw table elevation (BEG) X-ref pg 3 in MSL.

1:50pm The gw table was gauged at three different screen depths: 75', 68, 60'

The depth to H_2O @ 75' BEG was 56.1'
The depth to H_2O @ 68' BEG was 55.7'
The depth to H_2O @ 60' BEG was 55.4'

Based on the uncertainty of exact gw table elevation using geoprobe methodology, project manager has recommended that soil samples not be secured beyond 50' until the installation of the monitoring wells (4") has been completed. Upon completion of monitoring well installation, the gw table elevation will be determined and the remaining soil-gw interface samples from the grid and point locations will be secured after this measurement has been established.

Con't Page 6

2:00pm. Geoprobe operator has been instructed to move to the next soil grid sampling location. (335-GP-002, 50' west of 335-GP-001)

2:08pm. Geoprobe in position to begin 002 soil grid location.

2:22 sample 335-GP-002-SS10 was received (x-ref pg 4 in MSL)

2:40pm sample 335-GP-002-SS15 was received (x-ref pg 4 in MSL)

3:04pm sample 335-GP-002-SS30 was received (x-ref pg. 5 in MSL)

3:45pm sample 335-GP-002-SS45 was received (x-ref pg. 5 in MSL)

4:02pm. Geoprobe in position to begin 003 soil grid location.

4:18pm sample 335-GP-003-SS10 was received (x-ref pg. 6 in MSL)

-Left site @ 4:50

30
KK 29 Sept 99
KK

End of 9/30/99

10/1 Arrived on-site at 7:30am. Setup sample table, clean area, disposal area and safety equipement

7:37 Calibration of PID to a span gas of iso-butylene @ 100ppm. An ambient air sample was taken and failed to detect a response. No additional ambient air samples are recommended today based on the pid reading. (0.0ppm) x-ref pg. 3 in Site Safety log.

7:55am. Geoprobe in position to continue 335-GP-003

8:36am sample 335-GP-003-SS15 was received. (x-ref. pg. 7 in MSL)

9:04 sample 335-GP-003-SS30 was received. (x-ref. pg 7 in MSL)

9:42 sample 335-GP-003-SS45 was received. (x-ref pg. 8 in MSL)

9:45 Geoprobe in position to begin 004 soil grid location.

9:58 Sample 335-GP-004-SS10 was received. (x-ref pg. 8 in MSL)

10:15 sample 335-GP-004-SS15 was received. (x-ref pg. 9 in MSL)

10:40 Sample 335-GP-004-SS30 was received. (x-ref pg 9 in MSL)

Cont Page 8

11:10am Geoprobe operator has discovered that a bolt has vibrated out of place. Attempts to screw the bolt back in revealed that the threads inside have been damaged. The bolt threads also have been damaged. Therefore, a die and tap kit and/or new bolt are necessary. Leaving site to go to a hardware store for the needed items. EK to go to store, KK staying on-site.

12:22 Geoprobe back in operation. The damaged male + female threads have been fixed.

12:36pm Sample 335-GP-004-SS45 was received. (x-ref. pg. 10 in MSL)

12:45pm Inspected the point source sampling location identified as "suspected sanitary leaching cesspool". A determination was made that sampling at this location could not be performed today. Additional materials are necessary to stabalize the probe rods in a large void space (Sch 80 pvc piping). Will bring necessary materials next week.

1:03pm sample 335-GP-005-SS10 was received. (x-ref. pg. 10 in MSL)

1:13pm Chemtech lab pickup arrived. Joe Skrzyniaiz exchanged coolers + dropped off sample jars. All samples (except 335-GP-005-SS10) have been relinquished to lab personnel. (COC# 28984, 28985, 28966)

Cont Page 9

Custody seal was placed over the cooler dated 10/1/99 by KK. Three pink copies of chain of custodies were left for our record.

1:31pm Sample 335-GP-005-SS15 was received. (x-ref. pg. 11 in MSL)

1:35 Project manager arrived on-site. Discussion of specific issues regarding sample locations, monitoring well locations, what the samples have looked like. Proposed to translate the MW on the NE c/o site to inside the fenced area to avoid having to remove trees (overhead obstruction). Also, proposed to translate the MW on the SE c/o site approx 10-15 feet north to avoid other overhead obstructions (power lines). Proposed an additional point source sampling location on the E side of site (in a MW). PM left site at 2:05pm

2:00 sample 335-GP-005-SS30 was received. (x-ref. pg. 11 in MSL)

2:10 Note: A trip blank and temp sample were not included in the 1:13pm pickup (inadvertently).

2:35 sample 335-GP-005-SS45 was received. (x-ref pg. 12 in MSL)

3:00 Sample 335-GP-006-SS10 was received. (x-ref. pg. 12 in MSL)

Cont Page 10

3:16pm sample 335-GP-006-SS15 received.
(x-ref. pg 13 in MSL)

3:30 Sample acquisition finished for the day.
Decon sampling equipment + break down
designated areas.

4:00pm leave site

01 Oct 98
KIC

End Page
for 10/1/98

10/4/98 . Impact personnel on-site at 8:50am. Set up
. designated areas. Weather delays (heavy rain,
. lightning) prohibited field work until ~11:30am. However,
. it should be noted that the geoprobe operator
. was able to advance probes in location 006
. within that time frame. @ KEVIN KEARNS, R. PARRISH

11:27am . Sample 335-GP-006-SS30 was secured.
(x-ref. p. 14 in MSL)

12:11pm Sample 335-GP-006-SS45 was secured.
(x-ref. p14 in MSL)

1:12pm Sample 335-GP-~~006~~ 007-SS10 was secured.
(x-ref. p15 in MSL)

1:50pm. Sample 335-GP-007-SS15 was secured.
(x-ref. p 15 in MSL)

2:36 . Sample 335-GP-007-SS30 was received
(x-ref. p 16 in MSL)

2:40 R Parrish OPP-SITE @

3:24pm . Sample 335-GP-007-SS45 was received.
(x-ref. p. 16 in MSL)

3:45pm . Geoprobe in position for 008 soil grid location.

3:57pm . Sample 335-GP-008-SS10 was received.
(x-ref. p. 17 in MSL)

4:12pm . Sample 335-GP-008-SS15 was received.
(x-ref p. 17 in MSL)

Cont Page 12

4:35 Clean up areas, breakdown

4:50 Left site

4 Oct 99
KK

End Page

10/6/99

1:45 Samples were picked up by lab personnel (Joe Skrzynia w/ Chemtech)

005 - SS10, SS15, SS30, SS45
006 - SS10, SS15, SS30, SS45
007 - SS10, SS15, SS30, SS45
008 - SS10, SS15
Trip Blank

samples relinquished COC # 28987, 28988

6 Oct 99
KK

End Page

10/12/99

8:50am Arrived at site. Security guard on-site. For remainder of project, security will be present (when we are present) to provide access in/out of gate and provide security of site. R. Pannett, K. Kresh, E. Krist

Security guard : McDermott, Charles
Company name : Formost Consultants

8:55am Geoprobe in position to begin drilling at location 008 to obtain SS30

9am PID calibration (100ppm isobutylene), ambient air sample secured (X-ref p. 5 in Safety Log)

9:05 Geoprobe operator (Eric Krist) begins

9:32 Sample 335-GP-008-SS30 was received. (X-ref pg. 18 in MSL)

10:16am Sample 335-GP-008-SS45 was received. (X-ref. pg. 18 in MSL)

10:50am Geoprobe hitting concrete @ location 009 @ ~4' BEG. Probe eventually pushed through it. Soil was very soft down to ten' (could push it down manually).

Con't Page 15

11:00am Sample 335-GP-009-SS10 was received. It is suspected that this grid sampling location is actually a point source location (drywell). (X-ref pg. 19 in MSL).

Note: Due to poor sample recovery, SS10 is being collected again. (only one sample description will be referenced)

11:50am Sample 335-GP-009-SS30 was received. (X-ref. pg. 20 in MSL)

12:30pm Sample 335-GP-009-SS45 was received. (X-ref. pg. 20 in MSL)

R.P OFF-SITE

12:50pm Lunch break

1:30pm Returned from lunch

1:40pm Geoprobe in position for location 010

2:06pm Sample 335-GP-010-SS15 was received (X-ref p. 21 in MSL)

2:39pm Sample 335-GP-010-SS30 was received. (X-ref. p. 21 in MSL)

3:21pm Sample 335-GP-010-SS45 was received. (X-ref. pg. 22 in MSL)

Con't Page 16

3:30 Informed tenant that we would be sampling inside on 10/13/99.

3:37 Brake down designated areas

3:41 Left site

End Page
10/12/99
KK

10/13/99

7:30 am. Arrived on-site. Setup designated work areas, performed PID calibration (x-ref pg. 6 in SL).

7:47 am. Geoprobe in position for interior point source sampling location 335-GP-011.

8:12 am sample 335-GP-011-SS15 was received. (x-ref. pg. 23 in MSL)

8:46 am. sample 335-GP-011-SS30 was received. (x-ref. pg. 23 in MSL)

9:18 am. sample 335-GP-011-SS45 was received. However, due to poor recovery, the operator was instructed to redo this interval.

9:58 am sample 335-GP-011-SS45 was received. (x-ref. pg. 24 in MSL)

11:32 am. Geoprobe in position for point source sampling location 335-GP-012

12:07 pm. sample 335-GP-012-SS15 was received. (x-ref. pg. 24 in MSL)

12:15 pm. Lunch break

Con't Page 18

1:00 pm Returned from lunch. Geoprobe in position to complete 335-GP-012

1:35 pm Geoprobe operator indicating that he is having meshanical difficulties w/ his sampling apparatus.

2:38 pm sample 335-GP-012-SS30 was received (x-ref. pg. 25 in MSL)

3:30 pm sample 335-GP-012-SS45 was received (x-ref. pg. 25 in MSL)

4:00 Left site.

End Page
10/13/99
PK

10/14/99

9:00 am Geoprobe in position for UST sampling location 335-GP-013.

9:05 am Setup designated work areas, performed PID calibration (x-ref. pg. 7 in SL)

9:15 am sample 335-GP-013-SS8 was received (x-ref. pg. 26 in MSL)

9:55 am sample 335-GP-013-SS12 was received. (x-ref. pg. 26 in MSL)

10:13 am sample 335-GP-014-SS8 was received. (x-ref. pg. 27 in MSL)

10:31 am sample 335-GP-014-SS12 was received. (x-ref. pg. 27 in MSL)

10:50 am sample 335-GP-015-SS8 was received. (x-ref. pg. 28 in MSL)

11:00 am sample 335-GP-015-SS12 was received. (x-ref. pg. 28 in MSL)

11:55 am sample 335-GP-016-SS8 was received. (x-ref. pg. 29 in MSL)

12:10 pm sample 335-GP-016-SS12 was received. (x-ref. pg. 29 in MSL)

Cont Page 20

12:50 pm sample 335-GP-017-SS8 was received.
(x-ref. pg. 30 in MSL)

1:16 pm sample 335-GP-017-SS12 was received.
(x-ref. pg. 30 in MSL)

2:16 pm sample 335-GP-018-SS8 was received
(x-ref. pg. 31 in MSL)

2:36 pm sample 335-GP-018-SS12 was received
(x-ref. pg. 31 in MSL)

2:46 pm sample 335-GP-019-SS8 was received.
(x-ref. pg. 32 in MSL)

3:10 pm sample 335-GP-019-SS12 was received.
(x-ref. pg. 32 in MSL)

12:20 pm sample 335-GP-020-SS8 was received.
(x-ref. pg. 33 in MSL)

12:40 pm sample 335-GP-020-SS12 was received.
(x-ref. pg. 33 in MSL)

* Note: documentation is not in chronological order
(sample numbers were designated before acquisition
for the UST sp/s.)

4:15 pm Departed from site.

End Page
10/14/99 KK

10/18/99.

8:30 am Arrived on-site. Setup designated work areas. Performed PID calibration & secured ambient air sample.
(x-ref. pg. 8 in SL). R. Pannell, K. Kleotra, E. Krist.

9:05 Fenley & Nicol arrived w/ rig / supply truck.
Informed the two operators of the health & safety plan in effect.

9:30 Began drilling monitoring well on NE corner of site.

10:40 am A seal broke on rig, apparently a line was pinched.
F & N called for another drill rig to arrive to site

10:55 R. Pannell OFF-SITE

12:10 pm Replacement rig arrived.

12:18 pm Resumed work again (Left off @ 50' BEG)

12:38 Confirm materials used for well: 20' screen
40' riser
filtration sand / fine grain
bentonite
grout

3:55 pm Installation of monitoring well complete. Depth to water is 54.5' BEG

4:30 pm Left site.

End Page
10/18/99
KK

10/19/99

7:35 am Arrived on-site. Setup designated work areas performed PID calibration + secured ambient air sample (see fr pg. 9 in SL)

8:00 am gauged MW for DTW (54.5' BEG)

8:20 am F&N arrived on-site

8:35 am Rig in in place to begin drilling monitoring well on SW portion of site

8:45 am Geoprobe in position to begin drilling @ gw sampling location 335-GP-021-GW01

9:36 am sample 335-GP-021-GW01 was received.

11:04 am sample 335-GP-022-GW01 was received

12:13 pm F&N finishing monitoring well @ SW corner of site.

12:32 pm F&N position for monitoring well @ SE c/o site

12:46 pm sample 335-GP-023-GW01 was received

~~1:10 pm Geo~~ KC

2:45 sample 335-GP-024-GW01 was received.

3:30 Left site

10/20/99.

8:00 am Arrived on-site. Raining very hard. Did not setup designated work areas due to the heavy rain. Performed PID calibration + ambient (ref pg 10 in SL

8:10 Geoprobe in position to drill at GW location 026. GW point inside bld. needs to be completed another day due to tenant activity. (025)

9:06 am sample 335-GP-026-GW01 was secured.

10:34 am sample 335-GP-027-GW01 was secured

12:05 pm sample 335-GP-028-GW01 was secured.

1:04 pm Lunch Break (Re-fueled also)

1:26 pm Returned from break

~2:10 pm Anna Reupp of the NYSDEC arrived on-site. Inquired into how the advancement of the probes into the subsurface was and how much longer we think we would be on-site for sampling activities.

~2:25 Anna Reupp left site

2:50 pm sample 335-GP-029-GW01 was secured.

3:35 pm Left site

End Page
10/20/99
KK

10/21/99

7:30 am Arrived on-site. Setup designated work areas. Performed PID calibration + secured ambient air sample (x-ref pg 11 in SL).

7:40 am Geoprobe in position to begin drilling at GW location 335-GP-030-GW01

9:14 am sample 335-GP-030-GW01 was secured.

10:34 am sample 335-GP-031-GW01 was secured

12:06 pm sample 335-GP-032-GW01 was secured.

1:26 pm sample 335-GP-033-GW01 was secured.

3:00 pm sample 335-GP-034-GW01 was secured, left site.

End Page
10/21/99
KK

10/22/99

7:30 am Arrived on-site. Setup designated work areas. Performed PID calibration + secured ambient air sample (x-ref pg in SL). R. Rankoff, K. Kisaka, Z Knust.

8:00 am Geoprobe in position to begin drilling 335-GP-035 GW location

9:10 am sample 335-GP-035-GW01 was secured

10:31 am sample 335-GP-036-GW01 was secured.

11:57 sample 335-GP-037-GW01 was secured

1:10 pm sample 335-GP-025-GW01 was secured.

2:00 pm left site.

End Page
10/22/99
KK

10/28/99

11:30 am. Arrived on site.

1:00 . Developed on-site monitoring wells using 4" dia pvc bailer. Accom. between on well. Sampling wells using dedicated (disposable) plastic bailers.

12:05 . MW-1 (Northeast c/o site): GW depth 54.4'
sample 33S-MW-1-GW01 secured

12:51 pm. MW-2 (Western side of bld): GW depth 53.8'

1:35 MW-3 (South Eastern c/o site) GW depth 54.6'

* note: depth to water was measured relative to the N side of casing (pvc).

End Page
10/28/99
FIC

Record

2632 RDC-01278

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9/30 - Rain in the AM, currently cloudy, no rain

9:20AM Sample id: 335-GP-001-SS10
Sample location: NE c/o site
sample depth interval: 10'-12' BGS
Sampler: Eric Krist (EK)
Sample description:
- Brown 7.5 YR 5/4
- well graded (GW) gravel - sand mixture, little or no fines
- no odor
- PID Reading: 0.0 ppm

* packaged @ 9:47 am by EK

9:36AM. sample id: 335-GP-001-SS15
Sample location: NE c/o site
sample depth interval: 15'-17' BGS
Sampler: EK
Sample description:
- Brown 7.5 YR 5/4
- well graded gravel - sand mixture, little or no fines (quartz ~~cobbles~~ gravel)
- no odor
- PID Reading: 0.0 ppm

* packaged @ 9:57 by KK

9:58 Clouds clearing, giving way to sunshine.

Cont Page 2

2. 9/30

10:07 Sample id: 335-GP-001-SS30
Sample location: NE c/o site
sample depth interval: 30'-32' BEG
sampler: EK
sample description:
yellowish brown 10YR 5/8
poorly graded gravels (GP) = sand gravel
mixtures, little or no fines (quartz ~~cobbles~~)
(more homogeneous than previous depth
interval), no odor
PID Reading: 0.0 ppm
* packaged @ 10:16 am by KK

10:55 sample id: 335-GP-001-SS45
Sample location: NE c/o site
Sample depth interval 45'-47' BEG
sampler: EK
sample description:
very pale brown 10YR 8/2
SM silty sands, sand - silt mixture
PID Reading: 0.0 ppm
no odor
poor sample recovery
* packaged @ 11:00 am by KK

30
89 Sept. 99
KK

Cont Page 3

3

9/30

11:55am Sample id: 335-GP-001-SS60
sample location: NE c/o site
Sample depth interval: 60'-62' BEG
Sampler: EK
Sample description:
light yellowish brown 10YR 6/4
(SP) poorly-graded sands - medium
gravely sands, no fines
PID Reading: 6.1 ppm
- Sample was moist (not saturated).
- no odor
- good sample recovery
* packaged @ 12:05 am by KK

12:20pm Due to the previous sample being moist, a gw probe is to be advanced before acquisition of the interface sample. GW screen point SP 15 will be used in conjunction w/ a water level indicator to establish gw table (BEG). elevation, GW screen + apparatus is being decontaminated using alconox before installation into subsurface.

30
~~34~~ Sept 99
KK

Cont Page 4

2:22 sample id: 335-GP-002-SS10
sample location: N portion of site
sample depth interval: 10'-12' BE6
sampler: EK
sample description:
brown 7.5YR 4/4
(GP) Poorly graded gravels, gravel-sand mixtures, little or no fines (quartz ~~cobbles~~ gravel) KK 4.8-fl mm
no odor
PID Reading: 0.0
* packaged @ 2:24 by KK

2:40 sample id: 335-GP-002-SS15
sample location: Northern portion of site
sample depth interval: 15'-17' BE6
sampler: EK
sample description:
light brown 7.5YR 4/4
(GP) Poorly graded gravels, gravel-sand mixtures, little or no fines
quartz and smoky quartz ~~cobbles~~ KK gravel (4.8-fl mm)
no odor
PID Reading: 0.0
* packaged @ 2:48 by KK

30 KK 29 Sept 99 KK

Con't Page 5

30 pm sample id: 335-GP-002-SS30
sample location: N portion of site
sample depth interval: 30'-32' BE6
sampler: EK
sample description:
very pale brown 10YR 7/4
(SP) poorly graded sands (medium), little or no fines (no cobbles) or gravel
slight chemical odor (
PID Reading: 2.5 ppm
* packaged @ 3:13 by KK

3:45 pm sample id: 335-GP-002-SS45
sample location: N portion of site
sample depth interval: 45'-47' BE6
sampler: EK
sample description:
very pale brown 10YR 8/2 w/ traces of brown 10YR 4/3
(SP) poorly graded sands (medium), little fines (no cobble or gravel)
no odor
PID Reading 0.0
* packaged @ 3:55 by KK

30 KK 29 Sept 99 KK

Con't Page 6

4:10pm Sample id: 335-GP-003-SS10
Sample location: N portion of site
Sample depth interval: 10'-12' BEG
Sampler: EK
Sample description:
brown 7.5 YR 4/4
(GP) Poorly-graded gravels,
gravel-sand mixtures, little fines
(quartz ~~cobble~~ gravel) 4.8-19mm
no odor
PID Reading: 0.0 ppm
* packaged @ 4:25 by KK

30
~~25~~ Sept. 99
KK

End of 9/30/99

10/1/99
8am Clear skies, sunny, slight breeze, brisk temperature.

8:30am sample id: 335-GP-003-SS15
sample location: N portion of site (center-west)
sample depth interval: 15'-17' BEG
sampler: EK
Sample description:
brown 7.5YR 4/4
(GP) poorly-graded gravels,
gravel-sand mixtures, no fines
quartz ~~cobble~~ gravel (~~75-300~~ 4.8-19 mm)
no odor
PID Reading: 0.0
* packaged at 8:44am by KK

9:04am sample id: 335-GP-003-SS30
Sample location: N portion of site (c-w)
Sample depth interval: 30'-32' BEG
Sampler: EK
Sample description:
very pale brown 10YR 7/4 w/ traces of yellowish brown 10YR 5/6
(SP) Poorly-graded sands, medium sands, little or no fines
no odor
PID Reading: 0.0
* packaged at 9:16 by KK

Cont Page 8

9:45am Sample id: 335-GP-003-SS45
Sample location: N portion of site (E-W).
Sample depth interval 45'-47' BEG
Sampler: EK
Sample description:
very pale brown 10YR 8/3
(SP) Poorly ~~sorted~~ graded sands
(medium) sands, little fines.
no odor
PID Reading: 0.0ppm
* packaged at 9:50am by KK

9:58am Sample id: 335-GP-004-SS10
Sample location NW c/o site
Sample depth interval: 10'-12' BEG
Sampler: EK
Sample description:
yellowish brown 10YR 5/8
(GP) Poorly-graded gravels,
gravel-sand mixtures, no fines
(quartz, smoky quartz ~~coarse~~ gravel)
4.8-19mm
no odor
PID Reading: 0.0ppm
* packaged at 10:13am by KK

Con't Page 9

10:15 Sample id: 335-GP-004-SS15
Sample location: NW c/o site
Sample depth interval: 15'-17' BEG
Sampler: EK
Sample description:
dark yellowish brown 10YR 4/6
(GP) Poorly-graded gravels, gravel-sand mixtures, no fines
Fine to coarse quartz gravel (4.8-75mm)
no odor
PID Reading: 0.0ppm
* packaged at 10:24am by KK

10:40am Sample id: 335-GP-004-SS30
Sample location: NW c/o site
Sample depth interval: 30'-32' BEG
Sampler: EK
Sample description:
very pale brown 10YR 8/4
(SP) Poorly-graded sands,
gravelly sands (medium)
No fines
no odor
PID Reading: 0.0ppm
* packaged at 10:51am by KK

Con't Page 10

12:36pm Sample id: 335-GP-004-SS45
Sample location: NW c/o site
Sample depth interval: 45'-47' BEG
Sampler: EK
Sample description:
very pale brown 10YR 8/4
(SP) Poorly-graded sands,
gravel sands (fine-medium)
no odors
PID Reading: 0.0 ppm
*packaged at 12:52pm by KK

1:03pm Sample id: 335-GP-005-SS10
Sample location: NW c/o building
Sample depth interval: 10'-12' BEG
Sampler: EK
Sample description:
brown 10YR 4/3
(GP) Poorly-graded gravels,
gravel-sand mixtures
coarse gravel-quartz ~25mm
medium sand 0.43-2.0mm
no odors
PID Reading: 0.0ppm
*packaged at 1:28 by KK

Cont Page 11

1:31pm Sample id: 335-GP-005-SS15
Sample location: NW c/o bld.
Sample depth interval: 15'-17' BEG
Sampler: EK
Sample description:
brown 7.5YR 5/4
(GP) Poorly-graded gravels,
gravel-sand mixtures
coarse (~25mm) quartz gravel
medium-coarse sand (0.43-4.8mm)
dull odor
PID Reading: 204 ppm
* packaged at 2:14pm by KK

2:06pm Sample id: 335-GP-005-SS~~15~~ 30 EK
Sample location: NW c/o bld.
Sample depth interval: 30'-32' BEG
Sampler: EK
Sample description:
very pale brown 10YR 8/4
(SP) Poorly-graded sands,
Fine to medium sand (0.43-2.0mm)
no odor
PID Reading: 0.0ppm
* packaged at 2:24pm

Con't Page 12

2:44pm sample id: 335-GP-005-SS45
sample location: NW c/o bld.
sample depth interval: 45'-47' BEG
sampler: EK
sample description:
brownish yellow 10YR 6/8
(SP) Poorly-graded sands,
gravelly sands, no fines.
Fine gravel (4mm)
medium sand (~1.0mm)
no odors
PID Reading: 0.0ppm
* packaged at 2:51 by KK

Sample id: 335-GP-006-SS10
sample location: W side of bld.
sample depth interval: 10'-12' BEG
sampler: EK
sample description:
yellowish brown 10YR 5/4
(GP) Poorly-graded gravels,
gravel-sand mixtures. No fines
Fine gravel-quartz (~15mm)
medium sand (~1mm)
no odors.
PID Reading: 0.0ppm
* packaged at 3:10pm by KK

Con't page 13

3:16pm sample id: 335-GP-006-SS15
sample location: W side of bld.
sample depth interval: 15'-17' BEG
sampler: EK
sample description:
yellowish brown 10YR 5/8
(GP) Poorly-graded gravels,
gravel-sand mixtures.
No fines
Fine gravel-quartz (~19mm)
medium sand (~1mm)
no odors
PID Reading: 0.0ppm
* packaged at 3:22pm by KK

01 Oct 99
KK

End page
KK 10/1/99

10/4/99 Rain, lightning in am. Rain let up late morning, continued cloudiness.

11:27am. sample id: 335-GP-006-SS30
sample location: W side of bld.
sample depth interval: 30'-32' BEG
sampler: EK
sample description:
brownish yellow 10YR 6/6
(SP) Poorly-graded sands, gravelly sands, no fines (medium sand)
Slight chemical odor
PID Reading: 0.0ppm
* packaged at 2:54pm by KK

12:11pm sample id: 335-GP-006-SS45
sample location: W side of bld.
sample depth interval: 45'-47' BEG
sampler: EK
sample description:
very pale brown 10YR 8/4
(SP) Poorly-graded sands, gravelly sands. (medium sand)
no odor
PID Reading: 0.0ppm
* packaged at 3:10 by KK

Cont Page 15

1:12pm sample id: 335-GP-001-SS10
sample location: N of bld. (western bay)
sample depth interval: 10'-12' BEG
sampler: EK
sample description:
brownish yellow 10YR 6/6
(GP) Poorly-graded gravels, gravel-sand mixture. little/no fines
Fine gravel (4.8-19mm)
medium sand (~1mm)
no odors
PID Reading: 0.0ppm
* packaged at 3:27 by KK

1:50pm sample id: 335-GP-001-SS15
sample location: N of bld. (W. bay)
sample depth interval: 15'-17' BEG
sampler: EK
sample description:
yellowish brown 10YR 5/4
(GP) Poorly-graded gravels, gravel-sand mixture
Fine to coarse gravel (4.8-25mm)
medium sand (~1mm)
no odors
PID Reading: 0.0ppm
* packaged at 3:40pm by KK

3:36pm. sample id: 335-GP-007-SS 30
Sample location: N. of bld. (W=bay)
sample depth interval: 30'-32' BEG
Sampler: EK.
Sample description:
very pale brown 10yR 8/4
(SP). Poorly-graded sands,
fine - medium sand (0.43-2mm)
no odor
PID Reading: 0.0ppm
* packaged at 3:49pm by KK

3:24pm sample id: 335-GP-007-SS45
Sample location: N side of bld. (W-bay)
sample depth interval: 45'-47' BEG
Sampler: EK
sample description:
very pale brown 10yR 8/4
(SP). Poorly-graded sands,
fine - medium sand (0.43-2mm)
no odor
PID Reading: 0.0ppm
*. packaged at 4:03 by KK

Cont/ Page 17

3:57pm. sample id: 335-GP-008-SS10
sample location: N of bld. (center)
sample depth interval: 10'-12' BEG
Sampler: EK
sample description.
yellowish brown 10yR 6/4
(GP) Poorly-graded gravels,
gravel-sand mixtures.
little fines
fine gravel (-5mm)
fine - medium sand
Strong chemical odors (petroleum)
PID Reading: 955ppm
* packaged at 4:18pm by KK

4:12pm. sample id: 335-GP-008-SS15
sample location: N of bld. (center bay)
sample depth interval: 15'-17' BEG
sampler: EK
sample description:
yellowish brown 10yR 5/4
(GP) Poorly-graded gravels,
gravel-sand mixtures, little fines
Fine gravel (-5mm)
fine - medium sand
Strong chemical odors (petroleum)
PID Reading: 2,000+
* packaged at 4:30pm by KK

End 10/4/99
KK

10/12/99. sample id: 335-GP-008-SS30
9:40am sample location: N of bld. (center bay)
sample depth interval: 30'-32' BEG
sampler: EK
sample description:
very pale brown 10YR 7/4
(SP) Poorly-graded sands,
fine to medium sand (~1mm)
no odor
PID Reading: 82.5 ppm
* packaged @ 9:40am by KK

10:17am sample id: 335-GP-008-SS45
sample location: N of bld. (center bay)
sample depth interval: 45'-47' BEG
sampler: EK
sample description:
light brown 7.5YR 6/4
(SP) Poorly-graded sands,
fine to medium sand (~1mm)
strong odor
PID Reading: 2,000+
* packaged @ 10:23am by KK

Cont Page 19

11:[illegible]am sample id: 335-GP-009-SS10
sample location: ~15' N of bld. (East Bay)
sample depth interval: 10'-18' BEG
sampler: EK
sample description:
Black 1 For Gley 2.5/2.5
(GP) Poorly-graded gravels,
gravel-sand mixture
fine gravel (~5mm)
medium sand (~1mm)
strong odors / staining
PID Reading 2,000+

comments: Due to the poor sample recovery, the sample depth interval was extended to 18' BEG. Therefore, the SS15 sample was included in the SS10 sample.

* packaged @ 11:34am by KK

Cont Page 20

20

11:50 am. sample id: 335-GP-009-SS30
sample location: ≈15' N of bld. (East Bay)
sample depth interval: 30'-32' BEG
sampler: EK.
sample description:
very pale brown 10YR 7/4
(SP) Poorly-graded sands,
fine to medium sand (≈1mm)
trace gravel
strong odor
PID Reading 2,000+ ppm
* packaged @ 11:56am by KK

12:30 pm. sample id: 335-GP-009-SS45
sample location: ≈15' N of bld. (East bay)
sample depth interval: 45'-47' BEG
sampler: EK
sample description:
very pale brown 10YR 7/4
(SP) Poorly-graded sands
fine to medium sand (≈1mm)
no ~~strong~~ odor
P.I.D. Reading: ~~2,000+ ppm~~ 0.0
* packaged @ 12:40 by KK

Weather Update: clear skies, hot sun, warm, no breeze

Cont Page 21

21

2:06 pm. sample id: 335-GP-~~009~~ 010-SS15
sample location: NW of site (sanitary cesspool)
sample depth interval: 15'-17' BEG
sampler: EK
sample description:
black Grey 2.5/2.5
high organic matter content
(GP) Poorly-graded gravels,
gravel-sand mixture
fine gravel (~5mm)
medium sand (~1mm)
septic odor
PID Reading: 496 ppm
* packaged @ 2:13 by KK
comments. sample appeared moist (from sanitary)
PID reading might be skewed due to methane degassing.

2:39 pm. sample id: 335-GP-010-SS30
sample location: NW of site (sanitary cesspool)
sample depth interval: 30'-32' BEG
sampler: EK
sample description
brownish yellow 10YR 6/6
(SP) Poorly-graded sands
medium sand (~1mm)
no odor
PID Reading: 0.0ppm
* packaged @ 2:47 by KK

Cont Page 22

3:21 pm sample id: 335-GP-010-SS45
sample location: NW of site (sanitary cesspool)
sample depth interval: 45'-47' BEG
sampler: EK
sample description:
very pale brown 10YR 7/4
(SP) Poorly-graded sands,
fine to medium sand (~1mm)
no odor
PID reading: 0.0 ppm
* packaged @ 3:40 pm by KK

End Page
10/12/99
KK

10/13/99

Weather Update: clear skies, sunny and warm.

8:13 am sample id: 335-GP-011-SS15
sample location: W interior of bld.
sample depth interval: 15'-17' BEG
sampler: EK
sample description:
brownish yellow 10YR 6/6
(GP) Poorly-graded gravels,
gravel-sand mixture
fine gravel (~.4mm)
medium sand (~1mm)
no odor
PID Reading: 0.0 ppm
* packaged @ 8:31 am by KK

8:46 am sample id: 335-GP-011-SS30
sample location: W interior of bld.
sample depth interval 30'-32' BEG
sampler: EK
sample description:
brownish yellow 10YR 6/6
(SP) Poorly-graded sands
medium sand (~1mm)
trace gravel
no odor
PID Reading: 0.0 ppm
* packaged @ 9:10 am by KK

Cont Page 24

9^58 am Sample id: 335-GP-011-SS45
Sample location: W. interior of bld.
Sample depth interval: 45'-47' BEG
Sampler: EK
Sample description:
very pale brown 10YR 8/4
(SP) Poorly-graded sands
fine to medium sand
no odor
PID Reading: 0.0 ppm
* packaged @ 10^13 am by KK

12^05 pm Sample id: 335-GP-012-SS15
Sample location: ~17' N of bld (3rd bay from E)
Sample depth interval: 15'-17' BEG
Sampler: EK
Sample description:
brown 7.5YR 4/4
(GP) Poorly-graded gravels,
gravel sand mixture
fine gravel (~6mm)
medium sand (~1mm)
no odor
PID Reading: 0.0 ppm
* packaged @ 12^12 pm by KK

Cont Page 25

2^38 pm Sample id: 335-GP-012-SS30
Sample location: ~17' N of bld. (3rd bay from East)
Sample depth interval: 30'-32' BEG
Sampler: EK
Sample description:
yellowish brown 10YR 5/4
(SP)/(GP) Poorly-graded sands,
trace gravel (~3mm)
fine to medium sand (~1mm)
no odor
PID Reading: 5.2 ppm
* packaged @ 2^49 pm by KK

3^36 pm Sample id: 335-GP-012-SS45
Sample location: ~17' N of bld. (3rd bay from E)
Sample depth interval: 45'-47' BEG
Sampler: EK
Sample description:
very pale brown 10YR 7/4
(SP) Poorly-graded sands.
fine to medium sand
slight odor (petroleum)
PID Reading 457 ppm
* packaged @ 3^42 pm by KK

End Page
10/13/99
KK

10/14/99

9:20:15 am sample id: 335-GP-013-SS8
sample location: N of bld., ~~W~~ E of FO USTs
sample depth interval: 8'-10' BEG
sampler: EK
sample description: very dark grayish brown 10YR 3/2
(GW) Well-graded gravels,
gravel-sand mixtures
Fine gravel
medium sand
moderate odor
PID Reading: 37.2 ppm
* packaged @ 9:25 am by KK

9:55 am sample id: 335-GP-013-SS12
sample location: N of bld., ~~W~~ E of FO USTs
sample depth interval: 12'-14' BEG
sampler: EK
sample description:
dark yellowish brown 10YR 4/4
(GP) Poorly-graded gravels,
gravel-sand mixtures
fine gravel
fine to medium sand
moderate odor
PID Reading: 147 ppm
* packaged @ 10:00 am by KK

Con't Page 27

10:13 am sample id: 335-GP-014-SS8
sample location: N of bld., W of FO USTs
sample depth interval: 8'-10' BEG
sampler: EK
sample description:
dark yellowish brown 10YR 4/4
(GW) Well-graded gravels,
gravel-sand mixtures
fine gravel
medium sand
mild odor
PID Reading: 31.4 ppm
* packaged @ 10:15 am by KK

10:31 am sample id: 335-GP-01~~5~~4-SS12
sample location: N of bld., W of FO USTs
sample depth interval: 12'-14' BEG
sampler: EK
sample description:
dark yellowish brown 10YR 4/4
(GP) Poorly-graded gravels,
gravel-sand mixtures
fine gravel
fine to medium sand
no odor
PID Reading: 0.0 ppm
* packaged @ 10:36 by KK

Con't Page 28

10:50 am . sample id: 335-GP-015-SS8 was received.
Sample location: N of bld., N of E UST
. Sample depth interval: 8'-10' BEG
. Sampler: EK
. sample description:
very dark grayish brown 10YR 3/2
(GW) well-graded gravels,
gravel-sand mixtures
fine gravel
medium sand
moderate odor
PID Reading: 281 ppm
* packaged @ 10:55 am by EK

11:50 am . Sample id: 335-GP-015-SS12 was received
. Sample location: N of bld., N of W UST.
. Sample depth interval: 12'-14' BEG
. Sampler: EK
Sample description:
dark yellowish brown 10YR 4/4
(GP) Poorly-graded gravels
gravel-sand mixtures
fine gravel
fine to medium sand
strong odor
PID Reading: 692 ppm
* packaged @ 11:55 am by EK

Cont Page 29

11:55 am . Sample id: 335-GP-016-SS8 was received.
. Sample location: N of bld., N of E UST.
. Sample depth interval: 8'-10' BEG
. Sampler: EK
Sample description:
brown 10YR 4/3
(GW) well-graded gravels,
gravel-sand mixtures
fine gravel
medium sand
moderate odor
PID Reading: ~~[illegible]~~ 254 ppm
* packaged @ 12:00 pm by EK

12:10 pm Sample id: 335-GP-016-SS12
. Sample location: N of bld., N of E UST
Sample depth interval: 12'-14' BEG
Sampler: EK
Sample description:
dark yellowish brown 10YR 4/6
(GP) Poorly-graded gravels,
gravel-sand mixtures
fine gravel
fine to medium sand
moderate to strong odor
PID Reading: 395 ppm
* packaged @ 12:15 pm by EK

Cont Page 30

30

12^56 pm . Sample id: 335-GP-017-SS8
. Sample location: N of UST on E portion of site.
. Sample depth interval: 8'-10' BEG
. Sampler: EK
Sample description:
dark yellowish brown 10YR 4/4
(GW) well-graded gravels,
gravel-sand mixtures
fine gravel
medium sand
moderate odor
PID Reading: 236 ppm.
* packaged @ 1^01 pm by EK

1^5 pm . Sample id: 335-GP-017-SS12
. Sample location: N of UST on E portion of site.
. Sample depth interval: 12'-14' BEG
. Sampler: EK
. Sample description:
dark yellowish brown 10YR 4/4
(GP) Poorly-graded gravels,
gravel-sand mixtures
fine gravel
fine to medium sand
strong odor
PID Reading: 412 ppm.
* packaged @ 1^26 pm by EK

Cont'd Page 31

2^14 pm . Sample id: 335-GP-018-SS8
. Sample location: NE of UST on E portion of site.
. Sample depth interval: 8'-10' BEG
. Sampler: EK
. Sample description:
very dark brown 10YR 2/2
(GW) Well-graded gravels,
gravel-sand mixtures
fine gravel
medium sand
strong to moderate odor
PID Reading: 343 ppm
* packaged @ 2^21 by EK

2^36 pm . Sample id: 335-GP-018-SS12
. Sample location: E of UST on E portion of site.
. Sample depth interval: 12'-14' BEG
. Sampler: EK
. Sample description:
very dark brown 10YR 2/2
(GP) Poorly-graded gravels
gravel-sand mixtures
fine gravel
fine to medium sand
moderate to strong odor
PID Reading: 485 ppm
* packaged @ 2^41 pm by EK

Cont'd Page 32

2:50 pm . Sample id: 335-GP-019-SS8.
Sample location: S of UST on E portion of site
Sample depth interval: 8'-10' BEG
Sampler: EK
Sample description:
Strong brown 7.5 yr 5/6
(GW) Well-graded gravels,
gravel-sand mixtures
fine gravel
medium sand
mild odor
PID Reading: 142 ppm
* packaged @ 3" by KK

3:10 pm . Sample id: 335-GP-019-SS12
Sample location: S of UST on E portion of site.
Sample depth interval: 12'-14' BEG
Sampler: EK
Sample description:
dark grayish brown 10YR 4/2
(GP) Poorly-graded gravels
gravel-sand mixture
fine gravel
fine to medium sand
moderate to strong odor
PID Reading: 418 ppm
* packaged @ 3:15 pm by KK

Cont Page 33

12:20 pm . Sample id: 335-GP-020-SS8
Sample location: W of UST on E portion of site
Sample depth interval: 8'-10' BEG
Sampler: EK
Sample description:
~~light yellowish brown~~ 10 yr 6/6
brownish yellow
(GW) Well-graded gravels,
gravel-sand mixtures
fine gravel
medium sand
no odor
PID Reading: 0.5 ppm
* packaged @ 12:25 pm by KK

12:40 pm . Sample id: 335-GP-020-SS12
Sample location: W of UST on E portion of site.
Sample depth interval: 12'-14' BEG
Sampler: EK
Sample description:
light yellowish brown 10yr 6/4
(GP) Poorly-graded gravels,
gravel-sand mixtures
fine gravel
fine to medium sand
mild odor
PID Reading: 135 ppm
* packaged @ 12:45 pm by KK

End Page
10/14/99
KK

DRAFT

INTERIM REMEDIAL MEASURES WORK PLAN

Proposed for:

299 Main Street Site
Site Code 1-30-043S
Westbury, New York

Prepared for:

The New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York

October 2001

IMPACT ENVIRONMENTAL

a division of impact environmental consulting, inc.

1 VILLAGE PLAZA, KINGS PARK, NEW YORK 11754 ❖ 631.269.8800 TELEPHONE ❖ 631.269.1599 FACSIMILE ❖ IMPACTENVIRONMENTAL.COM

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625 Broadway
Albany, New York

October 2001

Richard S. Parrish
Project Manager

Kevin C. Kleaka
Quality Assurance Officer

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PLATES

Plate 1: Site Location Map, Westbury, New York

Plate 2: Site Map, Westbury, New York

Plate 3: Pollution Source Map, Westbury, New York

FIGURES

Figure 1: Potentiometric Contour Map, Westbury, New York

Figure 2: Target Analyte Concentration Map, Westbury, New York

APPENDICES

Appendix A: Material Safety Data Sheets (MSDS)

Appendix B: Accident Report Form

Appendix C: OSHA Form 200

Appendix D: Injury Report Form

Appendix E: Safety Meeting Sheet

Appendix F: Vapor Monitoring Sheet

DRAFT DISTRIBUTION LIST

Report Holders	*Number of Reports Issued*
NYSDEC	3
Rivkin, Radler & Kremer LLP	1
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1. INTRODUCTION

This Draft Interim Remedial Measure (IRM) Work Plan documents the remedial activities proposed to address the point pollution sources identified on the property located at 299 Main Street, Westbury, New York, herein identified as the Site. The scope of this work plan is based upon the recommendations presented in the Focused Remedial Investigation (FRI) Report, dated September 2000, prepared by Impact Environmental Consulting, Inc. This IRM Work Plan is submitted in accordance with the provisions of the Order on Consent between the New York State Department of Environmental Conservation (NYSDEC) and 2632 Realty Development Corp. dated June 30, 1999.

In 1997, the Site was listed on the New York State registry of Inactive Hazardous Waste Disposal Sites (IHWDS) resulting from a NYSDEC investigation. The NYSDEC investigation indicated that the Site was potentially a contributing source of regional chlorinated organic groundwater contamination. Consequently, the Site was designated as site code 01-30-043S by the NYSDEC. In 2000, Impact Environmental Consulting, Inc. performed a FRI to define the nature, source and extent of any contamination at the Site. Specifically, the performance of the FRI was designed to acquire strategic data to confirm or refute the Site as a contributory source of groundwater contamination. An evaluation of the FRI results indicated that the Site is not a contributing source of the regional chlorinated organic groundwater contaminant plume. However, soil contamination was confirmed at isolated areas of the Site that required remedial activities. These confirmed point pollution sources will be the focus of the IRM procedures implemented under the scope of this work plan.

The methodologies used of this work plan were based, in part, upon the following documents: the NYSDEC Technical and Administrative Guidance Memorandum # 4030, Selection of Remedial Action at Inactive Hazardous Waste Sites; the USEPA Compendium of Superfund Field Operations Methods, dated September 1987; and the USEPA Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERLA, dated October 1988.

The tasks to be performed under the scope of the IRM process have been summarized in this report in the following sections.

- **Site Background and Setting**
- **Interim Remedial Measures**
- **Health and Safety Plan**

Presented herein is the proposed Draft Interim Remedial Measures Work Plan to be implemented by Impact Environmental Consulting, Inc. for the Site.

2. SITE BACKGROUND AND SETTING

2.1 Site Location

The Site is located at 299 Main Street, Westbury, New York, and is designated by the Nassau County Tax Assessors Office as Section 11, Block 144, Lots 35-46 (see Plate 1: Site Location Map, Westbury, New York). The Site is situated in the western section of the NCIA and encompasses an areal extent of approximately 35,700 square feet. The NCIA is located in the unincorporated Village of Westbury, in the Town of North Hempstead, Nassau County, New York. The NCIA is comprised of individual properties with an aggregate area of approximately 170 acres. The NCIA is bordered by the Long Island Rail Road to the north, Old County Road to the south, Grand Boulevard to the west and Frost Street to the east.

The Site is bordered by Main Street to the south, a salvage yard to the north, Garden Street to the west and Hopper Street to the east (see Plate 2: Site Map, Westbury, New York). The Site was initially developed circa 1956 with one single-story, steel framed, masonry building. Subsequently, the building was improved with several additions and alterations. Presently, the existing building has an approximate footprint of 9,450 square feet.

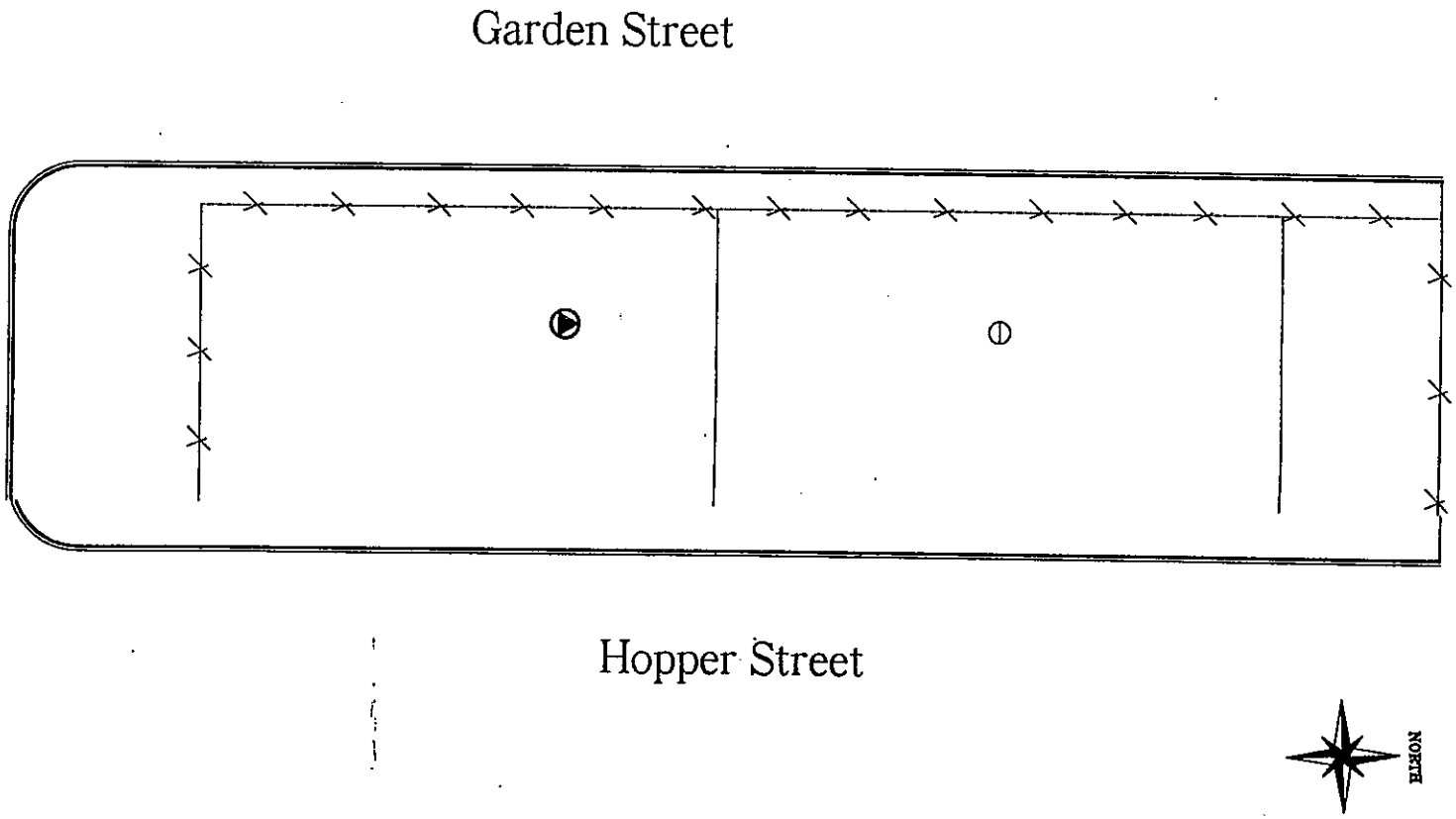
The Site was originally developed for light industrial applications. Such land uses have historically included automotive repair, automotive storage, automotive sales, automotive salvage, and bulk petroleum transportation. The Site is presently vacant.

2.2 Geological Background Study

2.2.1 Subsurface Geology

The geology of Long Island consists of thick deposits of unconsolidated, water bearing sediments resting upon a relatively impermeable, crystalline bedrock surface. The sequence of events that shaped Long Island's geology is not known with certainty, but it probably began with the formation of the original basement rocks in early Paleozoic to Precambrian time more than

Plate 1: Site Location Map, Westbury, New York,



IMPACT ENVIRONMENTAL
a division of Impact Environmental Consulting Inc.
1 Village Plaza
Kings Park, New York 11754
631.269.6600 TELEPHONE
631.269.1599 FACSIMILE

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Plate 2: Site Map

Westbury, New York

Legend

- monitoring well
- groundwater probe node
- soil probe node

scale: 1" = 20'

400 million years ago. These basement rocks were heated and compressed (metamorphosed) by folding and faulting, producing a rugged, mountainous topography. During the subsequent period ending with the late Cretaceous Epoch 100 million years ago, erosion reduced the land to a nearly planer surface that gently tilted to the southeast.

During the late Cretaceous Epoch (60-100 million years ago), streams brought sediments from the north and the west to the Long Island area on the continental margin, forming a permeable sand layer (Lloyd Sand Member of the Raritan Formation) and overlying clay member (clay member of the Raritan Formation) upon the bedrock surface. After a short period of erosion or non-deposition, thick, permeable beds of river delta clay, sand, and gravel were deposited on the Raritan Formation; these deposits comprise the Magothy Aquifer. Toward the close of the Late Cretaceous period (approximately 60 million years ago), a sand and clay unit (Monmouth Group) of low permeability was deposited in shallow marine waters in the area that now constitutes Long Island's south shore.

A long period of non-deposition, or possibly deposition followed by erosion, occurred after the Cretaceous era. Geologic activities during this time left few sedimentary traces, but streams flowing across Long Island cut deep valleys into the Magothy. It was not until late Pleistocene (Wisconsinian) glaciation- some 20 to 200 thousand years ago- that there were any significant additions to Long Island's geologic record. Valleys were filled and the other deposits were almost completely buried by glacial deposits. Prior to the southward movement of the Pleistocene ice sheets to Long Island, an extensive clay unit (Gardiners Clay) was deposited in shallow marine and brackish waters along the shores of what is now Suffolk County. This unit rested upon the Magothy and Monmouth Group, and acted as a confining layer. The northern portions of the Gardiners were subsequently eroded by advancing ice and glacial meltwaters, and Gardiners Clay beds are now found only in the south shore area.

In the area of the Site the bedrock exists at an elevation of approximately seven hundred feet below sea level. The top of the Raritan confining unit exists at an elevation of five hundred feet below sea level (Smolensky and Feldman, 1988). The top of the Magothy Aquifer exists at an elevation of approximately 30 feet above sea level. There is no confining layer with extensive

horizontal continuity overlying the Magothy Aquifer. In many areas of Westbury and Hicksville there is no confining layer between the Magothy and Glacial Aquifers. They are only differentiated by their hydraulic conductivities (50 vs. 270 ft/day) (Franke and Cohen, 1972). Localized clay lenses are present within this area of the Magothy Aquifer, but their location and extent have not been delineated.

2.2.2 Topography

The Pleistocene glaciation created the hilly Ronkonkoma moraine along Long Island's "spine" and south fork, and the Harbor Hill Moraine along the North shore and the North fork. Erosion of these morainal deposits (as the glacier melted away from Long Island) created extensive outwash plains of sand and gravel in the intermorainal area and south to the Atlantic Ocean. These highly permeable deposits comprise the upper glacial aquifer and represent the majority of Long Island's surficial sediments. Some local confining clay units were also formed from glacial materials in intermorainal lakes and tidal lagoons. Since the end of glaciation, about 12,000 years ago, Holocene beach and marsh deposits have been formed along the marine edge, and within stream corridors and ponds.

The elevation of the Site, as presented on the United States Geologic Survey (USGS), Hicksville Quadrangle Map, approximates one hundred twenty (120) feet above sea level. The USGS Map, which was base dated 1943, field checked in 1967, and photorevised in 1979, did not depict a structure on the Site (the property is within an area in which only landmark buildings were mapped).

2.2.3 Soil Component Identification

Nassau County is divided into ten general soil units, or groups of soils geographically associated in a characteristic repeating pattern, according to the Soil Survey of Nassau County, New York (U.S. Department of Agriculture, U.S. Soil Conservation Service). The general soil component of the Site, as defined by this publication, is the Urban Land Association. This Association

consists of dominantly nearly level or gently sloping areas that are covered by buildings, roads, sidewalks, and parking lots on plains and low hills.

The Soil Survey also describes detailed soil units that each represent an area on the landscape consisting of one or more soils for which the unit is named. The detailed component of the Site is identified by this Survey as the Urban Land-Hempstead Complex (Uh). This soil type consists of urbanized areas and very deep, well-drained soils on nearly level plains. Slope ranges from 0 to 3 percent, and slope is less than 2 percent in most of the areas that are not near drainage-ways or depressions.

This unit is described as a soil complex because the urbanized areas and Hempstead soils are so intermingled that it was not practical to classify them separately. This soil complex is made up of about 75 percent urbanized areas, 20 percent Hempstead soils, and 5 percent other soils. The urbanized areas consist of buildings, roads, driveways, parking lots, and other man-made structures.

Typical sequence, depth and composition of the layers of Hempstead Series Soils are as follows:

Depth In Soil Profile	Soil Description
Surface to 11 inches	black silt loam
11 to 15 inches	dark brown silt loam
15 to 29 inches	yellowish brown silt loam
29 to 33 inches	strong brown very gravelly loamy sand
33 to 60 inches or more	very pale brown sand and gravel

2.2.4 *Hydrology*

The Site lies within Hydrogeologic Zone I, The Deep Flow - Magothy Recharge Area (Nassau-Suffolk 208 Study - Water Management Zones in Nassau and Suffolk). Zone I is characterized by deep groundwater recharge and vertical groundwater flow.

2.2.5 *Regional Groundwater Characteristics*

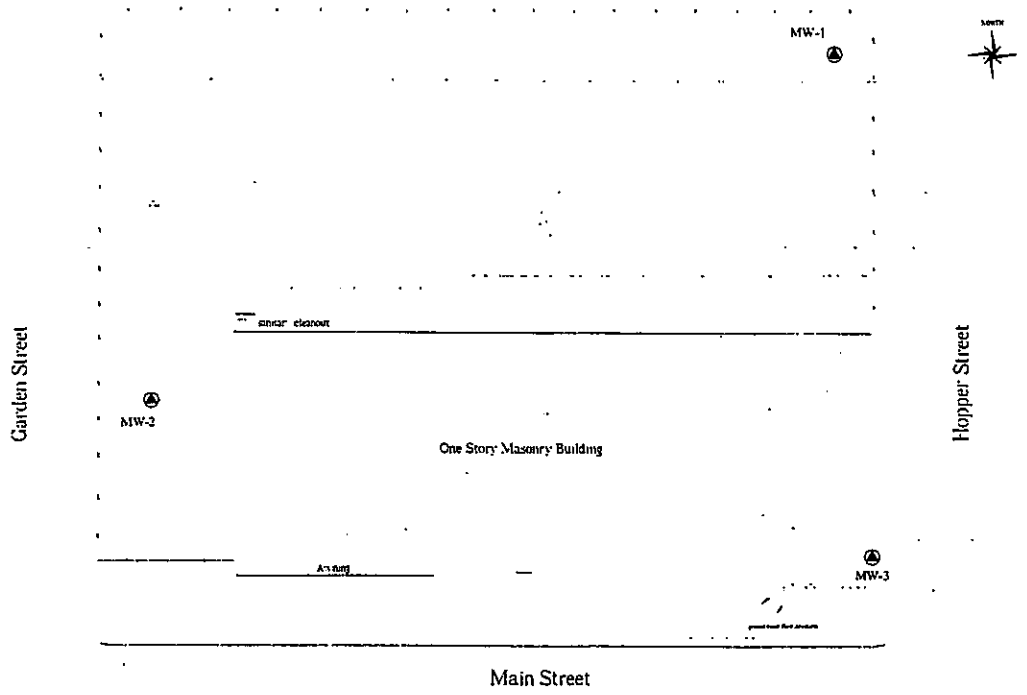
Regional groundwater flow direction in the area of the Site is toward the south-southwest. The water table is encountered at approximately fifty-five feet below grade.

2.2.6 *Site Groundwater Characteristics*

The elevation of groundwater was gauged at the monitoring wells installed at the Site during the performance of the FRI. The elevations were used to graphically define the planimetric surface of the water table beneath the Site. The elevations of the top of the casings were represented with respect to each other and were based on an estimated surface elevation of 120 feet (approximate elevation above mean sea level). The groundwater elevations were based as a function of the depth to water and the surface elevation. The average elevation of the water table (based on the estimated surface elevation) is 66 feet above mean sea level.

Water-table potentiometric contours were constructed from the measurement of groundwater elevations, and are presented in Figure 1. Based on these contours, the hydraulic gradient was approximated to be 0.00439 ft/ft. The calculated normal to the gradient indicated a south-southwest groundwater flow direction.

Figure 1: Potentiometric Contour Map



2.2.7 Site Groundwater Quality

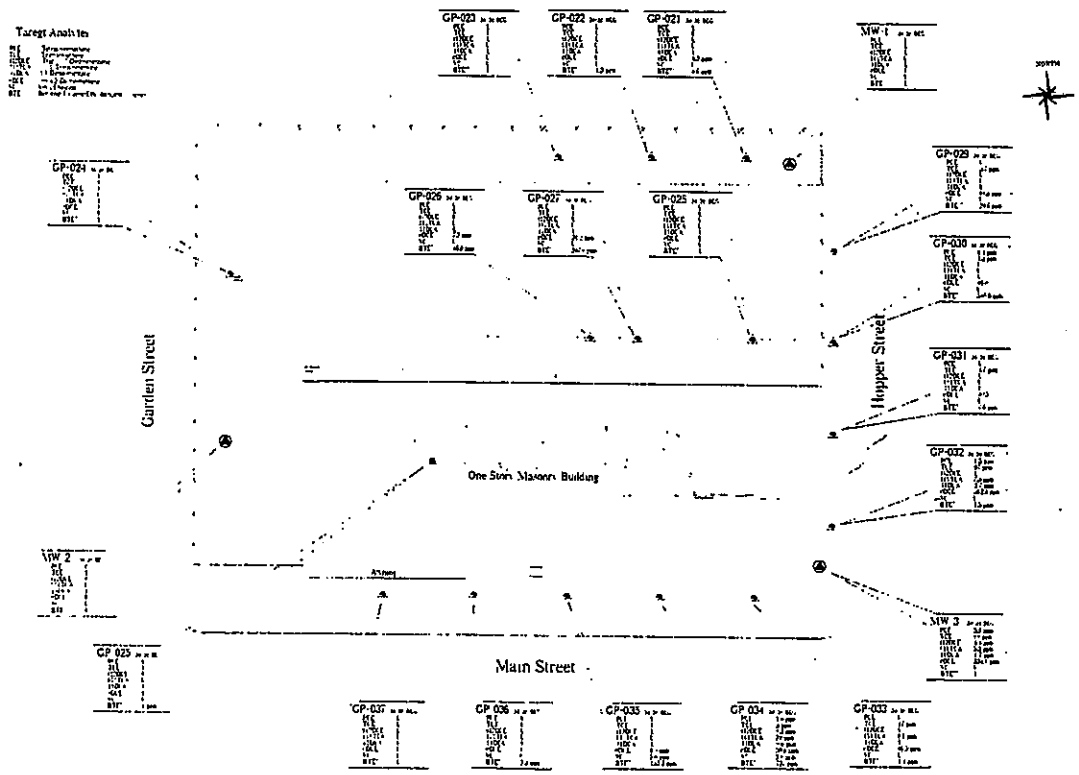
In general, the detected groundwater contaminants were limited to the southeast portion of the Site. The groundwater samples secured from the southeast portion of the Site (locations GP-029 through GP-037 and MW-3) were contaminated with both chlorinated organic, and gasoline and diesel related target analytes.

The highest single concentration of any chlorinated target analyte detected in the southeast corner of the Site was 562.4 ppb of cis-1,2 dichloroethene (location GP-032). This concentration, as well as ten others from five other sample locations, was in excess of the applicable 5 ppb SCG value. In general, the concentrations of the target chlorinated organic analytes that were above ambient were predominantly higher entering the Site than exiting. This fact is evident in the following table.

Analyte	Incoming Concentrations/Outgoing Concentrations [ppb]					
Sample Location	GP-032/GP-033	MW-3/GP-033	GP-031/GP-034	GP-030/GP-035	GP-029/GP-036	GP-021/GP-025
PCE	1.5/U	3.9/U	U/1.6	1.4/U	U/U	U/U
TCE	97/17	88/17	4.7/5	1.5/U	5.7/U	U/U
t-1.2 DCE	U/U	4.4/U	U/8.5	U/U	U/U	U/U
c-1.2 DCE	562.4/96.2	334.1/96.2	40.5/30.1	46/4	18.5/U	4.3/U
1.1.1 TCA	7.5/1.1	5.3/1.1	U/24	U/U	U/U	U/U
1.1 DCA	2.7/U	1.7/U	U/8.6	U/U	U/U	U/U
VC	U/U	U/U	U/3.8	U/2.6	U/U	U/U

Figure 2 presents the groundwater sampling locations on the Site and the corresponding contaminant concentrations identified during the performance of the FRI.

Figure 2: Target Analyte Concentration Map



3. INTERIM REMEDIAL MEASURES

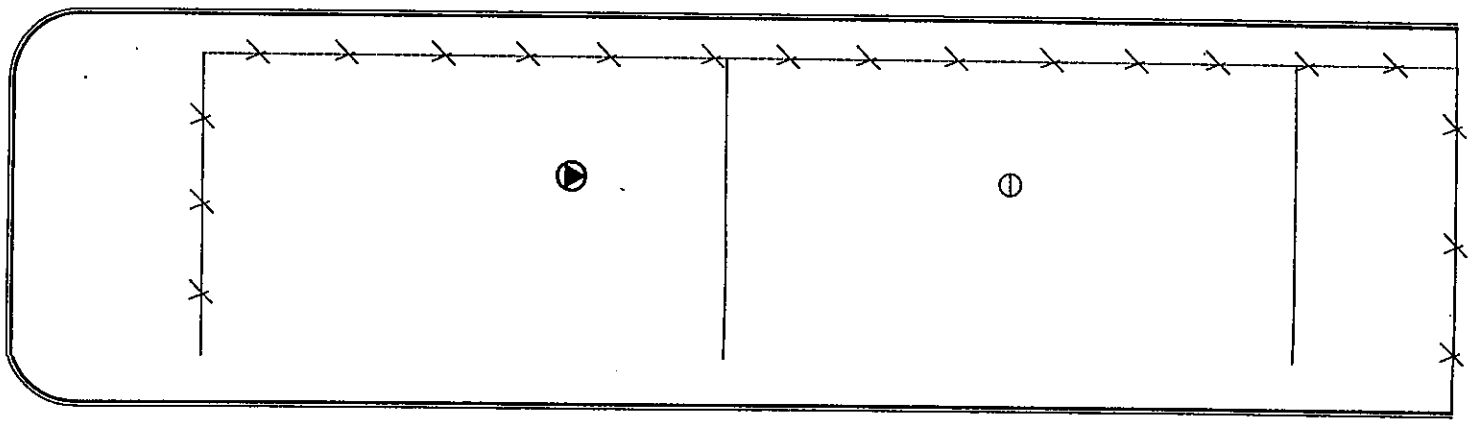
The IRM activities proposed for the Site relate to specific pollution sources identified during the performance of the FRI. The extent of these pollution sources were determined to be confined within Site-specific structures or isolated to the unsaturated subsurface soil of the Site. Accordingly, the treatment technologies developed for the pollution sources at the Site have been designed to permanently remove or significantly decrease the toxicity, mobility and volume of contaminants to the maximum extent practicable. An evaluation of the effectiveness of the IRM activities will be implemented through the performance of a sampling and analysis plan or an operations and maintenance plan to assure compliance with applicable New York State Standards, Criteria and Guidelines (SCGs).

3.1 Pollution Source Summary

All of the information presented in this section of the report was compiled during the performance of the FRI. The results of the FRI revealed that three (3) pollution sources exist at the Site requiring remedial activities. These pollution sources will be addressed under the scope of the IRM activities (see Plate 3: Pollution Source Map). The pollution sources identified from the performance of the FRI are presented in the following table.

Pollution Source Code	Pollution Source Structures	Affected Media
PS-1	Underground Injection Well	Soil Quality
PS-5	Underground Storage Tanks	Soil Quality
PS-7 and PS-8	Service Pits	Soil Quality

As indicated in the FRI, none of the point pollution sources for chlorinated organic solvents impacted the environmental quality of groundwater.



IMPACT ENVIRONMENTAL
a division of Impact Environmental Consulting Inc.
1 Village Plaza
Kings Park, New York 11754
631.269.5600 TELEPHONE
631.269.1599 FACSIMILE

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Plate 3: Pollution Source Map

Westbury, New York

Legend

- monitoring well
- groundwater probe node
- soil probe node

scale: 1" = 20'

3.1.1 Pollution Source PS-1

The underground injection well identified as being connected to an interior floor drain was investigated. A destructive survey was performed that involved using a hydraulic probing tool to detect the presence of the well structures (i.e. the block walls and domes) and to obtain subsurface pilot samples. Pilot probe samples obtained from a depth of eight feet at the target location was found to contain uncompacted stained organic silts and fine sands indicative of sediment. Furthermore, a substantial void space was encountered at the location, suggestive of an open cavity such as an injection well. The injection well was considered a confirmed point pollution source.

To evaluate the impact of PS-1 on Site soil quality, soil samples were secured from its center at three depths extending to forty-seven feet below existing grade (immediately above the water table). Said sampling location was designated GP-009. Samples secured from this location were secured at depths of 10 to 18 feet BEG, 30 to 32 feet BEG, and 45 to 47 feet BEG for subsequent laboratory analysis. The soil samples secured from its center (location GP-009) were contaminated with chlorinated organic, and gasoline and diesel related target analytes. The highest single concentration of any chlorinated organic analyte detected from this sample location was 43,800 ppb of cis-1,2-dichlroroethene.The highest single concentration of any gasoline and diesel related analyte detected from this sample location was 160,700 ppb of 1,3,5-trimethylbenzene. These concentrations decreased to below that of the applicable SCGs in the samples obtained at 45 feet BEG. The inorganic analysis of the sample secured from the underground injection well at 10-18 feet BEG detected elevated concentrations of beryllium, cadmium, copper, nickel, vanadium and zinc. The concentrations of inorganic analytes were above the applicable SCGs at 10-18 feet BEG.

To evaluate the impact of PS-1 on Site groundwater quality, one groundwater sample, identified as sample GP-028-GW01, was secured from the water table. Additionally, two groundwater samples, identified as GP-029-GW01 and GP-MW-1-GW01 were secured from locations hydraulically up-gradient of the source location, and three groundwater samples, identified as GP-33-GW01, GP-34-GW01 and GP-35-GW01 were secured from locations hydraulically

down-gradient of the source location. A comparison of the up-gradient and down-gradient groundwater analysis results demonstrated no affect of an order of magnitude.

3.1.2 Pollution Source PS-5

An interpretation of the imagery obtained from the performance of a ground penetrating radar survey of the Site revealed three anomalous features consistent with that of underground storage tanks. The underground storage tanks are located adjacent to the north side of the building. The orientation of two of the tanks appeared to be such that their long axis run parallel to the building (east-west). The long axis of the third tank runs perpendicular to the building. These tanks were identified as confirmed point pollution sources.

To evaluate the impact of these sources on Site soil quality, soil samples were secured from locations adjacent to the walls of each tank from two depths. As two of the tanks were positioned end-to-end, and were immediately adjacent to the building, samples were obtained from only two of their four walls. The sampling locations installed around the tanks were designated GP-013, GP-014, GP-015, GP-016, GP-017, GP-018, GP-019 and GP-020. Samples secured from these locations were secured at depths of 8 to 10 feet BEG and 12 to 14 feet BEG for subsequent laboratory analysis.

The majority of the detected soil contamination on the Site was identified proximal to these three abandoned underground petroleum storage tanks. The soil samples secured from around the tanks (locations GP-013 through GP-020) and from the grid sample in the area of the tanks (location GP-008) were all contaminated with gasoline and diesel related target analytes (including their transformation analytes). The soil samples generated the highest contaminant concentrations at a depth of 12 feet BEG. Said depth corresponds to the base of the storage tanks. The highest single concentration of any organic analyte detected from these sample locations was 20,500 parts per billion (ppb) of 1,2,4-trimethylbenzene (location GP-016 at a depth of 12 feet BEG). The concentrations of target analytes detected within samples secured from 7 of the 8 probes sited around the storage tanks were elevated above the applicable SCGs.

3.1.3 Pollution Source PS-7

This structure consisted of a large rectangular cut within the floor. The feature measured approximately forty feet in length (running north-south) and five feet in width (east-west). This appeared to be a former engine service pit that was filled-in and capped with a concrete patch. There were a number of cut-outs and discontinuities within the cap that were potentially utilized as floor drains. Therefore, it was suspected that said feature, as defined by its function, represented an abandoned underground injection well (if it had an earthen invert) or a semi-permeable tank (if it had a concrete invert). Said feature was subjected to a destructive survey.

The structure was accessed with a masonry cutting saw and a hydraulic probing tool. The tool penetrated the feature to its base (7 feet below grade), which was confirmed to be solid concrete bottom. The medium used to backfill the pit was observed to be stained with a petrochemical substance. Said substance exhibited a gasoline-like odor. The feature was determined to contain four feet of standing water as evidenced by observations made on the probe rods (rods were wet). This structure was determined to function as a semi-permeable storage tank. As such, it was identified as a confirmed non-point pollution source.

To evaluate the impact of this source on Site groundwater quality, three groundwater samples, identified as GP-034-GW01, GP-035-GW01 and GP-036-GW01 were secured from locations hydraulically down-gradient of the source location. Additionally, three groundwater samples, identified as GP-021-GW01, GP-029-GW01 and GP-030-GW01 were secured from locations hydraulically up-gradient of the source location. A comparison of the up-gradient and down-gradient groundwater analysis results failed to confirm that pollution source PS-7 was impacting groundwater quality.

3.1.4 Pollution Source PS-8

This structure consisted of a large rectangular cut within the floor. The structure measured approximately forty feet in length (running north-south) and four feet in width (east-west). This

appeared to be a former engine service pit (used to access the bottom of vehicle mounted engines) that was filled-in and capped with concrete. There were a number of cut-outs and discontinuities within the cap that were potentially utilized as floor drains. Therefore, it was suspected that said feature, as defined by its function, represented an abandoned underground injection well (if it had an earthen invert) or a semi-permeable tank (if it had a concrete invert). Said structure was subjected to a destructive survey.

The structure was accessed with a hydraulic probing tool. The tool penetrated the feature to its base (6 feet below grade), which was determined to be solid concrete bottom. The structure was determined to contain standing water as evidenced by observations of liquid on the probe rods. This structure was determined to function as a semi-permeable storage tank. As such, it was identified as a confirmed non-point pollution source.

To evaluate the impact of this source on Site groundwater quality, three groundwater samples, identified as GP-035-GW01, GP-036-GW01 and GP-037-GW01 were secured from locations hydraulically down-gradient of the source location. Additionally, three groundwater samples, identified as GP-021-GW01, GP-022-GW01 and GP-023-GW01 were secured from locations hydraulically up-gradient of the source location. A comparison of the up-gradient and down-gradient groundwater analysis results failed to confirm that pollution source PS-8 was impacting groundwater quality.

3.2 Development, Screening and Selection of Remedial Alternatives

3.2.1 Remedial Action Objectives

The remedial action objectives for the IRM activities proposed for the pollution sources at the Site are to permanently remove or significantly decrease the toxicity, mobility and volume of contaminants in accordance with the applicable New York State Standards, Criteria and Guidelines (SCGs). The purpose of meeting these objectives shall be for the overall protection of human health and the environment. The applicable SCGs for Site soil quality is defined under the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046, Determination of Soil Cleanup Objectives. The applicable SCGs for Site air quality is defined under the New York State Department of Environmental Conservation Guidelines for the Control of Toxic Ambient Air Contaminants, DAR-1, Air Guide 1.

3.2.2 Development and Screening of Remedial Alternatives

The development of remedial alternatives will consider four fundamental options based on the nature and extent of contaminants identified at the Site pollution sources. The primary contaminants identified at the Site from the performance of the FRI consisted of industrial organic and inorganic contaminants. The remedial alternatives to be considered for the Site pollution sources include: 1) removal and off-site disposal; 2) in-situ treatment or extraction; 3) isolation; and 4) no action, and are discussed below.

Removal and Off-Site Disposal

The remedial alternative identified as removal and off-site disposal involves the physical removal of contaminated media from a known pollution source and the off-site disposal of the contaminated media at a proper waste disposal facility. This type of remedial action is limited by the nature and extent of the contaminants, and the capabilities of the construction equipment performing the work. The nature of the contaminants, which includes type and concentrations, must be within acceptable limits for waste disposal facilities to receive and properly dispose of

the waste. The location and extent of the contaminants may limit the ability of conventional construction equipment to adequately remove the soil contamination. Therefore, an assessment of the horizontal and vertical extent of Site contaminants requiring remedial action must be determined. This includes determining the accessibility of the construction equipment into the location of source area (i.e. within a building). This type of remedial action will sufficiently meet the remedial action objectives to permanently remove contaminants (in a timely fashion) when performed on pollution sources that are limited or isolated in extent. To assess the effectiveness of this type of remedial action, it is necessary to design and implement a sampling and analysis program subsequent to the performance of the remedial activities. This program will include securing representative samples for analysis to determine if any residual contamination exists at the pollution source. If residual contaminants are identified at a pollution source exceeding the applicable SCGs subsequent to the performance of remedial activities, it may be necessary to consider further remedial alternatives to meet remedial action objectives.

In-Situ Treatment or Extraction (Non-Biological)

The remedial alternative identified as in-situ extraction involves the in-place treatment of contaminated media by technological processes without the physical removal of the affected media. The contaminants are stripped or volatilized from the contaminated media by altering subsurface conditions to that which induces the removal of contaminants. This type of remedial action will mitigate or permanently remove contaminants from the affected media over a certain time period. The time period and effectiveness for which the contaminants are removed or extracted is dependent on the nature and extent of the contaminants at the pollution sources and the subsurface geology at the Site. The nature of the contaminants must be primarily composed of compounds with relatively light molecular weights. Such compounds typically consist of volatile organic compounds and are readily volatilized upon introducing vacuum pressures into the subsurface. The extent of the contaminants at the pollution sources must be significantly beyond the capabilities of the removal and disposal remedial alternative. The extent of the contamination is typically greater than ten feet below grade and has a significant volume. When applying this type of remedial action, Site-specific factors such as geology and hydrology must be considered. The soil type that is being treated must have an adequate porosity and permeability for the contaminants to desorb and/or volatilize. In addition, the groundwater

elevations must be typically greater than five feet below grade. To assess the effectiveness of this type of remedial action, it may be necessary to secure representative samples of the affected media in the future to monitor the progress or completeness of the action for meeting the applicable SCGs.

The contaminants stripped from the affected media using this type of remedial action are typically released into the atmosphere. Remedial action objectives for this type of remedial action must consider potential risks of human exposure from contaminants leaving one media (soil) and entering another media (air). For this reason, it is necessary to assess the contaminant concentrations entering the atmosphere to protect human health. This assessment includes gauging the air quality at a release point from the treatment or extraction technology system. In addition, these activities will determine, in part, the effectiveness of the remedial action technology. Based on the rate of contaminant concentrations extracted from the pollution source, it may be necessary to filter or treat the air effluent to meet comprehensive remedial action objectives. To assess the air quality entering the atmosphere, it is necessary to design and implement an operation and maintenance plan during the operation of the remedial technology. This program will include securing representative air samples for analysis to determine what level, if any, of air treatment is necessary. If required, the treatment of air may be implemented using carbon charcoal filters. The waste retained in the filters will require subsequent removal and proper disposal at an off-site disposal facility.

Bio-Inoculation

In-situ groundwater bioremediation is a technology that encourages growth and reproduction of indigenous microorganisms to enhance biodegradation of organic compounds in the saturated zone. In-situ groundwater bioremediation can effectively degrade organic compounds that are dissolved in groundwater. In-situ groundwater bioremediation can be effective for the full range of petroleum hydrocarbons. The low-molecular-weight, more water soluble compounds are degraded more rapidly and to lower residual levels than are high-molecular-weight, less soluble compounds.

Bioremediation generally requires a mechanism for stimulating and maintaining the activity of these microorganisms. This mechanism is usually an inoculation for providing one or more of the following: An electron acceptor (oxygen, nitrate); nutrients (nitrogen, phosphorus); and an energy source (carbon). Generally, electron acceptors and nutrients are the two most critical components of any bio-inoculation.

The key parameters that determine the effectiveness of in-situ groundwater bioremediation are:

- hydraulic conductivity of the aquifer, which controls the distribution of electron acceptors and nutrients in the subsurface.
- biodegradability of the petroleum constituents, which determines both the rate and degree to which constituents will be degraded by microorganisms.
- location of contamination in the subsurface.
- Contaminants must be dissolved in groundwater or adsorbed onto more permeable sediments within the aquifer.

In general, the aquifer medium will determine hydraulic conductivity. Fine-grained media (e.g., clays, silts) have lower permeability than coarse-grained media (e.g., sands, gravels). Bioremediation is generally effective in permeable (e.g., sandy, gravelly) aquifer media. However, depending on the extent of contamination, bioremediation also can be effective in less permeable silty or clayey media. In general, an aquifer medium of lower permeability will require longer to clean up than a more permeable medium. Soil structure and stratification are important to in-situ groundwater bioremediation because they affect groundwater flow rates and patterns when water is extracted or injected. Structural characteristics such as microfracturing can result in higher permeabilities than expected for certain soils (e.g., clays). In this case, however, flow will increase in the fractured media but not in the unfractured media. The stratification of soils with different permeabilities can dramatically increase the lateral flow of groundwater in the more permeable strata while reducing the flow through less permeable strata. This preferential flow behavior can lead to reduced effectiveness and extended remedial times for less-permeable strata.

The biodegradability of a petroleum compound is a measure of its ability to be metabolized by hydrocarbon-degrading bacteria or other microorganisms. The chemical characteristics of the contaminants will dictate their biodegradability. For example, heavy metals are not degraded by bioremediation. The biodegradability of organic compounds depends on their chemical structures and physical/chemical properties (e.g., water solubility, water partition coefficient). Highly soluble organic compounds with low molecular weights will tend to be more rapidly degraded than slightly soluble compounds with high molecular weights. The low water solubilities of the more complex compounds render them less bioavailable to petroleum-degrading organisms. Consequently, the larger, more complex chemical compounds may be slow to degrade or may even be recalcitrant to biological degradation.

The location, distribution, and disposition of petroleum contamination in the subsurface can significantly influence the likelihood of success for bioremediation. This technology generally works well for dissolved contaminants and contamination adsorbed onto higher permeability sediments (sands and gravels). However, if the majority of contamination is (1) in the unsaturated zone; (2) trapped in lower permeability sediments, or (3) outside the "flow path" for nutrients and electron acceptors, this technology will have reduced impact or no impact.

Nutrient injection systems may not be necessary at all, if the groundwater contains adequate amounts of nutrients, such as nitrogen and phosphorus. Microorganisms require inorganic nutrients such as nitrogen and phosphate to support cell growth and sustain biodegradation processes. Nutrients may be available in sufficient quantities in the aquifer but, more frequently, nutrients need to be added to maintain adequate bacterial populations.

Isolation or Capsulation

The remedial alternative identified as isolation involves the controlled containment or capsulation of contaminants at Site pollution sources. The contaminants at the pollution sources are isolated in mobility by designing barriers or containment structures that prevent or limit migration pathways. This alternative is effective in the short-term by reducing human health exposure risks. However, this alternative does not decrease the toxicity or volume of the contaminated media for long-term effectiveness and therefore will not meet the applicable SCGs.

The pollution source remains persistent in the environment and may be exposed in the future during property redevelopment or demolition activities.

Natural Attenuation

The remedial alternative identified as no action involves the natural attenuation or breakdown of contaminants at pollution sources without any remedial action. This type of remedy will not permanently remove or significantly decrease the toxicity, mobility and volume of contaminants in the short-term. This type of remedy is typically limited to pollution sources that pose nominal risk to human health and the environment. The long-term effectiveness is dependant on the nature and extent of the contaminants at the Site pollution sources. Site pollution sources that are relatively persistent in the environment will typically exhibit residual traces of contaminants over prolonged time and present future exposure and pathway risks.

3.2.3 Selection of Remedial Alternatives

The primary consideration for selecting the remedial alternatives for the Site pollution sources was effectiveness in achieving remedial action objectives. Each remedial alternative was evaluated for technical and administrative feasibility. The following presents the remedial alternatives selected for each individual pollution source identified at the Site.

Code	Pollution Source Structures	Selected Remedial Alternative
PS-1	Underground Injection Well	Removal and In-Situ Extracation
PS-5	Underground Storage Tanks	Removal
PS-7 and PS-8	Service Pits	Removal

Based on an understanding of the nature and extent of pollution sources identified from the performance of the FRI, the remedial alternatives selected for the Site include removal / off-site disposal and in-situ extraction or a combination of each. The pollution sources that will be most appropriately addressed by removal and off-site disposal include the underground storage tanks (PS-5) and the abandoned service pits within the building (PS-7 and PS-8). These pollution

sources were determined to be isolated to Site soil or contained within Site structures. Further, the vertical extent of these pollution sources are limited in depth and can be effectively removed by conventional construction equipment. The nature of these pollution sources primarily consists of non-hazardous industrial petroleum waste, which should be accepted into a disposal facility at a reasonable cost. This selection should sufficiently meet the remedial action objectives and the applicable SCGs.

The remedial action alternatives selected for pollution source PS-1 will consist of removal and off-site disposal in conjunction with in-situ extraction. The nature of the contaminants identified within the underground injection well (PS-1) consisted of industrial organic and inorganic compounds. The depth of the inorganic contaminants confined within the structure extended to approximately eighteen feet below grade (presumed invert of the structure). The depth of the organic contaminants existed beyond the base of the structure and extended into the subsurface soil approximately forty-five feet below grade. It was determined that the organic contaminant concentrations were below the applicable SCGs at an approximate depth of thirty-five feet below grade. Accordingly, the removal and off-site disposal alternative will be applied to permanently remove the organic and inorganic contaminated soil to an approximate depth of eighteen feet below grade. This contaminated media, which is considered hazardous waste (F002) will be removed from the Site and disposed of at an appropriate disposal facility. The organic contaminated soil (contained-in) that will remain in the soil subsequent the removal and disposal process will be mitigated utilizing a soil vapor extraction system. The operation of this remedial technology will enhance the soil quality of the pollution source over time to sufficiently meet the applicable SCGs by significantly decreasing the toxicity, mobility and volume of the organic contaminants.

3.3 Detailed Analysis of Remedial Alternatives

3.3.1 Removal and Off-Site Disposal at PS-1, PS-5, PS-7 & PS-8

PS-1

The underground injection well, identified as PS-1 in the FRI, will be uncovered and accessed utilizing a backhoe. The contaminated sediment within the underground injection well will be excavated to a maximum depth feasible utilizing a clam shell. The objective of the excavation activities will be to remove contaminated sediment to the invert or base of the structure. The underground injection well structure will remain unaffected from the removal activities to efficiently remove the contaminated sediment. Prior to excavation activities, the ground surface of this area will be covered with heavy gauge plastic sheeting to prevent the potential contact between any spilled contaminated soil with the ground surface. The contaminated sediment removed from the underground injection well will be placed in a dedicated waste container for subsequent removal and off-site disposal. Upon removal of the contaminated sediment to the extent feasible, the waste container will be covered with plastic sheeting for vapor suppression. A sampling and analysis plan will be implemented preceding the backfilling of the excavation.

One sample will be secured from the invert of the excavation. The sample will be analyzed utilizing USEPA Test Method 6010 for priority pollutant inorganic analytes consistent with the data quality objectives performed for the FRI. The open excavation will be backfilled with clean fill (sand) to grade. The contaminated media will be transported by a licensed waste hauler to an approved waste disposal facility.

PS-5

Three underground storage tanks, identified as PS-5 in the FRI, and their associated piping will be unearthed and removed from the ground utilizing a hydraulic excavator. As necessary, all standing liquids (diesel, gasoline or water residuals) contained within the USTs will be pumped, transported and disposed of as a regulated waste. Subsequent to removal, each of the USTs will be visually inspected for pitting, holes, and corrosion. The USTs will be cut, and the interior surfaces cleaned of all residues and vapors on-Site. The cleaned USTs will be transferred from

the property for proper disposal as scrap material. All associated piping and appurtenances will also be removed from the property for proper disposal.

Subsequent to the removal activities, the contaminated soil beneath and surrounding the former USTs will be excavated and placed into a dedicated waste container for subsequent removal and off-site disposal. The contaminated soil will be excavated to a maximum depth feasible. The objective of the excavation activities will be to remove contaminated soil to approximately five feet beneath the former bases of the USTs (approximately twelve to fourteen feet below grade). Upon removal of the contaminated sediment to the extent feasible, the waste container will be covered with plastic sheeting for vapor suppression. A sampling and analysis plan will be implemented preceding the backfilling of the excavation. The sampling and analysis plan will conform the NYSDEC protocol for UST closures as published in the document Spill Prevention and Operations Technology Series No. 14. Approximately six post-excavation endpoint samples will be secured from within each UST excavation. The samples will be analyzed utilizing USEPA Test Method 8021 (STARS) for target volatile organic analytes and USEPA Test Method 8270 (STARS) for target semi-volatile organic analytes consistent with the data quality objectives performed for the FRI. The open excavation will be backfilled with clean fill (sand) to grade. The contaminated media, which will be managed as a non-hazardous industrial waste, will be transported by a licensed waste hauler to an approved waste disposal facility. Upon obtaining data results, the effectiveness of the remedial alternative will be evaluated. If significant residual soil contamination is still present, further remedial alternatives will be considered.

PS-7 & PS-8

Two abandoned service pits, identified as PS-7 and PS-8 in the FRI, will be uncovered and accessed utilizing concrete cutting tools and an excavator. As necessary, all standing liquids (diesel, gasoline or water residuals) contained within the USTs will be pumped, transported and disposed of as a regulated waste.

The contaminated sediment contained within the structures will be excavated and placed into a dedicated waste container for subsequent removal and off-site disposal. The contaminated sediment will be excavated to the base of the structures. The objective of the excavation

activities will be to remove all contaminated soil confined within the service pit structures. Upon removal of the contaminated sediment, the waste container will be covered with plastic sheeting for vapor suppression. A sampling and analysis plan will be implemented preceding the backfilling of the excavation activities. The sampling and analysis plan will include coring through the base of each concrete structure at two locations and securing a soil sample for subsequent analysis. The laboratory analysis of the secured samples will be performed utilizing USEPA Test Method 8260 for target volatile organic analytes and USEPA Test Method 8270 for target base-neutral semi-volatile organic analytes. The data quality objectives performed for the FRI. The open excavation will be backfilled with clean fill (sand) to grade. The contaminated media, which will be managed as a non-hazardous industrial waste, will be transported by a licensed waste hauler to an approved waste disposal facility. Upon obtaining data results, the effectiveness of the remedial alternative will be evaluated. If significant residual soil contamination is still present, further remedial alternatives will be considered.

3.3.2 Soil Vapor Extraction System at PS-1

Overview

Soil vapor extraction (SVE), also known as "soil venting" or "vacuum extraction", is an in situ remedial technology that reduces concentrations of volatile organic compounds adsorbed to soil in the unsaturated (vadose) zone. In this technology, a vacuum is applied through wells near the source of contamination in the soil. Volatile compounds of the contaminant mass "evaporate" and the vapors are drawn toward the extraction wells. In this technology, a vacuum is applied to the contaminated soil through extraction wells that create a negative pressure gradient, which causes movement of vapors toward these wells. Volatile compounds in the vapor phase are readily removed from the subsurface through the extraction wells. The extracted vapors are then treated, as necessary, and discharged to the atmosphere. The increased airflow through the subsurface can also stimulate biodegradation of some of the contaminants. Wells may be either vertical or horizontal. In areas of high groundwater levels, water table depression pumps may be required to offset the effect of upwelling induced by the vacuum.

This technology has been proven effective in reducing concentrations of volatile organic compounds and certain semi-volatile organic compounds. SVE is generally more successful when applied to the lighter (more volatile) molecular weight compounds. Diesel fuel, heating oils, and kerosene, which are less volatile than gasoline and/or solvents, are not readily removed by SVE, nor are lubricating oils, which are non-volatile.

SVE is generally not appropriate for sites with a groundwater table located less than three feet below grade. Special considerations must be taken for sites with a groundwater table located less than 10 feet below the land surface because groundwater upwelling can occur within SVE wells under vacuum pressures, potentially occluding well screens and reducing or eliminating vacuum-induced soil vapor flow.

Design Procedures

The primary factors that determine the design of an SVE system include: 1) permeability of the soil; 2) soil structure and stratification; 3) soil moisture; and 4) depth to groundwater.

- The permeability of the soil affects the rate of air and vapor movement through the soil; the higher the permeability of the soil, the faster the movement and (ideally) the greater the amount of vapors that can be extracted.
- Soil structure and stratification are important to SVE effectiveness because they can affect how and where soil vapors will flow within the soil matrix under extraction conditions. Structural characteristics (e.g., layering, fractures) can result in preferential flow behavior that can lead to ineffective or significantly extended remedial times if they are positioned so that the induced air flow occurs outside the area of contamination.
- High moisture content in soils can reduce soil permeability and, consequently, the effectiveness of SVE by restricting the flow of air through soil pores. Fine-grained soils create a thicker capillary fringe than coarse-grained soils. SVE is generally not effective in treating soils below the top of the capillary fringe unless water table depression pumps are used to draw down the water table.

- In the vicinity of the extraction wells the water table responds to the vacuum by rising, or "upwelling", which can cause the well screen to become submerged thereby reducing airflow.

Pilot Study

Pilot studies are an essential part of the design phase. Data provided by pilot studies is necessary to properly design the full-scale SVE system. Pilot studies provide information on the concentration of volatile organic compounds that are likely to be extracted during the early stages of operation of the SVE system. A pilot test will be conducted for evaluating SVE effectiveness and design parameters for the Site. The pilot study will include a short-term extraction of soil vapors from multiple extraction wells (the primary SVE extraction well and two additional observation wells). Different extraction rates and wellhead vacuums will be applied to the extraction well to determine the radius of influence and optimal operating conditions. Vapor concentrations will also measured at two or more intervals during the pilot study to estimate initial vapor concentrations of a full-scale system. The vapor concentration, vapor extraction rate and vacuum data will also be used in the design process to select extraction and treatment equipment. In addition, the vent stack height of the SVE will be determined through the pilot study.

Design Radius of Influence (ROI) is the most important parameter to be considered in the design of an SVE system. The ROI is defined as the greatest distance from an extraction well at which a sufficient vacuum and vapor flow can be induced to adequately enhance volatilization and extraction of the contaminants in the soil. Where applicable, extraction wells should be placed so that the overlap in their radii of influence completely cover the area of contamination.

Surface seals might be included in an SVE system design to prevent surface water infiltration that can reduce air flow rates, reduce emissions of fugitive vapors, prevent vertical short-circuiting of air flow, or increase the design ROI. These results are accomplished because surface seals force fresh air to be drawn from a greater distance from the extraction well. If a surface seal is used, the lower pressure gradients result in decreased flow velocities. This condition may require a higher vacuum to be applied to the extraction well.

Soil Vapor Extraction Well

One vertical soil vapor extraction well will be installed on the Site using an six inch hollow stem auger. The well will be sited within the former underground injection well area (PS-1). The screen of the SVE well will be set within the vadose zone from twenty to forty feet below grade. The well will be constructed with 2 inch PVC 20 slot screen. A filtration media will be used at the screened section and a bentonite seal will be provided above the screened section two to three feet thick. The balance of the well will consist of riser and backfilled with grout.

SVES Piping

All associated piping, to the SVE system and from the extraction well will be constructed of two inch Schedule 40 PVC. Pressure connection and joints will be applied to all joints of the piping network. The extraction well will be piped to the recovery area utilizing schedule 40 PVC piping and connected to a regenerative blower. The recovery equipment will be housed within the vestibule within the eastern portion of the building.

Start-Up

The SVE system will be optimized to match the operational parameters calculated during the system design. After eight hours of operation, a stack effluent sample will be acquired to verify SVES emissions.

Pollution Control

Air emission rates will be calculated utilizing Site-specific data to determine if the unit is operating within the applicable SCGs for air stripper emission limits. If the emission levels tested during system start-up or during operation, exceed said limits, the air emissions will be treated with vapor phase granulated activated carbon filter pollution control device.

3.4 Solid Waste Management

3.4.1 Estimation of Contaminated Media Volume

The extent of contaminants at the Site pollution sources will present a limiting factor for determining the appropriate remedial alternative. Specifically, the estimated volume of contaminated media at each pollution source can be used as a determining factor for the feasibility of a remedial alternative. The following table provides an estimation of the volume of contaminated soil based on performance of the FRI at the Site pollution sources.

Pollution Source	Area	Depth	In-Place Estimated Volume of Contaminated Media
PS-1	50 ft^2	30 ft	Soil - 1,500 ft^3
PS-5	600 ft^2	12 ft	Soil – 6,000 ft^3
PS-7	230 ft^2	7 ft	Soil – 1,600 ft^3
PS-8	230 ft^2	6 ft	Soil – 1,400 ft^3

3.4.2 Transport and Disposal

The selection of the waste disposal facilities for the contaminated soil will be determined by the analysis of representative samples from each pollution source for waste classification prior to disposal. The two general types of waste classifications are hazardous and non-hazardous waste. The solid waste media from each pollution source that is classified as a hazardous F-waste will be handled pursuant to Title 6 NYCRR Part 371 and EPA 40 CFR 261 regulations, transported with waste manifests and disposed in accordance with Title 6 NYCRR Part 360 regulations. Solid waste classified as a hazardous waste shall be transported to and disposed of at the following disposal facility:

Horizon Environmental, Inc.
120 Route 155
Grandes-Piles (Champlain), Canada
USEPA ID Number NYR000078964

The solid waste media from each pollution source that is classified as a non-hazardous waste will be handled, transported with waste charters and disposed in accordance with Title 6 NYCRR Part 371 and EPA 40 CFR 261 Criteria. The following table presents the selected waste disposal facilities corresponding to the waste classification of the contaminated media. Solid waste classified as a non-hazardous waste shall be transported to and disposed of at the following disposal facility:

Soil Remediation of Philadelphia, Inc.
3201 South 61st Street
Philadelphia, Pennsylvania
Facility Permit Number 301220

4. HEALTH AND SAFETY PLAN

This Health and Safety Plan (HASP) describes the procedures to be followed in order to reduce employee exposure to potential health and safety hazards that may be present at the project site. The emergency response procedures necessary to respond to such hazards are also described within this HASP. All activities performed under this HASP comply with Occupational Safety and Health Administration (OSHA) Regulations 29 CFR Parts 1910, 1925 and 1926 as amended.

4.1 Purpose

This Health and Safety Plan is required according to OSHA 29 CFR 1910.120. The purpose of this HASP is to provide the contractor's field personnel, subcontractors, and other visitors with an understanding of the potential chemical and physical hazards that exist or may arise while the tasks of this project are being performed.

The primary objective is to ensure the well being of all field personnel and the community surrounding this site. In order to accomplish this, project staff and approved subcontractors shall acknowledge and adhere to the policies and procedures established herein. Accordingly, all personnel assigned to this project shall read this HASP and sign the Agreement and Acknowledgment Statement (Appendix) to certify that they have read, understood, and agree to abide by its provisions.

The contractor's personnel have the authority to stop work performed by our sub-contractors at this site if said work is not performed in accordance with the requirements of this HASP.

4.2 Contaminants of Concern

The following organic chemical analytes are present or have the potential to be present in the soil at the Site.

- 1,1,2,2-tetrachloroethane
- Vinyl Chloride

- Cis-1,2-dichloroethylene
- Trans-1,2-dichloroethylene
- Trichloroethylene
- Tetracholoroethene
- 1,1,1-trichloroethane
- 1,1,2-trichloroethane
- 1,1-dichloroethane
- 1,2-dichloroethane
- 1,1,1,2-tetrachloroethane
- Benzene

4.3 Amendments

This plan is based on an initial assessment of health and safety risks associated with the site. The plan will be updated as additional information is obtained regarding the nature and extent of on-site contamination and the associated health and safety risks. Any changes in the scope of work of this project and/or site conditions must be amended in writing and approved by the Regional Health and Safety Manager.

4.4 Key Personnel / Identification of Health & Safety Personnel

4.4.1 Key Personnel

A list of the pertinent personnel authorized to be present on site is as follows:

Title	Name	Telephone Number
Project Manager	Richard Parrish	(631) 269-8800
Field Operations Leader	Keith Franzen	(631) 269-8800
Site Health and Safety Officer	Kristin Scroope	(631) 269-8800
Quality Assurance Officer	Kevin Kleaka	(631) 269-8800
Site Contact	Richard Parrish	(631) 269-8800

State Agency Contact (NYSDEC)	Joe Jones	(518) 402-9621

4.5 Organizational Responsibility

4.5.1 Project Manager

The Project Manager will be responsible for implementing the project and obtaining any necessary personnel or resources for the completion of the project.

Specific duties will include:

- Coordinating the activities of all subcontractors, to include informing them of the required PPE and insuring their signature acknowledging this Site Safety Plan;
- Selecting a Site Health and Safety Officer and field personnel for the work to be undertaken on site;
- Ensuring that the tasks assigned are being completed as planned and on schedule;
- Providing authority and resources to ensure that the Site Health and Safety Officer is able to implement and manage safety procedures;
- Preparing reports and recommendations about the project to clients and affected personnel;
- Ensuring that all persons allowed to enter the site (i.e., EPA, contractors, state officials, visitors are made aware of the potential hazards associated with the substances known or suspected to be on site, and are knowledgeable as to the on-site copy of the specific site safety plan;
- Ensuring that the Site Health and Safety Officer is aware of all of the provisions of this site safety plan and is instructing all personnel on site about the safety practices and emergency procedures defined in the plan;
- Ensuring that the Site Health and Safety Officer is making an effort to monitor site safety, and has designated a Field Operations Leader to assist with the responsibility when necessary.

4.5.2 Field Operations Leader

The Field Operations Leader will be responsible for field operations and safety. Specific duties will include, but are not limited to:

- Managing field operations;
- Executing the work plan and schedule;
- Enforcing safety procedures;
- Coordinating with the Site Health and Safety Officer in determining protection levels;
- Enforcing site control;
- Documenting field activities, including sample collection;
- Serving as liaison with public officials where there is no Public Affairs official designated.

In the event that the Project Manager and the Site Health and Safety Officer are not on site, the Project Field Manger will assume all responsibility of the Site Health and Safety Officer.

4.5.3 Site Health and Safety Officer

The Site Health and Safety Officer shall be responsible for the implementation of the site safety plan on site. Specific duties will include:

- Monitoring the compliance of field personnel for the routine and proper use of the PPE that has been designated for each task;
- Routinely inspecting PPE and clothing to ensure that it is in good condition and is being stored and maintained properly;
- Stopping work on the site or changing work assignments or procedures if any operation threatens the health and safety of workers or the public;
- Monitoring personnel who enter and exit the site and all controlled access points.
- Reporting any signs of fatigue, work-related stress, or chemical exposures to the Project Manager;
- Dismissing field personnel from the site if their actions or negligence endangers themselves, co-workers, or the public, and reporting the same to the Project Manager;
- Reporting any accidents or violations of the site safety plan to the Project Manager and documenting the same for the project in the records;
- Knowing emergency procedures, evacuation routes, and the telephone numbers of the ambulance, local hospital, poison control center, fire and police departments;
- Ensuring that all project-relating personnel have signed the personnel agreement and acknowledgments form contained in this site safety plan;

- Coordinate upgrading and downgrading PPE as necessary due to changes in exposure levels, monitoring results, weather, and other site conditions;
- Perform air monitoring with approved instruments in accordance with requirements stated in this Site Safety Plan.

4.5.4 Quality Assurance Officer

The Quality Assurance Officer (QAO) is an employee of the same consulting firm generating the work plan and acts in conjunction with the project manager to develop a site-specific quality assurance plan. The QAO must not have another position on the project, such as a project or task manager, that involves project productivity or profitability as job-performance criteria.

The QAO will assist the project manager in the development of the sampling and analytical portion of the Quality Assurance Project Plan. The QAO or his/her designee shall conduct periodic field and sampling audits, interface with the analytical laboratory to make requests and resolve problems, interface with the data validator and develop a project-specific data usability report.

4.5.5 Field Personnel

All field personnel shall be responsible for acting in compliance with all safety procedures outlined in the Site Safety Plan. Any hazardous work situations or procedures should be reported to the Site Safety Officer so that corrective steps can be taken.

4.6 Task / Operation Health and Safety Risk Analysis

The field tasks covered by the HASP may include well installation, development, gauging, and bailing; soil & groundwater handling/sampling; and confined space (excavation) entry and job task hazards. The following hazards may be encountered:

4.7 Oxygen Deficiency

Oxygen deficiency may result from the displacement of oxygen by another gas, or the consumption of oxygen by a chemical reaction.

4.7.1 Organic Vapors

The inhalation of volatile organic vapors during all operations can pose a potential health hazard. Hazard reduction procedures include monitoring the ambient air with a flame ionization detector (FID) and the use of appropriate Personal Protective Equipment (PPE). Workers should stand upwind of the source of contamination whenever possible.

4.8 Explosion and Fire

The following are possible fire and explosion hazards that may be encountered on the job site and fire preventive measures to take.

4.8.1 Flammable Vapors

The presence of flammable vapors can pose a potential fire and health hazard. Hazard reduction procedures include monitoring the ambient air with an oxygen/LEL meter (combustible gas indicator). If the LEL reading exceeds 20%, leave the site immediately and contact the fire department.

4.8.2 High Oxygen Levels

Atmospheres that contain a level of oxygen greater than 23% pose an extreme fire hazard (the usual ambient oxygen level is approximately 20.5%). This hazard can be compounded by the fact that vapors associated with this site are highly flammable. All personnel encountering atmospheres that contain a level of oxygen greater than 23% must evacuate the site immediately and must notify the Fire Department. If the oxygen level is less than 19.5%, do not enter the space without level B PPE.

4.8.3 Fire Prevention

- During equipment operation, periodic vapor concentration measurements should be taken with an explosimeter or combustimeter. If at any time the vapor concentrations exceed 20% of the LEL, then the Site Safety Officer or designated field worker should immediately shut down all operations.
- Only approved safety cans will be used to transport and store flammable liquids.
- All gasoline and diesel-driven engines requiring refueling must be shut down and allowed to cool prior to filling.
- Smoking is not allowed during any operations within the work area in which petroleum products or solvents in free-floating, dissolved, or vapor forms, or other flammable liquids may be present.
- No open flame or spark is allowed in any area containing petroleum products or other flammable liquids.

4.9 Operational Safety Hazards

4.9.1 Heavy Machinery / Equipment

All site employees must remain aware of those site activities that involve the use of heavy equipment and machinery. Respiratory protection and protective eyewear may be worn frequently during site activities. This protective equipment significantly reduces peripheral vision of the wearer. Therefore, it is essential that all employees at the site exercise extreme caution during operation of equipment and machinery to avoid physical injury to themselves or others.

4.9.2 Vehicular Traffic

All employees will be required to wear a fluorescent safety vest at all times while on site. In addition, supplemental traffic safety equipment use can be exercised when warranted by specific task. Supplemental equipment can be items such as cones, flags, barricades, and/or caution tape.

4.10 Noise Hazards

Requirements set forth in the OSHA Hearing Conservation Regulation (OSHA 1910.95) shall be adhered to during work on-site. Hearing protection shall be provided to the employees where sound pressure levels exceed 85 dB. Hearing protection shall be worn where sound pressure levels in areas and/or on equipment exceeds 90 dB. Typical drilling operations have been monitored with a sound level meter and indicate that hearing protection is required for all personnel while engaged in this action.

4.11 Well Installation, Development, Gauging and Bailing Hazards

Skin and eye contact with contaminated groundwater and/or soil may occur during these tasks. Nitrile gloves and approved safety glasses must be worn.

4.12 Soil & Groundwater Sampling Hazards

Skin and eye contact with contaminated groundwater and/or soil may occur during these tasks. Nitrile gloves and approved safety glasses must be worn.

4.13 Sample Preservation Hazards

When hydrochloric acid is used, skin and eye contact can occur. This hazard can be reduced with the use of Nitrile gloves and safety glasses. Safety goggles should be worn if there is a potential for a splash hazard.

4.14 Equipment Cleaning Hazards

Skin and eye contact with methanol, "Alconox", or other cleaning substances can occur while decontaminating equipment. This hazard can be reduced with the use of Nitrile gloves and safety glasses.

4.15 Heat Exposure Hazards

Since climatic changes cannot be avoided, work schedules will be adjusted to provide time intervals for intake of juices, juice products, and water in an area free from contamination and in quantities appropriate for fluid replacement to prevent heat stress conditions from occurring.

4.15.1 Types of Heat Stress

Heat stress may occur even in moderate temperature areas and may present any or all of the following:

4.15.1.1 Heat Rash

Result of continuous exposure to heat, humid air, and chafing clothes. Heat rash is uncomfortable and decreases the ability to tolerate heat.

4.15.1.2 Heat Cramps

Result of the inadequate replacement of body electrolytes lost through perspiration. Signs include severe spasms and pain in the extremities and abdomen.

4.15.1.3 Heat Exhaustion

Result of increased stress on the vital organs of the body in the effort to meet the body's cooling demands. Signs include shallow breathing; pale, cool, moist skin; profuse sweating; and dizziness.

4.15.1.4 Heat Stroke

Result of overworked cooling system. Heat stroke is the most serious form of heat stress. Body surfaces must be cooled and medical help must be obtained immediately to prevent severe injury and/or death. Signs include red, hot, dry skin, absence of perspiration, nausea, dizziness and confusion, strong, rapid pulse, coma, and death.

4.15.2 Heat Stress Prevention

A. Replace body fluids (water and electrolytes) lost through perspiration. Solutions may include a 0.1% salt and water solution or commercial mixes such as "Gatorade". Employees must be encouraged to drink more than the amount required in order to satisfy thirst.

B. Use cooling devices to aid the natural body ventilation. Cooling occurs through evaporation of perspiration and limited body contact with heat-absorbing protective clothing. Utilize fans and air conditioners to assist in evaporation. Long, cotton underwear is suggested to absorb perspiration and limit any contact with heat-absorbing protective clothing (i.e., coated Tyvek suits).

C. Conduct non-emergency response activities in the early morning or evening during very hot weather.

D. Provide shelter against heat and direct sunlight to protect personnel. Take breaks in shaded areas.

E. Rotate workers utilizing protective clothing during hot weather.

F. Establish a work regime that will provide adequate rest periods, with personnel working in shifts.

4.16 Cold Exposure Hazards

Work schedules will be adjusted to provide sufficient rest periods in a heated area for warming up during operations conducted in cold weather. Also, thermal protective clothing such as wind and/or moisture resistant outerwear is recommended to be worn.

If work is performed continuously in the cold at or below -7 °C (20 °F), including wind chill factor, heated warming shelters (tents, cabins, company vehicles, rest rooms, etc.) shall be made available nearby and the worker should be encouraged to use these shelters at regular intervals, the frequency depending on the severity of the environmental exposure. The onset of heavy shivering, frostnip, the feeling of excessive fatigue, drowsiness, irritability, or euphoria, are indications for immediate return to the shelter. When entering the heated shelter, the outer layer of clothing shall be removed and the remainder of the clothing loosened to permit sweat evaporation. A change of dry work clothing shall be provided as necessary to prevent workers from returning to their work with wet clothing.

Dehydration, or the loss of body fluids, occurs in the cold environment and may increase the susceptibility of the worker to cold injury due to a significant change in blood flow to the extremities. Warm sweet drinks and soups should be provided at the work site to provide caloric intake and fluid volume. The intake of coffee should be limited because of a diuretic and circulatory effect (Adapted from TLV's and Biological Exposure Indices 1988-1989, ACGIH).

4.17 Personnel Training

All personnel assigned to the project site should have completed an initial 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training course, health and safety training course, and a current eight-hour refresher course (as required annually after initial 40-hour training completion). Personnel assigned to the site should also have a minimum of three days of field experience under direct supervision of a trained, experienced person.

4.18 Site Supervisors Training

On-site managers and supervisors directly responsible for employees engaged in hazardous waste operations have received an additional eight hours of supervisory training. These training

requirements comply with the OSHA Hazardous Waste Operations and Emergency Response Regulation, 29 CFR 1910.120.

The project Quality Assurance Officer (QAO) must have a minimum of a bachelor's degree in chemistry or natural science with a minimum of 20 hours in chemistry. The QAO must be proficient in analytical methodology, data interpretation and validation, the development of sampling plans, quality control procedures, and auditing techniques. Because on-site work may be necessary, verification or completion of the 40-hour OSHA safety training course and 8-hour refresher is required.

4.19 On-Site Training Program

The site safety supervisor will conduct an on-site training meeting for all personnel and observers who will be involved in the various project operations before they are permitted to participate in any site activities. Training meetings will be provided routinely for any new project personnel. This program will cover specific health and safety equipment and protocols and potential problems inherent to each project operation. No one will be allowed to work on the project site in restricted areas (e.g., waste excavation / handling / processing) unless he/she has attended a project training meeting.

The HASP will be reviewed during the meeting. Copies of the HASP will be distributed to all attending and will be kept available for reference in the field office for the project duration.

4.20 Personal Protective Equipment

The purpose of personal protective clothing and equipment (PPE) is to shield or isolate individuals from the chemical, physical, and biological hazards that may be encountered on-site when engineering and other controls are not feasible or cannot provide adequate protection. Careful selection and use of adequate PPE should protect the health of all on-site workers. No single combination of PPE is capable of protecting against all hazards. Therefore, PPE should be

used in conjunction with, not in place of, other protective methods, such as engineering controls and safe work practices.

The following is a breakdown of the types of protective clothing and equipment to be used during the site activities. Personal protective equipment is in conformance with EPA criteria for Level B, C, and D protection.

4.21 Levels of Protection

Site Specific chemicals of Concern are Benzene, MTBE, Tetrachloroethene, Toluene, Trans 1,2 Dichloroethane, Trichloroethene, Xylene(s), and Vinyl Chloride. These chemicals are of moderate to low hazard. Therefore, modified level D personal protective equipment will be required at all times when on site.

The Site Safety Officer will determine whether or not a level of protection can be upgraded or downgraded. Changes in the level of protection will be recorded in the dedicated site logbook along with the rationale for the changes.

4.21.1 Level D Personal Protective Equipment

All initial site access and activities will be done in Level D attire. Level D protection is sufficient under conditions where no contaminants are present or those activities that do not pose a potential threat of unexpected inhalation of or contact with hazardous levels of any substances. Typical Level D activities may include sediment, logging and groundwater sampling, as well as surficial site surveys.

Level C protection equipment should be readily available at all times. Consistent with OSHA training, prior to donning Level C, oxygen percent must be continuously monitored.

- Hard hat
- Safety glasses

- Steel toe and shank boots
- Fluorescent vest
- Splash goggles
- Hearing protection (as appropriate)

4.21.2 Modified Level D Personal Protective Equipment

- Hard hat
- Safety glasses
- Steel toe and shank boots
- Fluorescent vest
- Nitrile "N-Dex" inner gloves
- Latex outer boots (chemical resistant)
- Splash goggles
- Polyethylene coated Tyvek suit
- Hearing protection (as appropriate)

4.21.3 Level C Personal Protective Equipment

Level C protection, as described in this plan, will be available at a minimum for those activities that involve surface and subsurface soil (strata disturbance such as well installation, and all subsurface media sampling activities such as split-spoon sampling and borings).

- Buddy system required at all times
- Full-face respirator with NIOSH approved OV/AG/HEPA combination cartridges (MSA GMC-H)
- Saranex coated Tyvek Suit
- Inner Nitrile "N-Dex" gloves
- Outer Nitrile (NBR) gloves
- Steel toe and shank boots

- Outer boots (chemical resistant)
- Hard hat
- Hearing protection (as appropriate)

4.21.4 Level B Personal Protective Equipment

Some activities may require Level B protection. In atmospheres potentially containing toluene and xylenes, the protective ensemble should include chemical resistant clothing since the two compounds have skin absorption potential.

Regional Health and Safety representatives must be on site upon start-up of <u>any</u> project requiring level B protection. This should be understood to include subcontractors conducting Level B activity.

- Buddy system required at all times
- Supplied air respirator or SCBA
- Saranex coated Tyvek Suit
- Inner Nitrile "N-Dex" gloves
- Outer Nitrile (NBR) gloves
- Steel toe and shank boots
- Outer boots (chemical resistant)
- Hard hat
- Hearing protection (as appropriate)

4.22 Personal Use Factors and Equipment Limitations

Prohibitive or precautionary measures should be taken as necessary to prevent workers from jeopardizing safety during equipment use.

All respiratory protective equipment used will be approved by NIOSH/MSHA. Respirator cartridges will be changed once per day at a minimum. This can be accomplished at the end of

the workday during respirator decontamination. If odor breakthrough is detected while wearing the respirator or if breathing becomes difficult, change cartridges immediately.

When utilizing protective garments such as Tyvek suits, gloves, and booties, all seams between protective items will be sealed with duct tape.

Contact with contaminated surfaces, or surfaces suspected of being contaminated, should be avoided. This includes walking through, kneeling in, or placing equipment in puddles, mud, discolored surfaces, or on drums and other containers.

Eating, smoking, drinking, and/or the application of cosmetics in the immediate work area is prohibited. Ingestion of contaminants or absorption of contaminants into the skin may occur.

The use of contact lenses on the job site is strongly advised against. Contact lenses may trap contaminants and/or particulate between the lens and eye, causing irritation. However, when glasses are not available, contact lenses are preferred over faulty vision. When contact lenses are worn, safety glasses and/or goggles must be worn at all times while on the job site. Wearing contact lenses with a respirator in a contaminated atmosphere is prohibited under 29 CFR §1910.134(e)(5)(iii).

4.23 Medical Surveillance Requirements

A baseline physical examination should be conducted on all employees before they are permitted to engage in sampling, cleanup, and remedial action work. A complete medical survey should be completed on each employee upon start of employment. Yearly re-examination should be performed to update information on employee health status. Additional re-evaluation will be considered in the event of a chemical overexposure. These medical surveillance requirements shall comply with OSHA regulations as defined in 29 CFR 1910.120.

4.24 Periodic Monitoring

4.24.1 Heat Stress Monitoring

Heat stress may occur even in moderate temperatures and may present heat rash, heat cramps, heat exhaustion, and/or heat stroke.

Monitoring procedures should be implemented to prevent heat stress arising from environmental conditions, use of PPE, and/or intensity of workload.

For temperatures above 70 °F, the following regime shall be followed for workers wearing permeable coveralls:

Adjusted Temperature	Normal Ensemble	Impermeable Ensemble
90 °F or above	After 45 min. of work	After 15 min. of work
87.5 to 90 °F	After 60 min. of work	After 30 min. of work
82.5 to 87.5 °F	After 90 min. of work	After 60 min. of work
77.5 to 82.5 °F	After 120 min. of work	After 90 min. of work
72.5 to 77.5 °F	After 150 min. of work	After 120 min. of work

Workers wearing semi-permeable or impermeable encapsulating protective clothing should be monitored for heart rate and temperature when the temperature in the work area is above 70 °F. In order to monitor the worker, measure:

A. Heart rate - Count the radial pulse during a 30-second period as early as possible in the rest period. If the heart rate exceeds 110 beats per minute at the beginning of the rest period, shorten the next work cycle by one-third.

B. Oral temperature - Use a clinical thermometer or similar device to measure the oral temperature at the end of the work period (before drinking). If oral temperature exceeds 99.6 °F, shorten the next work cycle by one-third.

Do not permit a worker to wear a semi-permeable or impermeable garment if the core body temperature exceeds 100.6 °F.

Workers shall not be required to continue working if they feel any of the symptoms of heat stress. Rest periods should be a minimum of 15 minutes. Length of rest period should be extended as appropriate or as recommended by the Site Safety Officer or alternate.

4.25 Frequency and Types of Air Monitoring / Sampling

4.26 Site Air Monitoring and Sampling Program

During drilling, excavation, and sampling, the air in work areas will be sampled periodically for the presence of contaminants. Levels of organic vapors in the ambient air will be monitored during the fieldwork to ensure that appropriate levels of respiratory protection are employed at all times.

Site Specific chemicals of Concern are Benzene, Tetrachloroethene, Toluene, Trans 1,2 Dichloroethane, Trichloroethene, Xylene(s), and Vinyl Chloride. These chemicals are of moderate to low hazard.

4.26.1 Volatile Organic Compounds

A member of the field investigation team will use a real-time, organic vapor instrument to monitor the concentration of volatile organic compounds (VOCs) in the air in the work areas, and will determine when changes in levels of respiratory protection required are necessary. No changes in the levels of respiratory protection specified above will be made without the approval of the site safety supervisor and the project team leader.

4.26.2 Detection Equipment

During the investigation of the project site, the site workers will use a photoionization detector (PID) to monitor levels of organic vapor in the air and verify that they are within the safety guidelines established by the preliminary assessment of the risks associated with site investigations. The measured readings will be recorded in a vapor-monitoring sheet (See Appendix F). The following information will be recorded in the field notebook:

- Instrument type
- Control settings
- Reading locations
- Atmospheric conditions

All air monitoring results should be logged in the Site Safety Log.

4.26.2.1 Ionization Detector Response

Flame Ionization Detector (FID)	
Concentrations (in ppm)	**Level of PPE Required**
0.0 to 5.0	Level D
5.0 to 250.0	Level C
250.0 to 750.0	Level B
Above 750.0	Immediately withdraw from the area

4.27 Site Control Measures

Site personnel will employ the buddy system when working under certain circumstances, such as enclosed spacing. Under the buddy system, each site worker is responsible for monitoring the well being of another worker. No one will work alone when the buddy system is implemented. At no time will fewer than two employees be present at the site if activities are underway.

4.28 Site Communications Plan

Mobile telephone and/or two-way radios will be used to communicate between the work parties on the site. The following standard hand signals will be used in case of failure of radio communication:

Hands on top of head:	Need assistance
Thumbs up:	OK, I am alright, I understand
Thumbs down:	No, Negative

Personnel in the Contaminated Zone should remain in constant radio communication or within sight of the project team leader. Any failure of radio communication will require the team leader to evaluate whether personnel should leave the zone.

4.29 Work Zone Definition

Work and support areas shall be established based on ambient air data and proposed work sites. They shall be established in order to contain contamination within the smallest areas possible and shall ensure that each employee has the proper PPE for the area or zone in which work is to be performed.

4.29.1 Exclusion Zone (EZ)

It is within this zone that the work activities are performed. No one shall enter this zone unless the appropriate PPE is donned.

4.29.2 Contaminant Reduction Zone (CRZ)

It is within this zone that the decontamination process is undertaken. Personnel and their equipment must be adequately decontaminated before leaving this zone for the support zone. This zone will be set up between the EZ and a well-ventilated open area.

4.29.3 Support Zone (SZ)

The support zone is considered to be uncontaminated; as such, protective clothing and equipment are not required but should be available for use in emergencies. All equipment and materials are stored and maintained within this zone. Protective clothing is put on in the SZ before entering the CRZ. The SZ will be established in a safe environment.

4.30 Safe Work Practices

4.30.1 Safety Practices / Standing Orders

The following are important safety precautions that will be enforced during work activities.

1. Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in any area designated as contaminated.
2. Hands and face must be thoroughly washed upon leaving the work area and before eating, drinking, or any other activity.
3. Whenever decontamination procedures for outer garments are in effect, the entire body should be thoroughly washed as soon as possible after the protective garments are removed.
4. No excessive facial hair that interferes with the effectiveness of a respirator will be permitted on personnel required to wear respiratory protection equipment. The respirator must seal against the face so that the wearer receives air only through the air purifying cartridges attached to the respirator. Fit testing shall be performed prior to respirator use to ensure the wearer obtains a proper seal.

5. Contact with potentially contaminated surfaces should be avoided whenever possible. One should not walk through puddles; kneel on the ground; lean, sit, or place equipment on drums, containers, vehicles, or the ground.
6. Medicine and alcohol can potentate the effect from exposure to certain compounds. Prescribed drugs and alcoholic beverages should not be consumed by personnel involved in the project.
7. Personnel and equipment in the work areas should be minimized, consistent with effective site operations.
8. Work areas for various operational activities should be established.
9. Procedures for leaving the work area must be planned and implemented prior to going to the site. Work areas and decontamination procedures must be established on the basis of prevailing site conditions.
10. Respirators will be issued for the exclusive use of one worker and will be cleaned and disinfected after each use.
11. Safety gloves and boots shall be taped to the disposable, chemical-protective suits as necessary.
12. All unsafe equipment left unattended will be identified by a "DANGER, DO NOT OPERATE" tag.
13. Noise mufflers or earplugs may be required for all site personnel working around heavy equipment. This requirement will be at the discretion of the Site Safety Officer. Disposable, form-fitting plugs are preferred.
14. Cartridges for air-purifying respirators in use will be changed daily at a minimum.

4.31 Decontamination Plan

Personnel involved in work activities at the site may be exposed to compounds in a number of ways, despite the most stringent protective procedures. Site personnel may come in contact with vapors, gases, mists, or particulates in the air, or other site media while performing site duties. Use of monitoring instruments and site equipment can also result in exposure and transmittal of hazardous substances.

In general, decontamination involves scrubbing with a detergent water solution followed by clean water rinses. All disposable items shall be disposed of in a dry container. Certain parts of contaminated respirators, such as harness assemblies and leather or cloth components, are difficult to decontaminate. If grossly contaminated, they may have to be discarded. Rubber components can be soaked in detergent and water and scrubbed with a brush. In addition to being contaminated, all respirators, non-disposable protective clothing, and other personal articles must be sanitized or replaced before they can be used again if they become soiled from exhalation, body oils, and perspiration. The manufacturer's instructions should be followed in sanitizing the respirator masks.

The Site Safety Officer will be responsible for the proper maintenance, decontamination, and sanitizing of all respirator equipment.

The decontamination zone layout and procedures should match the prescribed levels of personal protection.

The following procedures have been established to provide site personnel with minimum guidelines for proper decontamination. Personnel leaving the point of operations designated as the EZ must follow these minimum procedures. The decontamination process shall take place at a reasonable distance away from any area of potential contamination.

4.32 Minimum Decontamination Procedure

Personnel leaving the point of operations should wash outer gloves and boots. At a minimum, the outer boots shall be removed first and stored in an appropriate area or disposed of properly. Outer boots must be properly washed where gross contamination is evident. Personnel shall then remove and dispose of the Tyvek suits. Personnel should remove the Tyvek suits so that the inner clothing does not come in contact with any contaminated surfaces. After Tyvek removal, personnel shall remove and discard outer Nitrile gloves. Personnel shall then remove the respirator, where applicable. Respirators shall be disinfected between uses with towelettes or other sanitary methods. Potable water, at a minimum, will be present so that site personnel can thoroughly wash hands and face after leaving the point of operations.

Portable wash stations shall be utilized for easy and efficient access. The wash station shall consist of a potable water supply, hand soap, and clean towels. Portable sprayer units filled with Alconox solution and potable water should also be available to wash and rinse off grossly contaminated boots, gloves, and equipment. The Site Safety Officer will monitor decontamination procedures to ensure their effectiveness. Modifications of the decontamination procedure may be necessary as determined by the Site Safety Officer's observations.

4.33 Standard Decontamination Procedure

The following decontamination procedures should be implemented during site operations for the appropriate level of protection.

4.33.1 Level B

Segregated equipment drop	Deposit equipment (tools, sampling devices, notes, monitoring instruments, radios, etc.) used on the site onto plastic drop cloths.
Boot covers and glove wash	Outer boots and outer gloves should be scrubbed with a decontamination solution of detergent and water or replaced.
Rinse off boot covers and gloves	Decontamination solution should be rinsed off boot covers and gloves using generous amounts of water. Repeat as many times as necessary.
Tape removal	Remove tape from around boots and gloves and placé into container with plastic liner.
Boot cover removal	Remove disposable boot covers and place into container with plastic liner.
Outer glove removal	Remove outer gloves and deposit in container with plastic liner.
Suit / safety boot wash	Completely wash splash suit, SCBA, gloves, and safety boots. Care should be exercised that no water is allowed into the SCBA regulator. It is suggested that the SCBA regulator be wrapped in plastic.

Suit / safety boot rinse	Thoroughly rinse off all decontamination solution from protective clothing.
Tank or canister changes	This is the last step in the decontamination procedure for those workers wishing to change air tanks and return to the EZ. The worker's air tank or cartridge is exchanged, new outer glove and boot covers are donned, and joints taped.
Removal of safety boots	Remove safety boots and deposit in container with a plastic liner.
SCBA backpack removal	Without removing the face piece, the SCBA backpack should be removed and placed on a table. The face piece should then be disconnected from the remaining SCBA unit and then proceed to the next station.
Splash suit removal	With care, remove the splash suit. The exterior of the splash suit should not come in contact with any inner layers of clothing.
Inner glove wash	The inner gloves should be washed with a mild decontamination solution (detergent / water).
Inner glove rinse	Generously rinse the inner gloves with water.
Face piece removal	Without touching the face with gloves, remove the face piece. The face piece should be deposited into a container that has a plastic liner.
Inner glove removal	Remove the inner glove and deposit into a container that has a plastic liner.
Field wash	Wash hands and face thoroughly. If highly toxic, skin corrosive, or skin absorbent materials are known or suspected to be present, a shower should be taken.

4.33.2 Level C and Level D

The decontamination procedure for Level C and Level D personal protection will employ applicable steps detailed in the Level B decontamination process.

4.34 Sampling Equipment and Sample Container Decontamination

All non-disposable sampling equipment will be decontaminated with an Alconox / water solution followed by a clean water rinse. As an added precaution against cross-contamination, all non-disposable sampling equipment will be rinsed with distilled water. All disposable sampling equipment will be properly disposed of in dry containers.

Before leaving the site, all sample containers will be thoroughly decontaminated using a detergent and water solution followed by a clean water rinse. The decontamination procedure should include a complete scrubbing of the container's surface to remove possible contamination. Care must be exercised to prevent damage to sample container identification labels.

4.35 Emergency Response / Contingency Plan

In order to properly prepare for emergencies, personal protective equipment (PPE) will be worn by site workers, and first aid equipment will be kept at the site. Material Safety Data Sheets (MSDS) will be maintained for all contaminants that workers may be exposed to.

4.36 Contact Information

In the event of an accident or emergency situation, emergency procedures will be executed. Said procedures can and will be executed by the first person to observe an accident or emergency situation. The Project Field Manager will be notified about the situation immediately after emergency procedures are implemented.

4.36.1 Pertinent Personnel Authorized to be Present On-Site

Title	Telephone Number	Name
Project Manager	631-269-8800	Richard Parrish
Field Operations Leader	631-269-8800	Keith Franzen
Site Health and Safety Officer	631-269-8800	Kristin Scroope
Quality Assurance Officer	631-269-8800	Kevin Kleaka
Site Contact	631-269-8800	Richard Parrish
State Agency Contact (NYS DEC)	518-457-0639	Joe Jones

4.36.2 Emergency Contacts

Emergency:	911	
Ambulance:	516-572-6655	Nassau County Medical Center
Hospital:	516-572-0123	Nassau County Medical Center
Local Police Precinct:	516-573-5275	Westbury Police Dept.
State Police:	516-756-3300	New York State Police Department
Fire Department:	516-921-0000	Westbury Fire Dept.
Chemtrec:	800-424-9300	
Poison Control Center:	800-336-6997	
National Response Center:	800-424-8802	
US EPA (24-hour hotline):	800-424-9346	

Directions to Nearest Hospital From Project Site:

Take Garden Street south and turn left onto Grand Blvd. Continue east on Grand Blvd. and turn right onto Carman Ave. Travel approximately two miles south on Carman Ave. and the hospital will be on the left immediately after the Nassau County Jail.

4.36.3 Utility Emergencies / Initiating Subsurface Investigation Work

Impact Environmental Consulting, Inc. ("Impact") representatives are responsible for contacting appropriate agencies prior to conducting on-site activities when applicable.

Gas Company:	718-643-4050	Brooklyn Union Gas
Telephone Company:	516-661-6000	Bell Atlantic
Electric Company:	516-222-7700	Marketspan

4.37 Contingency / Evacuation Plan

It may be possible that a site emergency could necessitate the evacuation of all personnel from the site. If such a situation develops, an audible alarm shall be given for site evacuation (consisting of an air horn). Personnel shall evacuate the site in a calm and controlled fashion and regroup at a predetermined location. The route of evacuation will be dependent on wind direction, severity, type of incident, etc.

The site must not be re-entered until back-up help, monitoring equipment, and/or personal protective equipment are on hand and the appropriate regulatory agencies have been notified.

4.38 Emergency Medical Treatment Procedures

All injuries, no matter how slight, will be reported to the site safety supervisor immediately. The safety supervisor will complete an accident report for all incidents (Appendix B).

Some injuries, such as severe lacerations or burns, may require immediate treatment. Unless required due to immediate danger, seriously injured persons should not be moved without direction from attending medical personnel.

4.38.1 Standard Procedures for Injury

1. Notify the Site Safety Officer, Project Manager, and the Regional Safety Director of all accidents, incidents, and near emergency situations.
2. If the injury is minor, trained personnel should proceed to administer appropriate first aid.
3. Telephone for ambulance/medical assistance if necessary. Whenever possible, notify the receiving hospital of the nature of physical injury or chemical overexposure. If no phone is available, transport the person to the nearest hospital. Refer to Appendix for map to hospital.
4. When transporting an injured person to a hospital, bring this Health and Safety Plan with the attached MSDS to assist medical personnel with diagnosis and treatment.

4.38.2 Chemical Overexposure

In all cases of chemical overexposure, follow standard procedures as outlined below for poison management, first aid, and, if applicable, cardiopulmonary resuscitation. Different routes of exposure and their respective first aid/poison management procedures are outlined below.

Ingestion	Do not induce vomiting unless prompted by a health professional. Transport person to nearest hospital immediately.
Inhalation / Confined Space	Do not enter a confined space to rescue someone who has been overcome unless properly equipped and a standby person present.
Inhalation / Other	Move the person from the contaminated environment. Initiate CPR if necessary. Call or have someone call for medical assistance. Refer to MSDS for additional specific information. If necessary, transport the victim to the nearest hospital as soon as possible.
Skin Contact / Non-Caustic	Wash off skin with a large amount of water immediately. Remove any affected clothing and rewash skin using soap, if

Contaminant (Petroleum, Gasoline, etc.)	available. Transport person to a medical facility if necessary.
Skin Contact / Corrosive Contaminant (Acids, Hydrogen Peroxide, etc.)	Wash off skin with a large amount of water immediately. Remove any affected clothing and rewash skin with water. Transport person to a medical facility if necessary.
Eyes	Hold eyelids open and rinse the eyes immediately with large amounts of water for 15 minutes. Never permit the eyes to be rubbed. Transport person to a medical facility as soon as possible.

4.39 First Aid for Injuries Incurred During Field Work

A first aid kit and an emergency eyewash will be available on-site. Field crews, when performing field operations, will carry portable first aid kits that include emergency eye wash stations.

4.39.1 First Aid Equipment List

The first aid kit(s) kept at the site will consist of a weatherproof container with individually sealed packages for each type of item.

The kit will include at least the following items:

- Gauze roller bandages, 1-inch and 2-inch
- Gauze compress bandages, 4-inch
- Gauze pads, 2-inch
- Adhesive tape, 1-inch
- Bandage, 1-inch
- Butterfly bandages

- Triangular bandages, 40-inch
- Ampules of ammonia inhalants
- Antiseptic applicators or swabs
- Burn dressing and sterilized towels
- Surgical scissors
- Eye dressing
- Portable emergency eye wash
- Emergency oxygen supply
- Alcohol
- Hydrogen peroxide
- Clinical grade thermometer
- Tourniquet

4.39.2 Other Emergency Equipment

One portable fire extinguisher with a rating (ratio) of 20-pound A/B/C and one portable fire extinguisher with a rating of 2A will be conspicuously and centrally located between the restricted and non-restricted zones. In addition, similar extinguishers of the same size and class will be located in the site office trailer so that maximum travel distance to the nearest unit shall not exceed 50 feet. Portable extinguishers will be properly tagged with inspection dates and maintained in accordance with standard maintenance procedures for portable fire extinguishers. Field personnel will be trained in fire extinguisher use before field operations begin.

An emergency at any part of the site, such as fire or chemical release, might require that some appropriately trained site workers direct traffic on or near the site.
The following safety equipment to be used for traffic should be kept readily available on site in the field office:

- reflective/fluorescent vests
- flares

- traffic cones (and flags, or the equivalent, as needed)
- hazard tape (barricades as needed)
- working flashlights

4.40 Record of Injuries Incurred On-Site

4.40.1 Occupational Injuries and Illnesses Form (OSHA 200)

All occupational injuries and illnesses that are required to be recorded under the Occupational Safety and Health Act will be registered on OSHA Form 200 (see Appendix C). The site safety supervisor will record occupational injuries and illnesses within 48 hours of occurrence, as required by statute.

4.40.2 Employer's First Report of Injury

The site safety supervisor for all accidents involving work injury at the site will complete this form (Appendix D). Follow-up procedures will include investigation of each accident or near miss by the safety supervisor to assure that no similar accidents occur in the future.

4.41 Confined Space Entry Procedures

Excavation pits, storage tanks, soil trenches, subsurface vaults, basements, and sheds are examples of confined spaces. Confined spaces can be identified as an area having one of the following characteristics:

- Limited access and egress
- Unfavorable for natural ventilation
- Not designed for continuous human occupancy

Organic and/or combustible vapors may be trapped in confined spaces, resulting in lack of oxygen (anoxia) and/or overexposure to vapors. When site work takes place in a confined space, the air must be monitored for oxygen level, flammable vapors, and toxic vapors. The following air monitoring procedures must be followed before entering a confined space.

4.42 Oxygen Level

Monitor for percent oxygen with an oxygen/LEL meter (e.g., CGI) to ensure an oxygen level between 19.5 and 23%. Because of the high vapor density of the contaminants associated with this site, there is a high probability that vapors in the enclosed spaces or vaults will replace any oxygen that is present, even if the space is open to the air. Therefore, oxygen level monitoring will be done at the top, middle, and bottom of the enclosed space to determine if there is a minimum acceptable oxygen level of 19.5% prior to entry. The oxygen/LEL meter is factory-set to sound an alarm at levels less than 19.5% oxygen. If oxygen is less than 19.5% or greater than 23%, do not enter the space.

4.43 Explosive Vapors

Monitor the percentage of the Lower Explosive Limit (LEL) with an oxygen/LEL meter to determine whether vapor concentrations within the confined space are within the flammable range. If LEL readings exceed 10%, personnel should exercise extreme caution, use non-sparking tools, and utilize ventilation engineering controls to reduce LEL levels. The oxygen/LEL meter is factory set to sound an alarm at levels greater than 20% LEL. If LEL readings exceed 20%, personnel MUST leave the site immediately and contact the project manager.

4.44 Toxic Vapors

Monitor for toxic vapors with a photo ionization detector (PID) to determine whether toxic vapors within the confined space exceed the action levels. PID readings will be taken at the top, middle, and bottom of a vault, shed, or other confined space to determine vapor levels.

4.45 Summary

Do not enter the confined space unless:

- The oxygen concentration is between 19.5 and 23%;
- The LEL is less than 20%; and
- FID readings are less than 250 ppm (a respirator must be worn if the readings exceed 5 ppm)

APPENDIX A

MSDS SHEETS

Tetrachloroethylene
22900

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Tetrachloroethylene
Catalog Numbers:
C182 20, C182 4, C182-20, C182-4, C18220, C1824, O4586 4, O4586-4, O45864
Synonyms:
Ethylene tetrachloride; Tetrachlorethylene; Perchloroethylene;
Perchlorethylene
Company Identification: Fisher Scientific
1 Reagent Lane
Fairlawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
127-18-4	Tetrachloroethylene	99.0+	204-825-9

Hazard Symbols: XN N
Risk Phrases: 40 51/53

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: clear, colorless.
Caution! Irritant. May cause central nervous system depression. May cause respiratory and digestive tract irritation. May cause liver and kidney damage. May cause severe eye and skin irritation with possible burns. May cause reproductive and fetal effects. May cause cancer based on animal studies.
Target Organs: Kidneys, central nervous system, liver.

Potential Health Effects
Eye:
Contact with eyes may cause severe irritation, and possible eye burns.
Skin:
May cause severe irritation and possible burns.
Ingestion:
May cause central nervous system depression, kidney damage, and liver damage. Symptoms may include: headache, excitement, fatigue, nausea, vomiting, stupor, and coma. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation:
Inhalation of vapor may cause respiratory tract irritation. May cause central nervous system effects including vertigo, anxiety, depression, muscle incoordination, and emotional instability.
Chronic:
Possible cancer hazard based on tests with laboratory animals. Prolonged or repeated skin contact may cause defatting and dermatitis. May cause respiratory tract cancer. May cause adverse nervous system effects including muscle tremors and incoordination. May cause liver and kidney damage. May cause reproductive and fetal effects.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Containers may explode in the heat of a fire. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Flush down the spill with a large amount of water. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not reuse this container. Avoid breathing vapors from heated material. Avoid contact with skin and eyes. Keep container tightly closed. Keep away from flames and other sources of high temperatures that may cause material to form vapors or mists.

Storage:

Keep away from heat and flame. Store in a cool, dry place. Keep containers tightly closed.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Tetrachloroethylene	25 ppm; 100 ppm STEL	NIOSH Potential Occupational Carcinogen - see Appendix A; minimize workplace odo r exposure concentrations limit number of workers exposed Potential NIOSH carcinogen.	100 ppm TWA; C 200 ppm; C 200 ppm

OSHA Vacated PELs:
Tetrachloroethylene:
25 ppm TWA; 170 mg/m3 TWA

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
A respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Liquid
Appearance:	clear, colorless
Odor:	sweetish odor
pH:	Not available.
Vapor Pressure:	15.8 mm Hg
Vapor Density:	5.2
Evaporation Rate:	9 (ether=100)
Viscosity:	0.89 mPa s 20 d
Boiling Point:	121 deg C
Freezing/Melting Point:	-22.3 deg C
Autoignition Temperature:	Not applicable.
Flash Point:	Not applicable.
NFPA Rating:	(est.) Health: 2; Flammability: 0; Reactivity: 0
Explosion Limits, Lower:	Not available.
Upper:	Not available.
Decomposition Temperature:	150 deg C
Solubility:	Nearly insoluble in water.
Specific Gravity/Density:	1.623
Molecular Formula:	C2Cl4
Molecular Weight:	165.812

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:

Incompatible materials, excess heat.
Incompatibilities with Other Materials:
Strong bases, metals, liquid oxygen, dinitrogen tetroxide.
Hazardous Decomposition Products:
Hydrogen chloride, phosgene, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 127-18-4: KX3850000
LD50/LC50:
CAS# 127-18-4: Inhalation, mouse: LC50 =5200 ppm/4H; Inhalation, rat: LC50 =34200 mg/m3/8H; Oral, mouse: LD50 = 8100 mg/kg; Oral, rat: LD50 = 2629 mg/kg.
Carcinogenicity:
Tetrachloroethylene -
ACGIH: A3 - animal carcinogen
California: carcinogen; initial date 4/1/88
NIOSH: occupational carcinogen
NTP: Suspect carcinogen
OSHA: Possible Select carcinogen
IARC: Group 2A carcinogen
Epidemiology:
Epidemiologic studies have given inconsistent results. Studies have shown that tetrachloroethylene has not caused cancer in exposed workers. The studies have serious weaknesses such as mixed exposures. In tests with rats and mice, it appeared that tissue destruction or peroxisome proliferation rather than genetic mechanisms were the cause of the observed increases in normally occurring cancers. The oral mouse TDLo that was tumorigenic was 195 gm/kg/50W-I.
Teratogenicity:
Has caused musculoskeletal abnormalities. Has caused morphological transformation at a dose of 97mol/L in a study using rat embryos.
Reproductive Effects:
Has caused behavioral, biochemical, and metabolic effects on newborn rats when the mother was exposed to the TCLo of 900 ppm/7H at 7-13 days after conception. A dose of 300 ppm/7H 6-15 days after conception caused post-implantation mortality.
Neurotoxicity:
No information available.
Mutagenicity:
Not mutagenic in Escherichia coli. No mutagenic effects were seen in rat liver after exposure at 200 ppm for 10 weeks. No chromosome changes were seen in the bone marrow cells of exposed mice.
Other Studies:
A case of 'obstructive jaundice' in a 6-week old infant has been attributed to tetrachloroethylene in breast milk.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
Fish: Rainbow trout: LC50 = 5.28 mg/L; 96 Hr.; Static Condition, 12 degrees CFish: Fathead Minnow: LC50 = 18.4 mg/L; 96 Hr.; Flow-through conditionFish: Bluegill/Sunfish: LC50 = 12.9 mg/L; 96 Hr.; Static ConditionBacteria: Phytobacterium phosphoreum: EC50 = 120.0 mg/L; 30 minutes; Microtox test

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classif as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40 CFR Part
Additionally, waste generators must consult state and local hazardous waste regu ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: CAS# 127-18-4: waste number U210.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT

Shipping Name: TETRACHLOROETHYLENE
Hazard Class: 6.1
UN Number: UN1897
Packing Group: III

Canadian TDG

Shipping Name: TETRACHLOROETHYLENE
Hazard Class: 6.1
UN Number: UN1897

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA

CAS# 127-18-4 is listed on the TSCA inventory.
Health & Safety Reporting List
CAS# 127-18-4: Effective Date: June 1, 1987; Sunset Date: June 1, 1997
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)
CAS# 127-18-4: final RQ = 100 pounds (45.4 kg)
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 127-18-4: acute.
Section 313
This material contains Tetrachloroethylene (CAS# 127-18-4, 99 0%),which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.

Clean Air Act:

CAS# 127-18-4 is listed as a hazardous air pollutant (HAP).
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.
CAS# 127-18-4 is listed as a Priority Pollutant under the Clean Water Act.
CAS# 127-18-4 is listed as a Toxic Pollutant under the Clean Water Act.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

Tetrachloroethylene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:
WARNING: This product contains Tetrachloroethylene, a chemical known to the state of California to cause cancer.
California No Significant Risk Level:
CAS# 127-18-4: no significant risk level = 14 ug/day

European/International Regulations

European Labeling in Accordance with EC Directives
Hazard Symbols: XN N
Risk Phrases:

R 40 Possible risks of irreversible effects.
R 51/53 Toxic to aquatic organisms; may cause

long-term adverse effects in the aquatic environment.

Safety Phrases:

S 23 Do not inhale gas/fumes/vapour/spray.
S 36/37 Wear suitable protective clothing and gloves.
S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

WGK (Water Danger/Protection)
CAS# 127-18-4: 3

United Kingdom Occupational Exposure Limits
CAS# 127-18-4: OES-United Kingdom, TWA 50 ppm TWA; 345 mg/m3 TWA
CAS# 127-18-4: OES-United Kingdom, STEL 100 ppm STEL; 689 mg/m3 STEL

Canada
CAS# 127-18-4 is listed on Canada's DSL/NDSL List.
This product has a WHMIS classification of D1B, D2A.
CAS# 127-18-4 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits
CAS# 127-18-4: OEL-ARAB Republic of Egypt:TWA 5 ppm (35 mg/m3);Skin
OEL-AUSTRALIA:TWA 50 ppm (335 mg/m3);STEL 150 ppm;CAR
OEL-BELGIUM:TWA 50 ppm (339 mg/m3);STEL 200 ppm (1368 mg/m3)
OEL-CZECHOSLOVAKIA:TWA 250 mg/m3;STEL 1250 mg/m3
OEL-DENMARK:TWA 30 ppm (200 mg/m3);Skin
OEL-FINLAND:TWA 50 ppm (335 mg/m3);STEL 75 ppm (520 mg/m3);Skin
OEL-FRANCE:TWA 50 ppm (335 mg/m3)
OEL-GERMANY:TWA 50 ppm (345 mg/m3);Carcinogen
OEL-HUNGARY:STEL 50 mg/m3;Skin;Carcinogen
OEL-JAPAN:TWA 50 ppm (340 mg/m3)
OEL-THE NETHERLANDS:TWA 35 ppm (240 mg/m3);Skin
OEL-THE PHILIPPINES:TWA 100 ppm (670 mg/m3)
OEL-POLAND:TWA 60 mg/m3
OEL-RUSSIA:TWA 50 ppm;STEL 10 mg/m3
OEL-SWEDEN:TWA 10 ppm (70 mg/m3);STEL 25 ppm (170 mg/m3)
OEL-SWITZERLAND:TWA 50 ppm (345 mg/m3);STEL 100 ppm;Skin
OEL-THAILAND:TWA 100 ppm;STEL 200 ppm
OEL-UNITED KINGDOM:TWA 50 ppm (335 mg/m3);STEL 15 ppm
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 6/17/1999 Revision #2 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

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cis-1,2-Dichloroethylene, 97%
ACROS97773

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: cis-1,2-Dichloroethylene, 97%
Catalog Numbers:
AC113380000, AC113380025, AC113380100
Synonyms:
Acetylene Dichloride
Company Identification (Europe): Acros Organics N.V.
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Company Identification (USA): Acros Organics
One Reagent Lane
Fairlawn, NJ 07410
For information in North America, call: 800-ACROS-01
For information in Europe, call: 0032(0) 14575211
For emergencies in the US, call CHEMTREC: 800-424-9300
For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
156-59-2	cis-1,2-Dichloroethylene	97%	205-859-7

Hazard Symbols: XN F
Risk Phrases: 11 20 52/53

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: colorless liquid. Flash Point: 6 deg C.
Warning! Flammable liquid. May cause central nervous system depression. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. This substance may form hazardous decomposition products which may cause irritation and possible burns.
Target Organs: Central nervous system.

Potential Health Effects
Eye:
May cause eye irritation.
Skin:
May cause skin irritation. May cause dermatitis.
Ingestion:
May cause gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation:
Inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, unconsciousness and coma. May cause respiratory tract irritation. Inhalation of high concentrations may cause narcotic effects.
Chronic:
Not available.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin:
Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

Use water spray to cool fire-exposed containers. In case of fire use water spray, dry chemical, carbon dioxide, or appropriate foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Remove all sources of ignition. Use a spark-proof tool.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Use only in a well ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
cis-1,2-Dichloroethylene	200 ppm	none listed	none listed

OSHA Vacated PELs:

cis-1,2-Dichloroethylene:

No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Liquid
Appearance:	colorless liquid
Odor:	pleasant odor
pH:	Not available.
Vapor Pressure:	400 mm Hg @41.0 deg C
Vapor Density:	3.34
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	60 deg C @ 760.00mm Hg
Freezing/Melting Point:	-80 deg C
Autoignition Temperature:	Not available.
Flash Point:	6 deg C (42.80 deg F)
NFPA Rating:	Not published.
Explosion Limits, Lower:	9.7%
Upper:	12.8%
Decomposition Temperature:	
Solubility:	
Specific Gravity/Density:	1.2840g/cm3
Molecular Formula:	C2H2Cl2
Molecular Weight:	96.94

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Light, ignition sources, excess heat, exposure to flame.

Incompatibilities with Other Materials:

Potassium hydroxide, sodium, sodium hydroxide, strong oxidizing agents, bases, Reaction with solid caustic alkalies or concentrated solution produces chloracetylene gas which ignites spontaneously in air..

Hazardous Decomposition Products:

Hydrogen chloride, phosgene, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:

CAS# 156-59-2: KV9420000

LD50/LC50:

Not available.

Carcinogenicity:

cis-1,2-Dichloroethylene -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology:

No data available.
Teratogenicity:
No data available.
Reproductive Effects:
No data available.
Neurotoxicity:
No data available.
Mutagenicity:
See actual entry in RTECS for complete information.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
Dictionary of Substances and Their Effects 1992

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classif
as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40 CFR Part
Additionally, waste generators must consult state and local hazardous waste regu
ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
Shipping Name: 1,2-DICHLOROETHYLENE
Hazard Class: 3
UN Number: 1150
Packing Group: II
Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA
CAS# 156-59-2 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA
Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
Section 313
No chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous
Substances under the CWA.
None of the chemicals in this product are listed as Priority
Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants

under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

cis-1,2-Dichlorcethylene can be found on the following state right to know lists: Florida, Pennsylvania, Massachusetts.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN F

Risk Phrases:

R 11 Highly flammable.
R 20 Harmful by inhalation.
R 52/53 Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 7 Keep container tightly closed.
S 16 Keep away from sources of ignition - No smoking.
S 29 Do not empty into drains.
S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

WGK (Water Danger/Protection)

CAS# 156-59-2: No information available.

United Kingdom Occupational Exposure Limits

Canada

None of the chemicals in this product are listed on the DSL/NDSL list.

WHMIS: Not available.

CAS# 156-59-2 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 2/09/1998 Revision #2 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

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trans-1,2-Dichloroethylene, 99.7% (GC), stabilized
ACROS62420

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: trans-1,2-Dichloroethylene, 99.7% (GC), stabilized
Catalog Numbers:
AC406840000, AC406840250, AC406842500
Synonyms:
trans-Acetylene Dichloride
Company Identification (Europe): Acros Organics N.V.
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Company Identification (USA): Acros Organics
One Reagent Lane
Fairlawn, NJ 07410
For information in North America, call: 800-ACROS-01
For information in Europe, call: 0032(0) 14575211
For emergencies in the US, call CHEMTREC: 800-424-9300
For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
156-60-5	Trans-1,2-Dichloroethylene	99.7%	205-860-2

Hazard Symbols: XN F
Risk Phrases: 11 20 52/53

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW
Appearance: clear. Flash Point: 6 deg C.
Warning! Flammable liquid. Light sensitive. Air sensitive. Moisture sensitive. May be harmful if swallowed.
Target Organs: Central nervous system, respiratory system, eyes.

Potential Health Effects
Eye:
Causes moderate eye irritation.
Skin:
Causes moderate skin irritation. May cause dermatitis.
Ingestion:
May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. May cause central nervous system depression.
Inhalation:
May cause respiratory tract irritation. May cause narcotic effects in high concentration. May cause nausea and possible vomiting.
Chronic:
Not available.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin:
Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion:
If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical

aid immediately.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

Use water spray to cool fire-exposed containers. In case of fire, use water fog, dry chemical, carbon dioxide, or regular foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Remove all sources of ignition: Use a spark-proof tool.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Use only in a well ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Chemical Name	Exposure Limits		
	ACGIH	NIOSH	OSHA - Final PELs
Trans-1,2-Dichloroethylene	200 ppm	none listed	none listed

OSHA Vacated PELs:

Trans-1,2-Dichloroethylene:

No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face.

protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Liquid
Appearance:	clear
Odor:	Pleasant odor
pH:	Not available.
Vapor Pressure:	710 hPa @ 38 deg C
Vapor Density:	3.3
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	48 deg C @ 760.00mm Hg
Freezing/Melting Point:	-50 deg C
Autoignition Temperature:	440 deg C (824.00 deg F)
Flash Point:	6 deg C (42.80 deg F)
NFPA Rating:	Not published.
Explosion Limits, Lower:	9.70 vol %
Upper:	12.80 vol %
Decomposition Temperature:	
Solubility:	immiscible
Specific Gravity/Density:	1.2600g/cm3
Molecular Formula:	C2H2Cl2
Molecular Weight:	96.94

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Light, ignition sources, exposure to air, exposure to moist air or water.
Incompatibilities with Other Materials:
Copper, copper alloys, oxidizing agents, alkalies, bases.
Hazardous Decomposition Products:
Hydrogen chloride, phosgene, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 156-60-5: KV9400000
LD50/LC50:
CAS# 156-60-5: Oral, mouse: LD50 = 2122 mg/kg; Oral, rat: LD50 = 1235 mg/kg; Skin, rabbit: LD50 = >5 gm/kg.
Carcinogenicity:
Trans-1,2-Dichloroethylene -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No data available.
Teratogenicity:
No data available.
Reproductive Effects:
See actual entry in RTECS for complete information.
Neurotoxicity:

No data available.
Mutagenicity:
See actual entry in RTECS for complete information.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
Invertebrate toxicity: LC50 (30 min) Photobacterium phosphoreum 1540 ppm Microtox test. (Dictionary of Substances and Their Effects 1992)

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classif as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40 CFR Part
Additionally, waste generators must consult state and local hazardous waste regu ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: CAS# 156-60-5: waste number U079.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
Shipping Name: 1,2-DICHLOROETHYLENE
Hazard Class: 3
UN Number: 1150
Packing Group: II
Canadian TDG
Shipping Name: DICHLOROETHYLENE
Hazard Class: 3
UN Number: UN1150

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA
CAS# 156-60-5 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA
Section 302 (RQ)
CAS# 156-60-5: Final RQ = 1000 pounds (454 kg)
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 156-60-5: acute, chronic, flammable.
Section 313
No chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
CAS# 156-60-5 is listed as a Priority Pollutant under the Clean Water Act.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

Trans-1,2-Dichloroethylene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Massachusetts.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN F

Risk Phrases:

R 11 Highly flammable.
R 20 Harmful by inhalation.
R 52/53 Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 7 Keep container tightly closed.
S 16 Keep away from sources of ignition - No smoking.
S 29 Do not empty into drains.
S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

WGK (Water Danger/Protection)

CAS# 156-60-5: No information available.

United Kingdom Occupational Exposure Limits

Canada

CAS# 156-60-5 is listed on Canada's DSL/NDSL List.
This product does not have a WHMIS classification.
CAS# 156-60-5 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 156-60-5: Not available.

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 11/21/1997 Revision #2 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

Trichloroethylene
23850

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Trichloroethylene
Catalog Numbers:
S80327ACS-1, S80327ACS-2, NC932384B, NC9434003, NC9494591, S80232, S80237ACS-1, S80237ACS-2, T340 4, T340-4, T3404, T341 20, T341 4, T341 500, T341-20, T341-4, T341-500, T34120, T3414, T341500, T341J4, T403 4, T403-4, T4034
Synonyms:
Ethylene trichloride, triclene, trichloroethene, benzinol cecolene
Company Identification: Fisher Scientific
1 Reagent Lane
Fairlawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
79-01-6	Trichloroethylene	100	201-167-4

Hazard Symbols: XN
Risk Phrases: 40 52/53

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: clear, colorless.
Warning! May cause central nervous system depression. Aspiration hazard. May cause liver damage. May cause reproductive effects based upon animal studies. Causes eye and skin irritation. May cause respiratory and digestive tract irritation. May cause cancer based on animal studies. Potential cancer hazard.
Target Organs: Central nervous system, liver.

Potential Health Effects
Eye:
Causes moderate eye irritation. May result in corneal injury. Contact produces irritation, tearing, and burning pain.
Skin:
Causes mild skin irritation. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May cause peripheral nervous system function impairment including persistent neuritis, and temporary loss of touch. Damage to the liver and other organs has been observed in workers who have been overexposed.
Ingestion:
Aspiration hazard. May cause irritation of the digestive tract. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.
Inhalation:
Inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, unconsciousness and coma. May cause respiratory tract irritation. May cause liver abnormalities. May cause peripheral nervous system effects.
Chronic:
Possible cancer hazard based on tests with laboratory animals. Chronic inhalation may cause effects similar to those of acute inhalation. Prolonged or repeated skin contact may cause defatting

and dermatitis. May cause peripheral nervous system function impairment including persistent neuritis, and temporary loss of touch. Damage to the liver and other organs has been observed in workers who have been overexposed.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Possible aspiration hazard. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. DO NOT use mouth-to-mouth respiration.

Notes to Physician:

Treat symptomatically and

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Combustion generates toxic fumes. Cortainers may explode in the heat of a fire.

Extinguishing Media:

Use water spray to cool fire-exposed containers. In case of fire use water spray, dry chemical, carbon dioxide, or chemical foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Remove all sources of ignition. Provide ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Use only in a well ventilated area. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Chemical Name	Exposure Limits		
	ACGIH	NIOSH	OSHA - Final PELs
Trichloroethylene	50 ppm; 100 ppm STEL	NIOSH Potential Occupational Carcinogen - see Appendix A; see Appendix C for sup plementary exposure limits Potential NIOSH carcinogen.	100 ppm TWA; C 200 ppm; C 200 ppm

OSHA Vacated PELs:
Trichloroethylene:
50 ppm TWA; 270 mg/m3 TWA

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Liquid
Appearance:	clear, colorless
Odor:	sweetish odor - chloroform-like
pH:	Not available.
Vapor Pressure:	58 mm Hg @20C
Vapor Density:	4.53
Evaporation Rate:	0.69 (CCl4=1)
Viscosity:	0.0055 poise
Boiling Point:	189 deg F
Freezing/Melting Point:	-121 deg F
Autoignition Temperature:	778 deg F (414.44 deg C)
Flash Point:	Not applicable.
NFPA Rating:	(est.) Health: 2; Flammability: 1; Reactivity: 0
Explosion Limits, Lower:	12.5
Upper:	90.0
Decomposition Temperature:	Not available.
Solubility:	Insoluble in water.
Specific Gravity/Density:	1.47 (water=1)
Molecular Formula:	C2HCl3
Molecular Weight:	131.366

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:

Incompatible materials, ignition sources, oxidizers.
Incompatibilities with Other Materials:
Alkalis (sodium hydroxide), chemically active metals (aluminum, beryllium, lithium, magnesium), epoxies and oxidants. Can react violently with aluminum, barium, lithium, magnesium, liquid oxygen, ozone, potassium hydroxide, potassium nitrate, sodium, sodium hydroxide, titanium, and nitrogen dioxide. Reacts with water under heat and pressure to form hydrogen chloride gas.
Hazardous Decomposition Products:
Hydrogen chloride, carbon dioxide, chloride fumes.
Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 79-01-6: KX4550000
LD50/LC50:
CAS# 79-01-6: Inhalation, mouse: LC50 =8450 ppm/4H; Oral, mouse: LD50 = 2402 mg/kg; Oral, rat: LD50 = 5650 mg/kg; Skin, rabbit: LD50 = >20 gm/kg.
Carcinogenicity:
Trichloroethylene -
ACGIH: A5 - not suspected as a human carcinogen
California: carcinogen; initial date 4/1/88
NIOSH: occupational carcinogen
OSHA: Possible Select carcinogen
IARC: Group 2A carcinogen
Epidemiology:
Suspected carcinogen with experimental carcinogenic, tumorigenic, and teratogenic data.
Teratogenicity:
No information available.
Reproductive Effects:
Experimental reproductive effects have been observed.
Neurotoxicity:
No information available.
Mutagenicity:
Human mutation data has been reported. IARC and the National Toxicology Program (NTP) stated that variability in the mutagenicity test results with thichloroethylene may be due to the presence of various stabilizers used in TCE which are mutagens (e.g. epoxybutane, epichlorohydrin).
Other Studies:
None.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
Bluegill sunfish, LD50= 44,700 ug/L/96Hr. Fathead minnow, LC50=40.7 mg/L/96Hr.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classif as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40 CFR Part
Additionally, waste generators must consult state and local hazardous waste regu ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: CAS# 79-01-6: waste number U228.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
Shipping Name: TRICHLOROETHYLENE
Hazard Class: 6.1
UN Number: UN1710

Packing Group: III
Canadian TDG
Shipping Name: TRICHLOROETHYLENE
Hazard Class: 6.1(9.2)
UN Number: UN1710

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA
CAS# 79-01-6 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA
Section 302 (RQ)
CAS# 79-01-6: final RQ = 100 pounds (45.4 kg)
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 79-01-6: acute, chronic, reactive.
Section 313
This material contains Trichloroethylene (CAS# 79-01-6, 100%),which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.
Clean Air Act:
CAS# 79-01-6 is listed as a hazardous air pollutant (HAP).
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
CAS# 79-01-6 is listed as a Hazardous Substance under the CWA.
CAS# 79-01-6 is listed as a Priority Pollutant under the Clean Water Act.
CAS# 79-01-6 is listed as a Toxic Pollutant under the Clean Water Act.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE
Trichloroethylene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:
WARNING: This product contains Trichloroethylene, a chemical known to the state of California to cause cancer.
California No Significant Risk Level:
CAS# 79-01-6: ingestion: no significant risk level = 50 ug/day; inhalation: no significant ris k level = 80 ug/day
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
R 40 Possible risks of irreversible effects.
R 52/53 Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.
Safety Phrases:
S 23 Do not inhale gas/fumes/vapour/spray.
S 36/37 Wear suitable protective clothing and gloves.
S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

WGK (Water Danger/Protection)
CAS# 79-01-6: 3
United Kingdom Occupational Exposure Limits

Canada

CAS# 79-01-6 is listed on Canada's DSL/NDSL List.
This product has a WHMIS classification of D1B, D2B.
CAS# 79-01-6 is not listed on Canada's Ingredient Disclosure List.
Exposure Limits
CAS# 79-01-6: OEL-AUSTRALIA:TWA 50 ppm (270 mg/m3);STEL 200 ppm (1050 mg/m3)
OEL-BELGIUM:TWA 50 ppm (269 mg/m3);STEL 200 ppm (1070 mg/m3)
OEL-CZECHOSLOVAKIA:TWA 250 mg/m3;STEL 1250 mg/m3
OEL-DENMARK:TWA 30 ppm (160 mg/m3)
OEL-FINLAND:TWA 30 ppm (160 mg/m3);STEL 45 ppm (240 mg/m3);Skin
OEL-FRANCE:TWA 75 ppm (405 mg/m3);STEL 200 ppm (1080 mg/m3)
OEL-GERMANY:TWA 50 ppm (270 mg/m3);Carcinogen
OEL-HUNGARY:TWA 10 mg/m3;STEL 40 mg/m3
OEL-JAPAN:TWA 50 ppm (270 mg/m3)
OEL-THE NETHERLANDS:TWA 35 ppm (190 mg/m3);STEL 100 ppm
OEL-THE PHILIPPINES:TWA 100 ppm (535 mg/m3)
OEL-POLAND:TWA 50 mg/m3
OEL-RUSSIA:TWA 50 ppm;STEL 10 mg/m3
OEL-SWEDEN:TWA 10 ppm (50 mg/m3);STEL 25 ppm (140 mg/m3)
OEL-THAILAND:TWA 100 ppm;STEL 200 ppm
OEL-TURKEY:TWA 100 ppm (535 mg/m3)
OEL-UNITED KINGDOM:TWA 100 ppm (535 mg/m3);STEL 150 ppm;Skin
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 2/01/1999 Revision #2 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

1,1,1-Trichloroethane
14370

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: 1,1,1-Trichloroethane
Catalog Numbers:
S80231, T391 1, T391 20, T391 200, T391 4, T391-1, T391-20, T391-200, T391-4, T3911, T39120, T391200, T3914, T398 20, T398 4, T398-20, T398-4, T39820, T3984
Synonyms:
Ethane, 1,1,1-trichloro-; Chloroform, methyl-; Chlorothene; Methylchloroform; Methyl chloroform; Methyltrichloromethane; Trichloroethane; Trichloro-1,1,1-ethane; alpha-Trichloroethane; Trichloromethylmethane
Company Identification: Fisher Scientific
1 Reagent Lane
Fairlawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
71-55-6	1,1,1-trichloroethane	>96	200-756-3
75-52-5	Nitromethane	0.34	200-876-6
106-88-7	1,2-butylene oxide	0.47	203-438-2
123-91-1	1,4-dioxane	2.5	204-661-8

Hazard Symbols: XN N
Risk Phrases: 20 59

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: colorless liquid.
Warning! Causes respiratory tract irritation. May cause digestive tract irritation. Dangerous to the environment. May cause central nervous system depression. May cause fetal effects based upon animal studies. May cause cardiac disturbances. May cause liver and kidney damage. Causes eye and skin irritation. May be harmful if inhaled. Target Organs: Kidneys, heart, central nervous system, liver, cardiovascular system.

Potential Health Effects
Eye:
Causes severe eye irritation. May cause conjunctivitis.
Skin:
Causes moderate skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Exposure may cause irritation characterized by redness, dryness, and inflammation. May be absorbed through the skin. 1,4-Dioxane may cause an allergic skin reaction, and absorption of thi s substance may cause systemic toxicty.

Ingestion:
May cause gastrointestinal irritation with nausea, vomiting and

diarrhea. May cause effects similar to those for inhalation exposure. May cause central nervous system depression. Alcohol can intensify effects.
1,1,1-Trichloroethane may sensitize the heart to epinephrine and produce associated cardiac abormalities.

Inhalation:

Inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, unconsciousness and coma. May cause narcotic effects in high concentration. Causes irritation of the mucous membrane and upper respiratory tract.

Chronic:

Prolonged or repeated skin contact may cause defatting and dermatitis. May cause fetal effects. Laboratory experiments have resulted in mutagenic effects. Prolonged exposure may cause liver, kidney, and heart damage.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. DO NOT use mouth-to-mouth respiration. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician:

Causes cardiac sensitization to endogenous catelcholamines which may lead to cardiac arrhythmias. Do NOT use adrenergic agents such as epinephrine or pseudoepinephrine. Alcoholic beverage consumption may enhance the toxic effects of this substance.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

Use extinguishing media most appropriate for the surrounding fire. In case of fire, use water fog, dry chemical, carbon dioxide, or regular foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Provide ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Do not ingest or inhale.

Storage:

Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Do not store in aluminum containers.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1,1,1-trichloroethane	350 ppm; 450 ppm STEL	see Appendix C for supplementary exposure limits 700 ppm IDLH	350 ppm TWA; 1900 mg/m3 TWA
Nitromethane	20 ppm	no established RELs - see Appendix D 750 ppm IDLH	100 ppm TWA; 250 mg/m3 TWA
1,2-butylene oxide	none listed	none listed	none listed
1,4-dioxane	20 ppm; skin - potential for cutaneous absorption	NIOSH Potential Occupational Carcinogen - see Appendix A Potential NIOSH carcinogen.	100 ppm TWA; 360 mg/m3

OSHA Vacated PELs:

1,1,1-trichloroethane:
350 ppm TWA; 1900 mg/m3 TWA
Nitromethane:
100 ppm TWA; 250 mg/m3 TWA
1,2-butylene oxide:
No OSHA Vacated PELs are listed for this chemical.
1,4-dioxane:
25 ppm TWA; 90 mg/m3 TWA

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin

exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Liquid
Appearance:	colorless liquid
Odor:	Sweet, mild chloroform-like.
pH:	Not available.
Vapor Pressure:	100 mm Hg @ 20 deg C
Vapor Density:	4.55 (air=1)
Evaporation Rate:	1.0 (carbon tetrachloride=1)
Viscosity:	0.86 cP @ 20 de
Boiling Point:	74-76 C
Freezing/Melting Point:	-35 deg C
Autoignition Temperature:	536 deg C (996.80 deg F)
Flash Point:	Not available.
NFPA Rating:	Not published.
Explosion Limits, Lower:	7.5 vol %
Upper:	15 vol %
Decomposition Temperature:	Not available.
Solubility:	Insoluble.
Specific Gravity/Density:	1.338 (water=1)
Molecular Formula:	C2H3Cl3
Molecular Weight:	133.38

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid:
High temperatures, incompatible materials, ignition sources, moisture.

Incompatibilities with Other Materials:
Strong oxidizing agents, aluminum, aluminum alloys, magnesium, magnesium alloys, strong bases; potassium, sodium, active metals, aluminum oxide + heavy metals, metals, sodium hydroxide, liquid oxygen, hydrochloric acid, halocarbons, nitrogen tetroxide, caustics (e.g. ammonia, ammonium hydroxide, calcium hydroxide, potassium hydroxide, sodium hydroxide), water, halogens, reducing agents, decaborane, sulfur trioxide, triethynylaluminum, boron trifluoride.

Hazardous Decomposition Products:
Hydrogen chloride, phosgene, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 71-55-6: KJ2975000
CAS# 75-52-5: PA9800000
CAS# 106-88-7: EK3675000
CAS# 123-91-1: JG8225000

LD50/LC50:
CAS# 71-55-6: Inhalation, mouse: LC50 =3911 ppm/2H; Inhalation, rat: LC50 =18000 ppm/4H; Oral, mouse: LD50 = 6 gm/kg; Oral, rabbit: LD50 = 5660 mg/kg; Oral, rat: LD50 = 9600 mg/kg.
CAS# 75-52-5: Oral, mouse: LD50 = 950 mg/kg; Oral, rat: LD50 = 940 mg/kg.
CAS# 106-88-7: Oral, rat: LD50 = 500 mg/kg; Skin, rabbit: LD50 = 2100 mg/kg.
CAS# 123-91-1: Inhalation, mouse: LC50 =37 gm/m3/2H; Inhalation,

rat: LC50 =46 gm/m3/2H; Oral, mouse: LD50 = 5700 mg/kg; Oral, rabbit: LD50 = 2 gm/kg; Skin, rabbit: LD50 = 7600 mg/kg.

Carcinogenicity:

1,1,1-trichloroethane -

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Group 3 carcinogen

Nitromethane -

California: carcinogen; initial date 5/1/97

1,2-butylene oxide -

OSHA: Possible Select carcinogen

IARC: Group 2B carcinogen

1,4-dioxane -

ACGIH: A3 - animal carcinogen

California: carcinogen; initial date 1/1/88

NIOSH: occupational carcinogen

NTP: Suspect carcinogen

OSHA: Possible Select carcinogen

IARC: Group 2B carcinogen

Epidemiology:

No information available.

Teratogenicity:

Oral, rat: TDLo = 43 mg/kg (female 1-22 day(s) after conception and lactating female 21 day(s) post-birth) Specific Developmental Abnormalities - cardiovascular (circulatory) system.; Inhalation, rat: TCLo = 2100 ppm/6H (female 1-20 day(s) after conception) Effects on Embryo or Fetus - fetotoxicity (except death, e.g., stunted fetus).

Reproductive Effects:

No information available.

Neurotoxicity:

No information available.

Mutagenicity:

Morphological Transformation: Rat, Embryo = 99 umol/L.; Mutation in Microorganisms: Mouse, Lymphocyte = 31300 ug/L.; Morphological Transformation: Mouse, Embryo = 20 mg/L.; Cytogenetic Analysis: Hamster, Ovary = 160 mg/L.

Other Studies:

Standard Draize Test(Skin, rabbit) = 20 mg/24H (Moderate) Standard Draize Test: Administration into the eye (rabbit) = 2 mg/24H (Severe).

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:

Fish: Fathead Minnow: EC50 = 52.9 mg/L; 96 Hr; Flow-through at 25.5°CFish: Bluegill/Sunfish: LC50 = 72 mg/L; 96 Hr; Static bioassayFish: Fathead Minnow: LC50 = 52.9 mg/L; 96 Hr; Flow-through at 25.5°CFish: Sheepshead minnow: LC50 = 53-72 mg/L; 96 Hr; UnspecifiedWater flea Daphnia: EC50 > 530 mg/L; 48 Hr; UnspecifiedReleases to surface water will decrease in concn almost entirely due to evaporation. Spills on land will decrease in concentration almost entirely due to volatilization and leaching.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classif as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40 CFR Part
Additionally, waste generators must consult state and local hazardous waste regu
ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: CAS# 71-55-6: waste number U226. CAS# 123-91-1: waste number U108.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT

Shipping Name: 1,1,1-TRICHLOROETHANE
Hazard Class: 6.1
UN Number: UN2831
Packing Group: III

Canadian TDG

Shipping Name: 1 1 1 TRICHLOROETHANE
Hazard Class: 6.1
UN Number: UN2831

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA

CAS# 71-55-6 is listed on the TSCA inventory.
CAS# 75-52-5 is listed on the TSCA inventory.
CAS# 106-88-7 is listed on the TSCA inventory.
CAS# 123-91-1 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 71-55-6: Effective Date: October 4, 1982; Sunset Date: October 4, 1992
CAS# 75-52-5: Effective Date: April 13, 1989; Sunset Date: December 19, 1995
CAS# 106-88-7: Effective Date: October 4, 1982; Sunset Date: October 4, 1992

Chemical Test Rules

CAS# 71-55-6: Testing required by: manufacturers; processors (40 CFR 7

Section 12b

CAS# 71-55-6: 4a/12b/4 term

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

CAS# 71-55-6: final RQ = 1000 pounds (454 kg)
CAS# 123-91-1: final RQ = 100 pounds (45.4 kg)

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 71-55-6: acute.
CAS # 75-52-5: chronic, flammable, reactive.
CAS # 106-88-7: acute.
CAS # 123-91-1: chronic, flammable.

Section 313

This material contains 1,1,1-trichloroethane (CAS# 71-55-6, 96%),which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.
This chemical is not at a high enough concentration to be reportable under Section 313.
This material contains 1,4-dioxane (CAS# 123-91-1, 2 5%),which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.

Clean Air Act:

CAS# 71-55-6 is listed as a hazardous air pollutant (HAP).
CAS# 106-88-7 is listed as a hazardous air pollutant (HAP).
CAS# 123-91-1 is listed as a hazardous air pollutant (HAP).
CAS# 71-55-6 is listed as a Class 1 ozone depletor with an ODP = 0.1; GWP = 110; commodity code 2903.19.6010; essential use - cleaning, bon
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.
CAS# 71-55-6 is listed as a Priority Pollutant under the Clean Water Act.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

CAS# 75-52-5 is considered highly hazardous by OSHA.

STATE

1,1,1-trichloroethane can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
Nitromethane can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
1,2-butylene oxide can be found on the following state right to know lists: New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
1,4-dioxane can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
WARNING: This product contains Nitromethane, a chemical known to the state of California to cause cancer.
WARNING: This product contains 1,4-dioxane, a chemical known to the state of California to cause cancer.
California No Significant Risk Level:
CAS# 123-91-1: no significant risk level = 30 ug/day

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN N

Risk Phrases:

R 20 Harmful by inhalation.
R 59 Dangerous for the ozone layer.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.
S 59 Refer to manufacturer/supplier for information on recovery/recycling.
S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

WGK (Water Danger/Protection)

CAS# 71-55-6: 3
CAS# 75-52-5: 2
CAS# 106-88-7: 3
CAS# 123-91-1: 2

United Kingdom Occupational Exposure Limits

CAS# 71-55-6: OES-United Kingdom, TWA 200 ppm TWA; 1110 mg/m3 TWA
CAS# 71-55-6: OES-United Kingdom, STEL 400 ppm STEL; 2220 mg/m3 STEL
CAS# 75-52-5: OES-United Kingdom, TWA 100 ppm TWA; 254 mg/m3 TWA
CAS# 75-52-5: OES-United Kingdom, STEL 150 ppm STEL; 381 mg/m3 STEL
CAS# 75-52-5: OES-United Kingdom, STEL 150 ppm STEL; 381 mg/m3 STEL
CAS# 123-91-1: OES-United Kingdom, TWA 25 ppm TWA; 91 mg/m3 TWA
CAS# 123-91-1: OES-United Kingdom, STEL 100 ppm STEL; 366 mg/m3 STEL

Canada

CAS# 71-55-6 is listed on Canada's DSL/NDSL List.
CAS# 75-52-5 is listed on Canada's DSL/NDSL List.
CAS# 106-88-7 is listed on Canada's DSL/NDSL List.
CAS# 123-91-1 is listed on Canada's DSL/NDSL List.
This product has a WHMIS classification of D1B, D2A.
CAS# 71-55-6 is not listed on Canada's Ingredient Disclosure List.
CAS# 75-52-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 106-88-7 is not listed on Canada's Ingredient Disclosure List.
CAS# 123-91-1 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 71-55-6: OEL-AUSTRALIA:TWA 125 ppm (680 mg/m3)
OEL-BELGIUM:TWA 350 ppm (1910 mg/m3);STEL 450 ppm (2460 mg/m3)
OEL-CZECHOSLOVAKIA:TWA 500 mg/m3;STEL 2000 mg/m3
OEL-DENMARK:TWA 100 ppm (540 mg/m3)
OEL-FINLAND:TWA 100 ppm (540 mg/m3);STEL 250 ppm (1400 mg/m3)
OEL-FRANCE:TWA 300 ppm (1650 mg/m3);STEL 450 ppm (2500 mg/m3)
OEL-GERMANY:TWA 200 ppm (1080 mg/m3)
OEL-HUNGARY:TWA 100 mg/m3;STEL 300 mg/m3;Skin
OEL-JAPAN:TWA 200 ppm (1100 mg/m3)
OEL-THE NETHERLANDS:TWA 200 ppm (1080 mg/m3);STEL 500 ppm
OEL-THE PHILIPPINES:TWA 350 ppm (1900 mg/m3) JAN9
OEL-RUSSIA:TWA 200 ppm;STEL 20 mg/m3
OEL-SWEDEN:TWA 50 ppm (300 mg/m3);STEL 90 ppm (50 mg/m3)
OEL-SWITZERLAND:TWA 200 ppm (1080 mg/m3);STEL 100 ppm

OEL-TURKEY:TWA 350 ppm (1900 mg/m3)
OEL-UNITED KINGDOM:TWA 350 ppm (1900 mg/m3);STEL 450 ppm
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV
CAS# 75-52-5: OEL-DENMARK:TWA 100 ppm (250 mg/m3)
OEL-FINLAND:TWA 100 ppm (250 mg/m3);STEL 150 ppm (375 mg/m3)
OEL-FRANCE:TWA 100 ppm (250 mg/m3)
OEL-GERMANY:TWA 100 ppm (250 mg/m3)
OEL-THE NETHERLANDS:TWA 100 ppm (250 mg/m3)
OEL-THE PHILIPPINES:TWA 100 ppm (250 mg/m3)
OEL-SWITZERLAND:TWA 100 ppm (250 mg/m3)
OEL-TURKEY:TWA 100 ppm (250 mg/m3)
OEL-UNITED KINGDOM:TWA 100 ppm (250 mg/m3);STEL 150 ppm
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV
CAS# 123-91-1: OEL-AUSTRALIA:TWA 25 ppm (90 mg/m3);Skin
OEL-AUSTRIA:TWA 50 ppm (180 mg/m3);Skin
OEL-BELGIUM:TWA 25 ppm (90 mg/m3);Skin
OEL-DENMARK:TWA 10 ppm (36 mg/m3);Skin
OEL-FINLAND:TWA 25 ppm (90 mg/m3);STEL 40 ppm (13 mg/m3);Skin
OEL-FRANCE:TWA 10 ppm (35 mg/m3);STEL 40 ppm (140 mg/m3);CAR
OEL-GERMANY:TWA 50 ppm (180 mg/m3);Skin;Carcinoge
OEL-HUNGARY:STEL 10 mg/m3;Skin;Carcinogen
OEL-JAPAN:TWA 10 ppm (36 mg/m3);Skin;Carcinogen
OEL-THE NETHERLANDS:TWA 50 ppm (180 mg/m3);Skin
OEL-THE PHILIPPINES:TWA 100 ppm (360 mg/m3);Skin
OEL-POLAND:TWA 10 mg/m3
OEL-RUSSIA:TWA 10 ppm;STEL 10 mg/m3;Skin
OEL-SWEDEN:TWA 25 ppm (90 mg/m3);STEL 50 ppm;Skin;CAR
OEL-SWITZERLAND:TWA 25 ppm (90 mg/m3);STEL 50 ppm;Skin
OEL-TURKEY:TWA 100 ppm (360 mg/m3);Skin
OEL-UNITED KINGDOM:TWA 25 ppm (90 mg/m3);STEL 100 ppm;Skin
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 6/11/1999 Revision #2 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

1,1,2-Trichloroethane
26380

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: 1,1,2-Trichloroethane
Catalog Numbers:
T339 1, T339 4, T339-1, T339-4, T3391, T3394, T3991
Synonyms:
Beta-T, Vinyl Trichloride, Beta-Trichloroethane.
Company Identification: Fisher Scientific
1 Reagent Lane
Fairlawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
79-00-5	1,1,2-trichloroethane	ca. 100	201-166-9

Hazard Symbols: XN
Risk Phrases: 20/21/22

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: clear slightly yellow.
Caution! May be harmful if swallowed. May cause central nervous system depression. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. May cause cancer based on animal studies.
Target Organs: Kidneys, central nervous system, liver.

Potential Health Effects
Eye:
May cause eye irritation. May cause eye injury.
Skin:
Exposure may cause irritation characterized by redness, dryness, and inflammation.
Ingestion:
May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May be harmful if swallowed.
Inhalation:
Inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation.
Chronic:
May cause liver and kidney damage.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

Treat symptomatically and

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Containers may explode in the heat of a fire.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, halon, or water spray. For large fires, use water spray, fog or regular foam. Cool containers with flooding quantities of water until well after fire is out.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Clean up spills immediately, observing precautions in the Protective Equipment section. Flush spill area with water. A vapor suppressing foam may be used to reduce vapors.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not reuse this container.

Storage:

Keep away from heat, sparks, and flame. Store in a cool, dry place. Keep from contact with oxidizing materials. Do not store in metal containers. Keep containers tightly closed.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1,1,2-trichloroethane	10 ppm; skin - potential for cutaneous absorption	10 ppm TWA; 45 mg/m3 TWA; NIOSH Potential Occupational Carcinogen - see Appendix A; see Appendix C	10 ppm TWA; 45 mg/m3 TWA

		(Chloroethanes) for supplementary exposure limits Potential NIOSH carcinogen.	

OSHA Vacated PELs:
1,1,2-trichloroethane:
10 ppm TWA; 45 mg/m3 TWA

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Liquid
Appearance:	clear slightly yellow
Odor:	sweetish odor - irritating odor - weak odor
pH:	Not available.
Vapor Pressure:	3.1 kPa @ 25C
Vapor Density:	4.63
Evaporation Rate:	Not available.
Viscosity:	1.69 cP @ 25C
Boiling Point:	110 - 115 deg C @ 760.00mm Hg
Freezing/Melting Point:	-37 deg C
Autoignition Temperature:	459 deg C (858.20 deg F)
Flash Point:	None
NFPA Rating:	Not published.
Explosion Limits, Lower:	6.0 vol %
Upper:	15.5 vol %
Decomposition Temperature:	
Solubility:	0.4 G/100ML WATER (20°C)
Specific Gravity/Density:	1.4350g/cm3
Molecular Formula:	C2H3Cl3
Molecular Weight:	133.40

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Incompatible materials, metals, strong oxidants.

Incompatibilities with Other Materials:
Strong bases, strong oxidizing agents, sodium, potassium, magnesium, aluminum, heat.

Hazardous Decomposition Products:
Hydrogen chloride, phosgene, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Will not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 79-00-5: KJ3150000
LD50/LC50:
CAS# 79-00-5: Oral, mouse: LD50 = 378 mg/kg; Oral, rat: LD50 = 836 mg/kg; Skin, rabbit: LD50 = 5377 mg/kg.
Carcinogenicity:
1,1,2-trichloroethane -
ACGIH: A4 - Not Classifiable as a Human Carcinogen
California: carcinogen; initial date 10/1/90
NIOSH: occupational carcinogen
IARC: Group 3 carcinogen
Epidemiology:
No information available.
Teratogenicity:
No information available.
Reproductive Effects:
No information available.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Other
No information available.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classif as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40 CFR Part
Additionally, waste generators must consult state and local hazardous waste regu ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: CAS# 79-00-5: waste number U227.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
No information available
Canadian TDG
Shipping Name: POISONOUS LIQUID NOS (TRICHLOROETHANE)
Hazard Class: 6.1(9.2)
UN Number: UN2810

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA
CAS# 79-00-5 is listed on the TSCA inventory.
Health & Safety Reporting List
CAS# 79-00-5: Effective Date: June 1, 1987; Sunset Date: June 1, 1997
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA
Section 302 (RQ)
CAS# 79-00-5: final RQ = 100 pounds (45.4 kg)
Section 302 (TPQ)

None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 79-00-5: acute, chronic, flammable.
Section 313
This material contains 1,1,2-trichloroethane (CAS# 79-00-5, 100%),which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.
Clean Air Act:
CAS# 79-00-5 is listed as a hazardous air pollutant (HAP).
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
CAS# 79-00-5 is listed as a Priority Pollutant under the Clean Water Act.
CAS# 79-00-5 is listed as a Toxic Pollutant under the Clean Water Act.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE
1,1,2-trichloroethane can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:
WARNING: This product contains 1,1,2-trichloroethane, a chemical known to the state of California to cause cancer.
California No Significant Risk Level:
CAS# 79-00-5: no significant risk level = 10 ug/day
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
Safety Phrases:
S 9 Keep container in a well-ventilated place.
WGK (Water Danger/Protection)
CAS# 79-00-5: 3
United Kingdom Occupational Exposure Limits
Canada
CAS# 79-00-5 is listed on Canada's DSL/NDSL List.
This product has a WHMIS classification of D1B.
CAS# 79-00-5 is not listed on Canada's Ingredient Disclosure List.
Exposure Limits
CAS# 79-00-5: OEL-ARAB Republic of Egypt:TWA 10 ppm (40 mg/m3);Skin
OEL-AUSTRALIA:TWA 10 ppm (45 mg/m3);Skin
OEL-BELGIUM:TWA 10 ppm (55 mg/m3);Skin
OEL-DENMARK:TWA 10 ppm (54 mg/m3);Skin
OEL-FINLAND:TWA 10 ppm (54 mg/m3);STEL 20 ppm (11 mg/m3);Skin
OEL-GERMANY:TWA 10 ppm (55 mg/m3);Skin;Carcinogen
OEL-HUNGARY:TWA 10 mg/m3;STEL 20 mg/m3;Skin
OEL-JAPAN:TWA 10 ppm (55 mg/m3);Skin
OEL-THE NETHERLANDS:TWA 10 ppm (45 mg/m3);Skin
OEL-POLAND:TWA 100 mg/m3
OEL-RUSSIA:TWA 10 ppm
OEL-SWITZERLAND:TWA 10 ppm (55 mg/m3);STEL 50 ppm;Skin
OEL-UNITED KINGDOM:TWA 10 ppm (45 mg/m3);STEL 20 ppm;Skin
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 9/02/1997 Revision #3 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

1,1-Dichloroethane,99+%, Stabilized with Nitromethane
ACROS83933

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: 1,1-Dichloroethane,99+%, Stabilized with Nitromethane
Catalog Numbers:
AC113350000, AC113350010, AC113351000, AC113352500
Synonyms:
Ethylidene Chloride.
Company Identification (Europe): Acros Organics N.V.
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Company Identification (USA): Acros Organics
One Reagent Lane
Fairlawn, NJ 07410
For information in North America, call: 800-ACROS-01
For information in Europe, call: 0032(0) 14575211
For emergencies in the US, call CHEMTREC: 800-424-9300
For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
75-34-3	1,1-Dichloroethane	>99	200-863-5

Hazard Symbols: XN F
Risk Phrases: 11 22 36/37 52/53

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: clear colorless to very faint yellow. Flash Point: -10 deg C.
Danger! Extremely flammable liquid. Causes respiratory tract irritation. May cause skin irritation. May be harmful if swallowed. May cause central nervous system depression. May cause digestive tract irritation with nausea, vomiting, and diarrhea. Causes eye irritation.
Target Organs: Central nervous system.

Potential Health Effects

Eye:
Causes eye irritation. May cause chemical conjunctivitis and corneal damage.

Skin:
May cause irritation and dermatitis. May cause cyanosis of the extremities.

Ingestion:
May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. Ingestion of large amounts may cause CNS depression.

Inhalation:
Causes respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest.

Chronic:
Effects may be delayed.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes,

occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. DO NOT use mouth-to-mouth respiration.

Notes to Physician:

Treat symptomatically and supportively.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Extremely flammable liquid. Containers may explode in the heat of a fire. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Will be easily ignited by heat, sparks or flame.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1,1-Dichloroethane	100 ppm	100 ppm TWA; 400 mg/m3 TWA; see Appendix C (Chloroethanes) for supplementary exp osure limits 3000 ppm IDLH.	100 ppm TWA; 400 mg/m3 TWA

OSHA Vacated PELs:
1,1-Dichloroethane:
100 ppm TWA; 400 mg/m3 TWA

Personal Protective Equipment

Eyes:
Wear chemical goggles. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
A respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Liquid
Appearance:	clear colorless to very faint yellow
Odor:	None reported.
pH:	Not available.
Vapor Pressure:	244 mbar @ 20 C
Vapor Density:	3.41
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	57 deg C @ 760.00mm Hg
Freezing/Melting Point:	-97 deg C
Autoignition Temperature:	660 deg C (1,220.00 deg F)
Flash Point:	-10 deg C (14.00 deg F)
NFPA Rating:	(est.) Health: 2; Flammability: 3; Reactivity: 0
Explosion Limits, Lower:	.16 vol %
Upper:	.06 vol %
Decomposition Temperature:	
Solubility:	0.5g/100ml
Specific Gravity/Density:	1.1770g/cm3

Molecular Formula: C2H4Cl2
Molecular Weight: 98.96

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Incompatible materials, ignition sources, excess heat, strong oxidants.
Incompatibilities with Other Materials:
Oxidizing agents.
Hazardous Decomposition Products:
Hydrogen chloride, phosgene, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.
Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 75-34-3: KI0175000
LD50/LC50:
CAS# 75-34-3: Inhalation, rat: LC50 =13000 ppm/4H; Oral, rat: LD50 = 725 mg/kg.
Carcinogenicity:
1,1-Dichloroethane -
ACGIH: A4 - Not Classifiable as a Human Carcinogen
California: carcinogen; initial date 1/1/90
Epidemiology:
No information available.
Teratogenicity:
No information available.
Reproductive Effects:
No information available.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
See actual entry in RTECS for complete information.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classif as a hazardous waste.
US EPA guidelines for the classification determination are listed in 40 CFR Part
Additionally, waste generators must consult state and local hazardous waste regu ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: CAS# 75-34-3: waste number U076.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
Shipping Name: 1,1-DICHLOROETHANE
Hazard Class: 3
UN Number: UN2362
Packing Group: II
Canadian TDG
Shipping Name: 1,1-DICHLOROETHANE
Hazard Class: 3
UN Number: UN2362
Other Information: FLASHPOINT -10 C

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA

CAS# 75-34-3 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 75-34-3: Effective Date: June 1, 1987; Sunset Date: June 1, 1997

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

CAS# 75-34-3: 4/12b

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

CAS# 75-34-3: final RQ = 1000 pounds (454 kg)

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

This material contains 1,1-Dichloroethane (CAS# 75-34-3, 99%),which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.

Clean Air Act:

CAS# 75-34-3 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

CAS# 75-34-3 is listed as a Priority Pollutant under the Clean Water Act.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

1,1-Dichloroethane can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:

WARNING: This product contains 1,1-Dichloroethane, a chemical known to the state of California to cause cancer.

California No Significant Risk Level:

CAS# 75-34-3: no significant risk level = 100 ug/day

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN F

Risk Phrases:

R 11 Highly flammable.

R 22 Harmful if swallowed.

R 36/37 Irritating to eyes and respiratory system.

R 52/53 Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

S 16 Keep away from sources of ignition - No smoking.

S 23 Do not inhale gas/fumes/vapour/spray.

S 28A After contact with skin, wash immediately with plenty of water.

S 33 Take precautionary measures against static discharges.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek

medical advice immediately (show the label where possible).
S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

WGK (Water Danger/Protection)
CAS# 75-34-3: 3

United Kingdom Occupational Exposure Limits
CAS# 75-34-3: OES-United Kingdom, TWA 200 ppm TWA; 823 mg/m3 TWA
CAS# 75-34-3: OES-United Kingdom, STEL 400 ppm STEL; 1650 mg/m3 STEL

Canada
CAS# 75-34-3 is listed on Canada's DSL/NDSL List.
This product has a WHMIS classification of B2, D2B.
CAS# 75-34-3 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits
CAS# 75-34-3: OEL-ARAB Republic of Egypt
OEL-AUSTRALIA:TWA 200 ppm (810 mg/m3);STEL 250 pp (1010 mg/m3)
OEL-AUSTRIA:TWA 100 ppm (400 mg/m3)
OEL-BELGIUM:TWA 200 ppm (810 mg/m3);STEL 250 ppm (1010 mg/m3)
OEL-DENMARK:TWA 100 ppm (400 mg/m3)
OEL-FINLAND:TWA 100 ppm (400 mg/m3);STEL 250 ppm (1000 mg/m3)
OEL-FRANCE:TWA 200 ppm (810 mg/m3)
OEL-GERMANY:TWA 100 ppm (400 mg/m3)
OEL-JAPAN:TWA 100 ppm (400 mg/m3)
OEL-THE NETHERLANDS:TWA 200 ppm (820 mg/m3)
OEL-THE PHILIPPINES:TWA 100 ppm (400 mg/m3)
OEL-RUSSIA:TWA 100 ppm
OEL-SWITZERLAND:TWA 100 ppm (400 mg/m3);STEL 200 ppm (800 mg/m3)
OEL-THAILAND:TWA 50 ppm;STEL 100 ppm
OEL-TURKEY:TWA 100 ppm (400 mg/m3)
OEL-UNITED KINGDOM:TWA 200 ppm (810 mg/m3);STEL 400 ppm
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 9/02/1997 Revision #5 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

International Chemical Safety Cards

1,1,2,2-TETRACHLOROETHANE

ICSC: 0332

1,1,2,2-TETRACHLOROETHANE
Acetylene tetrachloride
Symmetrical-tetrachloroethane
S-tetrachloroethane
$CHCl_2CHCl_2$
Molecular mass: 167.9

CAS # 79-34-5
RTECS # KI8575000
ICSC # 0332
UN # 1702
EC # 602-015-00-3

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	In case of fire in the surroundings: all extinguishing agents allowed.
EXPLOSION			In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		STRICT HYGIENE!	
• INHALATION	Abdominal pain. Cough. Dizziness. Headache. Nausea. Sore throat. Vomiting.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
• SKIN	MAY BE ABSORBED! Dry skin. Tremors (further see Inhalation).	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
• EYES	Redness. Pain.	Face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
• INGESTION	Abdominal pain. Nausea. Vomiting (further see Inhalation).	Do not eat, drink, or smoke during work.	Do NOT induce vomiting. Rest. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Ventilation. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT let this chemical enter the environment (extra personal protection: complete protective clothing including self-contained breathing apparatus).	Separated from strong bases, food and feedstuffs. Cool. Keep in the dark. Well closed. Keep in a well-ventilated room.	Airtight. Do not transport with food and feedstuffs. T+ symbol R: 26/27-51/53 S: (1/2-)38-45-61 UN Hazard Class: 6.1 UN Packing Group: II Marine pollutant.

SEE IMPORTANT INFORMATION ON BACK

http://siri.uvm.edu/msds/mf/cards/file/0332.html

09/27/2000

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities © IPCS CEC 1993

International Chemical Safety Cards

1,1,2,2-TETRACHLOROETHANE

ICSC: 0332

IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:
COLOURLESS LIQUID , WITH CHARACTERISTIC ODOUR.

PHYSICAL DANGERS:
The vapour is heavier than air.

CHEMICAL DANGERS:
The substance decomposes on burning under influence of air, moisture and UV light, producing toxic and corrosive gases including hydrogen chloride and phosgene. Reacts violently with alkali metals, strong bases and many powdered metals producing toxic and explosive gases. Attacks plastic and rubber.

OCCUPATIONAL EXPOSURE LIMITS (OELs):
TLV: 1 ppm; 6.9 mg/m^3 (as TWA) (skin) (ACGIH 1994-1995).
MAK: 1 ppm; 7 mg/m^3; skin, B (1992).

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its vapour, through the skin and by ingestion.

INHALATION RISK:
A harmful contamination of the air can be reached rather quickly on evaporation of this substance at 20°C.

EFFECTS OF SHORT-TERM EXPOSURE:
The substance irritates the eyes and the respiratory tract. The substance may cause effects on the central nervous system, kidneys and liver , resulting in depression of the central nervous system, kidney impairment and liver impairment. Exposure may result in unconsciousness. Exposure may result in death.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
The liquid defats the skin. The substance may have effects on the central nervous system and liver , resulting in impaired functions.

PHYSICAL PROPERTIES

Boiling point: 146°C
Melting point: -44°C
Relative density (water = 1): 1.6
Solubility in water, g/100 ml at 20°C: 0.29
Vapour pressure, kPa at 20°C: 0.647
Vapour pressure, Pa at 25°C: 780
Relative vapour density (air = 1): 5.8
Relative density of the vapour/air-mixture at 20°C (air = 1): 1.031
Octanol/water partition coefficient as log Pow: 2.39

ENVIRONMENTAL DATA

The substance is toxic to aquatic organisms. This substance may be hazardous to the environment; special attention should be given to its impact on the ozone layer.

NOTES

Use of alcoholic beverages enhances the harmful effect. The odour warning when the exposure limit value is exceeded is insufficient. Do NOT use in the vicinity of a fire or a hot surface, or during welding.

Transport Emergency Card: TEC (R)-719
NFPA Code: H3; F0; R1

ADDITIONAL INFORMATION

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IMPORTANT LEGAL NOTICE: Neither the CEC or the IPCS nor any person acting on behalf of the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use.

Poly(Vinyl Benzyl Chloride)
ACROS89444

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Poly(Vinyl Benzyl Chloride)
Catalog Numbers:
AC9411521, XXPVCBCL2KG
Synonyms:
None
Company Identification (Europe): Acros Organics N.V.
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Company Identification (USA): Acros Organics
One Reagent Lane
Fairlawn, NJ 07410
For information in North America, call: 800-ACROS-01
For information in Europe, call: 0032(0) 14575211
For emergencies in the US, call CHEMTREC: 800-424-9300
For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
0-00-0	Poly(Vinyl Benzyl Chloride)	100.0	unlisted

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: white.
Caution! The toxicological properties of this material have not been fully investigated. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.
Target Organs: None known.

Potential Health Effects
Eye:
May cause eye irritation.
Skin:
May cause skin irritation.
Ingestion:
May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.
Inhalation:
May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.
Chronic:
No information found.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin:
Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.
Ingestion:
If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation:

Remove from exposure to fresh air immediately. Get medical aid if cough or other symptoms appear.

Notes to Physician:

Treat symptomatically and supportively.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:

In case of fire use water spray, dry chemical, carbon dioxide, or chemical foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Poly(Vinyl Benzyl Chloride)	none listed	none listed	none listed

OSHA Vacated PELs:

Poly(Vinyl Benzyl Chloride):

No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator

when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Solid
Appearance:	white
Odor:	Not available.
pH:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	Not available.
Freezing/Melting Point:	Not available.
Autoignition Temperature:	Not available.
Flash Point:	Not available.
NFPA Rating:	Not published.
Explosion Limits, Lower:	Not available.
Upper:	Not available.
Decomposition Temperature:	
Solubility:	
Specific Gravity/Density:	
Molecular Formula:	
Molecular Weight:	

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable.
Conditions to Avoid:
Incompatible materials.
Incompatibilities with Other Materials:
Strong oxidizing agents, strong bases.
Hazardous Decomposition Products:
Hydrogen chloride, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 0-00-0 unlisted.
LD50/LC50:
Not available.
Carcinogenicity:
Poly(Vinyl Benzyl Chloride) -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No data available.
Teratogenicity:
No data available.
Reproductive Effects:
No data available.
Neurotoxicity:
No data available.
Mutagenicity:
No data available.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classif as a hazardous waste.

US EPA guidelines for the classification determination are listed in 40 CFR Part
Additionally, waste generators must consult state and local hazardous waste regu
ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT

No information available

Canadian TDG

No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA

CAS# 0-00-0 is not listed on the TSCA inventory.
It is for research and development use only.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

Poly(Vinyl Benzyl Chloride) is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.
Risk Phrases:
Safety Phrases:

WGK (Water Danger/Protection)

CAS# 0-00-0: No information available.

United Kingdom Occupational Exposure Limits

Canada

None of the chemicals in this product are listed on the DSL/NDSL list.
WHMIS: Not available.
CAS# 0-00-0 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 3/10/1998 Revision #1 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

APPENDIX B

ACCIDENT REPORT FORM

ACCIDENT REPORT FORM
ACCIDENT FORM

SITE: _____ Report No. _____

PROJECT NO. _____

Location: _____

Date of Report: _____ Preparers Name: _____

Name and Address of Injured: _____ SSN: _____ Age: _____

_____ Sex: _____

Years of Service: _____ Time on Present Job _____ Title/Classification _____

Division/Department _____ Date of Accident _____

Accident Category: _____ Motor Vehicle _____ Property Damage Fire

_____ Chemical Exposure _____ Near Miss Other

Severity of Injury or Illness: _____ Non-disabling _____ Disabling

_____ Medical Treatment _____ Fatality

Amount of Damage: $ _____ Property Damaged: _____

Estimated Number of Days Away from Job: _____

Nature of Illness _____

CLASSIFICATION OF INJURY:

_____ Fractures

_____ Dislocations

_____ Sprains

_____ Abrasions

_____ Lacerations

_____ Punctures

_____ Bites

_____ Toxic Ingestions

_____ Heat Burns

_____ Chemical Burns

_____ Radiation Burns

_____ Bruises

_____ Blisters

_____ Toxic Respiratory Exposure

_____ Toxic Ingestions

_____ Dermal Allergy

_____ Cold Exposure

_____ Frostbite

_____ Heat Stroke

_____ Heat Exhaustion

_____ Concussion

_____ Faint/Dizziness

_____ Toxic Respiratory

Part of Body Affected _____

Degree of Disability _____

Accident Report Form (continued)

18. Injuries: Please Check Any Injuries You Have Had

- ☐ Fractures/Broken Bones
- ☐ Back Injury
- ☐ Low Back Pain
- ☐ None
- ☐ Severe Cuts
- ☐ Severe Burns
- ☐ Loss of Arm, Leg, Finger, Toe
- ☐ Loss of Consciousness
- ☐ Dislocations
- ☐ Other Injury

19. Check Yes or No. If Yes, Give Details in Blank Area	Yes	No	Details
a. Any Time Loss From Work Past Two Year Due to Illness			
b. Any Brace or Support Worn			
c. Discharged or Disqualified From Armed Services for any Reason			
d. Military Service - Dates and Locations			
e. Applied for, or Received Workmen's Compensation			
f. Been Exposed to Work with Dusts, Radiation, Excessive Noise; Chemicals			
g. Have you Been Unable to Hold a Job Because of:			
1. Sensitivity to Chemicals, Dust, Sunlight, etc.			
2. Inability to Perform Certain Motions			
3. Inability to Assume Certain Positions			
4. Other Medical Reasons			
h. Been a Patient in a Hospital or Sanitarium			
i. Had Surgery Recommended or Perform. Date and Type			
j. Are You Taking Medicines Now.			
k. Have You Been Turned Down on a Physical Examination or Been Informed of Any Abnormal Findings From a Physical Examination.			
l. Do You Smoke - If Yes, Quantity Per Day.			
m. Do You Use Alcoholic Beverages - If Yes, Quantity per Day			
n. Have You Lived or Traveled Outside the Continental U.S.A.			
o. Allergies			

Accident Report Form (continued)

Date Medical Care Was Received _____

Where Medical Care Was Received _____

Address (if off-site): _____

ACCIDENT LOCATION: _____

Causative agent most directly related to accident (Object substance, material, machinery, equipment conditions):

_____

Was weather a factor? _____

Unsafe mechanical/physical/environmental condition at time of accident (Be specific):

_____

Unsafe act by injured and/or others contributing to the accident (Be specific, must be answered):

_____

Personal factors (Improper attitude, lack of knowledge or skill, slow reaction, fatigue):

_____

Accident Report Form (continued)

Level of personal protection equipment requested in Site Safety Plan: _____

Modifications: _____

Was injured using required equipment _____

If not, how did actual equipment use differ from plan: _____

What can be done to prevent a recurrence of this type of accident (Modification of machine; mechanical guards; correct environment training): _____

Detailed narrative description (How did accident occur, why; objects, equipment tools used, circumstance assigned duties) (Be specific): _____

(Use back of sheet as required)

Witness to accident _____

Signature of Preparer _____

Signature of Site Leader _____

APPENDIX C

OSHA FORM 200

OSHA FORM 200

Log and Summary of Occupational Injuries and Illnesses

NOTE: This form is required by Public Law 91-[illegible] and must be kept in the establishment for 5 years. Failure to maintain and post can result in the assessment of [illegible] and assessment of penalties. (See posting requirements on the other side of form.)

RECORDABLE CASES: You are required to record information about every occupational [illegible] every nonfatal occupational illness; and those nonfatal occupational injuries which involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment (other than first aid). (See definitions on the other side of form.)

Case or File Number	Date of Injury or Onset of Illness	Employee's name	Occupation	Department	Description of Injury or Illness
Enter a nonduplicating number which will facilitate comparisons with supplementary records.	Enter Inquiry.	Enter first name or initial, middle initial, last name.	Enter regular job title, not activity employee was performing when injured or at onset of illness. In the absence of a formal title, enter a brief description of the employee's duties.	Enter department in which the employee is regularly employed or a description of normal workplace to which employee is assigned, even though temporarily working in another department at the time of injury or illness.	Enter a brief description of the injury or illness and indicate the part or parts of body affected. Typical entries for this column might be: Amputation of 1st joint right forefinger; Strain of lower back; Contact permanent on both hands; Electrocution—body.
(A)	(B)	(C)	(D)	(E)	(F)
					PREVIOUS PAGE TOTALS
					TOTALS (Subtract [illegible] on [illegible] of [illegible])

OSHA No. 200

OSHA Form 200 (continued)

U.S. Department of Labor

Company Name

For Calendar Year 19 ____

Page ____ of ____

Establishment Name

Establishment Address

Form Approved
O.M.B. No. 1218-0176
See OMB Disclosure Statement on reverse.

Types, Extent of, and Outcome of INJURY

Injuries	Nonfatal Injuries				
Injury Date	Injuries With Lost Workdays				Injuries Without Lost Workdays
Enter DATE of death. Mo./day/yr.	Enter a CHECK if injury involves days away from work, or days of restricted work activity, or both.	Enter a CHECK if injury involves days away from work.	Enter number of DAYS away from work.	Enter number of DAYS of restricted work activity.	Enter a CHECK if no entry was made in data items 1 or 2 but the injury is recordable as defined above.
(1)	(2)	(3)	(4)	(5)	(6)

Types, Extent of, and Outcome of ILLNESS

Illnesses	Nonfatal Illnesses											
Type of Illness	CHECK Only One Column for Each Illness (See back side of form for definitions of permanent illnesses.)											
	Occupational skin diseases or disorders	Dust diseases of the lungs	Respiratory conditions due to toxic agents	Poisoning (systemic effects of toxic materials)	Disorders due to physical agents	Disorders associated with repeated trauma	All other occupational illnesses					
	(7)											
	(a)	(b)	(c)	(d)	(e)	(f)	(g)					
Illness Number	Enter DATE of death. Mo./day/yr.	Illnesses With Lost Workdays						Illnesses Without Lost Workdays				
		Enter a CHECK if illness involves days away from work, or days of restricted work activity, or both.	Enter a CHECK if illness involves days away from work.	Enter number of DAYS away from work.	Enter number of DAYS of restricted work activity.	Enter a CHECK if no entry was made in data items 8 or 9.						
(8)		(9)	(10)	(11)	(12)	(13)						

Certification of Annual Summary Totals By _____ Title _____ Date _____

POST ONLY THIS PORTION OF THE LAST PAGE NO LATER THAN FEBRUARY 1.

OSHA Form 200 (continued)

Columns
6 and 13 — INJURIES OR ILLNESSES WITHOUT LOST WORKDAYS. Self-explanatory.

Columns 7a
through 7g — TYPE OF ILLNESS.
Enter a check in only one column for each illness.

TERMINATION OR PERMANENT TRANSFER—Place an asterisk to the right of the entry in columns 7a through 7g (type of illness) which represented a termination of employment or permanent transfer.

V. Totals

Add number of entries in columns 1 and 8.
Add number of checks in columns 2, 3, 6, 7, 9, 10, and 13.
Add number of days in columns 4, 5, 11, and 12.
Yearly totals for each column (1-13) are required for posting. Running or page totals may be generated at the discretion of the employer.

If an employee's loss of workdays is continuing at the time the totals are summarized, estimate the number of future workdays the employee will lose and add that estimate to the workdays already lost and include the figure in the annual totals. No further entries are to be made with respect to such cases in the next year's log.

VI Definitions

OCCUPATIONAL INJURY is any injury such as a cut, fracture, sprain, amputation, etc., which results from a work accident or from an exposure involving a single incident in the work environment.
NOTE: Conditions resulting from animal bites, such as insect or snake bites or from one-time exposure to chemicals, are considered to be injuries.

OCCUPATIONAL ILLNESS of an employee is any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. It includes acute and chronic illnesses or diseases which may be caused by inhalation, absorption, ingestion, or direct contact.

The following listing gives the categories of occupational illnesses and disorders that will be utilized for the purpose of classifying recordable illnesses. For purposes of information, examples of each category are given. These are typical examples, however, and are not to be considered the complete listing of the types of illnesses and disorders that are to be counted under each category.

7a. Occupational Skin Diseases or Disorders
Examples: Contact dermatitis, eczema, or rash caused by primary irritants and sensitizers or poisonous plants, oil acne, chrome ulcers; chemical burns or inflammations; etc.

7b. Dust Diseases of the Lungs (Pneumoconioses)
Examples: Silicosis, asbestosis and other asbestos-related diseases, coal worker's pneumoconiosis, byssinosis, siderosis, and other pneumoconioses.

7c. Respiratory Conditions Due to Toxic Agents
Examples: Pneumonitis, pharyngitis, rhinitis or acute congestion due to chemicals, dusts, gases, or fumes, farmer's lung; etc.

7d. Poisoning (Systemic Effect of Toxic Materials)
Examples: Poisoning by lead, mercury, cadmium, arsenic, or other metals, poisoning by carbon monoxide, hydrogen sulfide, or other gases, poisoning by benzol, carbon tetrachloride, or other organic solvents, poisoning by insecticide sprays such as parathion, lead arsenate, poisoning by other chemicals such as formaldehyde, plastics, and resins, etc.

7e. Disorders Due to Physical Agents (Other than Toxic Materials)
Examples: Heatstroke, sunstroke, heat exhaustion, and other effects of environmental heat, freezing, frostbite, and effects of exposure to low temperatures, caisson disease, effects of ionizing radiation (isotopes, X-rays, radium), effects of nonionizing radiation (welding flash, ultraviolet rays, microwaves, sunburn), etc.

7f. Disorders Associated With Repeated Trauma
Examples: Noise-induced hearing loss, synovitis, tenosynovitis, and bursitis, Raynaud's phenomena, and other conditions due to repeated motion, vibration, or pressure.

7g. All Other Occupational Illnesses
Examples: Anthrax, brucellosis, infectious hepatitis, malignant and benign tumors, food poisoning, histoplasmosis, coccidioidomycosis, etc.

MEDICAL TREATMENT includes treatment (other than first aid) administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does NOT include first-aid treatment (one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care) even though provided by a physician or registered professional personnel.

ESTABLISHMENT: A single physical location where business is conducted or where services or industrial operations are performed (for example: a factory, mill, store, hotel, restaurant, movie theater, farm, ranch, bank, sales office, warehouse, or central administrative office). Where distinctly separate activities are performed at a single physical location, such as construction activities operated from the same physical location as a lumber yard, each activity shall be treated as a separate establishment.

For firms engaged in activities which may be physically dispersed, such as agriculture, construction, transportation, communications, and electric, gas, and sanitary services, records may be maintained at a place to which employees report each day.

Records for personnel who do not primarily report or work at a single establishment, such as traveling salesmen, technicians, engineers, etc., shall be maintained at the location from which they are paid or the base from which personnel operate to carry out their activities.

WORK ENVIRONMENT is comprised of the physical location, equipment, materials processed or used, and the kinds of operations performed in the course of an employee's work, whether on or off the employer's premises.

*U.S. Government Printing Office: 1986 - 405-052/24106

OSHA Form 200 (continued)

Public reporting burden for this collection of information is estimated to vary from 4 to 30 (time in minutes) per response with an average of 15 (time in minutes) per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding this estimate or any other aspect of this information collection, including suggestions for reducing this burden, please send them to the OSHA Office of Statistics and/or the Department of Labor, Office of IRM Policy, Room N-1301, 200 Constitution Avenue, N.W. Washington, D.C. 20210

Instructions for OSHA No. 200

I. Log and Summary of Occupational Injuries and Illnesses

Each employer who is subject to the recordkeeping requirements of the Occupational Safety and Health Act of 1970 must maintain for each establishment a log of all recordable occupational injuries and illnesses. This form (OSHA No. 200) may be used for that purpose. A substitute for the OSHA No. 200 is acceptable if it is as detailed, easily readable, and understandable as the OSHA No. 200.

Enter each recordable case on the log within six (6) workdays after learning of its occurrence. Although other records must be maintained at the establishment to which they refer, it is possible to prepare and maintain the log at another location using data processing equipment if desired. If the log is prepared elsewhere, a copy updated to within 45 calendar days must be present at all times in the establishment.

Logs must be maintained and retained for five (5) years following the end of the calendar year to which they relate. Logs must be available informally at the establishment for inspection and copying by representatives of the Department of Labor, or the Department of Health and Human Services, or States accorded jurisdiction under the Act. Access to the log is also provided to employees, former employees and their representatives.

II. Changes in Extent of or Outcome of Injury or Illness

If, during the 5 year period the log must be retained, there is a change in an injury and outcome of an injury or illness which affects entries in columns 1, 2, 6, 8, 9, or 13, the log entry should be lined out and a new entry made. For example, if an injured employee at first required only medical treatment but later lost workdays away from work, the entry in column 6 should be lined out, and entries entered on columns 2 and 3 and the number of lost workdays entered in column 4.

In another example, if an employee with an occupational illness lost work days, returned to work, and then died of the illness, any entries in columns 9 through 12 should be lined out and the date of death entered in column 8.

The entire entry for an injury or illness should be lined out if later found to be nonrecordable. For example, an injury which is later determined not to be work related, or which was initially thought to involve medical treatment but later was determined to have involved only first aid.

III. Posting Requirements

A copy of the totals and information following the fold line of the last page for the year must be posted at each establishment in the place or places where notices to employees are customarily posted. This copy must be posted no later than *February 1 and must remain in place until March 1.*

Even though there were no injuries or illnesses during the year, zeros must be entered on the totals line, and the form posted.

The person responsible for the annual summary totals shall certify that the totals are true and complete by signing at the bottom of the form.

IV. Instructions for Completing Log and Summary of Occupational Injuries and Illnesses

Column A — CASE OR FILE NUMBER. Self-explanatory.

Column B — DATE OF INJURY OR ONSET OF ILLNESS.
For occupational injuries, enter the date of the work accident which resulted in injury. For occupational illnesses, enter the date of initial diagnosis of illness, or, if absence from work occurred before diagnosis, enter the first day of the absence attributable to the illness which was later diagnosed or recognized.

Columns C through F — Self explanatory.

Columns 1 and 8 — INJURY OR ILLNESS-RELATED DEATHS. Self explanatory.

Columns 2 and 9 — INJURIES OR ILLNESSES WITH LOST WORKDAYS. Self explanatory.

Any injury which involves days away from work, or days of restricted work activity, or both, must be recorded since it always involves one or more of the criteria for recordability.

Columns 3 and 10 — INJURIES OR ILLNESSES INVOLVING DAYS AWAY FROM WORK. Self explanatory.

Columns 4 and 11 — LOST WORKDAYS— DAYS AWAY FROM WORK.
Enter the number of workdays (consecutive or not) on which the employee would have worked but could not because of occupational injury or illness. The number of lost workdays should not include the day of injury or onset of illness or any days on which the employee would not have worked even though able to work.

NOTE: For employees hired in January, calculate lost workdays using a maximum of 180 days. For employees hired before January, calculate lost workdays using a maximum of 180 days. For those who are still off the job at the end of the year, it may be necessary to estimate the number of lost workdays. The maximum of lost workdays shall be based only on work history of the employee. AND: Lost workdays cannot exceed the number of scheduled workdays during the calendar year of the injury or illness, regardless of the number of days the employee would have worked or was able to work.

Columns 5 and 12 — LOST WORKDAYS—DAYS OF RESTRICTED WORK ACTIVITY.
Enter the number of workdays (consecutive or not) on which because of injury or illness:

(1) the employee was assigned to another job on a temporary basis, or
(2) the employee worked at a permanent job less than full time, or
(3) the employee worked at a permanently assigned job but could not perform all duties normally connected with it.

The number of lost workdays should not include the day of injury or onset of illness or any days on which the employee would not have worked even though able to work.

APPENDIX D

EMPLOYER'S FIRST REPORT OF INJURY FORM

EMPLOYER'S FIRST REPORT OF INJURY

Please submit this report in TRIPLICATE

Employer

1. Name of Employer _____
2. Office address: No. & St. _____ City/town _____ State ____
3. Insured by Name of Company _____
4. Give nature of Business (or article manufactured) _____

Time and Place

5. (a) Location of plant or place where accident occurred _____
   (b) If injured in a mine, did accident occur on surface, under ground, shaft, drift or mill _____
6. Date of injury _____ 19___ Day of week ____ Hour of day _____ a.m. _____ p.m.
7. Date disability began _____ 19___ a.m. ____ p.m. ____
8. Was injured paid in full for this day _____
9. When did you or foreman first know of injury _____
10. Name of foreman _____

Injured Person

11. Name of injured _____
    (First Name) (middle Initial) (Last Name) (SS #)
12. Address: No. and St. _____ City/Town _____ State _____
13. Check ( ) Married___Single___ Widowed___ Widower___ Divorced___ Male ____ Female___
14. Age_____Did you have on file employment certificate or permit _____
15. (a) Occupation when injured _____
    (b) Was this his or her regular occupation _____
    (If not, state in what department or branch of work regularly employed _____
16. (a) How long employed by you _____
17. (a) No. hours worked per day _____ (b) Wages per day $ _____
    (c) No. Days worked per week _____ (b) Wages per day$ _____
    (e) If board, lodging, fuel or other advantages were furnished in addition to wages, give estimated value per day, week, or month _____ (d) Average weekly earning $ _____

Cause of Injury

18. Machine, tool or thing causing injury _____
19. Kind of power (hand, foot, electrical, steam, etc.) _____
20. Part of machine on which accident occurred _____
21. (a) Was safety appliance or regulation provided _____ (b) Was it in use at time _____
22. Was accident caused by injury's failure to use or observe safety appliance or regulation _____
23. Describe fully how accident occurred, and state what employee was doing when injured _____
24. Name and addresses of witnesses _____

Nature of Injury

25. Nature and location of injury (describe fully exact location of amputations or fractures, right or left) _____
26. Probably length of disability _____
27. Has injured return to work _____ If so, date and hour _____
28. At what occupation _____ At what wage $ _____
29. (a) Name and address of physician _____
    (b) Name and address of hospital _____

Cases Fatal

30. Has injured died _____ If so, give date of death _____

Date of this report _____ Firm name _____

Signed by _____ Official title _____

APPENDIX E

SAFETY MEETING SHEET

RECORD OF SAFETY MEETINGS

RECORD OF SAFETY MEETINGS

Company	Date/Time	Location	Attended By	Affiliation

APPENDIX F

VAPOR MONITORING SHEET

VAPOR MONITORING SHEET

DATE	TIME	READING	COMMENTS

ONE STOP AUTO & TRUCK CENTER
299 MAIN STREET
WESTBURY, NEW YORK 11590

Sec. 11 - Blk. 144 - Lots 31-50
ABS Mortgage No. 9406
GCI Project No. 950011

GENERAL
CONSOLIDATED
INDUSTRIES

E 000155

RECEIVED
FEB 15

PHASE I
ENVIRONMENTAL SITE ASSESSMENT
and
PHASE II SUBSURFACE INVESTIGATION

ONE STOP AUTO & TRUCK CENTER
299 MAIN STREET
WESTBURY, NEW YORK 11590

Sec. 11 - Blk. 144 - Lots 31-50
ABS Mortgage No. 9406
GCI Project No. 950011

Prepared for:

Apple Bank For Savings
277 Park Avenue
New York, New York 10172

DATE OF PHASE I INSPECTION: February 9, 1995
DATE OF PHASE II SUB-SURFACE INVESTIGATION: February 9, 1995
DATE OF REPORT: February 14, 1995

Prepared by:

General Consolidated Industries, Inc. (GCI)
1111 Route 110
East Farmingdale, New York 11735
(516) 694-9696

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REPORT SPECIFICATIONS

This report contains 52 pages of text.

Copies and circulation of this report are as follows:

(3) Bound copies to Mr. Scott Reiner, Senior Real Estate Inspector, Apple Bank For Savings.

(1) Copy in the confidential client file at General Consolidated Industries, Inc. (GCI).

(1) Copy on security protected computer disk at General Consolidated Industries, Inc. (GCI).

This report is prepared for the exclusive use of parties noted above and is considered private and strictly confidential. General Consolidated Industries, Inc. (GCI) shall not release this report or any of the findings of this report to any person or agency except with the authorization of the principal parties noted above.

1.0 INTRODUCTION

General Consolidated Industries, Inc. has been retained to prepare a Phase I Environmental Site Assessment and a Phase II Subsurface Investigation for the property known as One Stop Auto & Truck Center, located at 299 Main Street, Unincorporated Village of Westbury, Town of North Hempstead, Nassau County, New York. GCI has prepared this assessment in accordance with the general requirements of "due diligence" in order that secured creditors may be classified as "innocent landowners" under the Superfund Amendments and Reauthorization Act (SARA 1986). The assessment has been completed by qualified professionals in accordance with the specific requirements established by Apple Bank For Savings for evaluating collateral risk during the performance of an Environmental Assessment.

1.1 Objectives/Scope of Work

The objective of this environmental assessment is to assess the soil and groundwater quality of the subject site, as well as to assess the existing and former conditions and utilization of the site to assess potential liability with respect to the presence of hazardous materials that may pose a potential environmental or human health threat. Environmental threats would include, but not be limited to, hazardous/toxic wastes or raw chemicals stored, dumped or spilled on premises, underground storage of hazardous materials, friable asbestos, and identification of potential off-site sources of hazardous waste contamination such as releases from storage facilities adjacent to the subject site.

1.2 Methodology

To complete the environmental assessment, the following procedures were conducted:

1) A detailed field inspection of the subject site was performed including the building(s) interior, exterior, property grounds and site perimeter.

2) Facility management personnel were interviewed concerning activities conducted at the subject site, past and present.

3) Neighboring property utilization was evaluated to determine potential impact on subject site.

4) The following federal and state regulatory agency documents were reviewed concerning the location of known hazardous waste sites proximal to the subject site: CERCLIS, National Priorities List, RCRA TSD, RCRA Generators, ERNS, Inactive Hazardous Waste Disposal Sites, Landfills and/or Solid Waste Disposal Sites, Leaking USTs, Registered USTs, and New York State Department of Environmental Conservation (NYS DEC) Spill File.

5) Research was conducted through the Nassau County Department of Health Services and the Nassau County Fire Marshal for the number, size and date of installation of fuel (heating) oil tanks, and also any existing violations.

6) Research was conducted on files held at the Town of North Hempstead to compile a chain-of-ownership of the subject site to identify past owners and possible uses of the property.

7) A search was made for sensitive ecological areas and wetlands in the vicinity of the subject site.

8) Borings were installed in four (4) various locations throughout the site for the purpose of obtaining and field screening groundwater samples. Based on this screening, groundwater samples were sent to a New York State certified laboratory for analysis.

Evaluations, conclusions and recommendations are submitted based on the careful consideration of the results of the above research. Recommendations are formulated with respect for maintaining the collateral value of the property. Where estimates of cost have been developed, those costs are estimated based on GCI's professional judgement and visual inspection, not construction bids or contracts from trade professionals. This report is intended to assess the threat to human health and/or the collateral value of the property. It is generally not within the scope of this report to perform intrusive or

aggressive testing of suspect materials observed at the site. Materials will be identified as environmentally suspect, however, a representative sampling procedure is required to fully assess the occurrence of the following materials: electrical devices containing PCB's; the occurrence of radon gas; the use of lead based paint and finally the extent of asbestos containing material (ACM).

The accuracy of presenting the findings of this environmental assessment was considered of paramount importance during the formulation of this report. However, the report's accuracy is limited to the information available from interviews, records, files and plans released by the property owner and/or his representatives and/or the respective regulatory agencies, their attorneys and information officers. The above mentioned parties interest in issues presented herein is unknown to General Consolidated Industries, Inc. (GCI).

GCI expressly reserves its common law copyright and other property rights in this report. This report is not to be reproduced, changed or copied in any form or manner whatsoever, nor is it to be assigned to any third party without first obtaining the express written permission and consent of **GCI.**

Darren Haverty
Project Manager
General Consolidated Industries, Inc.

Matthew Boeckel
Senior Hydrogeologist
General Consolidated Industries, Inc.

Tom P. Smyth
Director of Environmental Services
General Consolidated Industries, Inc.

Site Description

E 000164

2.0 SITE DESCRIPTION

2.1 Site Location

The subject site, One Stop Auto and Truck Center - 299 Main Street, is located on the north side of Main Street between Hopper Street and Garden Street, in the unincorporated Village of Westbury, Town of North Hempstead, Nassau County, New York. A copy of the Site Area / Location Map-Figure 1.0 and a copy of the Tax Map-Figure 2.0 are enclosed for reference in Appendix "A".

Ownership Information:	F. Scappatura 1015 Old Country Road Westbury, NY 11590	
Tax Map Number:	District:	001
	Section:	11
	Block:	144
	Lots:	0031-0

Sources:

1. U.S. Environmental Protection Agency
2. New York State Department of Environmental Conservation
3. New York State Department of Health
4. County of Nassau Department of Health
5. Town of North Hempstead Department of Building
6. Town of North Hempstead Board of Zoning and Appeals
7. LILCO - Long Island Lighting Company
8. Nassau County Water Authority
9. Nassau County Sewer District

Site Dimensions: The lot is irregular in shape with approximately 200 feet of frontage located along Main Street and 256 deep. The total subject site occupies approximately 51,200 square feet or 1.3 acres.

2.2 Site Characteristics

A field inspection of the subject site was completed by GCI inspector, Mr. Darren Haverty on February 9, 1995. The property was surveyed by inspecting the building interior(s) on a room by room basis; areas of particular note were the sources of building heat, the structure's thermal and pipe insulation and areas where there was storage of chemicals or hazardous materials. The exterior was inspected by walking the grounds with special attention given to the perimeter of the site, point sources of discharge or emission, injection wells, drywells, above-ground storage facilities, storage drums, and above-ground connections to underground storage tanks (UST's). The activities conducted in every part of the property were identified for the purpose of determining potential environmental threats, of interest were the waste handling procedures, storage of hazardous materials and neighboring activities. Photographs were also taken of the subject site, please see Appendices - Site Photographs.

The site is a multiple-lot parcel. The property was developed for use as an industrial warehouse and general retail facility. The subject building occupies approximately 9,086 square feet, with parking areas for the patrons located on the south side of the subject building along Main Street. The subject building is constructed with a foundation of poured concrete, built with concrete block walls with stucco finish facade, and aluminum and wood frame windows.

The automobile body repair and painting / auto repair facility known as "One Stop Auto Center" is accessible by way of two (2) curb cuts/gate openings along Hopper Street and one curb cut/gate opening along Garden Street. The subject facility is permitted for use as a "junk yard" by the Town of North Hempstead Board of Zoning and Appeals. The subject building consists of a service/repair area for approximately ten (10) vehicles, one (1) auto body repair shop, reception area, several office areas, and second floor storage area.

The **office/reception areas** are accessible by way of an entrance from the front (south) side as well as from the rear auto body repair area. These areas are equipped with a bathroom. The area was finished with dropped acoustic ceiling tile and resilient floor tile. The private office was finished with commercial carpeting and dropped acoustic ceiling tile. Fluorescent lighting was observed throughout these office areas.

The **service/repair area** is accessible by way of four (4) bay entrances located at the north and one (1) located at the south side of the building. The area was equipped with six (6) hydraulic vehicle lifts. Also located in the service area was an air compressor, two (2) degreasing stations, typical service/welding equipment, various storage drums and storage containers (Please see Section 3.3),

There are reportedly gas fired HVAC, roof mounted, heating units, serving the office/reception areas. Two (2) "MODINE" gas fired units heat the service/repair and auto body repair areas, as well as two (2) waste oil fired ceiling mounted, forced hot air units.

The roof of the subject site was reported to be a flat rolled asphalt type roof in good condition.

The subject site is serviced by the following utilities:

- Electrical service is provided by LILCO - Long Island Lighting Company.
- Gas service is provided by LILCO - Long Island Lighting Company.
- Water is supplied by the Nassau County Water Authority.
- Sanitary sewers are reportedly connected to the municipal sewer system.

Site Security:
The potential for vandalism type dumping of hazardous material on the property is considered low to moderate. The subject site is situated on a light traffic thoroughfare, which is moderately lighted. The entire rear perimeter of the subject site is secured by chain-link fencing and secured gates. Roof mounted surveillance cameras are positioned on the roof of the subject building on all corners. There is also a security dog on the site at all times.

Sewer/Storm Water Discharge & Drywells:
Sewage generated on site is reportedly directed to the municipal sewer system.

There are no floor drains or bay drains present in the subject building; although two (2) trench drains are located at the rear, one outside the far east bay door and one located at the far west bay door. There was one slop sink located in the bathroom of the subject building, this slop sink discharges to the sewer system.

Storm water from the subject site is directed to ground surface via gutters and leaders located along the rear of the subject building. There are no facilities or structures for collection of storm water runoff.

Storage Drums & Containers:
Activities conducted at the subject site do entail the use and storage of drums. There were numerous storage drums located throughout the subject building and property at 299 Main Street. The drums were utilized for the storage of waste oil, solvents and other materials typical to the use of the site, several were identified as follows:

- Five (5) 50 gallon drums were located along the east service area wall, each containing distinct materials including: anti-freeze coolant, motor oil, AW hydraulic oil 46 manufactured by QUAKER STATE, Dex-Merc ATF fluid, and CAM-2 anti-freeze manufactured by CAM-2 Oil Parts Company, Denver Colorado.

- One (1) 25 gallon drum of 85W-140 oil, manufactured by CAM-2.

- One (1) five gallon pale of Berkebel Dot Brake Fluid.

- One (1) 275 gallon tank labeled as QUAKER STATE Super Blend 10W-30 Motor Oil.

During the inspection, several drums were noted to be stored outside on the grounds of the subject site and included:

- Four (4) 55 gallon plastic drums at the rear of the site labeled to contain AFCO

Chain and Conveyer Oil containing isoprophel, tetra-sodium and other ingredients

- One (1) 55 gallon steel drum containing unknown material, located on the west side of the subject site.

- One (1) 55 gallon steel drum containing unknown material, located on the east side of the subject site in proximity to four (4) empty drums.

Note: at the time of inspection approximately twelve (12) 55 gallon, steel drums, were noted to be stored directly outside the west side gate of the subject site, specifically on the ground along Garden Street. Material stored inside the drums could not be determined, although one drum was visibly leaking what appeared to be oil; several gallons was found pooled on the surface below the tanks (see photo).

2.3 Facility Operations: Current & Past Uses

The parcel is currently utilized as an automobile dismantling facility "junk yard", and one building containing: a service/repair area for approximately ten (10) vehicles, one (1) auto body repair shop, reception area, several office areas, and second floor storage area. The building was reported to be erected in 1966 for use as a light industrial business. Records indicate that several alterations were performed on the building. Records indicate the site was used as an auto dismantling junk yard. According to conversation with Paula Scappatura, and research of local records, the site was utilized by Steven Yasinski as a junk yard from circa 1971 to 1977 and was subsequently occupied by Island Transportation Corp. from circa 1977 to 1982.

During the time period when the site was occupied by Island Transportation, research indicates response to several complaints, and site investigations by local agencies were performed. Nassau County Health Department conducted inspections and found various cleaning agents including Spra Jel (a petroleum solvent) were used to clean out trucks and this wastewater was found by to be discharged over the ground surface at the S/E corner of the site and into cesspools. Trichloroethylene was used during cleaning operations as well were most material was re-distilled on site. Semi-annual waste reports filed by Island Transportation indicate that during 1979 10 gallons/week of solvents and 80 gallons of trichloroethylene/week were generated at the site. Solvents

were handled by Safety Kleen Corporation, Mineola, NY. Waste oil was generated and removed by General Waste Oil Co. of Huntington, NY. Records indicate that in 1981 a 2,000 gallon diesel fuel tank had failed a pressure test and was apparently leaking. Observation well installation was planned by the DEC Regional Spill Department, however shortly thereafter the subject site was abandoned by Island Transportation.

A State Pollutant Discharge Elimination Systems (SPDES) Permit - to hold and haul hazardous waste, was issued by the New York State Department of Environmental Conservation from 1978-1982.

There is no record that the building had ever been used for laboratory, metal plating or x-ray processing. The normal operations conducted at the facility by the present uses would pose a threat to human health or the collateral value of the property.

2.4 Site Hydrology & Geology

New Cassel, Westbury, Nassau County, Long Island, New York is located in the Atlantic Coastal Plain physiographic province which is characterized by low hills of unconsolidated sands, gravel and silt. According to Franke (1972), regionally, the subsurface deposits consist of the Upper Glacial deposits that are characterized by southward sloping deposits of sand, gravel and silt. The Upper Glacial deposits have a maximum thickness of 600 feet. They are underlain by the Magothy, Raritan and Lloyd Formations. The Gardiners clay and the Jameco gravel separate the Upper Glacial deposits and the Magothy Formation along the south west portion of Long Island.

The subject site is in the Upper Glacial aquifer. The Upper Glacial has been designated a sole source aquifer by the US EPA, and as such is protected by US EPA mandated remediation legislation.

According to groundwater contour maps provided by the United States Geologic Survey (USGS) and the Nassau County Department of Public Works (NCDPW) groundwater is approximately between seventy (70) and seventy-five (75) feet below ground surface at the subject site. Groundwater flows south with a slight westerly component under a regional hydraulic gradient of 0.001 ft/foot.

The subject site has been classified as Ug (Urban Land) by the USDA Soil Conservation Service. This type of area consists of areas where at least 85 percent of the surface is covered with asphalt, concrete, or other impervious building material. These areas mostly are parking lots, shopping centers, industrial parks, or institutional sites. Many are in the business centers in the villages and cities. Most areas are nearly level, and some are gently sloping. A few small areas, mostly in the northern part of the county are strongly sloping. Many areas are rectangular or long and narrow and are mainly adjacent to local main thoroughfares. The areas range from about 3 acres to as much as several hundred acres.

Included with this type of area are small areas of soil that has not been appreciably altered or that is not under an impervious cover. These areas are mainly in lawns or other landscaped areas. Most of the included open areas are well drained Riverhead, Hempstead, or Enfield soils or excessively drained Udipsamments.

In many of these areas, rapid or very rapid runoff prevents adequate discharge or runoff from intense rainstorms to safe outlets. A few areas are in low spots where seasonal wetness sometimes causes temporary flooding of the surface or frost heaving and subsequent breakup of surface pavements.

2.5 Groundwater Use

The use of local groundwater as a potable drinking water source can compound a property owners potential financial exposure and associated liabilities from subsurface contamination. General Consolidated Industries therefore evaluated the extent of the local groundwater usage in the area of the subject site.

Public water supply wells are located downgradient from the subject site. Public / municipal water service is supplied to the subject site. The groundwater is not used as a direct water supply at the site for drinking water supply, or other uses. There are no private on-site wells which utilize the groundwater for any other uses at the subject site.

2.6 Adjacent Properties

North: Scibelli Automotive Enterprises and Frank and Son's (junk/auto salvage yards), followed by the L.I.R.R train line.

- Similar in use and nature.

South: Main Street, followed by Al's Tool and Die, IET Labs and other commercial / light industrial uses.

- Similar in use and nature.

East: Hopper Street, followed by Hopper Street Auto Wreckers, and one story industrial/office buildings at 110 and 120 Hopper Street, followed by an automobile dismantling business.

- Similar in use and nature.

West: Garden Street, followed by a tractor trailer storage facility, G.A Richards Company an office furniture shipping company and other commercial/light industrial businesses.

- Similar in nature and use.

2.7 Chemical Staining & Stressed Vegetation

A surface spill of petroleum hydrocarbon products or other chemicals may be adsorbed onto the soil particles and retained in the near-surface sediments. Plant life near a spill will often be killed or will suffer stress from the contamination of the soil with these products. The condition of vegetative growth can be an indicator of near-surface soil conditions.

During the site inspection, GCI personnel did identify evidence of chemical spills such as soil staining or stressed vegetation. As stated, the entire subject site is only partially paved. There are automobiles and automobile parts, such as gasoline tanks stored in open areas throughout the site. There were numerous areas where GCI observed staining of the surface soils, although much of the area was covered with snow and ice at the time of the inspection. These stains were most likely the result of small surface

spills of oil or gasoline. The subsurface investigation confirms that these spills have not impacted the soil or the groundwater. While the staining remains, the majority of the spills are assumed to be older. These older spill materials have volatilized over time. Twelve (12) 55 gallon, steel drums, were noted to be stored on the ground along Garden Street. One drum was visibly leaking what appeared to be oil; several gallons was found pooled on the surface below the tanks (see photo). In addition, staining was also observed in the area of the trench drains located in the rear/north yard.

2.8 Chemical Storage Facilities

Activities conducted at the subject site do entail the use or storage of any hazardous waste, including the waste oil handled and stored at the facility as a result of the automobile dismantling operations and vehicle service business and solvents used at the two Safety Kleen fluid recovery parts washers, models 7.0.R. Additional chemicals are stored in the auto body repair section of the building and include:

- Approximately ten (10) gallons of re-claimed heavy duty lacquer thinner collected by the Safety Kleen gun & equipment cleaner model No. 1107.
- Thirteen (13) one gallon containers of chemicals including: Clear Coat, NCT Activator, Deltron, Reactive Reducer and Universal Blender Agent.
- One (1) five gallon container of KNIGHT'S Engine degreaser.
- One (1) five gallon container of Fast Dry Acrylic Lacquer Thinner - 100% Virgin, manufactured by PPG Inc., Elizabeth, Kentucky.

2.9 Underground & Above Ground Storage Tanks (USTs & AGTs)

At the time of the inspection, there was a vent line for an underground storage tank observed along the rear wall of the subject building. Two (2) approximately 275 gallon steel tanks, storing waste oil and fueling the two forced hot air units inside the building are located along the rear wall of the subject building. One (1) 275 gallon tank labeled

as QUAKER STATE Super Blend 10W-30 Motor Oil is located inside the concrete block enclosure on the east side of the building. One empty abandoned 275 gallon steel tank was noted along the west side of the site, at the time of inspection. A vent line with no associated fill port was observed along the north wall of the subject building. There were no other underground or above ground storage tanks observed or reported at the time of inspection.

Research was conducted at the Nassau County Department of Health Services and The Nassau County Fire Marshal's office for records of any tanks, including tanks installed, sealed and/or removed. As of the date of this report, these agencies have records indicating that the following storage tanks existed on the site:

- 1 - 10,000 gallon diesel storage tank
  Installed February 15, 1972
  Abandoned in place July 18, 1990

- 2 - 4,000 gallon diesel storage tank
  Installed January 1, 1963
  Abandoned in place July 19 & 20, 1990

- 1 - 4,000 gallon gasoline storage tank
  Installed May 1, 1966
  Abandoned in place July 23, 1990

Copies of the Nassau County Fire Marshall certificate of registration, abandonments record, and correspondence is included with this report: Historical Records - Appendix B.

2.10 Hazardous Materials Generation, Use & Disposal

The subject property was inspected to determine the presence (generation, use & disposal) of hazardous materials. The following are the findings of the inspection:

- The activities conducted at the facility do not entail the generation, use or disposal of any hazardous materials, with the exception of the waste oil and solvents utilized on the site.

- The facility does store reportable quantities of regulated chemicals on site including:

- Approximately ten (10) gallons of re-claimed heavy duty lacquer thinner collected by the Safety Kleen gun & equipment cleaner model No. 1107.

- Thirteen (13) one gallon containers of chemicals including: Clear Coat, NCT Activator, Deltron, Reactive Reducer and Universal Blender Agent.

- One (1) five gallon container of KNIGHT'S Engine degreaser.

- One (1) five gallon container of Fast Dry Acrylic Lacquer Thinner - 100% Virgin, manufactured by PPG Inc., Elizabeth, Kentucky.

- The facility is not required to submit a SARA Title III Emergency Planning and Community Right-To-Know (EPCRA) Tier II form.

- The facility is reportedly not required to submit a SARA Title III Toxic Chemical Release Reporting (TCRR) Form R to the EPA.

- There are no known enforcement actions; judicial, administrative or negotiated consent orders; notice or demand letters; permit violations; fine proceedings; or other litigation, etc. pending or likely to be initiated by the state or federal agencies with respect to hazardous material management activities conducted at the facility.

2.11 Solid & Hazardous Waste

- The facility does not generate solid or hazardous waste other than refuse, with the exception of waste oil handled and stored at the facility as a result of the automobile dismantling operations and vehicle service business, and solvents used at the two Safety Kleen fluid recovery parts washers, models 7.0.R. .

- The refuse generated on site is placed in a holding/dumpster area located on-site. The waste is then disposed of by a private carter. At the time of inspection, no suspected hazardous waste was contained in the solid waste holding/dumpster area.

- There are no known analytical results regarding solid and/or hazardous wastes associated with the facility.

- There are no known hazardous waste transporters associated with or doing business with the site including Safety Kleen Corporation, Mineola, NY.

- The facility does not store any hazardous wastes for disposal on site for longer than 90 days.

- There are no known enforcement actions; judicial,administrative or negotiated consent orders; notice or demand letters; permit violations; fine proceedings; or other litigation, etc. pending or likely to be initiated by the state or federal agencies with respect to solid and/or hazardous waste management activities conducted at the facility.

2.12 Asbestos Building Materials & Urea Formaldehyde Foam Insulation

Asbestos

General Consolidated Industries' personnel performed a visual scan of accessible common areas for suspected asbestos containing material (ACM). Where a suspected asbestos building material was observed, General Consolidated Industries' determined the condition of the material and estimated the amount of suspect material.

Dropped acoustic ceiling tile and resilient floor tile were observed throughout the office areas of the subject building. The type of acoustic ceiling tile used in the dropped ceiling and the resilient floor tile are not suspected of being asbestos containing material (ACM) based on the numerous renovations of the building. The presence of asbestos materials can only be confirmed by laboratory analysis of samples collected from the building materials in question.

Urea Formaldehyde
Urea formaldehyde foam insulation was not identified within the subject site by GCI personnel.

2.13 Poly-Chlorinated Biphenyl's (PCB's)

Transformers:
There are three (3) types of transformers defined in the PCB regulations:

a. **PCB Transformer:** Any transformer containing 500 ppm PCB's or greater.

b. **Non-PCB Transformer:** Any transformer containing less than 50 ppm PCB's.

c. **PCB-Contaminated Transformer:** Any transformer containing 50-499 ppm PCB's. These transformers are not subject to parts of the regulations such as marking requirements or, if drained of liquid, to the disposal requirements. Any liquid drained from these transformers must be stored and disposed of in accordance with the regulations.

Transformers often contain dielectric liquid for the primary purpose of increasing resistance of the unit to arcing and acting as a heat transfer media, helping to cool the coils. The majority of transformers are filled with mineral oil, but a small percentage of these liquid-filled transformers contain PCB Askarel coolant liquid. The term "Askarel" is a generic term used for a group of nonflammable synthetic chlorinated hydrocarbons. All types of Askarels sold prior to 1979 contained 60 to 100 percent PCB's. Askarel transformers were manufactured in a variety of sizes, i.e. 3 to 3,000 gallons of PCB liquid, and are generally used in hazardous locations where flammability is of concern. PCB transformers are no longer produced because of EPA's ban on the manufacture of new equipment containing PCB's.

According to LILCO operations engineers, LILCO does not own or operate any PCB transformers containing over 500 ppm PCB's, however they do own and operate mineral oil transformers classified as PCB contaminated at a concentration to 50 ppm. PCB contaminated transformers do not require special notification, inspection, or other modification.

Inspection:
There were no transformers located on the site at the time of the inspection. The property is acceptable for PCB's.

Fluorescent Lighting:
There is fluorescent lighting within the subject buildings. Based on the original date of construction, and the numerous renovations to the subject building, the presence of PCB's is not suspected here. Prior to the banning of PCB manufacture in 1976, the compounds were used in small amounts during the manufacture of fluorescent light ballasts. According to EPA regulations, light ballasts containing less than three (3) pounds of PCB oil are exempt from special hazardous waste transportation and disposal and may be disposed of as municipal wastes, however, removal is not required by law.

To determine if the light ballasts contain PCB's the light fixtures would have to be dismantled and the make and model number obtained from the manufacturer.

If the lighting is to remain, maintenance personnel should be advised as to the possibility of the ballasts containing PCB's. Workers should exercise caution when handling the ballasts, taking care not to have them break or leak. Protective gloves should be worn when handling ballasts.

2.14 Radon

Radon is a heavy colorless, odorless, radioactive gas formed by the radioactive decay of radium. Radon is associated with specific geologic formations which contain granite, uranium minerals, certain shales and phosphate related minerals. Radon, being a gas, can migrate to and accumulate in confined spaces such as building basements. Continued exposure of radon gas has been associated with increased lung cancer risk and possible genetic damage.

The US EPA has set a minimum action level of 4 picocuries per liter (pCi/Liter) in air. At concentrations above this level, the US EPA recommends remedial measures to lower the concentrations.

The NYS Department of Health, Bureau of Radiation Protection monitors radon levels throughout the state. According to this monitoring data, Nassau and Suffolk Counties have the lowest radon average (1.6 pCi/Liter) within the state. The radon level for zip code 11590 was reported as 0.9 pCi/Liter. The radon level for Nassau County was 1.3 pCi/Liter. Given this information, radon is not considered a significant environmental concern within the subject site.

2.15 Lead-Based Paint (LBP)

The subject site is improved by a commercial / industrial building. Being that the subject site was not residential in nature, the potential for lead-based paint (LBP) was not required to be scrutinized. Therefore, an on-site testing of painted surfaces for the presence of lead-based paint (LBP) was not performed.

Site inspection

E 000180

3.0 SUBSURFACE INVESTIGATION

On February 9, 1995, in order to determine the quality of groundwater at the subject site, GCI conducted a Phase II Sub-Surface Investigation. The investigation was conducted under the supervision of GCI Senior Hydrogeologist, Mr. Matthew Boeckel. The investigation consisted of installing four (4) soil borings with the use of a van-mounted Geoprobe unit. The locations for the soil borings were placed strategically throughout the subject site based on potential sources of contamination, areas of concern, and probable groundwater flow direction. The locations of the borings are illustrated on the enclosed site plan - Figure 1. The soil borings were drilled to a final depth of 75 feet below land surface (bls). Prior to drilling activities, all utilities in the area of the proposed drilling were located.

For the documentation of groundwater quality, samples were collected from the soil borings at the groundwater interface level. Groundwater was encountered at depths of approximately 70 feet bls, groundwater samples were obtained at this interface level by the use of a peristaltic pump and clean teflon tubing.

Prior to the collection of each sample in order to prevent cross-contamination of the groundwater samples all sampling material was thoroughly decontaminated. The groundwater samples were stored in a decontaminated cooler with ice. The groundwater samples were delivered to a New York State Department of Health (NYSDOH) Certified laboratory for analysis and were analyzed using EPA method 624. The Chain of Custody and Laboratory Analysis Results are included in this report - Appendix A.

After completing the borings, the holes were backfilled with clean sand. Boring cuttings were disposed of properly in accordance with all requirements.

The collected groundwater samples were inspected in an attempt to identify signs of contamination, such as noticeable odors, sheen, floating product, etc., the samples were supposed to be field screened using an HNU Photolonization Detector (PID) to determine the presence of volatile organics in the soil. Due to the weather conditions the HNU Photoionization Detector (PID) was not able to be utilized. A summary of the boring locations, and description of the samples obtained is presented in Table 1 - Boring Logs.

The groundwater samples from all of the borings were retained for laboratory analysis. A total of four (4) groundwater samples were obtained on February 9, 1995. The samples were sent to American Analytical Laboratories, located in Farmingdale, New York. Groundwater samples were analyzed for purgeable-volatile organics using EPA Method 624 - TCL (Target Compound List). A summary of the laboratory data is presented on Table 2.

TABLE 1

BORING LOCATION LOGS

299 MAIN STREET
NEW CASSEL, NEW YORK

WATER BORING	LOCATION	DEPTH OF GROUNDWATER SAMPLE (below grade)	LITHOLOGY/PID READINGS (ppm)
WB-1	Approximately five feet from northwest corner of subject property.	74-76 ft.	Water sample contained abundant amount of fine clayey-sand material. No odor, sheen, or product noticed in sample.
WB-2	Middle of subject site in car storage area approximately 40 feet from eastern boundary.	74-76 ft.	Water sample contained abundant amount of fine clayey-sand material. No odor, sheen, or product noticed in sample.
WB-3	Southeast corner of subject property approximately seven feet from the subject building.	72-74 ft.	Water sample contained abundant amount of fine clayey-sand material. No odor, sheen, or product noticed in sample.
WB-4	Southwest corner of subject property approximately five feet from subject building.	72-74 ft.	Water sample contained abundant amount of fine clayey-sand material. No odor, sheen, or product noticed in sample.

3.1 Soil Analytical Results

Based upon the nature of operations conducted at the site, car repair, service and storage of wrecked automobiles, the potential for contamination of the soil at the site is considered high. Due to the prevailing weather conditions of snow and ice, the majority of the ground surface was unable to be inspected. In the areas where examination of the ground was possible it was observed that the ground was stained with petroleum products. Certain areas were observed to contain direct spill/pooling areas resulting from the improper storage of parts, tanks, drums, etc. It is assumed that there surficial contamination of the sub-surface and surface soils throughout the area where the wrecked cars are stored. This soil contamination is due to surface spills of oil, gasoline, anti-freeze, solvents, etc. that have occurred.

In addition, there was a vent line located in the rear/north side of the building. The vent line indicates the presence of an underground storage tank, although there were no records of the underground storage tank. It is assumed that the storage tank is still present on the subject site and that it has caused some soil and/or groundwater contamination due to deterioration and leaks.

Furthermore, the trench drains along the rear/north side of the subject building were observed to collect the run-off from the service bay areas. The drains were observed to contain some staining. It is assumed that the drains have caused some leaching of contamination into the surrounding soils.

A summary of the laboratory analytical results are contained in Table 3.

3.2 Groundwater Analytical Results

A total of four (4) soil borings were strategically placed throughout the subject site in order to acquire a representative representation of the groundwater quality at the site and to determine if the present and/or former operations conducted at the subject site are contributing to contaminating the groundwater. After each boring was completed to its final depth, a groundwater sample was collected. The samples were sent for laboratory analysis for Purgeable-volatile organics using EPA method 624 - TCL (Target Compound List). The analytical results showed that all three samples contained concentrations of some volatile organics compounds (VOCs) at elevated levels. The samples all contained relatively the same constituents at elevated levels. Upon interpretation of the data there was indication that the contamination present in the groundwater is possibly related to the operations at the subject site. Results for the groundwater also suggest that the contamination present is possibly the result of an off site source, such as the New Cassel Industrial Area plume. A summary of the laboratory analytical results are contained in Table 3.

TABLE 2

GROUNDWATER QUALITY DATA
VOLATILE ORGANIC COMPOUNDS
TCL (Target Compound List)
EPA METHOD 624

LABORATORY ANALYTICAL PARAMETERS	DETECTION LIMIT	WB-1	WB-2	WB-3	WB-4
Benzene	<5	<5	<5	<5	<5
Acetone	<5	<10	<10	<10	<10
Bromoform	<5	<5	<5	<5	<5
Bromomethane	<5	<10	<10	<10	<10
2-Butanone	<5	<10	<10	<10	<10
Carbon Disulfide	<5	<5	<5	<5	<5
Chlorobenzene	<5	<5	<5	<5	<5
Chloroethane	<5	<10	<10	<10	<10
Chloroform	<5	<5	<5	<5	<5
Chloromethane	<5	<10	<10	<10	<10
Dibromochloromethane	<5	<5	<5	<5	<5
1,1-Dichloroethane	<5	<5	<5	<5	<5
1,2-Dichloroethane	<5	<5	<5	<5	<5
1,1-Dichloroethene	<5	<5	<5	<5	<5
C/T-1/2 Dichloroethene	<5	<5	<5	50.6	<5
cis-1,3-Dichloropropene	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	<5	<5	<5	<5	<5
Ethyl Benzene	<5	<5	<5	<5	<5

LABORATORY ANALYTICAL PARAMETERS	DETECTION LIMIT	WB-1	WB-2	WB-3	WB-4
2-Hexanone	<5	<10	<10	<10	<10
Methylene Chloride	<5	<5	<5	<5	<5
4-Methyl-2Pentanone	<5	<10	<10	<10	<10
Styrene	<5	<5	<5	<5	<5
1,1,2,2,-Tetrachloroethane	<5	<5	<5	<5	<5
Tetrachloroethene	<5	<5	<5	<5	<5
Toluene	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5	<5	<5
Trichloroethene	<5	<5	<5	20.0	<5
Vinyl Acetate	<5	<10	<10	<10	<10
Vinyl Chloride	<5	<10	<10	<10	<10
Xylenes (Total)	<15	<5	<5	<5	<5

Notes:

1. All results in ug/L (ppb)

2. * = Results are published in the New York State Department of Conservation Petroleum Contaminated Soil Guidance Policy (STARS Memo # 1), August 1992.

E 000186

3.3 NYS DEC Investigative Summary - New Cassel Industrial Area

NYS DEC Preliminary Site Assessment (PSA)
New Cassel Industrial Area (NCIA)

Investigation Summary

As previously stated, the subject site is located within an area which has been designated by the New York State Department of Environmental Conservation (NYSDEC) Division of Hazardous Waste Remediation as an Inactive Hazardous Waste Disposal Site. The specific denotation of the area/site is the New Cassel Industrial Area (NCIA), located north of Old Country Road and south of the Long Island Rail Road (LIRR) tracks in New Cassel, Unincorporated Village of Westbury, Town of North Hempstead, Nassau County New York. Whereas the subject site is presently located within this designated area, it is consequently included as one of the many sites which comprise the one listed area.

The NCIA is comprised of approximately 170 acres of land, which is occupied by approximately 200 commercial or industrial businesses / operations, and these are owned by approximately 150 individual owners. The area has been operating as an industrial area since circa 1950. In 1985 the Nassau County Department of Health (NCDH) conducted an investigation of the NCIA and identified extensive halogenated volatile organic contamination of the groundwater in the area. Based on this investigation, the NYSDEC classified the area as a hazardous waste site in 1988.

The NCIA is bounded to the north by the Long Island Rail Road (LIRR) tracks, to the east by the Wantagh State Parkway, to the south by Old Country Road, and to the west by Grand Boulevard. The area has been given a Priority Classification Code of 2, meaning that the area is a "significant threat to the public health or environment - action required." The Class 2 designation also means that all property owners within the area are potentially responsible parties (PRPs), even though the specific operation of a site may never have released contaminants or contributed to the contamination.

Since the area was designated a hazardous waste site, many owners of properties within the boundaries of the NCIA have requested that the NYSDEC remove their specific properties from the list. Where the NYSDEC has received "delist petitions" and elected to remove properties from the list, such delisting was still subject to future investigation during which these delisted properties could be relisted.

In October 1994 the NYSDEC conducted a preliminary site assessment (PSA) of the NCIA. The PAS consisted of (1) file research and review, (2) compilation of database information acquired from "(1)", (3) collection and analysis of groundwater samples from 56 existing monitoring wells, (4) collection and analysis of samples obtained from 40 groundwater probes, (5) second phase of groundwater probes, suspected source area sampling and selected facility inspections, and (6) the preparation of a PSA report.

The PSA identified several groundwater plumes containing volatile organic compound (VOC) contamination. The properties suspected to be potentially contributing these plumes have been identified. Three major areas within the NCIA site have been identified as containing the majority of the contamination. These three areas are located in each of the western, central and eastern sections of the NCIA site. In addition, separate plumes exist within each of the three sections. There have been two plumes identified in the western section, three plumes identified within the central section, and two plumes identified within the eastern section. The remaining area of the NCIA has been designated as "relatively uncontaminated" by the PSA.

The recommendation of the PSA will be that the entire NCIA site be removed from the NYSDEC Inactive Hazardous Waste Site list, and that the areas or sites (which have been found to be major contaminated areas) be added to the NYSDEC list. Those sites or areas which are not specifically listed can be assumed to be not responsible.

The PSA concludes that while the numerous plumes have been documented as having significant impact to the environment, the documentation of a release or presence of hazardous wastes has not been confirmed, and this is the second criteria for listing a site with the NYSDEC. The PSA also states that whether the plumes were connected, whether there was one plume, and whether there were areas with no contamination can not as yet be pronounced.

At this time it can not be speculated what the NYSDEC's next course of action will be. Although interviews conducted between GCI personnel and the NYSDEC indicate that the parties not found to be responsible will in fact be removed from the list. Further investigation and assessment will need to be conducted in order to confirm the remaining responsible parties. At the point which the responsible parties have been clearly identified, legal negotiations will be conducted between the responsible parties and the state. A Remedial Investigation / Feasibility Study (RI/FS) or simply an Feasibility Study (due to the amount of investigation already conducted) will be conducted in order to outline the options and a scope for the remedial actions to be conducted.

The NYSDEC has not yet begun to consider the options for remediation of the NCIA. All further investigations, assessments, as well as at least the Feasibility Study (FS) will need to be conducted before any considerations for remedial plans can be made. Although it is clear that the remedial measures taken will be conducted as a single, integrated, large scale plan, not sporadically on a site by site basis.

The costs associated with all work including the investigations, assessments, and future remedial actions will be attributable to the responsible parties on a percentage basis.

Regulatory Review

E 000190

4.0 REVIEW OF FEDERAL, STATE AND LOCAL REGULATORY AGENCY RECORDS & DOCUMENTS

To determine if the subject site is listed, known, or suspected of being a hazardous waste site, federal and state listings/documents were reviewed. The NYS DEC Spill logs were reviewed to determine if any documented discharge of hazardous materials has occurred within or near the subject site. The NYS DEC Inactive Hazardous Waste Disposal Sites (IHWD) inventory of all actual or suspected inactive hazardous waste sites was reviewed. The State lists were reviewed for landfills and/or solid waste disposal sites, leaking UST sites, and registered UST sites. The US EPA databases were reviewed for NPL (National Priority List) sites, CERCLIS (Comprehensive Environmental Response Compensation Liability Information System) listed sites, RCRA TSD sites, RCRA generators list sites, ERNS listed sites. The Nassau County Department of Health, the Nassau County Fire Marshall, and the Town of North Hempstead files were reviewed for any records which may have been maintained by the agency concerning the subject site.

4.1 US EPA Listed Sites

US EPA NPL (National Priority List)

The US EPA (United States Environmental Protection Agency) maintains a data base of unmanaged (uncontrolled) and/or forsaken (abandoned) hazardous waste sites. The data base is known as the National Priority List (NPL). Sites included in this list are given priority by the US EPA for remedial action under the federal Superfund Program. A particular site will be included on the NPL if it equals or exceeds an established hazard classification system score, or if it is designated as a particular state's top environmental priority site.

A site is also classified as an NPL site if all of the following criteria are satisfied:

1) The U.S. Department of Health & Human Services issues a health advisory recommending that people be evacuated from the site to avoid exposure.

2) The EPA determines that the site is a potentially significant environmental hazard.

3) The EPA determines that site remediation is more cost-effective than removal.

GCI reviewed the United States Environmental Protection Agency's National Priorities List. This review indicated that the subject site is not on the NPL list and that there are no (0) NPL sites within a one (1.0) mile radius of the subject property.

US EPA CERCLIS

The US EPA Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 was designed to allow the federal government to directly address any potential release of hazardous waste that may endanger public health or welfare; in order to "provide for liability, compensation, clean-up, and emergency response for hazardous substances released into the environment and clean-up of inactive hazardous waste disposal sites."

GCI has reviewed the USEPA Comprehensive Environmental Response Compensation Liability Information System (CERCLIS) database listing. The review has indicated that the subject site is not a CERCLIS hazardous waste site and that there are no (0) CERCLIS hazardous waste sites located within a one-half (½) mile radius of the subject property.

RCRA TSD

The US EPA maintains a database of facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA. The database is known as the RCRA TSD facilities list. A review of the latest database published indicated that the subject property was not listed in the USEPA Resource Conservation Recovery Information System and that there are no (0) RCRIS TSD facilities located within one (1.0) mile radius of the subject site.

RCRIS Generators

The US EPA maintains a database of those persons or entities that generate hazardous wastes as defined and regulated by RCRA. The database is known as the RCRA generators list. A review of the latest database published indicated that ten (10) RCRIS Generators were located within 1/8 mile of the subject site.

There were a total of four (4) Small Quantity Generators:

(1) SITE: "Frank & Sons Auto Wrecking"
ADDRESS: 132 Hopper Street
Westbury, NY 11590
EPA ID NO: NYD986972388
LOCATION: < 1/8 mile east, northeast

(2) SITE: "Avanel Industry"
ADDRESS: 121 Hopper Avenue
Westbury, NY 11590
EPA ID NO: NYD982532954
LOCATION: < 1/8 mile east, northeast

(3) SITE: "Rac Mechanical"
ADDRESS: 120 Hopper Street
Westbury, NY 11590
EPA ID NO: NYD987033651
LOCATION: < 1/8 mile east, northeast

(4) SITE: "Giffords Energy Corp."
91 Magnolia Avenue
Westbury, NY 11590
EPA ID NO: NYD982270118
LOCATION: < 1/8 mile south, southwest

There were a total of six (6) Large Quantity Generators:

(1) SITE: "Pittston Petroleum Inc."
ADDRESS: 80 Garden Street
Westbury, NY 11590
EPA ID NO: NYD000689042
LOCATION: < 1/8 mile west

(2) SITE: "Biltrite Steel Buck Corp."
ADDRESS: 95 Hopper Street
Westbury, NY 11590
EPA ID NO: NYD986946259
LOCATION: < 1/8 mile east, southeast

(3) SITE: "Contemporary Packaging Corp."
ADDRESS: 90 Hopper Street
Westbury, NY 11590
EPA ID NO: NYD054997069
LOCATION: < 1/8 southeast

(4) SITE: "Atlas Graphics Inc."
ADDRESS: 567 Main Street
Westbury, NY 11590
EPA ID NO: NYD060317898
LOCATION: < 1/8 mile east

(5) SITE: "IMC Magnetics Corp."
ADDRESS: 570 Main Street
Westbury, NY 11590
EPA ID NO: NYD002041895
LOCATION: < 1/8 mile east

(6) SITE: "Midbury Industries Inc."
ADDRESS: 73 Rushmore Street
Westbury, NY 11590
EPA ID NO: NYD000021253
LOCATION: < 1/8 mile east

US EPA ERNS

The US EPA maintains an Emergency Response Notification System list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. The list is known as the ERNS list. A review of the latest list published indicated that no ERNS activity was reported at or adjacent to the subject property.

4.2 New York State Listed Sites

Inactive Hazardous Waste Sites

The New York State Department of Environmental Conservation (NYS DEC) publishes a report entitled "Inactive Hazardous Waste Disposal Sites in New York State", April 1993, which lists all properties that have been found to contain, or are suspected of containing, significant amounts of hazardous or toxic contamination.

A review of inactive hazardous waste disposal (IHWD) sites revealed that the subject site is not listed by the NYS DEC as a known hazardous waste disposal site, although the subject site is located within an area which has been designated a New York State Inactive Hazardous Waste Disposal Site by the NYS DEC. Therefore, the subject site is considered to be one of numerous sites which comprise the Inactive Hazardous Waste Site. The area encompasses approximately 170 acres of land, which is occupied by approximately 150 sites, which are owned by approximately 120 individual owners.

SITE:	New Cassel Industrial Area
ADDRESS:	North of Old Country Road South of Rail Road Tracks New Cassel, NY 11590
LOCATION:	Approx. 170 acres total circumference
STATUS:	Groundwater contamination has been confirmed. Groundwater is a primary source of drinking water in the area. Public water supply wells are located downgradient from the site (area), approximately 300 to 500 meters downgradient of the industrial area. Monitoring wells located within the area contained several volatile organic compounds ranging from 2.0 to 9,800 ug/L and indicated that the plume is migrating towards the three public water supply wells. Periodic sampling of the public supply wells has not detected volatile organics in excess of NYS DEC drinking water standards.

Please refer to the excerpts from the New York State Department of Environmental Conservation (NYSDEC) Division of Hazardous Waste Remediation Inactive Hazardous Waste Disposal Sites report enclosed in Appendix B - Historical Records for the documented records of the site.

Landfills and/or Solid Waste Disposal Sites
A review of New York State listed landfills and/or solid waste disposal sites revealed that there are no (0) landfills located within a one-half (½) mile radius of the subject site.

Registered Underground Storage Tanks (UST)
A review of the New York State list of registered underground storage tanks revealed that there were no (0) UST's registered at the subject site. There are a total of two (2) UST's registered within a one-eight (1/8) mile of the subject site.

(1)	SITE:	"Harmon Associates Corp."
	ADDRESS:	111 Swalm Street Westbury, NY 11590
	LOCATION:	< 1/8 mile east, northeast
	TANK TYPE:	Aboveground Unleaded Gasoline
	TANK CAPACITY:	250 gallons
(2)	SITE:	"Varitek Machine Co."
	ADDRESS:	130 Swalm Street Westbury, NY 11590
	LOCATION:	< 1/8 mile northeast
	TANK TYPE:	Aboveground Leaded Gasoline
	TANK CAPACITY:	3,000 gallons

Leaking Underground Storage Tanks (LUST)
The NYS DEC has compiled a record of all documented hazardous materials spills and illegal discharges to the land, subsurface, and surface water that have occurred within New York State since 1986. This record, commonly referred to as the "DEC Spill Logs" is a record of spills or releases of petroleum products such as gasoline and fuel oils from above and below ground storage tanks, however, it also includes any documented illegal dumping of any type of hazardous material.

A review of the New York State Department of Environmental Conservation (NYS DEC) list of leaking underground storage tanks (LUSTs) revealed that there were a total of twenty-five (25) such sites located within a one-half (1/2) mile radius of the subject site. Of these twenty-five (25) sites, thirteen (13) are located between 1/4 and 1/2 mile of the subject site, nine (9) are

located within 1/8 and 1/4 mile of the subject site, and three (3) are located within 1/8 mile of the subject site. Upon review of the documented spills, it was found that only four (4) of the spills are still active spills (on going).

(1) SITE: "Royal Guard Fence"
ADDRESS: 550 Main Street
Westbury, NY 11590
LOCATION: < 1/8 mile east, southeast
MATERIAL: Gasoline
QUANTITY: 0.00 gallons
SPILL DATE: October 8, 1993
CAUSE: Tank Test Failure
STATUS: Active Spill (On Going)

(2) SITE: "Elm Transit"
ADDRESS: 482 Grand Boulevard
New Cassel, NY 11590
LOCATION: 1/8 to 1/4 mile southwest
MATERIAL: Diesel
QUANTITY: 0.00 gallons
CAUSE: Tank Test Failure
SPILL DATE: October 28, 1990
STATUS: Active Spill (On Going)

(3) SITE: "Newell ?"
ADDRESS: 231 Hopper Street
Westbury, NY 11590
LOCATION: 1/8 to 1/4 mile north
MATERIAL: No. 2 Fuel Oil
QUANTITY: 0.00 gallons
CAUSE: Other
SPILL DATE: April 27, 1992
STATUS: Active Spill (On Going)

(4)	SITE:	"Bill Wolf Petroleum"
	ADDRESS:	750 Old Country Road Westbury, NY 11590
	LOCATION.	1/4 to 1/2 mile south, southwest
	MATERIAL:	Gasoline
	QUANTITY:	0.00 gallons
	CAUSE:	Other
	SPILL DATE:	February 13, 1989
	STATUS:	Active Spill (On Going)

Please refer to the enclosed New York State Department of Environmental Conservation (NYSDEC) database search in Appendix D - ASTM Database Searches for the specific information regarding the spill records.

CONCLUSION:

Based on the review of the regulatory agency databases mentioned above, as well as a review of the surrounding properties, the project is not found acceptable. The database searches of the Federal and State lists noted in the above sections revealed some potential concerns within the general area of the subject site, specifically the existence of the NYS DEC Inactive Hazardous Waste Site - New Cassel Industrial Area. The subject site is centrally located within the Inactive Hazardous Waste Site (area), therefore there is a high potential of concern. Based on the documented plume in the area, it would be likely for contamination from the responsible sources to have impacted the subject property.

For these reasons, the scope of this assessment was expanded to include a sub-surface investigation of the subject site in order to confirm the impact of the groundwater contamination. Please refer to Section 5.0 - Phase II Sub-Surface Investigation for the conclusions of the groundwater sampling conducted.

4.3 Nassau County Department of Health

A search was made through the Nassau County Department of Health for all records regarding any underground or aboveground storage tanks (UST's or AGT's), as well as any violations for the subject site.

As of the date of this report, the Nassau County Department of Health reported the following:

- September 15, 1977
  Based on an Industrial Chemical Survey of Island Transportation Corp. located at 299 Main Street, there is documented record of discharging "detergent wash from trucks into 8-9000 gallon cesspools". In addition, there is documented use of 80 gallons per year of Trichlorethylene, 600 gallons per year of Methanol, and 1,400 gallons per year of parts cleaner.

- April 6, 1981
  NCHD was given a copy a letter documenting the failure of a pressure test on the 2,000 gallon diesel tank located at the property. Based on the spill, the NCFM requested the installation of monitoring wells and the owner was not complying.

- November 20, 1981
  NCHD inspection report for waste report documented the site as being closed, the storage yard cleaned, all trucks removed, and assumed to be out of business.

- January 21, 1981
  Documentation of the Island Transportation Corp. having a permit to "haul hazardous waste" - NYS DEC Permit No. 30-H-56, Facility No. 2414.

- October 21, 1980
  Island Transportation's NYS DEC application to operate a Solid Waste Management Facility (Part 360) at the site used as a "petroleum product transporter with repair facility for own tractor trailers".

- October 21, 1980
  Material Flow Sketch of operation documenting (1) trucks washed with detergent in bays and discharge to underground industrial cesspool, (2) on site 500 gallon waste oil tank, and (3) two on site sanitary cesspools receiving discharges from a wash room.

- January 11, 1979 & August 21, 1979
  Documentation of waste water surface spills from overfilled drywells, and also from southeast corner of the shop.

- 1978 - 1979
  Various correspondence from the NYSDEC and the NCHD concerning the NYSDEC SPDES permit for the storage and removal of potentially hazardous wastes.

Copies of the research records obtained from the Nassau County Department of Health are included in Appendix C - Historical Agency Records.

4.4 Nassau County Fire Marshall

A search was made through the Nassau County Fire Marshall for all records regarding any underground or aboveground storage tanks (UST's or AGT's), as well as any previous or existing violations for the subject site.

As of the date of this report, the Nassau County Fire Marshall has records indicating that the following storage tanks existed on the site:

- 1 - 10,000 gallon diesel storage tank
  Installed February 15, 1972
  Abandoned in place July 18, 1990

- 2 - 4,000 gallon diesel storage tank
  Installed January 1, 1963
  Abandoned in place July 19 & 20, 1990

- 1 - 4,000 gallon gasoline storage tank
  Installed May 1, 1966
  Abandoned in place July 23, 1990

In addition, the Nassau County Fire Marshall has record of a license/permit for "application of flammable finishes", dated June 1994.

Copies of the research records obtained from the Nassau County Fire Marshall are included in Appendix C - Historical Agency Records.

4.5 Nassau County Tax Assessor's Office

Tax records maintained with the Nassau County Tax Assessor's Office indicated that the subject site was developed in 1966. Copies of the current tax card as well as the old tax cards, have been included with this report in Appendix C - Historical Records.

4.6 Town of North Hempstead

A search was made through the Town of North Hempstead Building Department, Zoning Board of Appeals, and Planning Department to trace the history of all past applications to the Town for modification of the subject property, such as permits, zoning changes/modifications, variances, certificates of occupancy (C/O), or any other changes at the site, and to search for any past or existing violations.

The Town of North Hempstead Building Department reported that the subject site had been occupied by a light industrial building in 1966, when it was originally developed. Subsequent to the original construction, alterations were made to the building, and the site was utilized as an automobile dismantling junk yard.

Specific records held by the Town of North Hempstead Building Department reported the following:

- September 21, 1994
  Building Department Notice of Violation (No. 94-1039) for sidewalk being full of debris and car parts.

- June 30, 1971
  Zoning Board of Appeals Notice of Decision (No. 9615) granting "erection and or maintenance of vehicular entrance gates..."

Copies of all documents obtained from the Village are included with this report in Appendix C - Historical Records.

Historical Tenant Search

For the purpose of further identifying the utilization of the subject site, GCI has carried out a historical tenant search of the subject site, dating back to 1935. The search revealed the following:

1956	Changed Zoning To "INDUSTRIAL"
1955 to 1960's	Auto Dismantling & Junk Yard
1968 to 1970's	Bus Depot and Storage Yard
1971 to 1977	Auto Dismantling & Junk yard
1977 to 1994	Island Transportation
1994 to present	One Stop Auto & Truck Center

Conclusions & Recommendations

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5.0 SUMMARY OF FINDINGS

5.1 Conclusions & Recommendations

Conclusions:

The preceding sections provide a full evaluation of the environmental threat to private and public health. Based on the completion of the Phase I Environmental Site Assessment of the subject site, General Consolidated Industries, Inc. (GCI) has come to the following conclusions:

- The subject site, is located on the north side of Main Street between Hopper Street and Garden Street, unincorporated Village of Westbury, Town of North Hempstead, Nassau County, New York.

- The lot is irregular in shape with approximately 200 feet of frontage located along Main Street and 256 deep. The total subject site occupies approximately 51,200 square feet or 1.3 acres.

- The site is a multiple-lot parcel. The property was developed for use as an industrial warehouse and general retail facility. The subject building is improved with parking areas for the patrons located on the south side of the subject building along Main Street. The subject building is constructed with a foundation of poured concrete, built with concrete block walls with stucco finish facade, and aluminum and wood frame windows.

- The subject building consists of a service/repair area for approximately ten (10) vehicles, one (1) auto body repair shop with a spray booth, reception area, and several office areas.

- The **office/reception areas** are accessible by way of an entrance from the front (south) side as well as from the rear auto body repair area. These areas are equipped with a bathroom. The area was finished with dropped acoustic ceiling tile and resilient floor tile. The private office was finished with commercial carpeting and dropped acoustic ceiling tile. Fluorescent lighting was observed throughout these office areas.

- The **service/repair area** is accessible by way of four (4) bay entrances located at the north and one (1) located at the south side of the building. The area was equipped with six (6) hydraulic vehicle lifts. Also located in the service area was an air compressor, two (2) degreasing stations, typical service/welding equipment, various storage drums and storage containers (Please see Section 3.3).

- There are reportedly gas fired HVAC, roof mounted, heating units, serving the office/reception areas. Two (2) "MODINE" gas fired units heat the service/repair and auto body repair areas, as well as two (2) waste oil/fuel oil fired ceiling mounted, forced hot air units.

- The roof of the subject site was reported to be a flat rolled asphalt type roof in good condition. The potential for vandalism type dumping of hazardous material on the property is considered low to moderate.

- Sewage generated on site is reportedly directed to the municipal sewer system.

- There are no floor drains or bay drains present in the subject building; although two (2) trench drains are located at the rear, one outside the far east bay door and one located at the far west bay door. There was on slop sink located in the bathroom of the subject building, this slop sink discharges to the sewer system.

- Storm water from the subject site is directed to ground surface via gutters and leaders located along the rear of the subject building. There are no facilities or structures for collection of storm water runoff.

- Activities conducted at the subject site do entail the use and storage of drums. There were numerous storage drums located throughout the subject building and property at 299 Main Street. The drums were utilized for the storage of waste oil, solvents and other materials typical to the use of the site.

- The building was reported to be erected in 1966 for use as a light industrial business. Records indicate that several alterations were performed on the building. Records indicate the site was used as an auto dismantling junk yard.

- There is no record that the building had ever been used for laboratory, metal plating or x-ray processing. The normal operations conducted at the facility by the present uses would pose a threat to human health and the collateral value of the property.

- During the site inspection, GCI personnel did identify evidence of chemical spills such as soil staining or stressed vegetation. As stated, the entire subject site is only partially paved. There are automobiles and automobile parts, such as gasoline tanks stored in open areas throughout the site. There were numerous areas where GCI observed staining of the surface soils, although much of the area was covered with snow and ice at the time of the inspection. These stains were most likely the result of surface spills of oil or gasoline. A total of twelve (12)-55 gallon, steel drums, were noted to be stored on the ground along Garden Street. One drum was visibly leaking what appeared to be oil; several gallons was found pooled on the surface below the tanks (Please see photographs).

- At the time of the inspection, there was a vent line for an underground storage tank observed along the north/rear wall of the subject building, with no associated fill port. Furthermore, there were no records indicating the removal or abandonment of this tank.

- There were two (2) approximately 275 gallon steel tanks, storing waste oil and fueling the two forced hot air units inside the building are located along the rear wall of the subject building. One (1) 275 gallon tank labeled as QUAKER STATE Super Blend 10W-30 Motor Oil is located inside the concrete block enclosure on the east side of the building. One empty abandoned 275 gallon steel tank was noted along the west side of the site, at the time of inspection.

- The facility does generate solid or hazardous waste other than refuse including: waste oil handled and stored at the facility as a result of the automobile dismantling operations and vehicle service business, and solvents used at the two Safety Kleen fluid recovery parts washers, models 7.0.R.

- There were no transformers located on the site at the time of the inspection. The property is acceptable for PCB's.

Based on the completion of the Phase II Sub-surface Investigation of the subject site, including field observations and review of the laboratory results, General Consolidated Industries, Inc. (GCI) has come to the following conclusions:

- Groundwater occurs under unconfined conditions at approximately 70 feet below grade at the subject site.

- Groundwater flow direction was not verified through field measurements. Based on USGS publications the ground water flow is in a southerly direction. Please see Site Plan - Figure 1.0.

- On February 9, 1995 a soil boring program was implemented and a total of four (4) soil borings were drilled at the subject site.

- Groundwater samples were taken and visually inspected for the presence of odors, sheens, or floating product.

- All water samples that were collected and laboratory analyzed revealed that there is some elevated levels of VOC (Volatile Organic Compound) contamination of the groundwater at the site.

- There is a slight degree of groundwater contamination at the site subject site, and the elevated levels of compounds are similar to the elevated levels of compounds confirmed by the NYSDEC to be present as part of the New Cassel Industrial Area groundwater plume.

- The New Cassel Industrial Area consists of approximately 170 acres of industrial land, and is occupied by approximately 200 businesses, many of which deal with hazardous substances. Facilities in this area have either illegally discharged or spilled the following types of chemicals: chlorinated hydrocarbons, acids, metals and aliphatic solvents.

- Previous investigations conducted by the NYSDEC have indicated that there is an appreciable degree of groundwater contamination within the 170-acre site. Contamination in the subsurface can be very misleading, not all chemicals act the same in the subsurface, contamination has several options once it is introduced into the ground. Contamination may float on the groundwater, it may sink deeper

into the groundwater, it can lose vapor to the surrounding medium, or it can be adsorbed and retained in the soil in which it comes in contact with.

- Groundwater samples collected at the site were analyzed and the results were compared to previous groundwater quality data that had been obtained in the area. It was determined that the groundwater contamination present at the site is probably the result of operations conducted within the industrial area. In addition, the groundwater samples obtained only represent a "snapshot" of conditions at the site, that is the samples are representative of the present conditions, and does not illustrate what may have been or possibly could exist at the site in the future due to the continued migration of the plume.

- It is the conclusion of this subsurface investigation that the subject site is not fully paved and there are numerous areas observed to have staining as a result of spilled products which has probably lead to contamination of the surficial soil present at the site. The groundwater samples confirm that there is contamination at the water-table. After interpretation of the groundwater results was completed it was determined that the subject site is not a primary source of contamination to the groundwater. The elevated levels detected in the water samples are the result of elevated groundwater quality due to the operations conducted in the general vicinity of the subject site.

Based on the above conclusions achieved through General Consolidated Industries, Inc. assessment of the subject site, the following environmental concerns exist:

1. The subject site is located within an area which has been designated by the New York State Department of Environmental Conservation (NYS DEC) Division of Hazardous Waste Remediation as an Inactive Hazardous Waste Disposal Site. The specific site name is classified as the "New Cassel Industrial Area". The subject site is one of numerous sites within the area which comprise the entire hazardous waste site, as such the subject site is a "Potential Responsible Party (PRP)" for the contamination present.

   As previously stated, a Preliminary Site Assessment (PSA) has been completed and a draft report will be released in the coming weeks. The NYS DEC has advised that the process of appointing legal responsibility for the hazardous waste site will be conducted upon the review of additional assessments of the entire area. The NYS DEC has also advised that the legal responsibility for the hazardous waste site will be appointed to the responsible parties on a percentage basis. The appropriated percentage designated for each responsible site will be determined by numerous factors including: the use of the site, the size of the site, the situation of the groundwater plume beneath the site, etc. The area will not be remediated on a site-by-site basis, but as one entire project.

   This Phase II Sub-Surface Investigation has confirmed that the volatile organic compound (VOC) contamination previously assessed by the NYS DEC to be existing in a groundwater plume at the hazardous waste site are present in some elevated levels at the subject site.

2. A stated in the report, a vent line for an underground storage tank was observed along the north/rear wall of the subject building, with no associated fill port. Furthermore, there were no records indicating the removal or abandonment of this tank. In addition, an abandoned 275 gallon storage tank was observed in the rear yard area.

3. If it is the intention of the future operators of the subject site to continue the existing use, as an automobile dismantling facility with outdoor storage of automobiles and small trucks, there would be the continued threat of surface spills from the operations impacting the soil and/or groundwater.

4. As stated, there were numerous areas throughout the rear yard of the subject site where the "junked" cars are stored which were observed to contain severe and obvious contamination resulting from surface spills.

5. There are trench drains located in the rear/north side of the subject building. These drains collect the run-off from the service bay areas. At the time of the inspection, these drains were observed to have some staining. It is assumed that the drains have caused some leaching of contamination in to the surrounding soils.

Recommendations:

To further assess the risk for environmental damage, potential financial exposure and associated liabilities related to ownership of the property GCI recommends that one of the following actions can be performed:

1) Based on the fact that the subject site is a "Potential Responsible Party (PRP)", the subject site would be required to assume responsibility for the percentage of the remedial work to be conducted at the hazardous waste site at a future time. At this the NYS DEC is funding the assessment and research work being conducted, although the future legal ramifications may determine that in addition to the remedial work, the responsible parties are also required to assume responsibility for the costs of all assessment and research work completed. This responsibility may also include future assessment and research work, legal work, the Remedial Investigation / Feasibility Study (RI/FS), and all other associated work.

   NOTE: While it is extremely difficult to predict the future chain of events which will occur in order to remediate this hazardous waste site, for the purposes of this assessment report GCI has attempted to quantify the possible future responsibility of the subject site. In addition, GCI has attempted to calculate the possible monetary costs attributable to the subject site's responsibility in the matter. All predictions and assumptions are based on the GCI's limited information released to date by the NYS DEC with regard to the subject site, as well as GCI's knowledge of the best acceptable methods of research, assessment and remediation. GCI's cost estimates are based upon industry standards while calculating the future increases in the costs.

   As stated, the costs associated with the on-going work conducted by the NYS DEC is very difficult to determine with any surety. The following is an extremely estimated and limited breakdown of the costs associated with the research, inspection, assessment, and remediation of the New Cassel Industrial Area:

INVESTIGATION:	
Preliminary Research & Investigation:	$ 45,000.00
NYS DEC Funded Preliminary Site Assessment:	$ 450,000.00
Follow-Up Site Assessment Work:	$ 375,000.00
Legal Negotiations:	$ 260,000.00
Sub-Total:	$ 1,130,000.00
REMEDIAL SYSTEM INSTALLATION:	
Monitoring Well Installation:	$ 550,000.00
Groundwater Pump & Treat Systems:	$ 1,850,000.00
Soil Excavation & Disposal:	$ 1,150,000.00
Soil Vapor Extraction (SVE) Systems:	$ 850,000.00
Sub-Total:	$ 4,400,000.00
FUTURE MONITORING & MAINTENANCE (2 years):	
Monitoring Well Sampling:	$ 460,000.00
Remediation System Maintenance:	$ 280,000.00
Laboratory Analysis:	$ 1,350,000.00
Sub-Total:	$ 2,090,000.00
SYSTEM SHUTDOWN & SITE CLOSURE:	
Closure Report:	$ 65,000.00
Remediation System Shutdown:	$ 650,000.00
Final Assessment Report:	$ 350,000.00
Sub-Total:	$ 1,065,000.00
TOTAL ESTIMATED COSTS:	$ 8,685,000.00

The subject site consists of approximately a 1.30 acre site. The total hazardous waste site is comprised of approximately 170 acres. Therefore, based primarily upon the size of the subject site in relation to the other responsible party sites, the subject site would be responsible for approximately 0.77 % of the total work and associated costs.

Estimated Costs:

Based on the above cost estimates for the potential work involved with the New Cassel Industrial Area, the subject site would be potentially responsible for approximately $ 66,414.20.

Please note that the above costs may vary based on the final number of designated responsible parties. If certain sites are de-listed from the area, the percentage of costs will be increased.

2a. The underground storage tank associated with the vent line should be located and the tankremoved by a licensed tank removal/installation contractor. All contaminated soil should be excavated and disposed of properly, with all manifests submitted as documentation of same. A soil vapor extraction (SVE) remediation system should be installed in order to address and residual contamination of the soils. Monitoring wells should be installed so as to monitor the possible threat to the groundwater. The NYSDEC oil spill unit should be notified of the situation and approve all remedial work.

Estimated Costs:

Tank Location - GPR (Ground Penetrating Radar)	$ 1,400.00
Tank Removal	$ 4,500.00
Contaminated Soil Removal & Disposal	$ 5,000.00
SVE System Installation	$ 16,000.00
Monitoring Well Installation	$ 5,000.00
Future Monitoring Well Sampling	$ 3,200.00
Sub-Total:	$ 35,100.00

2b. The abandoned 275 gallon storage tank should be removed from the site and properly disposed of, including any residual product.

Estimated Cost: $ 550.00

3. In order to prevent the future impact of surface spills at the subject site from typical operations of the present use, the following recommendations are made:

(a) If the outdoor storage of the dismantled vehicles in open areas of the three lots is to continue, the soil should be cultivated and aerated to aid in removing residual hydrocarbons that are present as a result of spillage on the ground surface. The entire site should be paved in order to prevent the seepage of materials through to the subsurface soils.

Estimated Cost: $ 16,000.00

(b) If the dismantling of automobile and small trucks is to take place in the outdoor / open areas of the site, a designated area should be set aside for this type of work. This area should be fully paved, contained with a dike, and an impervious liner applied to prevent any seepage of materials to the subsurface soils.

Estimated Cost: $ 4,500.00

(c) Soil-vapor extraction (SVE) technology could be incorporated into a remedial system for the site if the extent of surficial contamination is too great. SVE draws soil vapor from the ground and discharges it to the air hence, any hydrocarbon vapors present as a result of surface spills will be removed and no further contamination of the subsurface will take place from the previous surface spills.

Estimated Cost: $ 26,000.00

4. The areas of the rear yard which were observed to contain direct contamination resulting from surface spills would need to be excavated with all contaminated soils being disposed of properly. All manifest records would need to be provided as documentation of the soil disposal.

Estimated Cost: $ 6,000.00

5. The trench drains should be removed with all affected soils also removed and disposed of properly. Manifest records for all disposed of soils should be provided as documentation of the disposal.

Estimated Cost: $ 4,500.00

5.2 Limitations

The purpose of this investigation was to identify potential sources of contamination at the property, and to satisfy the all appropriate inquiry standard set forth in Section 9601 (35)(b) of CERCLA. The findings and conclusions set forth in this report are based upon information that was available to General Consolidated Industries, during its inspection of the property and after review of selected records and documents. If new information becomes available concerning the property after this date, or if the property is used in a manner other than that which is identified in this report, the findings and conclusions contained herein may have to be modified. Additionally, while this investigation was performed in accordance with good commercial and customary practice and generally accepted protocols within the consulting industry, General Consolidated Industries, cannot guarantee that the property is completely free of hazardous substances or other materials or conditions that could subject Apple Bank For Savings to potential liability. The presence or absence of any such condition can only be confirmed through the collection and analysis of air, soil and/or groundwater samples, which was beyond the scope of this investigation.

Future events and/or investigation could change the findings stated herein. Should additional investigations encounter differing conditions, sections of this report may require modification.

Limiting Conditions

The preceding Environmental Assessment is subject to the following conditions and to such other conditions and limiting conditions as are set forth in the report.

1. General Consolidated Industries assumes no responsibility for hidden or latent conditions or misrepresentation by the property owner, his representatives, public information officials or any authority consulted in connection with the compilation of this report.

2. This report is prepared for the sole and explicit purpose for assessing the potential liability with respect to the suspected presence of hazardous materials that may pose a potential health or environmental threat and for evaluating collateral risk associated with the same. This report is not intended to have any direct bearing on the value of the property.

3. The Environmental Assessment Report is for the sole use of the principal parties. No disclosure or reproduction shall be made of the preceding report without the prior written consent of General Consolidated Industries.

4. General Consolidated Industries or any representative of General Consolidated Industries is not required to give testimony with reference to the opinions expressed herein without prior written arrangement.

Disclaimer:

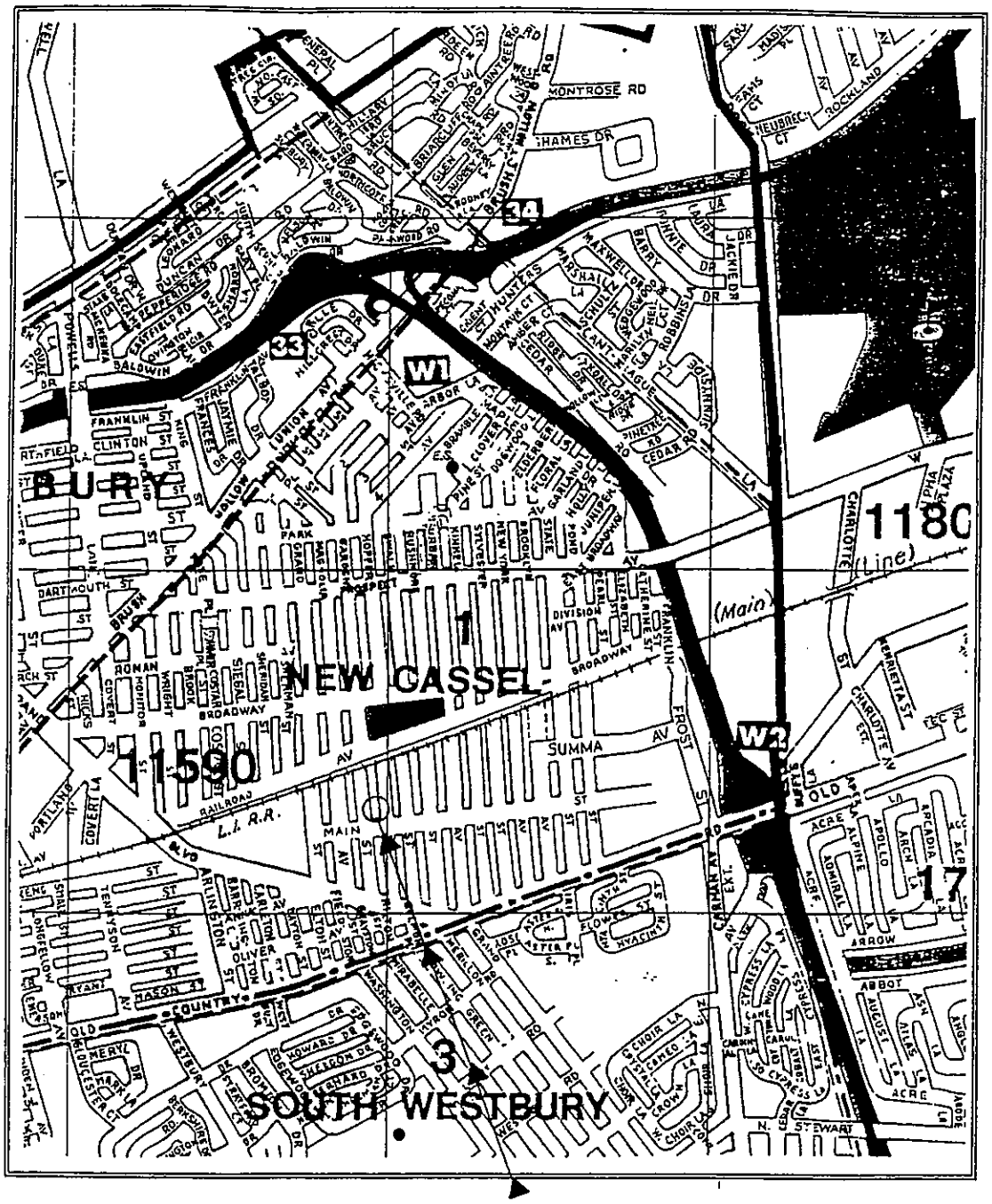
This report is for the use by Apple Bank For Savings as a guide in determining the possible presence of toxic materials on the subject property at the time of the inspection. This report is based on the review of historic records, relating to past occupants, and upon a visual inspection of the surrounding properties at the time of inspection. The records researched may be incomplete, and this report makes no determinations with respect to portions of the surrounding properties which were not inspected. This Phase II report is not a definitive determination of the presence of absence of toxic substances.

Any and all liability on the part of General Consolidated Industries, Inc. shall be limited solely to the cost of this environmental assessment. General Consolidated Industries, Inc. shall have no liability for any damages, whether consequential, compensatory, punitive, or special, arising out of, incidental to, or as a result of, this assessment and report. General Consolidated Industries, Inc. shall have no liability for any cleanup and/or response costs, or any other incidental, or consequential, punitive, or special costs arising out of, incidental to, or as a result of any action against Apple Bank For Savings brought by any federal, state, or local government agency. General Consolidated Industries, Inc. assumes no liability for the use of this assessment and report by any person or entity other than Apple Bank For Savings for whom it has been prepared.

Appendices

E 000219

SITE AREA / LOCATION MAP



SUBJECT SITE

299 Main Street
New Cassel, New York

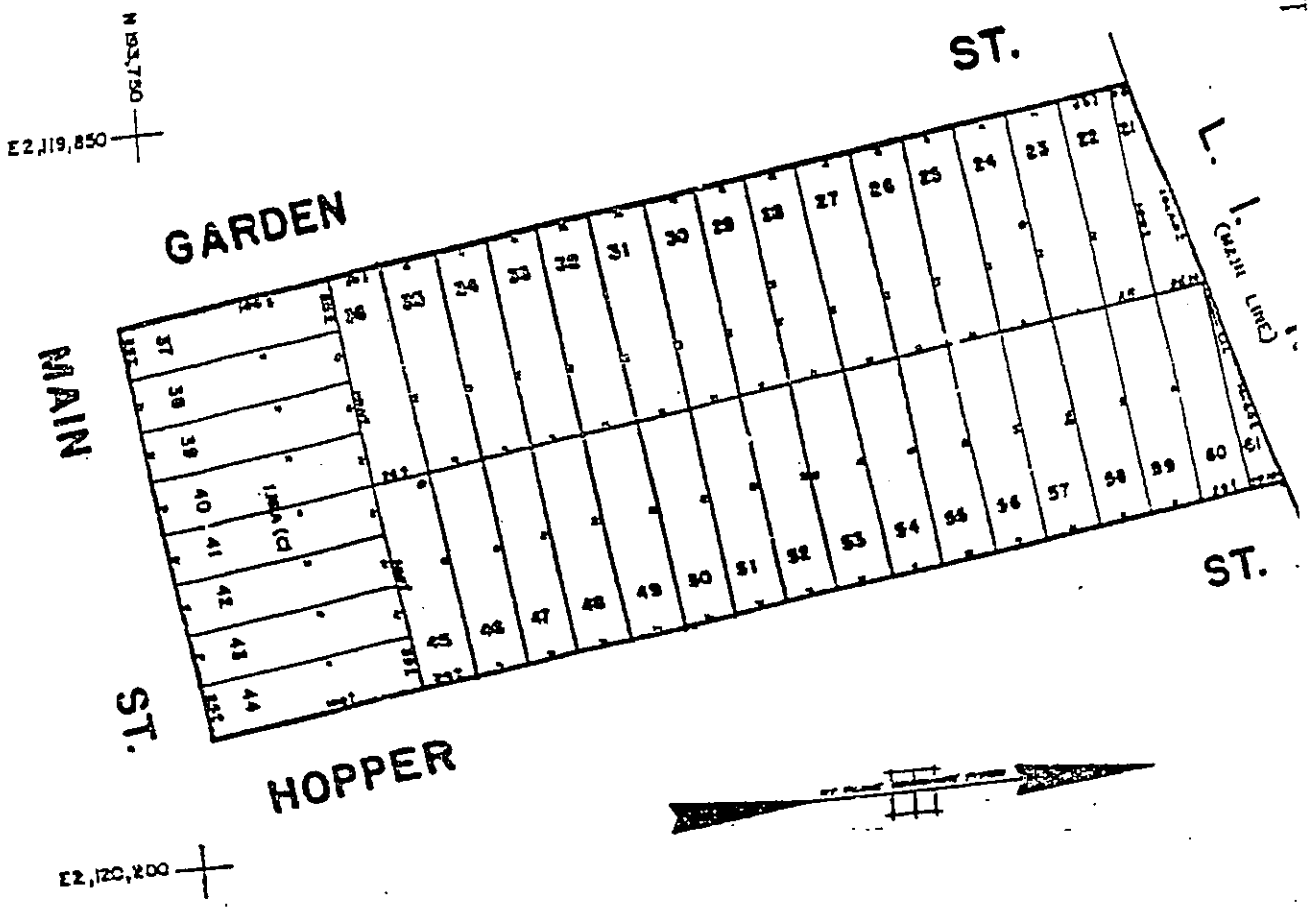
E 000221

TAX MAP & OWNERSHIP REFERENCES

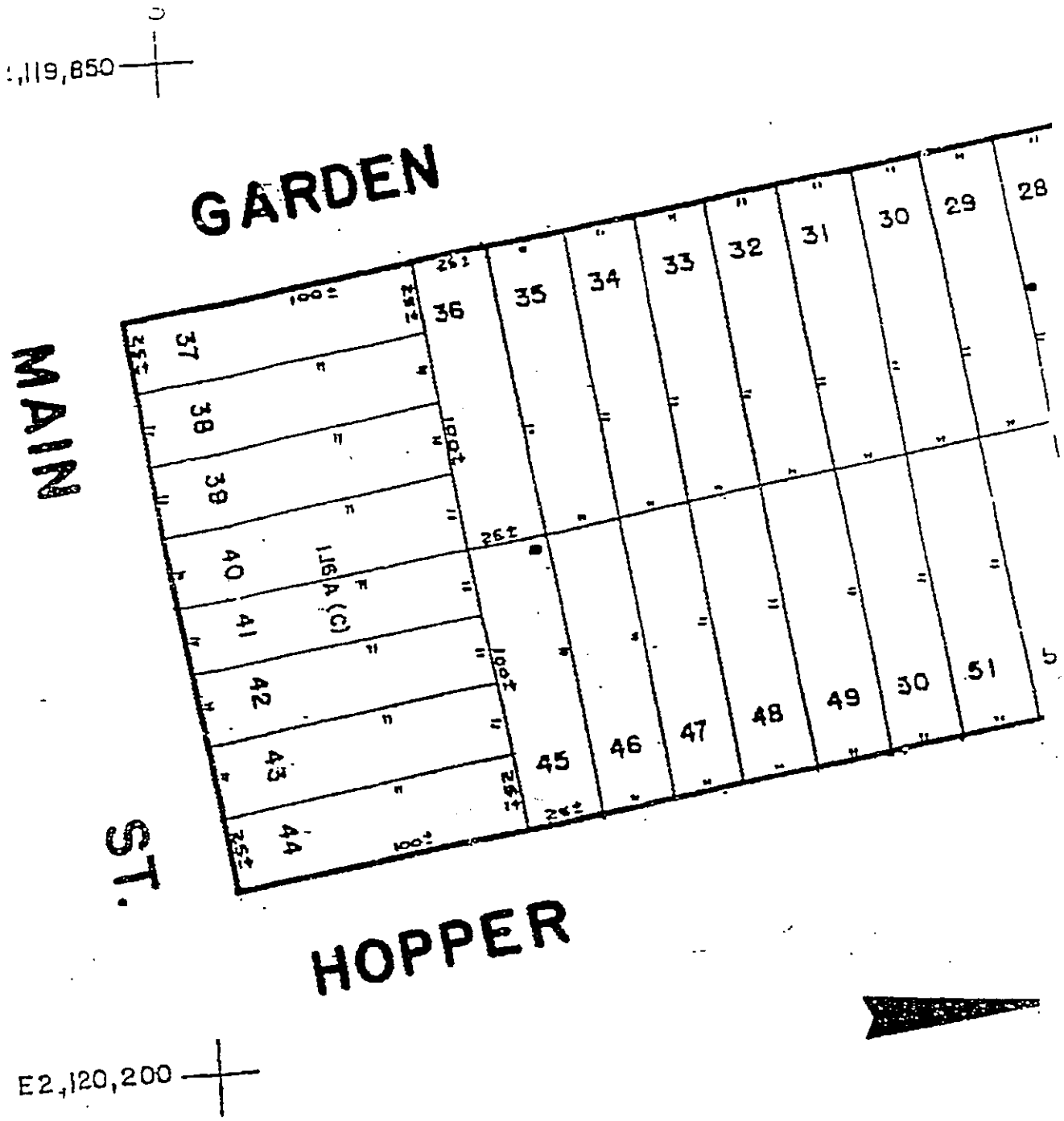
PARCEL NUMBER / OWNERS NAME / MAILING ADDRESS / PHONE NUMBER / PROPERTY LOCATION	BLDG	UNIT	TOWNSHIP / MUNICIPALITY / TAXPAYER NAME / MAILING ADDRESS	SCHOOL DISTRICT	PROPERTY USE / BUILDING DATA / EXTRA FEATURES	STATISTICAL INFO	VALUES / LIBR
11-143- -0060-0 LUNCEFORD C & PAUL SCANLON 68 CENTRAL PARKWAY HUNTINGTON NEW YORK 11743 MAGNOLIA AVE			NORTH HEMPSTEAD 2289-TOWN NORTH HEMPSTEAD B JANKOWSKI J R SCANLON &EA KAIDER 112 MAGNOLIA AVE WESTBURY NY 11590 LOT SIZE- 5.00 X 100.00	001	340.14-INDUSTRIAL-VACANT		$800TV $800LV $221.32CT $346.13ST LIBR 9463-0521
11-143- -0061-0 LUNCEFORD C & PAUL SCANLON 68 CENTRAL PARKWAY HUNTINGTON NEW YORK 11743 112 MAGNOLIA AVE			NORTH HEMPSTEAD 2289-TOWN NORTH HEMPSTEAD B JANKOWSKI J R SCANLON &EA KAIDER 112 MAGNOLIA AVE WESYBURY NY 11590 LOT SIZE- 5.00 X 100.00	001	340.14-INDUSTRIAL-VACANT		$800TV $800LV $221.32CT $346.13ST LIBR 9463-0521
11-144- -0021-0 603 MAIN STREET REALTY CORP 15 KINKEL STREET WESTBURY NY 11590 GARDEN ST			NORTH HEMPSTEAD 2289-TOWN NORTH HEMPSTEAD 603 MAIN ST REALTY CORP INC 15 KINKEL STREET WESTBURY NY 11590 LOT GROUP-21-26 LOT SIZE- 133.00 X 100.00	001	340.14-INDUSTRIAL-VACANT		$16,800TV $16,800LV $4,647.72CT $7,268.69ST LIBR 9191-0322
11-144- -0027-0 603 MAIN STREET REALTY CORP 15 KINKEL STREET WESTBURY NY 11590 GARDEN ST			NORTH HEMPSTEAD 2289-TOWN NORTH HEMPSTEAD 603 MAIN ST REALTY CORP 15 KINKEL STREET WESTBURY NY 11590 LOT GROUP-27-30 LOT SIZE- 100.00 X 100.00	001	340.14-INDUSTRIAL-VACANT		$12,000TV $12,000LV $3,316.80CT $5,191.92ST
11-144- -0031-0 SCAPPATURA F 1015 OLD COUNTRY RD WESTBURY NEW YORK 11590 1015 OLD COUNTRY RD			NORTH HEMPSTEAD 2289-TOWN NORTH HEMPSTEAD CAPTURE REALTY 1035 OLD COUNTRY RD WESTBURY NY 11590 LOT GROUP-31-50 LOT SIZE- 1.16AC	001	433.14-AUTO GARAGE/SHOP USE: 210-GENERAL RETAIL & SVC TOT AREA-3765 SF GF AREA-3765 SF FLR HGT-18 CLASS-MSNRY/CONC WALL EXT WALL-STUCCO USE: 511-GENERAL WAREHOUSE TOT AREA-7821 SF GF AREA-7821 SF FLR HGT-10 CLASS-MSNRY/CONC WALL EXT WALL-STUCCO	CARD NO - 1 SECT - 1 STY HGT - 1.0 NO FLRS - 1.0 RENT UNITS- 1 YR BUILT - 1966 CARD NO - 1 SECT - 2 STY HGT - 1.0 NO FLRS - 1.0 RENT UNITS- 1 YR BUILT - 1966	$84,150TV $60,060LV $24,090TV $23,280.10CT $36,408.34ST

E 000223

TRW·REDI Nationwide 1-800-345-7334 Copyright 1994 All Rights Reserved


GARDEN
ST.
MAIN
ST.
HOPPER
ST.
L. I. (MAIN LINE)
N 153,750
E 2,119,850
E 2,120,200

E 000224

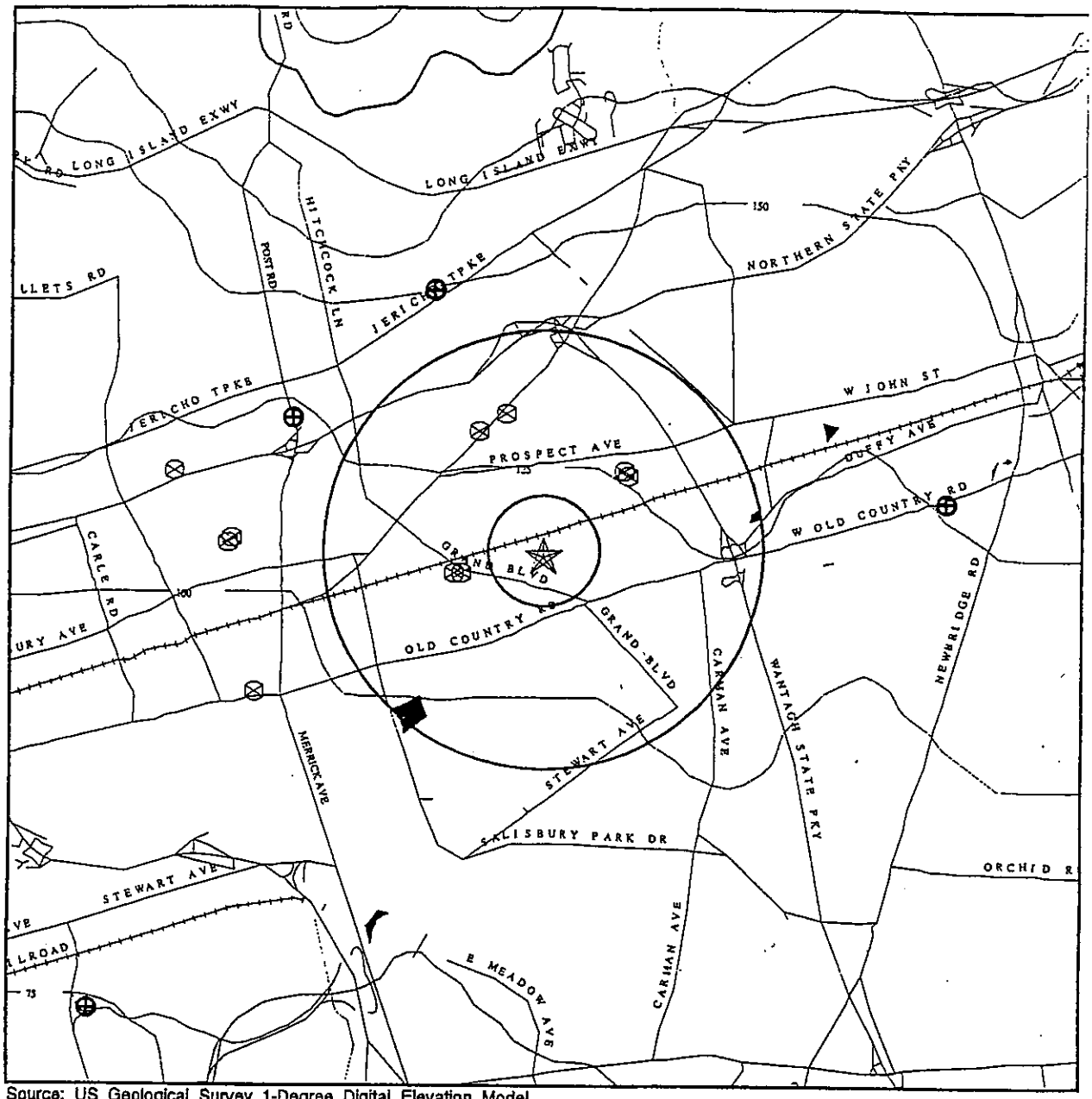

:,119,850
GARDEN
MAIN
ST.
HOPPER
E2,120,200
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
16A (C)

E 000225

TOPOGRAPHIC MAP

- **Displays a two mile radius around the target property.**
- **Displays the United States Geological Survey (USGS) topographic contours and selected road features (i.e., major street names, and hydrographic data)**

TOPOGRAPHIC MAP - 67371.5s - Wilsearch Info Network Inc.



Source: US Geological Survey 1-Degree Digital Elevation Model
Compiled 09/15/92

0 1/4 1/2 1 2
Miles

- Major Roads
- Contour lines (25 foot interval unless otherwise shown)
- Waterways
- Indicates closest well in quadrant to target property.
- Indicates closest public water supply well(s) to target property.

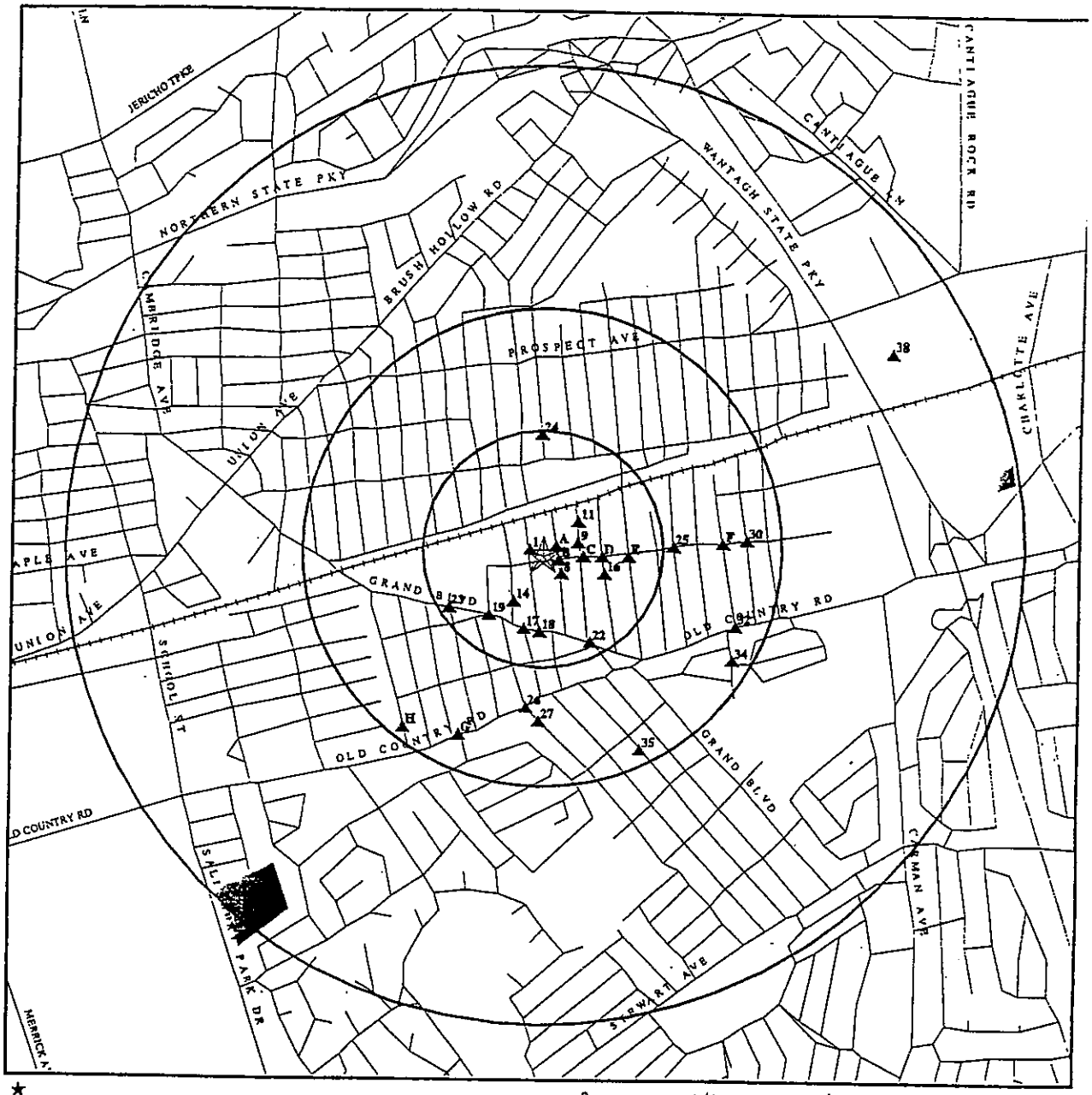
TARGET PROPERTY:	299 Main Street	CUSTOMER:	Wilsearch Info Network Inc.
ADDRESS:	299 Main Street	CONTACT:	Mr Chris Wilson
CITY/STATE/ZIP:	New Cassel NY 11590	INQUIRY #:	67371.5s
LAT/LONG:	40.7567 / 73.5666	DATE:	February 2, 1995

E 000227

OVERVIEW MAP

- **Displays a one mile (ASTM Standard) radius around the target property.**
- **Includes major geographic attributes available in the computer mapping system (i.e., street names, available hydrography)**

OVERVIEW MAP - 67371.5s - Wilsearch Info Network Inc.



★ - Indicates TARGET PROPERTY.

▲ - Indicates environmental elements at elevations higher than or equal to the target property.

◆ - Indicates environmental elements at elevations lower than the target property.

- Coal Gasification Sites (if requested)

- National Priority List Sites

0 1/4 1/2 1
Miles

- Power transmission lines (USGS DLG, 1993)

- Oil & Gas pipelines (USGS DLG, 1993)

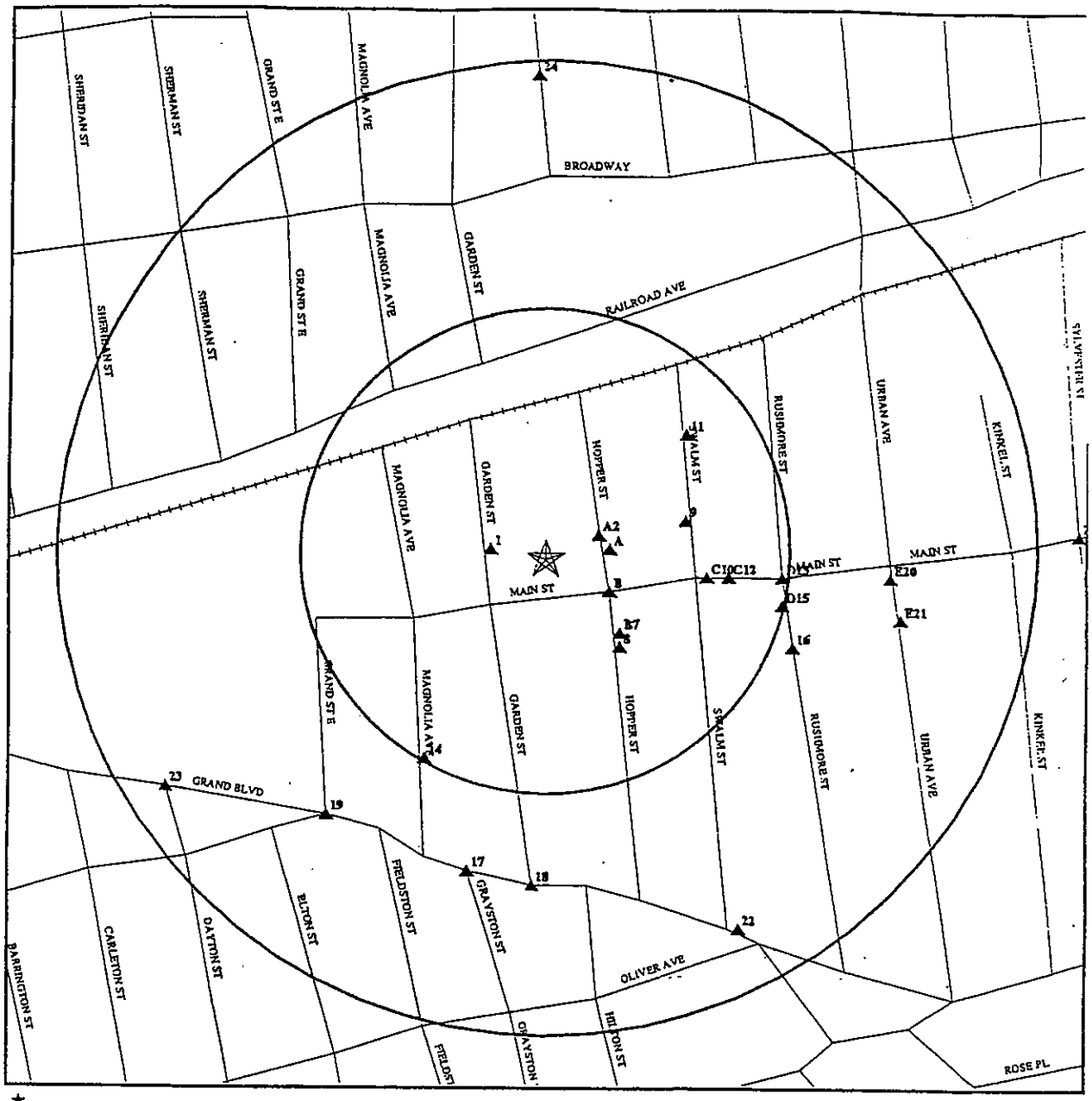
TARGET PROPERTY:	299 Main Street	CUSTOMER:	Wilsearch Info Network Inc.
ADDRESS:	299 Main Street	CONTACT:	Mr Chris Wilson
CITY/STATE/ZIP:	New Cassel NY 11590	INQUIRY #:	67371.5s
LAT/LONG:	40.7567 / 73.5666	DATE:	February 2, 1995

E 000229

DETAIL MAP

- Displays a quarter mile radius around the target property and provides a close-up view.
- Includes all geographic attributes available in the computer mapping system (i.e., street names, address ranges).
- Helps locate "orphan" sites, those sites with insufficient address information such that they can only be identified as within the zip code, city, or county of the target property.

DETAIL MAP - 67371.5s - Wilsearch Info Network Inc.



★ - Indicates TARGET PROPERTY.

▲ - Indicates environmental elements at elevations higher than or equal to the target property.

◆ - Indicates environmental elements at elevations lower than the target property.

- Coal Gasification Sites (if requested)

- National Priority List Sites

0 1/8 1/4
Miles

- Power transmission lines (USGS DLG, 1993)

- Oil & Gas pipelines (USGS DLG, 1993)

TARGET PROPERTY:	299 Main Street	CUSTOMER:	Wilsearch Info Network Inc.
ADDRESS:	299 Main Street	CONTACT:	Mr Chris Wilson
CITY/STATE/ZIP:	New Cassel NY 11590	INQUIRY #:	67371.5s
LAT/LONG:	40.7567 / 73.5666	DATE:	February 2, 1995

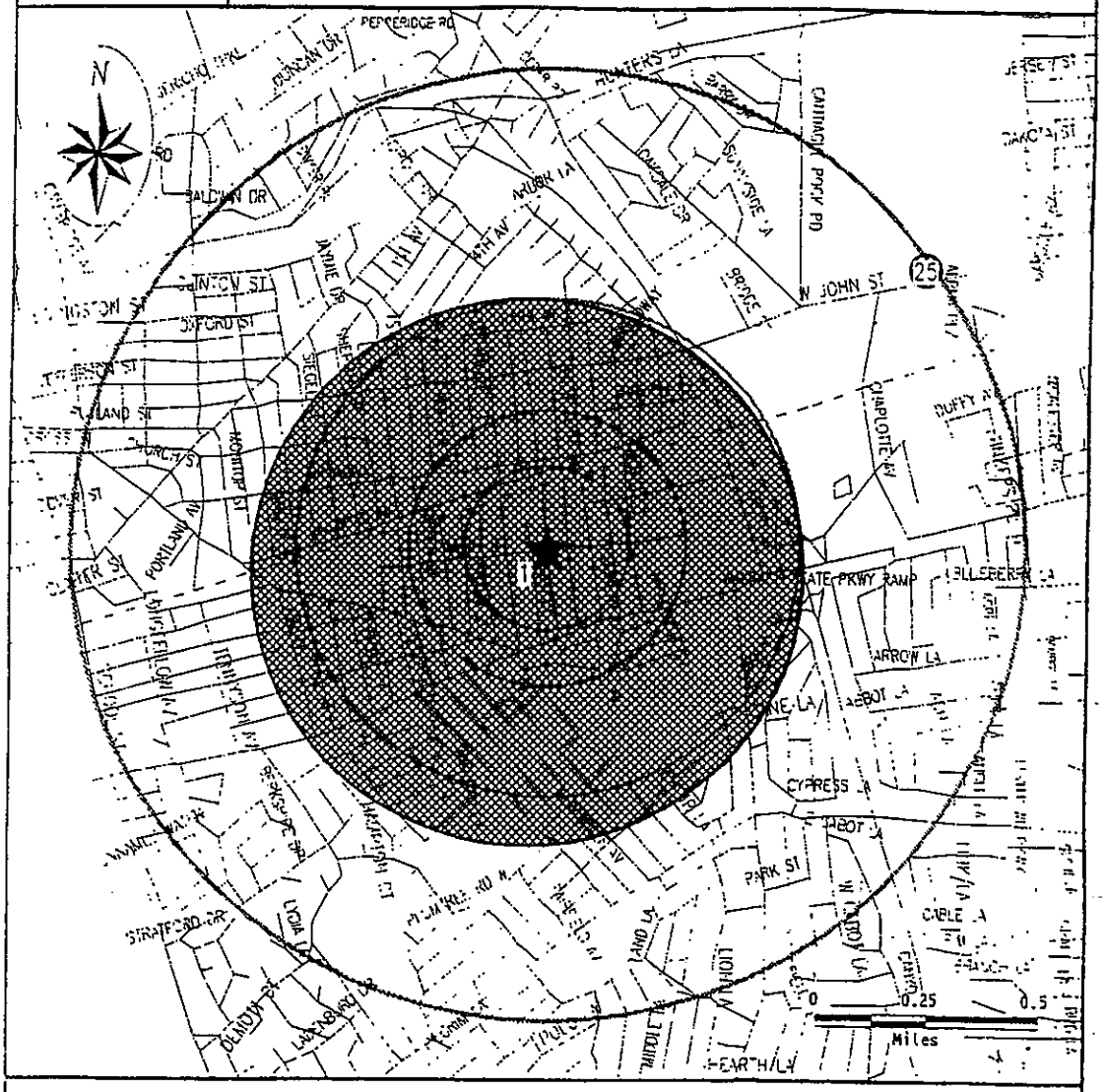
E 000231

NEW CASSEL INDUSTRIAL AREA

- **Street Map**
- **Site Radius Perimeter**

SITE ASSESSMENT REPORT

Sites Represented as Radius Buffers



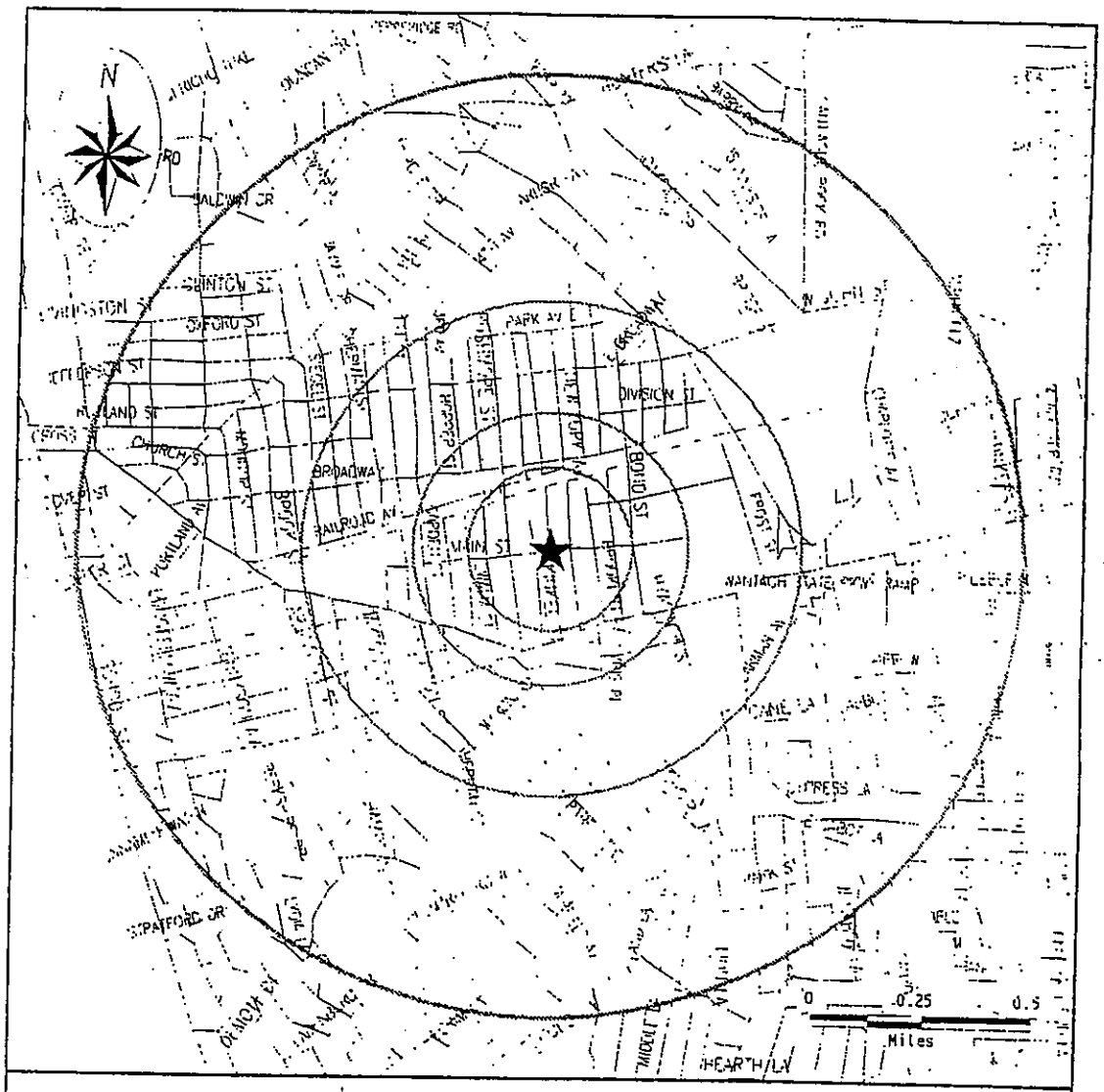
These radii are estimated from agency records or detailed street maps. The radii may be based on the furthest boundary of each property or study area from its center. For more information contact the agency referenced by source number in the site listing.

★ Subject Site	Roads Highways Railroads Rivers or Water Bodies Utilities

E 000233

SITE ASSESSMENT REPORT

Street Map



Subject Site ★

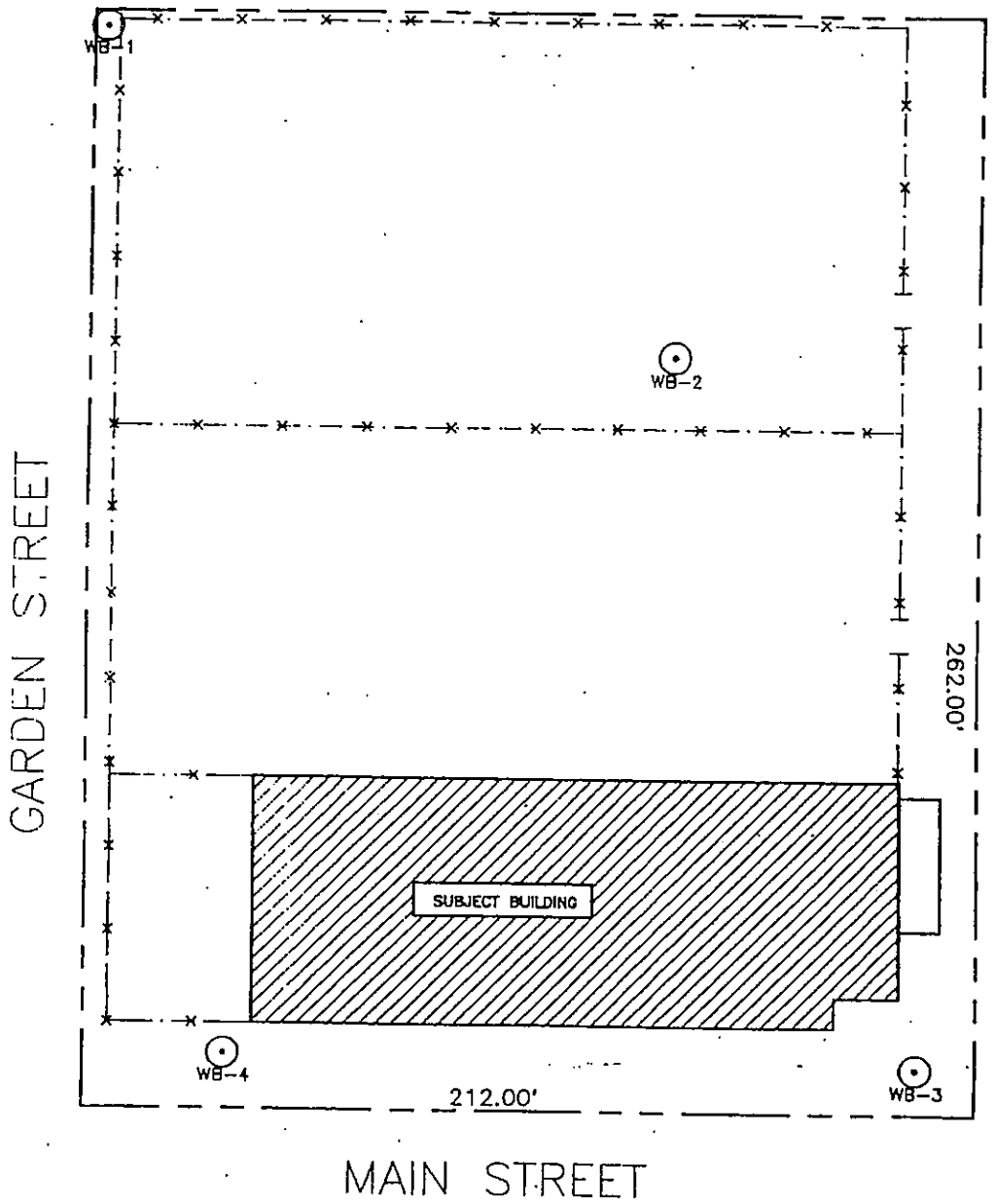
Roads, Highways, Rivers, Water Bodies

Railroads, Utilities

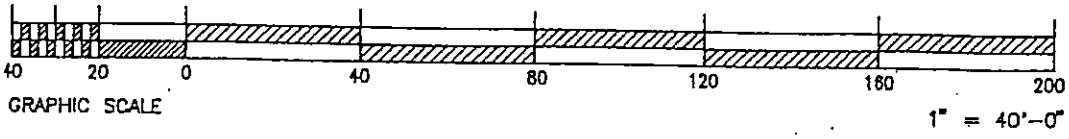
E 000234

BORING SITE PLAN

E 000235


WB-1
WB-2
WB-3
WB-4
GARDEN STREET
HOPPER STREET
MAIN STREET
262.00'
212.00'
SUBJECT BUILDING

SITE PLAN


40
20
0
40
80
120
160
200
GRAPHIC SCALE
1" = 40'-0"

NASSAU COUNTY SOIL SURVEY MAP

E 000237

E 000238

LABORATORY ANALYTICAL RESULTS

Client: G.C.I.	Client ID: WB-1(299)
Date received: 2/10/95	Laboratory ID: 9512410
Date extracted: 2/11/95	Matrix: Liquid
Date analyzed: 2/11/95	Contractor: 11418

Target Compound List-Purgeable Organics

PARAMETER	CAS No.	RESULTS ug/kg
CHLOROMETHANE	74-87-3	<10
BROMOMETHANE	74-83-9	<10
VINYL CHLORIDE	75-01-4	<10
CHLOROETHANE	75-00-3	<10
METHYLENE CHLORIDE	75-09-2	<5
1,1-DICHLOROETHENE	75-35-2	<5
1,1-DICHLOROETHANE	75-34-3	<5
CHLOROFORM	67-66-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
CARBON TETRACHLORIDE	56-23-5	<5
BROMODICHLOROMETHANE	75-27-4	<5
1,2-DICHLOROPROPANE	78-87-5	<5
TRANS-1,3-DICHLOROPROPENE	542-75-6	<5
TRICHLOROETHENE	79-01-6	<5
DIBROMOCHLOROMETHANE	124-48-1	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
CIS-1,3-DICHLOROPROPENE	10061-01-5	<5
BENZENE	71-73-2	<5
BROMOFORM	75-25-2	<5
1,1,2,2-TETRACHLOROETHANE	79-34=5	<5
TETRACHLOROETHENE	127-18-14	<5
TOLUENE	108-88-3	<5
CHLROBENZENE	108-90-7	<5
ETHYLBENZENE	100-41-4	<5
ACETONE	67-64-1	<10
2-BUTANONE	78-93-3	<10
4-METHYL-2PENTANONE	108-10-1	<10
CARBON DISULFIDE	75-15-0	<5
VINYL ACETATE	108-05-4	<10
2-HEXANONE	591-78-6	<10
STYRENE	100-42-5	<5
C/T-1/2 DICHLOROETHENE		<5
XYLENES(total)		<5

Michael Venaldi

Laboratory Director

AMERICAN ANALYTICAL LABORATORIES
56 TOLEDO STREET • FARMINGDALE, NEW YORK 11735 • (516) 454-6100 • FAX (516) 454-8027

Client: G.C.I.	Client ID: WB-2(299)
Date received: 2/10/95	Laboratory ID: 9512411
Date extracted: 2/11/95	Matrix: Liquid
Date analyzed: 2/11/95	Contractor: 11418

Target Compound List-Purgeable Organics

PARAMETER	CAS No.	RESULTS ug/kg
CHLOROMETHANE	74-87-3	<10
BROMOMETHANE	74-83-9	<10
VINYL CHLORIDE	75-01-4	<10
CHLOROETHANE	75-00-3	<10
METHYLENE CHLORIDE	75-09-2	<5
1,1-DICHLOROETHENE	75-35-2	<5
1,1-DICHLOROETHANE	75-34-3	<5
CHLOROFORM	67-66-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
CARBON TETRACHLORIDE	56-23-5	<5
BROMODICHLOROMETHANE	75-27-4	<5
1,2-DICHLOROPROPANE	78-87-5	<5
TRANS-1,3-DICHLOROPROPENE	542-75-6	<5
TRICHLOROETHENE	79-01-6	<5
DIBROMOCHLOROMETHANE	124-48-1	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
CIS-1,3-DICHLOROPROPENE	10061-01-5	<5
BENZENE	71-73-2	<5
BROMOFORM	75-25-2	<5
1,1,2,2-TETRACHLOROETHANE	79-34=5	<5
TETRACHLOROETHENE	127-18-14	<5
TOLUENE	108-88-3	<5
CHLROBENZENE	108-90-7	<5
ETHYLBENZENE	100-41-4	<5
ACETONE	67-64-1	<10
2-BUTANONE	78-93-3	<10
4-METHYL-2PENTANONE	108-10-1	<10
CARBON DISULFIDE	75-15-0	<5
VINYL ACETATE	108-05-4	<10
2-HEXANONE	591-78-6	<10
STYRENE	100-42-5	<5
C/T-1/2 DICHLOROETHENE		<5
XYLENES(total)		<5

Michael Venaldi

Laboratory Director

E 000241

AMERICAN ANALYTICAL LABORATORIES

56 TOLEDO STREET • FARMINGDALE, NEW YORK 11735 • (516) 454-6100 • FAX (516) 454-3027

Client: G.C.I.	Client ID: WB-3(299 Main)
Date received: 2/11/95	Laboratory ID: 9512431
Date extracted: 2/11/95	Matrix: Liquid
Date analyzed: 2/11/95	Contractor: 11418

Target Compound List-Purgeable Organics

PARAMETER	CAS No.	RESULTS ug/kg
CHLOROMETHANE	74-87-3	<10
BROMOMETHANE	74-83-9	<10
VINYL CHLORIDE	75-01-4	<10
CHLOROETHANE	75-00-3	<10
METHYLENE CHLORIDE	75-09-2	<5
1,1-DICHLOROETHENE	75-35-2	<5
1,1-DICHLOROETHANE	75-34-3	<5
CHLOROFORM	67-66-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
CARBON TETRACHLORIDE	56-23-5	<5
BROMODICHLOROMETHANE	75-27-4	<5
1,2-DICHLOROPROPANE	78-87-5	<5
TRANS-1,3-DICHLOROPROPENE	542-75-6	<5
TRICHLOROETHENE	79-01-6	20.0
DIBROMOCHLOROMETHANE	124-48-1	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
CIS-1,3-DICHLOROPROPENE	10061-01-5	<5
BENZENE	71-73-2	<5
BROMOFORM	75-25-2	<5
1,1,2,2-TETRACHLOROETHANE	79-34=5	<5
TETRACHLOROETHENE	127-18-14	<5
TOLUENE	108-88-3	<5
CHLOROBENZENE	108-90-7	<5
ETHYLBENZENE	100-41-4	<5
ACETONE	67-64-1	<10
2-BUTANONE	78-93-3	<10
4-METHYL-2PENTANONE	108-10-1	<10
CARBON DISULFIDE	75-15-0	<5
VINYL ACETATE	108-05-4	<10
2-HEXANONE	591-78-6	<10
STYRENE	100-42-5	<5
C/T-1,2-DICHLOROETHENE		50.6
XYLENES(total)		<5

Michael Verrelde

Laboratory Director

AMERICAN ANALYTICAL LABORATORIES

56 TOLEDO STREET • FARMINGDALE, NEW YORK 11735 • (516) 454-6100 • FAX (516) 454-8027

E 000242

Client: G.C.I.	Client ID: WB-~~2~~4(299)
Date received: 2/10/95	Laboratory ID: 9512412
Date extracted: 2/11/95	Matrix: Liquid
Date analyzed: 2/11/95	Contractor: 11418

Target Compound List-Purgeable Organics

PARAMETER	CAS No.	RESULTS ug/kg
CHLOROMETHANE	74-87-3	<10
BROMOMETHANE	74-83-9	<10
VINYL CHLORIDE	75-01-4	<10
CHLOROETHANE	75-00-3	<10
METHYLENE CHLORIDE	75-09-2	<5
1,1-DICHLOROETHENE	75-35-2	<5
1,1-DICHLOROETHANE	75-34-3	<5
CHLOROFORM	67-66-3	<5
1,2-DICHLOROETHANE	107-06-2	<5
1,1,1-TRICHLOROETHANE	71-55-6	<5
CARBON TETRACHLORIDE	56-23-5	<5
BROMODICHLOROMETHANE	75-27-4	<5
1,2-DICHLOROPROPANE	78-87-5	<5.
TRANS-1,3-DICHLOROPROPENE	542-75-6	<5
TRICHLOROETHENE	79-01-6	<5.
DIBROMOCHLOROMETHANE	124-48-1	<5
1,1,2-TRICHLOROETHANE	79-00-5	<5
CIS-1,3-DICHLOROPROPENE	10061-01-5	<5
BENZENE	71-73-2	<5
BROMOFORM	75-25-2	<5
1,1,2,2-TETRACHLOROETHANE	79-34=5	<5
TETRACHLOROETHENE	127-18-14	<5
TOLUENE	108-88-3	<5
CHLROBENZENE	108-90-7	<5
ETHYLBENZENE	100-41-4	<5.
ACETONE	67-64-1	<10
2-BUTANONE	78-93-3	<10
4-METHYL-2PENTANONE	108-10-1	<10
CARBON DISULFIDE	75-15-0	<5
VINYL ACETATE	108-05-4	<10
2-HEXANONE	591-78-6	<10
STYRENE	100-42-5	<5
C/T-1/2 DICHLOROETHENE		<5
XYLENES(total)		<5

Michael Veraldi

Laboratory Director

E 000243

AMERICAN ANALYTICAL LABORATORIES
56 TOLEDO STREET • FARMINGDALE, NEW YORK 11735 • (516) 454-6100 • FAX: (516) 454-8027

HISTORICAL & REGULATORY AGENCY RECORDS

E 000244

FMIGS96 00111

PERMIT NO. 02795

STATE OF NEW YORK
COUNTY OF NASSAU
OFFICE OF FIRE MARSHAL

TR FLAMMABLE/COMBUSTIBLE LIQUID STORAGE TANK REGISTRATION

LOCATION: ISLAND TRANSPORTATION CORP. 299 MAIN ST NEW CASSEL, NY 11590

ISSUED TO: NAME ISLAND TRANSPORTATION CORP.
ADDRESS 299 MAIN ST
NEW CASSEL, NY 11590

DATE ISSUED: 08/31/86
EXPIRE DATE: 09/30/91

TANK	SIZE	PRODUCT	DATE INSTALLED	DATE TESTED	CONSTRUCTION
HB01	10K	3 01993 01	02/15/72	09/11/80	STL
HB02	4K	3 01993 01	01/01/63	09/11/80	STL
HB03	4K	3 01993 01	01/01/63	09/11/80	STL
HB04	4K	3 01203 00	05/01/66	09/11/80	STL

****

ASSISTANT FIRE MARSHAL

E 000245

PAGE 01

2632 RDC-01525

THOMAS S. GULOTTA
COUNTY EXECUTIVE
JOSEPH G. BOSLETT, JR.
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
888 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553

TO: NASSAU COUNTY FIRE MARSHAL

FM KEY # GS-96-111

FROM: ~~A. VOLINO & SONS, INC.~~
~~P.O. BOX 128~~
~~CARLE PLACE, N.Y. 11514~~

CONCERNING TANKS AT:
SAM-TON SALVAGE CO.
199 MAIN ST. WESTBURY N.Y.

The following flammable /combustible liquid storage tanks at the above location have been:

T - Placed temporarily out-of-service (if permitted), or

(P) - Permanently abandoned in place, of

R - Removed from the premises.

(indicate one of the above letters under "STATUS" for each tank.)

	TANK TYPE*	TANK SIZE	CONSTRUCTION	STATUS	DATE WHEN DONE
1	U/G	10,000	STEEL	P	7-18-90 ✓
1	U/G	4000	"	P	7-19-90 ✓
1	U/G	4000	"	P	7-20-90 ✓
1	U/G	4000	"	P	7-23-90 ✓

JUL 26 1990

* NOTE: If the tank type is unknown, indicate either A/G (aboveground) or U/G (underground). If more than 8 tanks, use an additional sheet.

==========

All work as indicated above has been done in accordance with the applicable Sections of Article III of the Nassau County Fire Prevention Ordinance.

A. Volino & Sons Inc
Name

Pat Volino
Signature

County of NASSAU
State of New York
Sworn to before me this
24th day of July 1990

Joseph Siniscalchi
Notary Signature

JOSEPH SINISCALCHI
NOTARY PUBLIC, State of New York
No. 30-3687900
Qualified in Nassau County
Commission Expires March 30, 1991

Notary Stamp

JOSEPH SINISCALCHI
NOTARY PUBLIC, State of New York
No. 30-3687900
Qualified in Nassau County
Commission Expires March 30, 1991

0841C / 110788

INVESTIGATION - 568-5979 & SCHOOL - 568-5824 & INDUSTRIAL - 568-5815 & INSTITUTIONAL - 568-5819 & GENERAL INSPECTION - 568-5826

E 000246

2632 RDC-01526

THOMAS S. GULOTTA
COUNTY EXECUTIVE
JOSEPH G. BOSLET, JR.
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
899 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553

August 1989
Insp. No. GS-96-111

ISLAND TRANSPORTATION OR CURRENT RESIDENT
299 MAIN ST
NEW CASSEL, NEW YORK 11590

TO WHOM IT MAY CONCERN:

Article III of the Nassau County Fire Prevention Ordinance, Section 3.6.3.1.2 requires that all existing underground steel storage tanks be replaced in accordance with the following schedule:

All steel tanks placed into service after February 23, 1961 and before February 23, 1976 shall be replaced, removed or permenantly abandoned by February 23, 1990.

The following is a list of tanks at your location which our records indicate require replacement, abandonment or removal:

SIZE	CONTENTS	INSTALLATION DATE
10K	DIESEL	2/15/72
4K	DIESEL	1/1/63
4K	DIESEL	1/1/63
4K	GASOLINE	5/1/66

If you have any questions please feel free to call this office at (516) 566-5832.

REC'D BY

Very truly yours,

David M. Barlow
Supervising Fire Inspector
Industrial Division

10/4/89

1679C

E 000247

THOMAS S. CULOTTA
COUNTY EXECUTIVE

DAVID M. BARTOW
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
899 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553
516-566-5200

Application for License or Permit

Initial ☒ Renewal ☐

Check Only One

Flamm/Comb Liquid Storage Tank
- Installer's License ☐
- Remover's License ☐

Automatic Fire Suppression (Artill)
- Installer's License ☐

Application of Flammable Finishes
- Location License ☒

Solid/Liquid Oxidizer Storage
- Location Permit ☐

Flammable Gas Storage/Refill
- Location Permit ☐

Hood & Duct
- Installer's License ☐
- System Permit ☐

Automatic Fire Extinguishing (Art XXI)
- Installer's License ☐
- System Permit ☐

Sprinkler Systems
- Installer's License ☐
- System Permit ☐

Automatic Fire Alarm Systems
- Installer's License ☐

Portable Fire Extinguisher License ☐

Check All That Apply
- Sales ☐
- Leasing ☐
- Full Service ☐
- OR
- Limited Service ☐

Make Checks Payable to: "TREASURER, COUNTY of NASSAU"

Please Type or Print all Information

Firm Name: One Stop Auto & Truck Center, Inc. Date: June 1994

D/B/A Name: One Stop Auto & Truck Center, Inc. Phone #: (516) 338-4000

Mailing Address: 299 Main Street

Village: Westbury (New Cassel) St: NY Zip: 11590

Permit/License Address: Same as Above

Village: St: Zip:

Applicant's Name: Joseph Dibella Title: President

Date of Birth: 11/19/49 Citizen: U.S. Resident Alien:

FOR FIRE MARSHAL USE ONLY

Certificate #: FMKey #: FF 96-21

Date Issued:

Expiration:

Record #: 940926-15303527

Check #: 113 Amount Rcvd: $150

Initals

Fee Entry: [initials]

Data Base:

L/P Issued:

PM/Alpersonal(2-93)

GENERAL INSPECTION 566-5256 • HAZ MAT 566-5254 • INDUSTRIAL 566-5277 • SCHOOLS 566-5272
INSTITUTIONAL 566-5251 • INVESTIGATIONS 566-5218 • LICENSE & PERMITS 566-5241

E 000248

2632 RDC-01528

DIVISION OF HAZARDOUS WASTE REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL REPORT

CLASSIFICATION CODE: 2 REGION: 1 SITE CODE: 130043
EPA ID:

NAME OF SITE : New Cassel Industrial Area
STREET ADDRESS: N of Old Country Rd. S of Railroad Tracks
TOWN/CITY: New Cassel COUNTY: Nassau ZIP: 11590

SITE TYPE: Open Dump- Structure-X Lagoon- Landfill- Treatment Pond-
ESTIMATED SIZE: 170 Acres

SITE OWNER/OPERATOR INFORMATION:
CURRENT OWNER NAME....: ** Multi - Owner Site **
CURRENT OWNER ADDRESS.: * * * * *
OWNER(S) DURING USE...:
OPERATOR DURING USE...: ** Multi - Site Operators **
OPERATOR ADDRESS.....: * * * * *
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From 1950 To Present

SITE DESCRIPTION:
This site is a 170 acre industrial area that has operated since 1950. The site is bounded by the Long Island Railroad tracks on the north, Wantagh State Parkway on the east, Old County Road on the south, and Grand Boulevard on the west. Some of the industrial facilities in this area have, over the period, either illegally discharged to the ground or spilled the following types of chemicals: chlorinated hydrocarbons, acids, metals and aliphatic solvents. A hazard to the environment and public health is evident due to the groundwater contamination and the potential to affect three public water supply wells. These wells are located in the direction of groundwater flow from the industrial site.
Total VOC contamination was detected in 36 of 39 groundwater observation wells. Contamination ranged from 2 to 9,800 ppb. Of the 36 contaminated wells, 10 have contaminated levels between 10-100 ppb; 12 wells have contamination levels between 100-1000 ppb; and 6 wells have levels over 1000 ppb. The monitoring wells indicate the glacial and upper Magothy Aquifers are contaminated with organic compounds and the plume is migrating towards the three public water supply wells. A state-funded investigation to determine the sources of the contamination within the industrial area is underway.

HAZARDOUS WASTE DISPOSED: Confirmed-X Suspected-

TYPE	QUANTITY (units)
Chlorinated hydrocarbons	Unknown
Metals	Unknown
Acids	Unknown
Aliphatic solvents	Unknown

E 000249

ANALYTICAL DATA AVAILABLE:
Air- Surface Water- Groundwater-X Soil- Sediment-

CONTRAVENTION OF STANDARDS:
Groundwater-X Drinking Water- Surface Water- Air-

LEGAL ACTION:

TYPE..: State- Federal-
STATUS: Negotiation in Progress- Order Signed-

REMEDIAL ACTION:

Proposed- Under design- In Progress- Completed-
NATURE OF ACTION:

GEOTECHNICAL INFORMATION:
SOIL TYPE:
GROUNDWATER DEPTH: Ranges from 25-50 ft. below surface

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Groundwater contamination has been confirmed. Public water supply wells are located downgradient from the site.

ASSESSMENT OF HEALTH PROBLEMS:

Groundwater is the primary source of drinking water in the area, and contamination of groundwater has been confirmed. Monitoring wells located within the area contained several volatile organic compounds from 2 to 9,800 ug/L. Public water supply wells are located 300 to 500m downgradient of the industrial area. Periodic sampling of the public supply wells has not detected volatile organics in excess of NYS drinking water standards.

THOMAS S. GULOTTA
COUNTY EXECUTIVE

JOHN R. SPECHT
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
899 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553
516-566-5200

APPLICATION FOR PUBLIC ACCESS TO RECORDS

TO: Records Access Officer

DATE: 2/1/95

I hereby apply to inspect the following record: (Exact address including Number & Street)

299 MAIN STREET NEW CASSEL

TANKS, U.S.T., VIOLATIONS, PERMITS, APPLICATIONS, INSPECTIONS.

Reason for inspection: (Be specific)

~~ENVIRONMENTAL AND HISTORICAL SEARCH~~

Steven Clark
Name (Please Print)

Pending Litigation YES ☐ NO ☐

Steven Clark
Signature

SAME
Person or Firm your office represents

WILSEARCH INFORMATION NETWORK, INC.
Representing (Business Name)

SAME
Address

Mailing Address: 141 MARK TREE ROAD ~~STE 102-325~~
CENTEREACH, N.Y. 11720

Phone No.: (516) 348-2374

FOR FIRE MARSHAL USE ONLY

- ☑ Approved
- ☐ Denied for reason(s) checked
- ☐ Confidential Disclosure - Part of Investigatory Files
- ☐ Unwarranted Invasion of Personal Privacy
- ☐ Record of which this Agency is Legal Custodian, cannot be found
- ☐ Record is not Maintained by this Agency
- ☐ Exempted by Statute other than Freedom of Information Act
- ☐ Other

Signature

Title

2-3-95
Date

NOTICE: You have a right to appeal denial of this application to the head of this agency. Fire Marshal_____, 899 Jerusalem Avenue, PO Box 128, Uniondale, NY 11553, who must fully explain his reasons for such denial in writing within seven days of receipt of an appeal.

I hereby Appeal: _____ Signature _____ Date

FMACCESS[011491]

GENERAL INSPECTION 566-5256 • HAZ MAT 566-5254 • INDUSTRIAL 566-5277 • SCHOOLS 566-5272
INSTITUTIONAL 566-5251 • INVESTIGATIONS 566-5218 • LICENSE & PERMITS 566 5241

E 000251

THOMAS S. GULOTTA
COUNTY EXECUTIVE

DAVID H. BARTOW
FIRE MARSHAL

NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
899 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553-0128
516-572-1000

Date 2/2/95

To Whom It May Concern:

Your request to review the attached location has been approved.
The inspection number for this location is: FF-96-21 GS-96-111

In order to review this record, you must contact
Fire Inspector SHAWN GUERIN
at (516) 572-1047 to schedule an appointment.

You must bring the original Freedom of Information Form and this letter.

INDUSTRIAL DIVISION

3946C

E 000252

THOMAS S. GULOTTA
COUNTY EXECUTIVE

COUNTY OF NASSAU
DEPARTMENT OF HEALTH
240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501-4250

KATHLEEN A. GAFFNEY, M.D.
COMMISSIONER

February 3, 1995

Re: Sam-Ton Auto Sales
299 Main St.
New Cassel, NY

Dear Mr. Clark;

Your request for access to records of the Department of Health has been approved. Records will be made availab during normal working hours at 240 Old Country Road, Mineola, and there will be a 25¢ per page fee for photo copying any Nassau County Records.

The Nassau County Department of Health shall not be responsible for inaccuracies in electronic information due to programming and/or clerical error.

Listed below are the Bureau(s) which have searched their files for records pertaining to your request. Please call th Bureau(s) checked below and speak to the contact person before arriving to see the records:

	BUREAU	CONTACT PERSON	
[X]	ENVIRONMENTAL MANAGEMENT Underground Tanks; Chemical/Oil Bulk Storage; Spills & Leaks; Environmental Impact Statements; Medical Waste; Solid Waste; Air Emission Sources; Air Contaminant Emissions; Smoking Violations; Air Complaint Investigations.	Ms. Lutzker	571-3314
[ ]	ENVIRONMENTAL ENGINEERING Underground Tanks; Petroleum & Chemical Bulk Storage; Spill Sites; Air Emission Sources; Road Salt Storage.	Mr. Silvers	571-2404
[ ]	WATER SUPPLY PROTECTION Drinking Water; Private Wells; Groundwater Quality; Backflow Prevention Devices; Bottled Water; Realty Subdivision; Private Sewage Disposal; Sewer Extensions, Sewer Connections, USEPA Underground Injection Control	Mr. Shisgal	571-3333
	ENVIRONMENTAL SANITATION		
[ ]	Food Protection.	Mr. Lynch	571-3680
[ ]	Summer Camps; Temporary Residences; Bathing Facilities.	Mr. Santeramo	571-3680
[ ]	Housing; Rodent Control; Heat; General Nuisance.	Mr. Putnam	571-2328
[ ]	Radiological Health.	Mr. Walderman	571-3313

[ ] *No Records Noted*

Yours truly,

Nola Sanchez

Nola Sanchez

E 000253

TOWN OF NORTH HEMPSTEAD
DEPARTMENT OF BUILDING, SAFETY INSPECTION & ENFORCEMENT
Code Enforcement Division

REQUEST FOR INVESTIGATION

V10

AREA: Westbury BLDG CASE # 94-1039 DATE: 09/20/94
INVESTIGATE PREMISES: 299 Main Street

OWNER: Gladys Bletter
c/o Keara Pltg. & Stitch Co.
ADDRESS: 194 Old Country Road
Westbury NY 11590

869-7676

Tenant: Scibelli Bros. (Hopper Street Auto Parts)
ADDRESS: 591 Main Street
Westbury NY 11590
334-4040

REASON: Obstruction of Sidewalk with Car Parts, Tires, Junk Cars; Sidewalk filthy with car parts, tires, junk cars.

SCH DIST: SECTION: 11 BLOCK: 145 LOT: 00380
LOT GROUP: 38-40; sd=001. S/E cor. Hopper Street

INSPECTOR ASSIGNED: MACEDO, JOHN

COMPLAINANT:

ADDRESS: PHONE:
NY

VIOLATIONS

Article	Section	Description

DATE	INSPECTOR'S REMARKS

E 000254

TOWN OF NORTH HEMPSTEAD
Department of Building Safety Inspection & Enforcement
CODE ENFORCEMENT DIVISION

Town Hall
Manhasset, N.Y. 11030
516-869-7628

NOTICE OF VIOLATION

CASE # 94-1039 DATE: 09/21/94 AREA: Westbury

1) OWNER: Gladys Bletter
c/o Keara Plig. & Stitch Co.
194 Old Country Road
Westbury NY 11590

2) Tenant: Scibelli Bros. (Hopper Street Auto Parts)
591 Main Street
Westbury NY 11590

YOU ARE HEREBY CHARGED WITH VIOLATING THE TOWN CODE, AS FOLLOWS:

ARTICLE SECTION 48-11 of the Code of the Town of North Hempstead

(Multiple junk cars & many tires obstructing sidewalk)

ARTICLE IV SECTION 48-10 of the Code of the Town of North Hempstead
Sidewalks must be kept clean
(Sidewalk is filthy with high weeds, car parts, debris.)

PLACE OF OCCURRENCE: 299 Main Street
Westbury

SCH DIST SECTION 11 BLOCK 145 LOT 003S0
LOT GROUP 38-40; sd=001. S/E cor. Hopper Street

INVESTIGATING INSPECTOR: MACEDO, JOHN

E 000255

File No. 5929

Appeal No. 9615

John L. Molloy, Esq.
346 Maple Avenue
Westbury, N. Y.

NOTICE OF DECISION

BOARD OF ZONING AND APPEALS
TOWN OF NORTH HEMPSTEAD
MANHASSET, NEW YORK

This is not a Building Permit

In the matter of the appeal of Steven Yasinsky

of 535 Rutland Street, Westbury, New York
Address

from the decision of the Building Official for variance of Article XX, Section 20.10

~~permit under Article~~

~~conditional use under Article~~

of the Building Zone Ordinance in the

erection and or maintenance of vehicular entrance gates with insufficient setback from front property lines

on premises ~~XX~~ between Garden Street and Hopper St., 250' no. of Main St.

Westbury	11	144	21-30 incl.& 51-61 incl.	Ind. B
	Sec.	Block	Lot	Zone

PLEASE TAKE NOTICE: That at a meeting of the Board of Zoning and Appeals held on

June 30, 1971, the appeal in above entitled matter was

GRANTED permitting erection and or maintenance of vehicular entrance gates in the location as indicated on the plot plan submitted with the application.

BOARD OF ZONING AND APPEALS

Executive Secretary

EXCERPTS FROM RULES OF BOARD OF ZONING AND APPEALS, TOWN OF NORTH HEMPSTEAD

"Article IV, Section 10. Time Limitation. Unless at the time of the granting of a variance or conditional use the Board shall otherwise order, or for good cause shown, the Board shall extend the time, any and all variances or conditional uses hereafter granted by the Board of Zoning and Appeals shall lapse and cease to be effective unless within ninety (90) days from date of the granting thereof, the permit required to be issued thereunder, shall have been duly issued by the Building Department. Any and all variances and conditional uses heretofore granted shall likewise lapse and cease to be effective unless within (90) days from the adoption of this rule, the permit required to be issued thereunder shall have been duly issued by the Building Department. The lapse of any variance, however, under this rule, shall not preclude the applicant from making a new application for the same relief, except that he shall be bound by the law and the facts as they then exist."

Written application for extension accompanied by fee of $5.00 for residential purposes and $10.00 for commercial purposes should be made by applicant at least two weeks prior to expiration date. No notice of expiration date will be given by the Board of Zoning and Appeals.

E 000256

APPLICATION FOR

CERTIFICATE OF COMPLETION

TOWN OF NORTH HEMPSTEAD
ROBERT C. MEADE, Supervisor
BUILDING DEPARTMENT
JOHN F. McDONALD, Manager
Manhasset, New York 11030

Date .....

To the Manager, Building Department
Town Hall, Manhasset, N. Y.

Sir:

The undersigned, as owner, or agent for owner, respectfully requests a Certificate of Completion for the construction to the building located below.

712450

House No. 535 Rutland Lt.
(Street)
Westbury
(Post Office)

Sec. 11 Block 144 Lot 21-30, 51-61

Building Permit No. .....

Signed Steven Yoansky

Address 535 Rutland Lt
Westbury

FEE — $5.00

E 000257

2632 RDC-01537

Certificate of Completion

No. 72 208
71-2450

BUILDING DEPARTMENT, TOWN OF NORTH HEMPSTEAD
MANHASSET, NEW YORK

DATE May 1st. 1972

This Certifies that THE BUILDING LOCATED IN SEC. NO. 11 BLOCK NO. 144 LOT NO. 21-30 & 51-61

NASSAU COUNTY TAX MAP, ADDRESS West side of Hopper Street 250 foot north of Main Street, Westbury, New York

CONFORMS SUBSTANTIALLY TO THE APPROVED PLANS ON FILE IN THIS OFFICE, PERMIT NO. 4586 DATE 8/3/71
AND TO ALL REQUIREMENTS OF THE BUILDING ZONE ORDINANCE AND BUILDING CODE OF THE TOWN OF NORTH HEMPSTEAD, NASSAU COUNTY, N. Y.

ZONE Ind. B COMPLETION *** Vehicular Entrance Gates ***
Variance granted Board of Zoning and Appeals case #9615 June 30, 1971

THIS CERTIFICATE ISSUED TO Steven Yasinsky
owner OF THE AFORESAID BUILDING.

ADDRESS 535 Rutland St., Westbury, N. Y.

Steven Yasinsky
OWNER - BUILDER - ARCHITECT

ADDRESS 535 Rutland St., Westbury, N. Y.

BUILDING OFFICIAL

250 10/71 LZ

E 000258

2632 RDC-01538

[redacted] APPLICATION shall be written in ink or typewritten, filed in triplicate within 15 days of the [redacted] accompanied by neccessary data on sheets 8½ x 14 inches in size, and fee of $15.00.
[redacted] will not be accepted unless affidavit of ownership is executed by the record owner of property [redacted]

TOWN OF NORTH HEMPSTEAD
[redacted] BOARD OF ZONING AND APPEALS
Town Hall, Manhasset, New York

Application for Variance From or Permit Under the Requirements of the Building Zone Ordinance of 1929, as Amended

Applicant: STEVEN YASINSKY
GEORGE T. McGREGOR, JR.
535 Rutland Street, Westbury, New York.
Address: 124 King Street, Hicksville, New York.

Owner: FRANK LORDI
Address: No Number, Brush Hollow Road, Westbury, New York.

Street Address of Affected Premises: Fronting on Hopper St. & Center St.
No — Name of Street

ITEM A: Application is hereby made for a permit under Article XIII Section 37 & 37 A of the Building Zone Ordinance.
Application is hereby made for a variance of Article ..... Section ..... of the Building Zone Ordinance under the authority vested in the Board of Appeals by Article XVII thereof.

B: Premises Affected is situated on the South side of the L.I.R.R. 250 feet from Main street fronting on Hopper St. & Center St., ... feet ..... of ..... Town of North Hempstead
Nearest Intersection — Town or Village

Location: Nassau County Tax Map
Section No. 11 Block No. 144 Lot No. 21 - 30 incl. & 51 - 61 incl.

C: Located in Zoning District designated as Light Industry

D: To Permit the ~~[illegible]~~ Use of premises as a junk yard.
In accordance with plans filed under New Building File No. ..... Alteration File No. .....
Dated ..... 195..... Application for Certificate of Occupancy .....

E: Attached hereto is copy of the decision by the Building Official issued on ..... — ..... 195..

F: Question Involved ——

G: In connection with—A Proposed—An Existing—Building—Use ——

H: If existing building, give date of erection ——
File certificate of occupancy if issued.

I: Class of Construction under Building Code ——

J: Size of Lot: 250 plus or minus feet front 275 plus or minus feet Rear 200 plus or minus feet deep.
Size of Existing Building None feet front ..... feet deep.
Size of Building as Proposed — feet front ..... feet deep.
Size of Building: Height — stories ..... feet.

K:
1. Use. Present (or Former, if unoccupied) None
Proposed Junk Yard
2. What is the assessed valuation of the plot in question?
Land $2,010 Buildings —— Total $2,010.
3. Were the zoning district designations affecting this plot changed since 1929? .....
4. If change was made, explain in statement.
5. Is there a petition pending before the Town Board to change the zoning district designations affecting this plot? No

L:
1. Give Calendar No. of any previous Application filed on these premises ——
2. How long has present owner held title to property? approximately 1½ years.
3. Is the proposed site within 200 feet of any premises used for a public school, public library, church, hospital or orphanage? No
4. Has any violation been issued affecting these premises? No
If yes, file copy.
5. Has Court Summons been served relative to this Matter? No.
File Disposition.
This applies only to public garages, [illegible]

E 000259

2632 RDC-01539

NOTE. This application to be made out in duplicate, together with surveys, in duplicate showing proposed curb cuts, on which must be indicated the section, block and lot numbers including an accurate description of the location of the property, also all existing and proposed buildings with distances of same from the property lines, together with names of all streets and distances from corners. Two (2) complete sets of drawings to scale, including floor plans, elevations, structural details, and plumbing elevations, shall accompany application for permit, one set thereof showing the approval of the Building Department shall be kept on the work and exhibited on demand to any Inspector of the Town of North Hempstead

This Is Your P

Permit File No 71-2415
C of O No. C of C No
Fee 22.00
Inspector Ralph Morl
Approved by Joe Kasotsky
Permit No 4506 8/31
C of O C of C
File No 71-2450

APPLICATION FOR BUILDING PERMIT

Town of North Hempstead

Michael J. Tully, Jr., Supervisor
BUILDING DEPARTMENT
JOHN F. McDONALD, Manager
Manhasset, New York 11030

Issued pursuant to the provisions of the Building Zone Ordinance, and the Administration and Enforcement Ordin 21-30 incl. & 7

Zone Ind. B Checked by Section 11 Block 144 Lot 51-61 Date

Location between Garden St. and Hopper St. 250' no. of Main Str

Owner/Address Steven Yasinsky, 535 RutlandSt., Westbury, NY

Description of Work erection and or maintenance of gates W/Hopper St. 275' N/Main St.

Residence ☐ Garage ☐ Business ☐ Industrial ☒ Oth

New Building ☐ Alteration ☐ Addition ☐ Rep.

Size of lot – Feet Front 269.10 Feet Deep 200

Size of existing buildings – Feet Front Feet Deep Number of stories

Size of proposed buildings – Feet Front Feet Deep Number of rooms

Existing buildings used for Proposed buildings used for

Material of Footings Size under Walls Under Columns

Material of Foundation Walls . . . Thickness Height

Material of Exterior Walls Thickness Height No. of Stories

Size of wood studs O.C. . . Height No. of Stories

Size of Beams:

1st floor . o. c. 2nd floor o. c. 3rd floor . . . o. c.

Size of rafters or roof beams o. c. . Size of sill

Size of corner post Size of Girders – 1st 2nd 3rd

Size of Girts ties plates bridging

Size of columns Fire stops at all floors

Material of roof Pitch of roof

Floor Construction – Fireproof Wood

Maximum liveload for each floor – 1st 2nd 3rd 4th

Size of steel beams, girders, columns, lintels, etc.

Lighting System. ..... Fire Place

Heating System . . . Size of Chimney Flue

Toilet Facilities ..... Water Supply (Public or Pump)

Distance of Cesspool from Well . . . From Adjoining Property House

Will drainage system be provided with required traps, cleanouts, and vents?

Will there be plumbing work done?

Name and license number of plumber

Will there be electrical work done?

Name and license number of electrician

Estimated cost of proposed buildings, alterations, etc. $ 300.00

Sq. Ft. Area: 1st floor 2nd floor .... Garage. . Porch

NO WORK IS TO BE STARTED UNTIL BUILDING PERMIT HAS BEEN RECEIVED BY APPLICANT

CERTIFICATE OF OCCUPANCY

1. New building. No building hereafter erected, enlarged, extended or altered shall be occupied or used, in whole or in par a certificate of occupancy, certifying that such building conforms to the approved plans and the requirements of this code and stat purpose for which the building may be used in its several parts, and any special stipulations, shall have been issued by the Building In and signed by him or his authorized assistant. If the occupancy or use of a building is not discontinued during the work of alterati occupancy or use of the building shall not continue for more than thirty days after the completion of the alteration unless a certificat have been issued.

2. Change of occupancy.

(a) No change or use shall be made in a building hereafter erected or altered that is not consistent with the last issued certifi occupancy for such building unless a permit is secured. In case of an existing building, no change of occupancy that would bring it some special provision of this ordinance shall be made unless the Building Inspector, upon inspection, finds out that such building co substantially to the provisions of this ordinance with respect to the proposed new occupancy and use, and issues a certificate of occ therefor

E 000260

2632 RDC-01540

Town of North Hempstead

BOARD OF ZONING AND APPEALS

TOWN HALL, MANHASSET, NEW YORK

Application for Variance, Conditional Use or Permit Under the Requirements of the Building Zone Ordinance of 1929, as Amended

File No. 6799 4-27-71 Case No. 7615

NOTICE—This APPLICATION shall be written in ink or typewritten and filed in triplicate.

APPLICATION WILL NOT BE ACCEPTED UNLESS AFFIDAVIT OF OWNERSHIP IS EXECUTED BY THE RECORD OWNER OF PROPERTY DESCRIBED.

Applicant: STEVEN YASINSKY Address: 535 Rutland St., Westbury, NY

Owner: STEVEN YASINSKY Address: Same

Street address of affected Premises: (no number) Hopper Street, New Cassel, Westbury, NY
No. Name of street

Name and Address of Person who will appear for the applicant at the public hearing John L. Molloy, Esq.
346 Maple Ave., Westbury, New York Phone No. 334-1000

ITEM A

Application is hereby made for a conditional use under Article ..... Section .....
Application is hereby made for a permit under Article ..... Section .....
Application is hereby made for a variance of Article XX Section 20.10
Appeal is hereby made for a determination under Article ..... Section ..... of the Building Zone Ordinance under the authority vested in the Board of Zoning and Appeals by Article XXII thereof.

ITEM B

Subject Premises situated on the E/S side of Garden Street W/S Hopper street:
250 feet of Main Street North Hempstead
Nearest Intersection Town or Village

Location: Nassau County Tax Map
Section No. 11 Block No. 144 Lot No. 21-30 inclus. 51-61 inclus.

ITEM C

Located in Zoning District designated as Industrial B

ITEM D

To Permit the ~~Construction~~—Maintenance—~~Extension~~ of* gate
In accordance with plans filed under New Building File No. ..... Alteration File No. .....
Dated ....., 195.... Application for Certificate of occupancy .....

ITEM E

Attached hereto is copy of the decision by the Building Official issued on ....., 196....

ITEM F

Question Involved gate opening on Hopper St. and Garden St.

ITEM G

In connection with—~~Existing~~—An Existing—~~Building~~—Use* .....

ITEM H

If existing building, give date of erection .....
File certificate of occupancy if issued.

ITEM I

Class of Construction under Building Code .....

ITEM J

Size of Lot 269.10 feet front 233.18 feet rear 200 feet deep
Size of Existing Building ..... feet front ..... feet deep.
Size of Building as Proposed ..... feet front ..... feet deep.
Size of Building: Height ..... stories ..... feet.

ITEM K

1. Use. Present (or Former, if unoccupied) auto dismantling & junk yard
   Proposed same
2. What is the assessed valuation of the plot in question? .....
   Land ..... Buildings ..... Total .....
3. Were the zoning district designations affecting this plot changed since 1929? .....
4. If change was made, explain in statement.
5. Is there a petition pending before the Town Board to change the zoning district designations affecting this plot?

ITEM L

1. Give Calendar No. of any previous Application filed on these premises #3218
2. How long has present owner held title to property? since 1955
3. Is the proposed site within 200 feet of any premises used for a public school, public library, church, hospital or orphanage?** no
4. Has any violation been issued affecting these premises? yes
   If yes, file copy.
5. Has Court Summons been served relative to this Matter? yes
   File Disposition. Pending

*Strike out inapplicable words. Answer all questions which apply.

**This applies only to public garages, motor vehicle repair shops and gasoline service stations.

(See Over)

E 000261

SECTION | BLK. 194 | ADDRESS | CARD NO. | ASSESSMENT SUMMARY

REMARKS

ZONED AS INDUSTRIAL

9-8-6 ADD

1-23-6

1	LAND	12250
	BLDGS.	
	TOTAL	12250
3	LAND	6250
	BLDGS.	9248
	TOTAL	15500
5	LAND	9000
	BLDGS.	9398
	TOTAL	18400
8	LAND	18050
	BLDGS.	9398
	TOTAL	27450
10	LAND	15000
	BLDGS.	9398
	TOTAL	24400
11	LAND	15000
	BLDGS.	11422
	TOTAL	26422
12	LAND	15000
	BLDGS.	12122
	TOTAL	27100
14	LAND	15000
	BLDGS.	21474
	TOTAL	36450

PROPERTY RECORD

NO UTILITIES			LOW																				
NO SEWER			HIGH																				
NO WATER			ROUGH																				
NO GAS			ROCKY																				
NO ELECTRICITY			SWAMPY																				
			HILLSIDE																				
NO STREET			WOODED																				
DIRT STREET			BRUSH LAND																				
SEMI IMPROVED ST.			TILLABLE																				
NO SIDEWALK																							

LAND VALUE COMPUTATIONS

FRONTAGE (FIGURED)	AVERAGE DEPTH	UNIT PRICE	UNIT PERCENT	FRONT FT PRICE		SUBTOTAL	% DEPR.	VALUE		
125	100	2.5				3125			LAND	
									BLDGS.	
									TOTAL	
						6250			LAND	
									BLDGS.	
									TOTAL	
200	125	45				9000			LAND	
									BLDGS.	
									TOTAL	
200	100	75				15000			LAND	
									BLDGS.	
									TOTAL	
250	100	60				15000			LAND	
									BLDGS.	
									TOTAL	

ASSESSORS RECORD NASSAU COUNTY NEW YORK

E 000262

2632 RDC-01542

SECTION 11 | BLOCK 144 | LOT 31-50 Inc | ADDRESS 199 MAIN ST | CARD No. 1/3

PROPERTY DESCRIPTION

[redacted]

72,390 776 -4
11,760 776T-4

SCAPPATURA
A-036738

TRANSITIONAL

REASON CODE 15

69,450 776

-52-S

JUL 12 1977

APPATURA
A-036738

69,450 776

-52-S

N518 77

APPATURA
A-036738

CLASS 433.14

60,060 84,150
NH 1
86097-1421
1-2-3-15-30-48-66-39-52-S
1-2-3-15-30-48-66-39-52-S

F
SEC 11 BLOCK 144
LOT 31-50

LOT 31-50

REMARKS

LOTS 31-50 Inc GROUPED FOR 1968
A-36738 HM AUG 8 '68
APP. No. 770736 See Report
in File. 6/9/76 [illegible]
6/10/77 APP. No 780257 [illegible]
4/24/86 REF. TO BD. of SUP. RES. # 182/86
COURT ORDER BY HON. L.E. [illegible] Sinity 4/4/86
INDEX # 17816/76 CAL. # 80T0390
TAX ROLL WRIT # OLD ASS. RED. NEW ASS.
Years settled 5/1/76 - 5/1/82.

ASSESSMENT SUMMARY

1968	LAND	3301
	BLDGS.	230
	TOTAL	5600
1968	LAND	3300
	BLDGS.	3944
	TOTAL	6945
1969	LAND	
	BLDGS.	
	TOTAL	
1970	LAND	
	BLDGS.	
	TOTAL	
1971	LAND	
	BLDGS.	
	TOTAL	
1972	LAND	
	BLDGS.	
	TOTAL	
1973	LAND	
	BLDGS.	
	TOTAL	
1974	LAND	
	BLDGS.	
	TOTAL	
1975	LAND	
	BLDGS.	
	TOTAL	
1976	LAND	
	BLDGS.	
	TOTAL	

LAND RECORD

NO UTILITIES		LOW	
NO SEWER		HIGH	
NO WATER		ROUGH	31-36
NO GAS		ROCKY	
NO ELECTRICITY		SWAMPY	36-45
		HILLSIDE	
NO STREET		WOODED	46-49
DIRT STREET		BRUSH LAND	
SEMI IMPROVED ST.		TILLABLE	49-50
NO SIDEWALK			

LAND VALUE COMPUTATIONS

FRONTAGE FIGURED	AVERAGE DEPTH	UNIT PRICE	UNIT PERCENT	FRONT FT. PRICE	COR. INFL.	TOTAL	% DEPR.	VALUE
125	100	60				7500		
250	100	60				15000		
75	100	60				4500		
50	100	60				3000		
						32000		

E 000263

2632 RDC-01543

EXTERIOR WALLS

FLOORS & DEAD LOADS

CEILINGS

ROOFING & FRAMING

PARTITIONS

STAIRS & FIRE ESCAPES

INTERIOR FINISH

HEATING

PLUMBING

TILING

ELECTRICAL WIRING

MISCELLANEOUS ITEMS

COMPUTATIONS

TOTAL REPLACEMENT VALUE

OCCUPANCY DETAIL & INCOME

RENTAL CAPITALIZATION

PERCENTAGE ITEMS

FLAT EXPENSE ITEMS

TOTAL CAP RATE

TOTAL FLAT EXPENSES

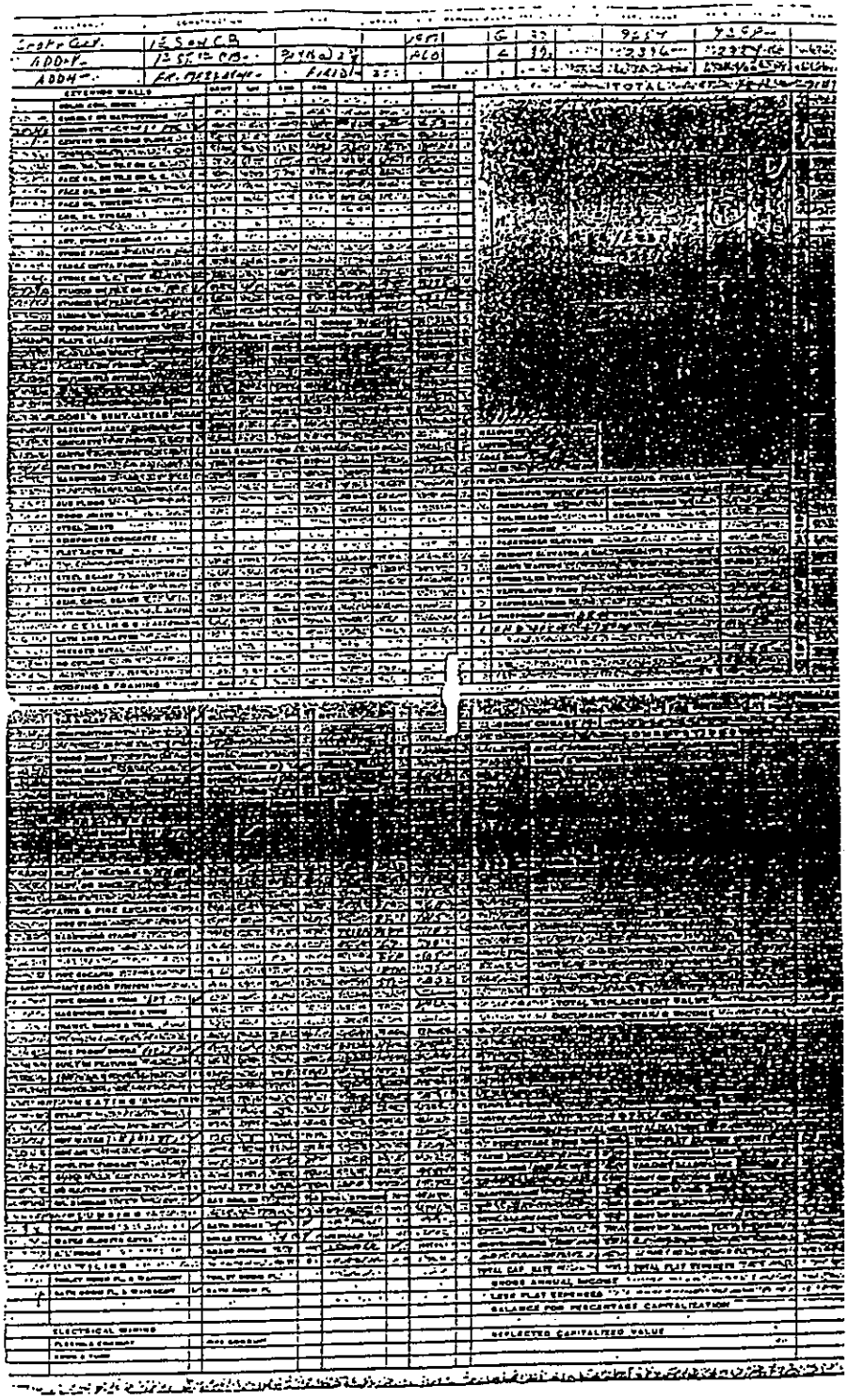
GROSS ANNUAL INCOME

LESS FLAT EXPENSES

BALANCE FOR PERCENTAGE CAPITALIZATION

11 144 31 E2120028 N153268

E 000264



E 000265

ASSESSED LAND 60050 ASSESSED TOTAL 84150

1-2-3-15-30-48-66-39-52-5

775 -4 84150

TAX EX CODE

PROPERTY USE CODE 433 14

CAD 255
VILLAGE
ZONING 1-5
RATE 775
VIDEO # 19211

DATE OF LAST SALE
AMOUNT OF SALE
LIBER & PAGE

1995 ASSESSMENT ROLL
CARD PRINTED FEB.-01-95
ROLL LIBR & PG 10459-217

CHANGE DATE & TIME 10/13/94
CHANGE ORDER # A-035738

LAST MAINT. DATE 2/20/86
REASON

SKETCH SUMMARY

	GROUND AREA	DESCRIPTION
ADDITION	3765	1 SC
ADDITION	7321	1 SC
ADDITION		
ADDITION		
ADDITION		
ADDITION		
ADDITION		
ADDITION		

L/B: 4.32 SITE DATA AND VALUATION

SUB	TYP	DCC.	RTG	SIZE	RATE	DF	ADJUSTMENTS	EST VALUE
0	L	210-		200X	250	2500	175	375000

TOTAL 375000

STREET TYPE
N 1- - -
3- - -

ASSOCIATED PARCELS & DCC
2- - -
4- - -

VALUE INDICATIONS

1	RCNLD	1225700	---
2	INCAP	1051600	100
3	GROSS	1165100	---
4	COMPS.	1072300	---
LAND ALLOC		750700	

CORRELATED VALUE 1051600

ASSESSED LAND 60050

ASSESSED TOTAL 84150

BUILDING DATA

01	BUILDING ID	1A	1B
02	MAX STY:HGT	1.0	1.0
03	FLOOR KEY	F	F
04	#.FLOORS	1.0	1.0
05	OCCUPANCY	210	511
06	RENT. UNITS	1	1
07	STRUC CLASS	C	C
08	EXT WALLS	B	B
09	HEATING/AC	99	90
10	QUAL GRADE	C	C
11	1:GFA	3765	7321
12	TOTAL GFA	3765	7321
13	FLOOR HGT.	18	10
14	L/F WALLS	272	329
15	BSMT FLR%		
16	BSMT.UTIL		
17	YEAR NEW	1965	1965
18	YEAR RENOV		
19	RENOV.RTG		
20	CONDITION	AV	AV
21	OBS AGE	9	20
22	STATUS	0	0
23	P/A RATIO	7.22	4.20
24	F.ADJ.AREA	3765	7321
25	F.APPL RATE	60.46	27.24
26	U.ADJ.AREA		
27	U.APPL RATE		
28	TOT WGT FAC	1.00	1.00
29	CST/DSN.FAC		

SALE DATE SALE PRICE BOOK PAGE D C S NP V
/ 00
/ 00

INCOME ESTIMATE

#	DCC	FLR	FIN	NO.OF.UNITS	TAI	S	ECON	RENT	XP
1	210	N.	D20	3765	GFA	3+	X	12.30	24
	GENERAL RETAIL & SVC FACILITIE								
2	511	N.	U10	7321	GFA	3	X	6.15	17
	GENERAL WAREHOUSE								
3									
4									
5									
6									
7									
8									

EST. EFFECTIVE GROSS INCOME 95291
ESTIMATED NET INCOME (AVE 79.4 %) 75548
CAP .144 (.094 + .050) IND VALUE 531600
GRM 6.700 IND VALUE 645100

NOTES
SAM-TON AUTO SALVAGE

MARKET VALUE
ADJUSTMENTS

CODE	AMOUNT
(11)	520000
(__)	
(__)	
(__)	

FACTOR:

1 +ADD LND 6 -TO CURE
2 +ADD IMP 7 +OT ADDN
3 +ADD L+I 8 -OT EXCL
4 -ALLOCTN 9 -INCOMPL
5 -NON-TAX

IMPROVEMENT VALUATION

ITEM	RCN.	CF	RCNLD
1	500995	70%	350697
TOTAL	500995		350700

SPECIAL FEATURES, COST REFINEMENTS AND MISCELLANEOUS IMPROVEMENTS

BID.	CD.	UNITS	TYP	DESCRIPTION		C	C
1B	505	192	C10	UT BLDG-C B<10+/-P/A		C	3
1	413	250	608	CHNLNK FNC STD GSE-B		C	3
1	401	31200	BTP	YARD PAVING-BLACKTOP		C	3

E 000266

2632 RDC-01546

S+R issued 4/14/78
0140155

INDUSTRIAL CHEMICAL SURVEY
BUREAU OF WATER POLLUTION CONTROL
Nassau County Department of Health
240 Old Country Road, Mineola, N.Y. 11501 Tel. 535-2404

#00058

Part I

Company Name: Island Transportation Corp.		SIC (if known) Code: 4210	
Company Mailing Address: 299 Jericho St, Westbury			Zip: 11590
Plant Name (if different): —	Contact Name: Timothy Cropper		Tel. 334-5400
Plant Address: —	Village: Westbury	Water Distr.:	Code / Zip
Principal Business of Plant: trucking		No. Employees at this Facility: 375	

Part II

COMPLETE LIST OF CHEMICALS USED (See attached)

PART III - DISCHARGE INFORMATION

WATER

1. Does your plant discharge liquid wastes to a municipally owned sanitary sewer system? ☐ Yes ☑ No
   If yes, name of system: cesspool
2. Is your facility permitted to discharge liquid wastes under a State (SPDES) or Federal (NPDES) permit? ☐ Yes ☑ No
   If yes, enter Permit No. ☐☐☐☐☐☐☐
3. Do you discharge liquid industrial wastes in any other manner? ☑ Yes ☐ No
   If yes, explain: detergent wash from trucks into 8-9000 gal cesspools
4. If any of the above are yes:
   a. Do you discharge process or chemical wastes, i.e., water used in manufacturing, including direct contact cooling water and scrubber water? ☐ Yes ☐ No
   b. Do you discharge non-contact cooling water? ☐ Yes ☐ No
   c. Do you discharge sanitary wastes? ☐ Yes ☐ No

AIR

1. Does your facility have sources of possible emissions to the atmosphere? ☐ Yes ☑ No
2. Enter location and facility code as shown on your Air Pollution Control Application for Permits & Certification (if applicable) ☐☐☐☐☐☐☐☐☐☐
3. Heating System: ☐ None ☐ Boiler ☑ Space Heater | Type of Fuel: ☐ Electric ☐ Gas ☑ Oil #2 | Incinerator: ☐ Yes ☑

SOLID & CONCENTRATED LIQUID WASTES

1. List name and address of firm (incl. yourself) removing wastes other than office and cafeteria refuse (industrial scavenger)

Name	Name
Address	Address

2. List location(s) of landfills owned and used by your Facility

	Active	Inactive
a.		
b.		

E 000267

PEST

Does this facility manufacture, produce, formulate or repackage pesticides? ☐ Yes ☑ No

Signature (owner, partner, or officer): Jim Cropper — Date: 9-15-77

Name (printed or typed): Jim Cropper — Title: Vice-Pres.

Inspector's Name: DB RZ — Date of Inspection: 9/15/77

2632 RDC-01547

USTRIAL C MICAL SURVEY-BUREAU OF WATER POLLUTION
Issue County partment of Health

Name of Company: Island Transportation | Site Code | Water Dist: Westbury | Code

PART II - CHEMICALS USED (include gases and oils)

INSTRUCTIONS: Complete all information for those chemicals your facility has used, stored, distributed, or otherwise disposed of since January 1, 1977. Do not include chemicals used only in analytical laboratory work.

Name of Chemical/Trade Name, Supplier and Address	Code	Avg Annual Usage	Gal	Lbs	Use of Chemical	Final Disposition of Chemical
Trichlorethylene (drawn from 275 gal holding tank)		80	✓		Vapor degreaser cleaning inside of tankers	- evaporation + recirculation of cleaning fluids within tank truck
Methanol		5-600	✓		fuel system additive for trucks + tractors	- evaporative loss [ea truck uses 6oz/wk]
					added to Service Stations tanks	
Safety-Kleen (Mineral Spirits 99.9%)		1400	✓		parts cleaner	picked up + delivered by Safety Kleen (some evaporation)

E 000268

OR
FFICE
SE
NLY

RECOMMENDED ACTION

2 ☐ Immediate Abatement
3 ☐ Sample
4 ☒ SPDES Application
5 ☐ Refer To: _____
6 ☐ Re-inspection
7 ☐ No Action
9 ☐ Other (specify)

FID 2 '77

2632 RDC-01548

November 4, 1981

Mr. T. E. Cropper
Island Transportation Corp.
299 Main Street
Westbury, NY 11590

Dear Mr. Cropper:

On April 6, 1981, this office was notified of a 2,000-gallon diesel fuel tank that failed a pressure test.

By letter dated April 1, 1981, the Nassau County Fire Marshal's Office requested the installation of four-inch PVC observation wells to groundwater. Since these wells have not been installed, New York State Department of Transportation will do the installation in accordance with Article 12 of the State Navigation Law and seek reimbursement from you at a later date.

On November 20, 1981, we will hire a contractor to start work on these wells.

If you have any questions, I can be reached at 979-5082.

#81-0028

Very truly yours,

LAWRENCE J. PETEREC, P.E.
Regional Oil Spill Engineer

LJP:BC
cc D. Bartow, NCFM
S. Silvers, NCHD ✓
W. Parish, NYSDEC

BMMC
NCDH
NOV 3 1981
RECEIVED

March 31, 1982

Mr. T. E. Cropper
Island Transportation Corp.
299 Main Street
Westbury, NY 11590

Dear Mr. Cropper:

RE: Spill #81-0023

After our telephone conversation, I met with representatives of the New York State Department of Environmental Conservation, Nassau County Health Department and Nassau County Fire Marshal's Office and discussed the information you mentioned to me.

It was decided that site wells will be necessary. Therefore, I will have my field engineer contact you.

If you elect not to install the wells, then the New York State Department of Transportation will do the installation in accordance with Article 12 of the State Navigation Law and will seek reimbursement from you at a later date.

Very truly yours,

L. Peterec

LAWRENCE J. PETEREC, P.E.
Regional Oil Spill Engineer

LJP:BAM
cc W. Parish, NYSDEC
S. Silvers, NCHD
D. Bartow, NCFM

E 000270

2632 RDC-01550

PERMIT COMPLIANCE INSPECTION REPORT

Bureau of Land Resources Management

Nassau County Department of Health

Facility Name: ISLAND TRANSPORTATION CORP

Address: 299 MAIN ST WESTBURY

Company Representative: TIMOTHY CROPPER

Title:

Phone:

Changes in Name, Address, Rep.

Permit No. 30-11-86

☒ New ☐ Renewal

Effective Date of Permit: 1/2/81

Expiration Date of Permit: 1/20/82

Item	Yes	No	N/A
1. Waste Storage and Handling			
A. Adequate Spill Control?			
B. No obvious infraction of Fire Code?			
C. Proper waste containers?			
D. Proper Storage of incompatible wastes?			
E. Waste containers properly labeled?			
F. Proper drum stack size and aisles?			
G. Containers off ground and not leaking?			
H. Waste stored in secure area?			
2. Registered Industrial Waste Scavenger?			
Name			
DEC #			
☐ Different scavenger since last report			
3. Records			
A, B, C Proper waste inventory records?			

Item	Yes	No	N/A
3. Records (Cont'd.)			
D. Record of spills & notification of N.C.H.D.?			✓
E. Record of special sampling results?			✓
4. Records kept a minimum of 3 years?			
5. Reports submitted on time?		✓	
6. Waste storage in conformance with permit?			
Quantities O.K.? Drums			✓
1 (500 GAL) UNDERGROUND Tanks			
Maximum storage time O.K.?			
7. Sampling in conformance with permit?			
8. Is compliance schedule met as required by permit?			
9. Overall Inspection Rating			
☐ Satisfactory			
☐ Non-Compliance ☐ Major ☒ Minor			

Date	Item	Comments
		WASTE REPORT DUE FOR 1ST HALF OF 1981
		VISITED ISLAND TRANSPORTATION + FOUND THE FACILITY TO BE CLOSED
		THE ENTIRE STORAGE YARD HAS BEEN CLEANED & ALL TRUCKS ARE GONE THERE
		IT APPEARS THAT THIS FACILITY IS OUT OF BUSINESS.

Signature of Inspector: G. Fitzgerald

Date 11/20/81

Signature of Company Representative:

Date

FH 702 9/80

E 000271

2632 RDC-01551

'20-2 (3/77)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PERMIT

Under the Environmental Conservation Law, Article 27, Title 7, Part 360

FACILITY NO. [illegible]

EXPIRATION DATE [illegible]

☐ CONSTRUCTION ☐ INITIAL ISSUE ☐ REISSUANCE
☐ OPERATION ☐ RENEWAL ☐ MODIFICATION

PERMIT ISSUED TO	ADDRESS OF PERMITTEE	TELEPHONE NO.
[illegible]land Transportation Corp.	299 Main St., Westbury, NY 11590	516-334-5400

LOCATION OF PROJECT Town	County	Environmental Conservation Regional Office
[illegible]	[illegible]	[illegible] Stony Brook, NY 11790

DESCRIPTION OF PROJECT	ON-SITE SUPERVISOR
[illegible]	[illegible]

GENERAL CONDITIONS

1. The permittee shall file in the office of the Environmental Conservation Region specified above, a notice on intention to commence work at least 48 hours in advance of the time of commencement and shall also notify said office promptly in writing of the completion of the work.
2. The permitted work shall be subject to inspection by an authorized representative of the Department of Environmental Conservation who may order the work suspended if the public interest so requires.
3. As a condition of the issuance of this permit, the applicant has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.
4. All work carried out under this permit shall conform to the approved plans and specifications. Any amendments must be approved by the Department of Environmental Conservation prior to their implementation.
5. The permittee is responsible for obtaining any other permits, approvals, easements and rights-of-way which may be required for this project.
6. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with Part 360 and the special conditions. Any variances granted by the Department of Environmental Conservation to Part 360 must be in writing and attached hereto.

SPECIAL CONDITIONS

[illegible]

E 000272

ISSUE DATE	ISSUING OFFICER	SIGNATURE
	[illegible]	X [illegible]

Facility # 30 H 56

Permit Conditions for Operation
of a Waste Generating Facility

1. The following minimum standards will apply for storing and handling wastes:

   a. There should be adequate spill control in the storage area; i.e. an impervious storage pad or floor, bermed to facilitate containment of spills. Stormwater shall be directed to prevent entry into the pad.

   b. Building and fire codes should be met where required.

   c. Wastes should be stored in leakproof containers which are compatible with the waste materials. The containers should not be corroded or leaking and should be tightly closed.

   d. Wastes which deleteriously react with each other must not be stored directly adjacent or mixed together.

   e. Waste containers should be labeled, numbered and distinctly coded and identified as to contents in accordance with Department of Transportation Regulations 49CFR, Part 172.

   f. Waste drums should not be stacked more than two high and aisles should be provided so that all drums are accessible and clearly visible for inspection.

   g. Waste drums should be stored off the ground a minimum of 2 inches to facilitate detection of bottom leaks.

   h. Wastes should be stored in a secured area.

2. Removal of wastes should be only by registered industrial scavenger.

E 000273

30 11 56

3. Records should be kept on premises and made available to Personnel from the Department of Environmental Conservation or its agents upon request. The following should be included:

   a. Quantity and type waste generated.

   b. Waste container inventory and identification including starting date of collection.

   c. Waste removals by scavenger including container I.D. numbers and scavenger I.D. numbers and final disposal site.

   d. Spills - Notification of DEC (751-7900) and/or Health Department (535-2404) should be made immediately.

   e. Sampling results

4. All records shall be kept a minimum of three years.

5. A report shall be filed on an approved form by the fifteenth day of the following months each year:

   February and August

   Reports shall be filed with the Nassau County Department of Health.

6. Limits on maximum storage time and quantities of wastes stored on the site shall be _____.

   Less than 90 days for one 500 gal. underground tank.

7. Samples shall be collected and analyzed as follows:

   N.A.

E 000274

30 H56

8. Compliance Schedule

The waste storage area is to be modified to conform with Item 1a of permit conditions within 12 weeks of the effective date of the permit. All other conditions to be complied with no later than four weeks after EDP.

NOTICE OF PERMIT

for:

- [ ] CONSTRUCTION
- [ ] INITIAL ISSUE
- [ ] REISSUANCE
- [x] OPERATION
- [ ] RENEWAL
- [ ] MODIFICATION

has been issued to: ISLAND TRANSPORTATION CORP.

address: 299 MAIN STREET, WESTBURY, NEW YORK 11590

for a project described as: HOLD TO HAUL HAZARDOUS WASTE

under the Environmental Conservation Law,
Article 27, Title 5, Part 360 (Solid Waste Management Facilities)

E 000276

NOTE:
- This Notice of Permit must be posted on the project site in such a manner that it is protected from weather and is in a location readily visible to the public.
- A copy of the Permit with the general and special conditions noted thereon will be shown to anyone upon request.

Issuing Officer MORRIS BRUCKMAN, P.E.

BLDG.#40, SUNY, STONY BROOK, NEW YORK 117[illegible]
Address

Permit No.	Issue Date	Expiration Date
30-H-56	1/21/81	1/20/82

New York State
Department of Environmental Conservation

47-12-2 (6/77)

2632 RDC-01556

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR APPROVAL TO OPERATE A SOLID WASTE MANAGEMENT FACILITY

FOR STATE USE ONLY

PROJECT NO. | DATE RECEIVED

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

1. OWNER'S NAME: PETER PIOREK
2. ADDRESS (Street, City, State, Zip Code): [redacted]
3. Telephone No.: [redacted]
4. OPERATOR'S NAME: Same
5. ADDRESS (Street, City, State, Zip Code): [redacted]
6. Telephone No.: [redacted]
7. ENGINEER'S NAME: NONE
8. ADDRESS (Street, City, State, Zip Code): [redacted]
9. Telephone No.: [redacted]
10. ON-SITE SUPERVISOR: [illegible] CUPPER
11. ADDRESS (Street, City, State, Zip Code): 116 RYDER AVE. DIX HILLS N.Y. 11746
12. Telephone No.: 516.243.4577
13. HAS THE INDIVIDUAL NAMED IN ITEM 10 ATTENDED A DEPARTMENT SPONSORED OR APPROVED TRAINING COURSE? ☐ Yes Date _____ Course Title _____ Location _____ ☒ No
14. PROJECT/FACILITY NAME: ISLAND TRANSPORTATION CORP.
15. COUNTY IN WHICH FACILITY IS LOCATED: NASSAU
16. ENVIRONMENTAL CONSERVATION REGION: NO MAP
17. TYPE OF PROJECT FACILITIES: ☐ Composting ☐ Transfer ☐ Shredding ☐ Baling ☐ Sanitary Landfill ☐ Incineration ☐ Pyrolysis ☐ Resource Recovery-Energy ☐ Resource Recovery-Materials ☐ Other TRUCKING COMPANY
18. HAS THIS DEPARTMENT EVER APPROVED PLANS AND SPECIFICATIONS AND/OR ENGINEERING REPORTS FOR THIS FACILITY? ☐ Yes Date _____ ☒ No
19. LIST WASTES NOT ACCEPTED: NONE
20. BRIEFLY DESCRIBE OPERATION

PETROLEUM PRODUCT TRANSPORTER WITH REPAIR FACILITY FOR OWN TRACTOR TRAILERS

ESJ

21. IF FACILITY IS A SANITARY LANDFILL, PROVIDE THE FOLLOWING INFORMATION:
a. Total useable area: (Acres) Initially _____ Currently _____
b. Distance to nearest offsite, downgradient water supply well _____ Feet
c. No. of groundwater monitoring wells: Upgradient _____ Downgradient _____
22. INDICATE WHICH ATTACHMENTS, IF ANY, ARE INCLUDED WITH THIS APPLICATION: ☐ Form 47-19-2 or SW-1 ☐ Operations Plan & Report ☐ USGS Topographic Map ☐ Record Forms ☐ Other PLOT PLAN ☐ Construction Certificate ☐ Boring Logs ☐ Water Sample Analysis ☐ None
23. CERTIFICATION: I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A Misdemeanor pursuant to Section 210.45 of the Penal Law.

10/21/80 — Date

[illegible] Signature and Title

FIELD COPY

E 000277

2632 RDC-01557

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N. Y., 11501

FRANCIS T. PURCELL
County Executive

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Deputy Commissioner
for Environmental Health

October 31, 1980

Mr. Morris Bruckman, P.E.
New York State Department of
Environmental Conservation
SUNY-Bldg. 40
Stony Brook, New York 11790

Re: Island Transportation
Part 360 Application & Permit

Dear Mr. Bruckman:

Please find enclosed an application for a Part 360 permit to replace the SPDES hold and haul permit for the above facility. We have reviewed the application and found it to be complete.

Consequently, a draft permit has been drawn up and enclosed. This permit requires a facility number, your signature and an issuance date.

If you have any questions, please contact me at 535-2404.

Very truly yours,

L. Sama
Public Health Engineer
Bureau of Land Resources Mgmt.

LS:ceg
Encl.

E 000278

PERMIT

Under the Environmental Conservati.. Law, Article 27, Title 7, Part 360

EXPIRATION DATE
1 year after ED

☐ CONSTRUCTION ☒ OPERATION

☐ INITIAL ISSUE ☐ RENEWAL

☐ REISSUANCE ☐ MODIFICATION

PERMIT ISSUED TO	ADDRESS OF PERMITTEE	TELEPHONE NO.
Island Transportation Corp.	299 Main St. Westbury, N.Y. 11590	516-334-5400

LOCATION OF PROJECT Town	County	Environmental Conservation Regional Office
North Hempstead	Nassau	Region I-Stony Brook, N.Y. 11790

DESCRIPTION OF PROJECT	ON-SITE SUPERVISOR
Waste Oils/Solvents from Heavy Equip. Maintenance	Mr. Timothy Cropper

GENERAL CONDITIONS

1. The permittee shall file in the office of the Environmental Conservation Region specified above, a notice on intention to commence work at least 48 hours in advance of the time of commencement and shall also notify said office promptly in writing of the completion of the work.
2. The permitted work shall be subject to inspection by an authorized representative of the Department of Environmental Conservation who may order the work suspended if the public interest so requires.
3. As a condition of the issuance of this permit, the applicant has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.
4. All work carried out under this permit shall conform to the approved plans and specifications. Any amendments must be approved by the Department of Environmental Conservation prior to their implementation.
5. The permittee is responsible for obtaining any other permits, approvals, easements and rights-of-way which may be required for this project.
6. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with Part 360 and the special conditions. Any variances granted by the Department of Environmental Conservation to Part 360 must be in writing and attached hereto.

SPECIAL CONDITIONS

Hold to Haul

See list of permit conditions attached

ISSUE DATE	ISSUING OFFICER	SIGNATURE
		X

E 000279

Permit Conditions for Operation of a Waste Generating Facility

1. The following minimum standards will apply for storing and handling wastes:

   a. There should be adequate spill control in the storage area; i.e. an impervious storage pad or floor, bermed to facilitate containment of spills. Stormwater shall be directed to prevent entry into the pad.

   b. Building and fire codes should be met where required.

   c. Wastes should be stored in leakproof containers which are compatible with the waste materials. The containers should not be corroded or leaking and should be tightly closed.

   d. Wastes which deleteriously react with each other must not be stored directly adjacent or mixed together.

   e. Waste containers should be labeled, numbered and distinctly coded and identified as to contents in accordance with Department of Transportation Regulations 49CFR, Part 172.

   f. Waste drums should not be stacked more than two high and aisles should be provided so that all drums are accessible and clearly visible for inspection.

   g. Waste drums should be stored off the ground a minimum of 2 inches to facilitate detection of bottom leaks.

   h. Wastes should be stored in a secured area.

2. Removal of wastes should be only by registered industrial scavenger.

3. Records should be kept on premises and made available to Personnel from the Department of Environmental Conservation or its agents upon request. The following should be included:

   a. Quantity and type waste generated.

   b. Waste container inventory and identification including starting date of collection.

   c. Waste removals by scavenger including container I.D. numbers and scavenger I.D. numbers and final disposal site.

   d. Spills - Notification of DEC (751-7900) and/or Health Department (535-2404) should be made immediately.

   e. Sampling results

4. All records shall be kept a minimum of three years.

5. A report shall be filed on an approved form by the fifteenth day of the following months each year:

   February and August

   Reports shall be filed with the Nassau County Department of Health.

6. Limits on maximum storage time and quantities of wastes stored on the site shall be _____.

   Less than 90 days for one 500 gal. underground tank.

7. Samples shall be collected and analyzed as follows:

   N.A.

8. Compliance Schedule

The waste storage area is to be modified to conform with Item 1a of permit conditions within 12 weeks of the effective date of the permit. All other conditions to be complied with no later than four weeks after EDP.

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N. Y., 11501

FRANCIS T. PURCELL
County Executive

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Deputy Commissioner
for Environmental Health

NOTICE OF COMPLETENESS

Date October 30, 1980

TO: Island Transportation Corp.
299 Main St.
Westbury, N.Y. 11590

Att: Mr. Timothy Cropper

This is to advise you that your application for a Part 360-Solid Waste Management Facility permit is complete and that a review of it has commenced. (Additional information may be requested from you if such is deemed necessary at a future date in order to process the application.)

It has been determined that your project is a minor project. Accordingly, a decision will be mailed to you within 45 days.

Application Number: _____ - _____ Permit Agent: L. Sama

Telephone Number: 535-2404

14-12-6 (10/77)

E 000283

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR APPROVAL TO OPERATE A SOLID WASTE MANAGEMENT FACILITY

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

FOR STATE USE ONLY

PROJECT NO.	DATE RECEIVED
DEPARTMENT ACTION ☐ Approved ☐ Disapproved	DATE

1. OWNER'S NAME: PETER FIORETTI	2. ADDRESS (Street, City, State, Zip Code): 299 MAIN ST. WESTBURY N.Y. 11590	3. Telephone No.: 516-334-5400
4. OPERATOR'S NAME: SAME	5. ADDRESS (Street, City, State, Zip Code):	6. Telephone No.:
7. ENGINEER'S NAME: NONE	8. ADDRESS (Street, City, State, Zip Code):	9. Telephone No.:
10. ON-SITE SUPERVISOR: TIMOTHY CROPPER	11. ADDRESS (Street, City, State, Zip Code): 116 RYDER AVE. DIX HILLS NY. 11746	12. Telephone No.: 516-643-4572

13. HAS THE INDIVIDUAL NAMED IN ITEM 10 ATTENDED A DEPARTMENT SPONSORED OR APPROVED TRAINING COURSE?
☐ Yes Date Course Title Location ☒ No

14. PROJECT/FACILITY NAME	15. COUNTY IN WHICH FACILITY IS LOCATED	16. ENVIRONMENTAL CONSERVATION REGION
ISLAND TRANSPORTATION CORP.	NASSAU	NO MAP

17. TYPE OF PROJECT FACILITIES: ☐ Composting ☐ Transfer ☐ Shredding ☐ Baling ☐ Sanitary Landfill ☐ Incineration ☐ Pyrolysis ☐ Resource Recovery-Energy ☐ Resource Recovery-Materials ☒ Other TRUCKING COMPANY

18. HAS THIS DEPARTMENT EVER APPROVED PLANS AND SPECIFICATIONS AND/OR ENGINEERING REPORTS FOR THIS FACILITY? ☐ Yes Date _____ ☒ No

19. LIST WASTES NOT ACCEPTED

NONE

20. BRIEFLY DESCRIBE OPERATION

PETROLEUM PRODUCT TRANSPORTER WITH REPAIR FACILITY FOR OWN TRACTOR, TRAILERS

E 000284

21. IF FACILITY IS A SANITARY LANDFILL, PROVIDE THE FOLLOWING INFORMATION:
a. Total useable area: (Acres) Initially _____ Currently _____
b. Distance to nearest offsite, downgradient, water supply well _____ Feet
c. No. of groundwater monitoring wells Upgradient _____ Downgradient _____

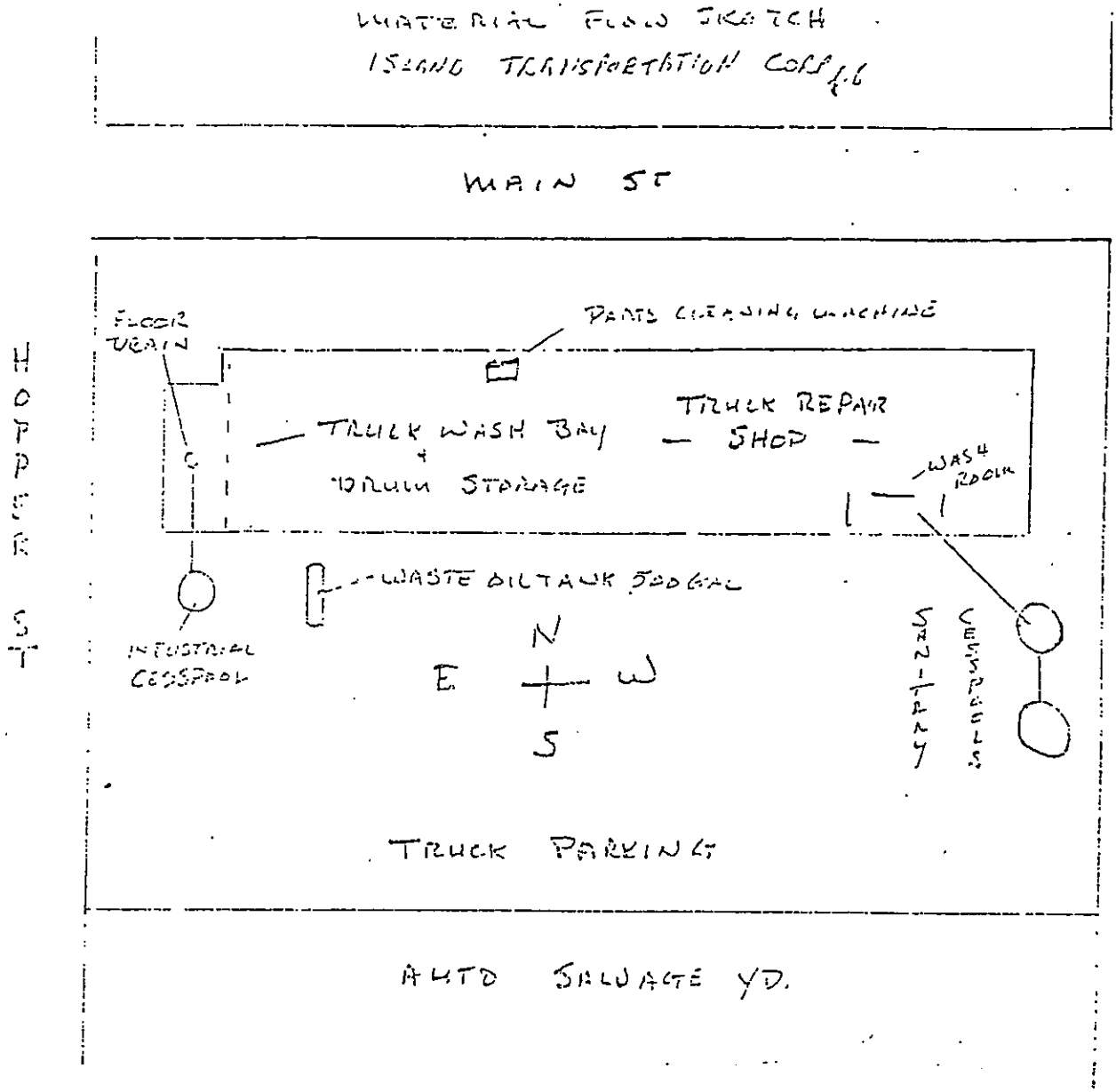
22. INDICATE WHICH ATTACHMENTS, IF ANY, ARE INCLUDED WITH THIS APPLICATION:
☐ Form 47-19-2 or SW-7 ☐ Operations Plan & Report ☐ USGS Topographic Map ☐ Record Forms MATERIAL FLOW SKETCH
☐ Construction Certificate ☐ Boring Logs ☐ Water Sample Analysis ☐ None ☐ Other PLAT SKETCH

23. CERTIFICATION:
I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

10/21/80 Timothy Cropper V.P. Maint.

2632 RDC-01564

MATERIAL FLOW SKETCH
ISLAND TRANSPORTATION CORP.



MATERIAL FLOW DESCRIPTION

1. TRUCKS WASHED WITH DETERGENT IN EAST BAY - DRAINAGE INTO UNDERGROUND POOL.

2. SAFETY-CLEAN CORP. REMOVES LIQUID + SOLID WASTE @ 10 GAL PER WEEK RATE (APPROX)

3. ENGINE WASTE OIL REMOVED BY GENERAL WASTE OIL CO.

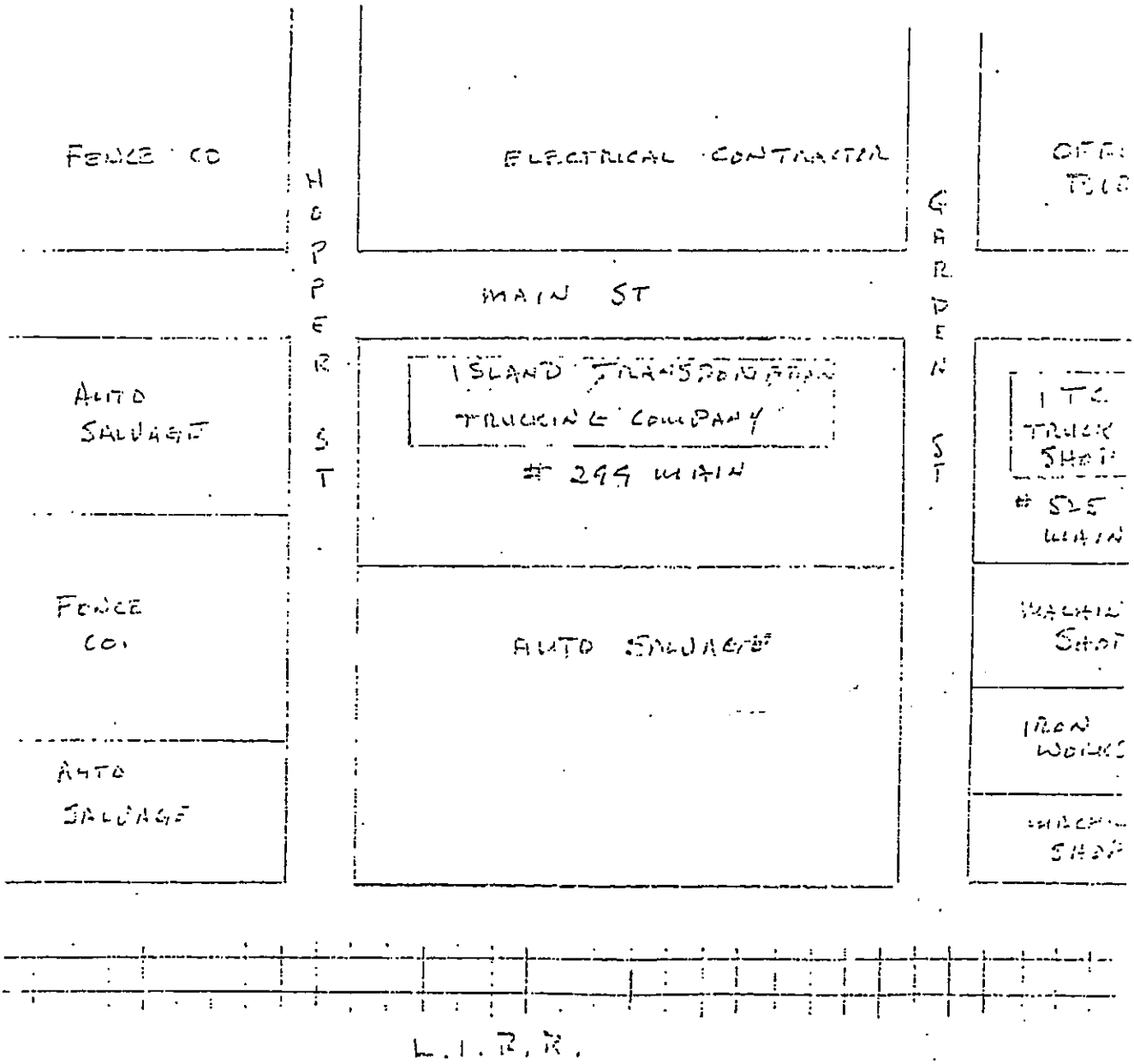
E 000285

2632 RDC-01565

PLOT SKETCH

ISLAND TRANSPORTATION CORP.
299 MAIN ST
WESTBURY, N.Y. 11590

SIGNATURE [illegible]
TITLE V.P. MAINT
DATE 10-21-80



E 000286

APPENDIX B

SHORT ENVIRONMENTAL ASSESSMENT FORM

INSTRUCTIONS:

(a) In order to answer the questions in this short EAF is is assumed that the preparer will use currently available information concerning the project and the likely impacts of the action. It is not expected that additional studies, research or other investigations will be undertaken.

(b) If any question has been answered Yes the project may be significant and a completed Environmental Assessment Form is necessary.

(c) If all questions have been answered No it is likely that this project is not significant.

(d) Environmental Assessment

1. Will project result in a large physical change to the project site or physically alter more than 10 acres of land? . . . . . ___ Yes ✓ No

2. Will there be a major change to any unique or unusual land form found on the site? . . . . ___ Yes ✓ No

3. Will project alter or have a large effect on an existing body of water? . . . . . ___ Yes ✓ No

4. Will project have a potentially large impact on groundwater quality? . . . . . ___ Yes ✓ No

5. Will project significantly effect drainage flow on adjacent sites? . . . . . ___ Yes ✓ No

6. Will project affect any threatened or endangered plant or animal species? . . . . . ___ Yes ✓ No

7. Will project result in a major adverse effect on air quality? . . . . . ___ Yes ✓ No

8. Will project have a major effect on visual character of the community or scenic views or vistas known to be important to the community? . . . ___ Yes ✓ No

9. Will project adversely impact any site or structure of historic, pre-historic, or paleontological importance or any site designated as a critical environmental area by a local agency? . . . ___ Yes ✓ No

10. Will project have a major effect on existing or future recreational opportunities? . . . ___ Yes ✓ No

11. Will project result in major traffic problems or cause a major effect to existing transportation systems? . . . . . ___ Yes ✓ No

12. Will project regularly cause objectionable odors, noise, glare, vibration, or electrical disturbance as a result of the project's operation? . ___ Yes ✓ No

13. Will project have any impact on public health or safety? . . . . . ___ Yes ✓ No

14. Will project affect the existing community by directly causing a growth in permanent population of more than 5 percent over a one-year period or have a major negative effect on the character of the community or neighborhood? . . ___ Yes ✓ No

E 000287

15. Is there public controversy concerning the project? ___ Yes ✓ No

PREPARER'S SIGNATURE: [illegible] TITLE: V.P. [illegible]

[illegible] DATE: [illegible]

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PROJECT PERMIT REQUIREMENT QUESTIONNAIRE

The purpose of this questionnaire is to assist the applicant in determining what, if any Department Permits or approvals must be obtained before starting work on a proposed project. If you are not sure if the action proposed is a regulated activity or is within an area subject to Department regulations (tidal wetlands, freshwater wetlands, etc.) contact our regional office for clarification. A pre-application conference with our staff to obtain guidance in the Department's permit application review process can be arranged.

ANSWER ALL QUESTIONS

NAME OF APPLICANT: ISLAND TRANSPORTATION CORP

DETAILED PROJECT DESCRIPTION & LOCATION: 299 MAIN ST. WESTBURY TRUCKING COMPANY HAULING PRIMARILY PETROLEUM PRODUCTS FOR WATER OIL COMPANIES ON LONG ISLAND

	YES	NO	NOT KNOWN
1. Realty Subdivision Approvals in Nassau County Does project involve subdivision of land into 5 or more residential lots that will be served by a public or community sewage disposal system?		✓	
2. Mining Permit Does project involve the mining and commercial sale or off-site use of 1,000 tons of mineral within 12 calendar months (excepting excavation or grading in connection with on site construction or farming)?		✓	
3. Air Contamination Permit a) New or Modified Sources: Does project involve the construction, modification or operation of a boiler greater than 1 million BTU/hr rated heat input, an incinerator or an industrial process.		✓	
b) Indirect Source: Does project involve construction or modification of a highway, airport or a parking facility with 250 --			

E 000288

2632 RDC-01568

	YES	NO	NOT KNOWN
9. Tidal Wetlands Permit			
I. Will project be located: a) in tidal waters, b) within 300-feet of either the landward edge of a tidal wetland boundary or a tidal body of water?		✓	
II. Will there be any subdivision of land or physical alterations of land or water?		✓	
Exemptions to the above regulated locations if:			
1) Project will be located at a ground elevation of 10-feet or higher above mean sea level (excepting on the face of a bluff or cliff).		✓	
2) A substantial, man-made structure (such as a paved street or bulkhead) 100-feet or longer exists between the project site and tidal wetlands or tidal water. (Consult D.E.C. Regional Office if unsure.).		✓	
10. Freshwater Wetlands Permit			
a) Will project area be within, or within 100-feet of, a freshwater wetland or freshwater body of 12.4 acres or larger?		✓	
b) Will project involve draining, dredging, filling, excavating, erecting structures, roads, utilities or other alterations or placing any form of pollution in a wetland? (Consult D.E.C. Regional Office if unsure).		✓	
11. Section 401 - Water Quality Certification Letter Does project or activity require a Federal Permit or License? If so, this State certification may be required prior to Federal approval.		✓	
12. State Pollutant Discharge Elimination System (SPDES) Permit			
Does project involve:			
a) A proposed subdivision of 5 or more units?		✓	
b) A proposed or existing discharge of 1,000 gallons per day of sewage or any discharge of industrial or other wastes to ground waters?		✓	
c) Any discharge of sewage, industrial or other wastes to surface water?		✓	
d) Any disposal of [illegible]		✓	

E 000289

11/30/81

Called Island Transportation's new number & found they have moved to

299 Edison Ave
West Babylon, NY 11704

They have been there since the end of October 1981.

[illegible]

E 000290

2632 RDC-01570

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501

FRANCIS T. PURCELL
COUNTY EXECUTIVE

JOHN J. DOWLING, M.D., M.P.H.
COMMISSIONER

FRANCIS V. PADAR, P.E.
ASST. DEPUTY COMMISSIONER
DIV. OF ENVIRONMENTAL SERVICES

August 24, 1979

DuBois Chemicals
Division of Chemed Corp.
DuBois Tower
Cincinnati, Ohio 45202

Gentlemen:

We are currently establishing a list of approved industrial products in use in Nassau County for the purpose of meeting effluent discharge standards as set forth in New York State Pollutant Discharge Elimination System Permits. Of interest to us are the IUPAC names, chemical structural formulas, and composition of the following products: "Spra-Jel", jelled asphalt and grease-remover concentrate.

We are not interested in OSHA Material Safety Data Sheets or their equivalents. Rather, we are interested in the composition of the products and possible by-products produced during their intended use. In particular, we are monitoring liquid wastes from the washdown of equipment and the products contained in this effluent.

All information of a proprietary nature will of course be kept confidential.

Sincerely,

Joseph Schechter

Joseph Schechter
SPDES - Chemical Division
P.H. Sanitarian I
Bureau of Wastewater Management

JS:cs:r

RE: ISLAND TRANSPORTATION

E 000291

SPRA JEL

is a concentrated emulsifier composed of these ingredients in descending percentage in a homogenous mixture:

Petroleum solvent, kerosene cut

Orthodichlorobenzene

Hi flash coal tar naphtha

Pine oil

Alkanolamide

Amine oxide

NASSAU COUNTY HEALTH DEPARTMENT
PERMIT COMPLIANCE INSPECTION REPORT

Name, Address and Phone of Permittee
Island Transport.
299 M. Street
Westbury, N. 11590

Permit #NY0140155 Effective Date 4/14/78 Expiration Date 4/13/78

Company Representative & Title Bill Ryan – Super. – [illegible]

Permit Verification	Yes	No	N.A.
Name and location correct	/		
Changes:			
Purchase records in order			/
Removal of waste material records in order			/
Name & Number of scavenger & waste pick-up			/
Changes in scavenger pick-up			/
Final destination of waste known			/
Destination All Pet [illegible]			/
Re: 2841.5 lbs Trichlor. March, 28, 1978			
Chemical Storage Area			
Waste contained in sealable leakproof containers.....		/	
Containers labeled		/	
Storage area relatively secure			/
Spill prevention appears adequate.....	/		
Cleanup apparatus or material on premises.....	/		
Records of spill occurrences.....		/	
Date of last spill		/	
Reported to this department		/	
Comments: Storage area for oils and such fairly saturated. This was in [illegible] Must expect a little oil around.			
Operation			
Changes in operation or chemical usage since last inspection		/	
Comments:			
Sludges & solids adequately disposed of in production in area	/		
Production area kept relatively free of chemical spillage into floor drain			

E 000293

2632 RDC-01573

Compliance Schedule Special Requirements

	Yes	No	N.A.
Permittee under complicance schedule.....			
Status of compliance			
All records and reports required by this department sent by prescribed date.....			

Prescribed date Jan 31/1973

Date sent N/A

Comments:

Gave them a few days to [illegible] [illegible] adjacent to [illegible]. Oil [illegible] [illegible] [illegible] east side of [illegible].

Signature Inspector [illegible] Date 10/10/73

Signature Company Agent [illegible] Date 17/10/73

E 000294

2632 RDC-01574

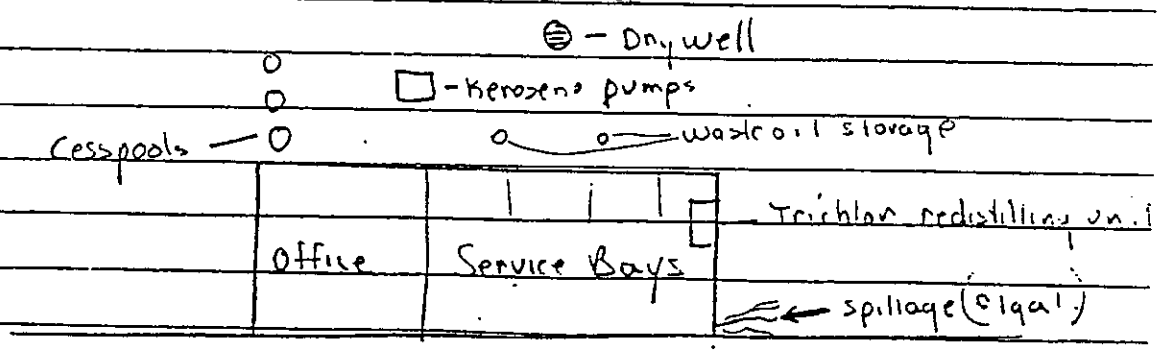
ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent : Island Trans
Address: Main St. Westbury

Inspector: Gene M.

DATE	COMMENTS
1/11/79	Arrived at Island Transport at approx. 3:00. Spoke to Tim Cropper, Maintence Head. Inspected oil storage, and trichlor redistillation unit. Both stopping. Can be expected in this operation, however, some chemical is leaking out of corner of shop at S.E. corner. Informed him to clean up area. We proceeded to the West area of maintance lot. Mr Cropper pointed out 3 cesspools in sequence. See diagram. He also pointed out a drywell in the middle of the lot. This was under a tanker filled with gasoline. It was also frozen over with oily water. Sample not accessible. Informed Mr Cropper I will return at some future date.

Gene Marleas



Main St

E 000295

2632 RDC-01575

NASSAU COUNTY DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES & RESEARCH
ENVIRONMENTAL HEALTH LABORATORIES

RESULTS OF EXAMINATION

REPORTING LAB: TRACE ORGANICS

LAB ACCESS NO.: 900391

SOURCE: ISLAND TRANSPORTATION

MATRIX: WATER

DATE SAMPLED: 8/21/79

DATE RECEIVED: 8/21/79

DATE COMPLETED: 8/21/79

PARAMETER	ppb(ug/l.)
BENZENE	359
TOLUENE	766
XYLENE	2003
* ALIPHATIC HYDROCARBON	1571

ADDITIONAL HIGHER MOLECULAR WEIGHT HYDROCARBONS PRESENT

AL.

* C4 - C10 based on n-hexane

E 000296

AUG 23 1979

2632 RDC-01576

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

334-5400

Owner or Agent: Island Transportation Corp.
Address: 299 Main Street Westbury

Inspector: HW

DATE | COMMENTS (Maintenance & Equipment)

30 August 1979 Field Contact - Timothy E. Cropper V.P.
Results of sample taken on 8/21/79 - discussed with Tim Cropper.
Further advised Mr. Tim Cropper that results of another certified sample would have to be submitted to NCHD by Island Transportation Corp. to ascertain whether conditions have improved.
Herbert Welch NCHD.
Sanitarian II

13 Sept 1979 Field Contact - Wm. Ryan (Plant Maintenance Foreman).
Spoke with Bill Ryan regarding waste water discharge into street (via pipe) from truck wash area; Will discuss problem further with Tim E. Cropper V.P. (Maintenance & Equipment).
Further advised Mr. Ryan regarding the DuBois Chemical product "SPRA-JeL" - being just as deleterious to ground water integrity as 1,1,1 Trichloro.
Herbert Welch NCHD
Sanitarian II

E 000297

2632 RDC-01577

5. SLUDGE DISPOSAL If sludge is created as a result of processing or treatment, what is ultimate disposal point?

6. DISCHARGE DATA (Continued) (See Instructions) ATTACH SKETCH SHOWING OUTFALL LOCATIONS

OUTFALL NO.	☐ Proposed ☐ Replacement ☒ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)
One		Biodegradeable Detergent	None

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
10 Gal Day	10 Gal/Day	☐ Continuous ☒ Intermittent ☐ Batch	☐ Yes ☒ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Twelve Months per year	Five Days per week	Seven Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☒ Yes ☐ No	Unknown	– Ft.	Unknown	Unknown

OUTFALL NO.	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

OUTFALL NO.	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

OUTFALL NO.	☐ Proposed ☐ Replacement ☐ Existing ☐ Expansion	TYPE OF WASTE	TYPE OF TREATMENT (If none, so state)

DESIGN FLOW	ACTUAL FLOW	FREQUENCY OF DISCHARGE	IS FLOW EQUALIZATION PROVIDED?
Gal/Day	Gal/Day	☐ Continuous ☐ Intermittent ☐ Batch	☐ Yes ☐ No If "Yes", describe in comments

PERIOD OF DISCHARGE		
Months per year	Days per week	Hours per day

SURFACE DISCHARGE	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
☐ Yes ☐ No			

SUBSURFACE DISCHARGE	If "Yes", Name of nearest Surface Water	Distance	SOIL TYPE	Depth to Water Table
☐ Yes ☐ No		Ft.		

7. COMMENTS:

E 000298

8. I hereby affirm under penalty of perjury that information provided on this form and any attached supplemental forms is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

APPLICANT'S SIGNATURE (See Instructions)	Date	Printed Name	Title
X [signature]	1/27/72	Timothy E. Cropper	Vice Pres. Maintenance

2632 RDC-01578

SEMI-ANNUAL WASTE REPORT

Company: Island Transportation Corp. Date: January 15. 1979

Permit#: NY - #0140155 Reporting Period: Previous 6 months

Item	Reporting Requirement	
1. Waste generating chemicals and/or solvents purchased during reporting period.	Name	Quantity
Solvents	Safety Kleen Corp. P.O. Box 768 Mineola, N.Y. 11501	10 gal./week approximately
Tricholoroethylene	Pride Solvents & Chemical Co., Inc. 86 Lamar Street West Babylon, N.Y. 11704	275 gal. approximately

2. Waste Removal

Attach copies of manifests or receipts from registered industrial waste scavenger. Must include nature, name and amount of waste, date removed, registration number, and name of scavenger.

General Waste Oil Co., Inc.
Huntington. New York 11746

3. Final Disposal Site for Waste (obtain information from scavenger)

New Jersey Waste Oil Refinery

4. Occurrence of Accidental Spills (include date, nature, and approximate amount spilled)

None

E 000299

Signed Timothy E. Grogan

Title Vice-President Maintenance

ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent: Island Transportation
Address: Main St Westbury

Inspector: LS

DATE (Telephone Call) COMMENTS

4/26/78 Spoke to T. Cropper re SPDES application and draft permit we issued 4/14/78. Claim no trichloroethylene waste. Uses in summer to clean asphalt from inside truck tanks. Then redistills and saves solvent. Draws off asphalt and reuses - ie no wastes ~~exp~~ except by evaporation. Told him we want to keep track of Safety-Kleen solvent waste. He will report on this but claim will need a reminder. No way he will remember 6 m from now. Feels every one will need reminding.

We also discussed his detergent washing of trucks. Water water goes into several dry wells or cesspools. Only first one has a cover - but all are interconnected. Told him we would have to sample for oil. Have him on our sampling list.

E 000300

2632 RDC-01580

SPRA-JEL

TECHNICAL DATA

GENERAL DESCRIPTION

SPRA-JEL represents a totally new concept in asphalt and grease removal. It is a liquid that forms a gel when mixed with water and sprayed. This gel clings to vertical surfaces and undersides of tank trucks and road building equipment, remaining soft and active even when left overnight. (SPRA-JEL is easily removed with a pressure rinse, using either cold or hot water, or by steam cleaning.)

PROPERTIES

Appearance	Yellow liquid
Alkalinity	None
Biodegradable	Yes, all surfactants
Density	7.83 lbs/gallon
Emulsification	Excellent
Flash Point	130°F
Foaming	None
Odor	Solvent
Phosphates	None
Stability	Excellent
Wetting Ability	Very Good

ADVANTAGES

SPRA-JEL is easily removed with a pressure rinse, using either cold or hot water, or by steam cleaning.

USING PROCEDURE

MIXING — Pour the required amount of SPRA-JEL into a container, tank or drum. Add 5-10 parts water to each part of product. Allow to stand 3-5 minutes then mix to form a stable emulsion. Note: Always add water to SPRA-JEL. Never add SPRA-JEL to water. Do not spray the concentrated product. APPLICATION—Upon spraying, this emulsion will form a gel 1/8" to 1/4" thick. A 1:10 mix will give a thicker gel. ASPHALT REMOVAL — After approximately 15 minutes dwell time, the gel will turn from white to brown to black, as it absorbs more asphalt. Ordinary asphalt spills can be removed with a pressure rinse at this point. For heavy encrustations, longer dwell time is needed, and at times, subsequent applications must be made. SPRA-JEL can be applied at the close of the work day and rinsed off the following morning. Rinse between applications. For extremely heavy soils, brush with a stiff fibre or wood bristle broom prior to rinsing. When temperature is below 40°F, allow gel to dwell from 1-3 hours. GREASE REMOVAL — Allow gel to dwell for 5-10 minutes; rinse with steam or high-pressure water. Reapplication should not be necessary. TAR REMOVAL — While SPRA-JEL is exceedingly effective on asphalt and certain tars, it will not attack solvent-resistant tars such as those used for black top dressing. If your customer has been hauling tars, break off a small piece and allow it to soak in an undiluted SPRA-JEL solution. If the solution turns black within a few minutes you know that SPRA-JEL is attacking the soil.

DISPENSING

SPRA-JEL may be dispensed with a Drum Pump, and applied by means of a Universal Sprayer or Graco Pump (equipped with teflon seals and solvent resistant hoses).

TITRATION

None.

ACCEPTABILITY

OSHA accepted Material Safety Data sheet and pollution information available upon request from the Regulatory Environmental Compliance Service Department.

MATERIAL SAFETY

Metal — Safe on all common metals except titanium. Paints — Pretest for safety. Freshly applied paint may be sensitive to SPRA-JEL. Rubber — Some types of rubber may be softened by prolonged exposure. Rinse tires after application.

STORAGE

Keep container closed when not in use.

CAUTION

SPRA-JEL concentrate is a combustible liquid. Keep away from heat, sparks, and open flame. Avoid breathing vapors. Use only with adequate ventilation. Avoid contact with skin and eyes. For accidental skin contact, flush thoroughly with water. For eye contact, flush with water for at least 15 minutes and get medical attention.

PACKAGING

55 gal. (208.2 liters) MDR — 474 lb. gross wt.
15 gal. (56.8 liters) 1/4 MDR — 134 lb. gross wt.

The information contained in this bulletin is, to our best knowledge, true and accurate, but all recommendations or suggestions are made without guarantee since the conditions of use are beyond our control. DuBois Chemicals disclaims any liability incurred in connection with the use of these data or suggestions.

DuBois Technical Representatives are located throughout the United States, Canada, the United Kingdom, Australia, Africa, Germany, Holland, Italy, Japan, Mexico and Venezuela.

E 000301

DuBois Chemicals

DuBOIS CHEMICALS, DIVISION OF CHEMED CORPORATION

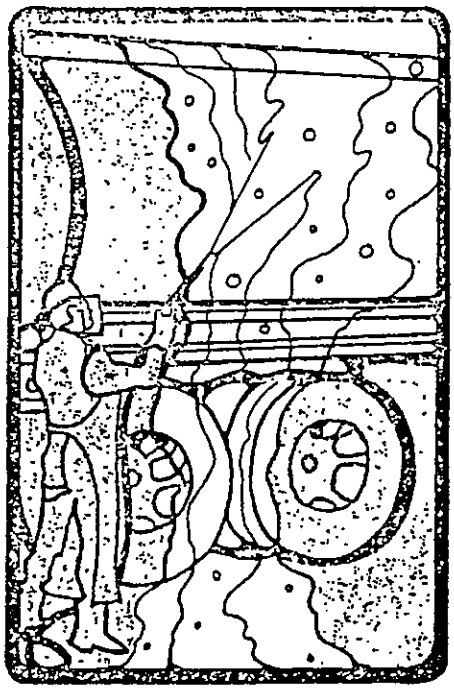
Island Transportation

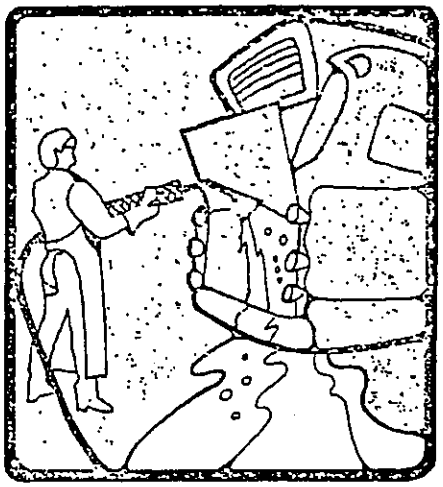
SPRA-JEL

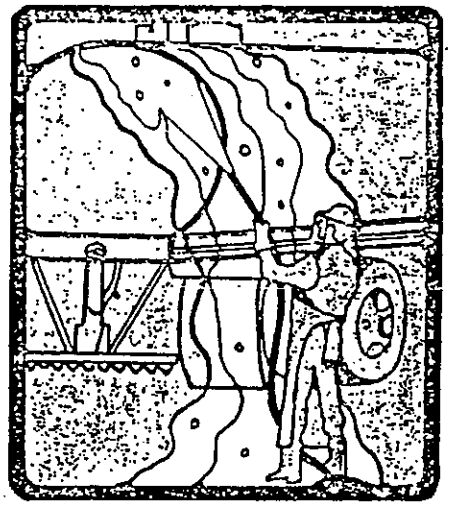
JELLED ASPHALT AND GREASE REMOVER CONCENTRATE

SPRA-JEL rapidly penetrates asphaltic and greasy soils — makes asphalt and grease water rinsable.

- Safe on all metals
- Sprays on easily
- Rinses easily
- Sticks to the job until it's done
- Labor saving. It works by itself







DuBois Chemicals

SPRA-JEL

JELLED ASPHALT AND GREASE REMOVER CONCENTRATE

E 000302

DuBOIS CHEMICALS, DIVISION OF CHEMED CORPORATION
GENERAL OFFICES • DuBOIS TOWER • CINCINNATI OHIO 45202 • (513) 762-6000

2632 RDC-01582

ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent: Island Transportation Corp.
Address: 299 Main Street, Westbury
Inspector: HW

DATE | COMMENTS (Maintenance & Equipment)

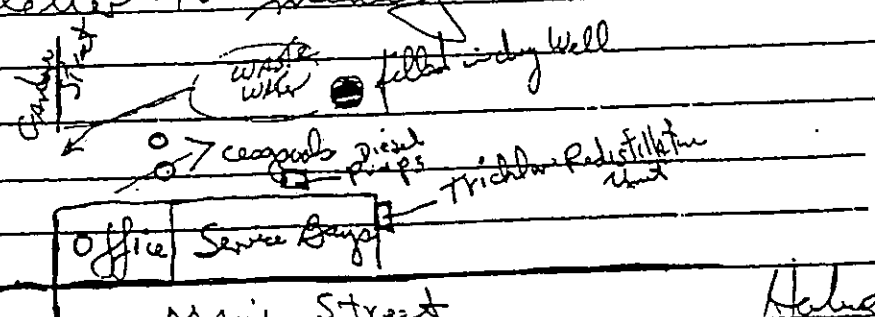
21 August 1979 Field Contact – Timothy E. CROPPER V.P.

Visited Island Transportation Corporation Accompanied by Ms. L. Lutzker NCHD. Investigation revealed that one dry well filled in with earth and (2) cesspools were dry. According to Tim Cropper of Island Transportation third cesspool cover most probably was blacktopped over during yard roadway repair.

Waste water accumulation now filled in dry well spilling over into street at this time of investigation. (See Diagram)

Water Sample for BTX taken from ground surface in close proximity to filled in dry well

Use of 1,1,1 Trichloroethane has been discontinued, it was previously used to clean asphalt from inside of holding vehicles. Another product called SPRA-JET by Dubois Chemicals is being considered in lieu of 1,1,1 Trichloroethane. Product ingredients to be checked out by letter to manufacturer.



E 000303

Helen Welch NCHD
Sanitarian II

2632 RDC-01583

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Land Resources Management

Nassau County Department of Health

Name	Permit Number
Island Transportation corp.	0140155
Address	**Report Period**
299 Main Street, Westbury, N.Y. 11590	June 80-Dec.80

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp.	10 Gal/Wk.
		P.O. Box 768 Mineola, N.Y. 11501	Approximately

RECEIVED
JAN 23 1981
NCDH
BLRM

E 000304

continued on reverse

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Wastewater Management

Nassau County Department of Health

Name: Island Transportation Corp.

Address: 299 Main St., Westbury, NY 11590

Permit Number: 01/0155

Report Period: Jan-June 198(

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp	10 Gal./Wk.
		P.O. Box 768 Mineola, NY 11501	Approximately

RECEIVED
JUL 16 1980
NCDH
BWWC

E 000305

continued on reverse

ENVIRONMENTAL HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent : Island Transportation
Address: 599 Main St Westbury

Inspector

DATE	COMMENTS
10/11/80	Visited Island Transportation & spoke to Mr. [illegible]. I explained the 360 program with him & discussed the applications to be returned to this office
	C. Fitzgerald

E 000306

EH 109a 1/68

2632 RDC-01586

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N. Y., 11501

FRANCIS T. PURCELL
County Executive

JOHN J. DOWLING, M.D., M.P.H
Commissioner

FRANCIS V. PADAR, P.E., M.C.E
Director of Environmental Health

1/22/80.

Island Transportation
2900 Main St.
Westbury, N.Y. 11590
Att: Mr. T. Cropper

Gentlemen:

As stated in the permit (NY# 0140155) issued to you for the storage and the removal of industrial chemical and/or solvent wastes, you are required to report periodically on the nature of these activities.

Please complete the attached report for the period July-Dec. 1979, and return it to this office within 30 days.

If you have any questions, please feel free to call me at 535-2404

Very truly yours,

Larry Sama
Public Health Engineer
Bureau of Wastewater Management

Encl.

E 000307

EH 703 1/80

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Wastewater Management

Nassau County Department of Health

Name	Permit Number
Island Transportation Corp.	0140155
Address: 299 Main St. Westbury, N.Y. 11590	Report Period: 7/9/79 - 1/28/

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Solvent	Parts Cleaning	Safety Kleen Corp.	10 Gal./Wk.
		P.O. Box 768 Mineola, N.Y, 11501	Approximately

RECEIVED
JAN 30 1980
NCDH
BWWC

E 000308

11590

Phone 334-540[illegible]

Phone

[illegible]

RESULT[illegible]

RACE ORGANIC[illegible]

[illegible]00691

TRANSPORT[illegible]

[illegible]/21 79

8/21/79

[illegible]/21/79

[illegible]R	ppb(ug/l.)
	359
	766
	2003
IC HYDROCARBON	1571

HIGHER MOLECULAR WEIGHT HYDROCARBONS PRESENT

☐ NO Action

☐ Dye Test

☐ Other

	INSPEC DATE

AUG 2 3 1979

E 000309

Y based on [illegible]

2632 RDC-01589

DuBois Chemicals
Division of Chemed Corporation

RESEARCH LABORATORY
3630 EAST KEMPER ROAD • SHARONVILLE, OHIO 45241 • (513) 769-4200

September 6, 1979

Mr. Joseph Schechter
SPDES - Chemical Division
Bureau of Wastewater Management
Nassau County Department of Health
240 Old Country Road
Mineola, New York 11501

CONFIDENTIAL

Dear Mr. Schechter:

Your request for specific informations for the DuBois product SPRA JEL is enclosed with this letter. This is confidential and proprietary information of DuBois Chemicals, Division of Chemed Corporation and has been provided on the basis that you will treat this disclosure in strict confidence. Please do not divulge these data to others unless a need-to-know has been established.

I can not provide information of the by-products produced during the use of this material. I can say that the material is used cold in diluted form and followed by cold potable water rinsing.

If we can be of any further help, please feel free to call on DuBois Chemicals at any time.

Very truly yours,

W. J. Corbett

W. J. Corbett, Manager
Regulatory Compliance Services

WJC/dw

cc: SPRA JEL File

RECEIVED
SEP 11 1979
NCDH
BWWC

Facility ID No. : NY 0140155

Effective Date : June 12/78

Expiration Date : June 11/81

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
PERMIT FOR THE STORAGE AND REMOVAL OF
POTENTIALLY HAZARDOUS WASTES
(NO DISCHARGE PERMITTED)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisions or the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972, (33 U.S.C. Sec. 1251 et. seq.).

is authorized to store wastes for removal by authorized industrial scavenger from the facility described below:

in accordance with the monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to store and have wastes removed shall expire on midnight of the expiration date shown above and the permitee shall not discharge wastes after the expiration date unless this permit has been renewed, or written authorization is given by the Department. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the Department no later than 180 days prior to the expiration date.

By Authority of R.D.Cusumano,P.E. - Director, Wastewater Management
Designated Representative of Commissioner of the
Department of Environmental Conservation

June 5, 1978
Date

R D Cusumano
Signature

E 000311

Facility ID No. : NY 0140155

Effective Date : June 12/78

Expiration Date : June 11/81

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
PERMIT FOR THE STORAGE AND REMOVAL OF
POTENTIALLY HAZARDOUS WASTES
(NO DISCHARGE PERMITTED)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972, (33 U.S.C. Sec. 1251 et. seq.).

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in accordance with the monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to store and have wastes removed shall expire on midnight of the expiration date shown above and the permitee shall not discharge wastes after the expiration date unless this permit has been renewed, or written authorization is given by the Department. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the Department no later than 180 days prior to the expiration date.

By Authority of R.D.Cusumano,P.E. - Director, Wastewater Management
Designated Representative of Commissioner of the Department of Environmental Conservation

June 5, 1978
Date

Signature

E 000312

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501

FRANCIS T. PURCELL
County Executive
JOHN J. DOWLING, M.D., M.P.H.
Commissioner
FRANCIS V. PADAR, P.E.
Asst. Deputy Commissioner
Div. of Environmental Health

Island Transportation
299 Main Street
Westbury, N. Y. 11590

Att: Mr. T. Cropper

Re: Your Application for Permit to Store and Remove Under New York State Pollutant Discharge Elimination System Application No. NY-0140155

Gentlemen:

Enclosed for your review and comments (if any) is a copy of the draft SPDES discharge permit this Department intends to issue to you for the storage and removal of

Industrial Chemical and/or Solvent Wastes

The draft permit contains effluent limitations on volume, storage, and manifest requirements with which you will be required to comply.

☐ The draft permit also contains a Schedule of Compliance since it has been determined that your discharge is not currently meeting applicable State and Federal standards. This Schedule will require you to take certain steps by specific dates to replace or modify your disposal system so that it will be able to meet the Final Effluent Limitations specified in the permit. (This paragraph is not applicable unless box is checked).

A notice of your application will be published in the New York State Department of Environmental Conservation publication called the "Environmental Notice Bulletin" and the public or other interested parties will be afforded an opportunity to write comments and/or request that a public hearing be held.

If you have any questions regarding this permit, contact Mr. Marvin Fleisher at the Nassau County Health Department, (516) 535-2404 prior to May 14, 1978 as we expect to issue the final permit on or after that date.

Very truly yours,

R. D. Cusumano, P. E.
Director
Bureau of Wastewater Management

Enclosures
cc: NYSDEC - Stony Brook
Ms. Magee, Rm 602-Albany
G. Hansen, PDES, Albany

E 000313

DRAFT

Facility ID No. : NY 0140155

Effective Date : April 14, 1978

Expiration Date : April 13, 1981

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
PERMIT FOR THE STORAGE AND REMOVAL OF
POTENTIALLY HAZARDOUS WASTES
(NO DISCHARGE PERMITTED)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisio of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972, (33 U.S.C. Sec. 1251 et. seq.).

Island Transportation

is authorized to store wastes for removal by authorized industrial scavenger from the facility described below:

299 Main Street
Westbury, N. Y. 11590

in accordance with the monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to store and have wastes removed shall expire on midnight of the expiration date shown above and the permitee shall not discharge wastes after the expiration date unless this permit has been renewed, or written authorization is given by the Department. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the Department no later than 180 days prior to the expiration date.

By Authority of R.D.Cusumano,P.E. - Director, Wastewater Management
Designated Representative of Commissioner of the
Department of Environmental Conservation

April 14, 1978
Date

R D Cusumano
Signature

E 000314

2632 RDC-01594

DRAFT

Facility ID No. NY 0140155

During the period beginning EDP and lasting until EDP + 3 years the wastes from the permitted facility shall be controlled and monitored by the permittee as specified below:

All industrial wastes shall be collected in sealable leakproof holding tanks or drums. The storage vessels shall be suitable for and utilized and maintained in a manner to minimize corrosion and other damage and to prevent discharges onto the ground or discharged into the groundwater or surface waters of the State. Wastes shall be removed by a licensed industrial waste scavenger only. It shall be the responsibility of the permit holder to determine whether the scavenger employed is licensed by the State. The following records and manifests shall be maintained on the premises of this facility:

1. Amount of waste producing chemicals or solvents purchased during the reporting period.
2. Nature, name and amount of waste removed.
3. Date and method of removal. Copy of receipts or manifests.
4. Registration number and name of scavenger.
5. Final disposal site for waste.
6. Occurance of accidental spills.

Copies of records are required to be submitted to:

Bureau of Wastewater Management
Nassau County Health Department
240 Old Country Road
Mineola, New York 11501

Such records should be submitted by the last day of January and July of each year, covering collection for July to December and January to June respectively, if wastes total more than 100 gallons/year. Where wastes are less than 100 gallons/year only one submission need be made and that on the last day of January covering the previous calender year's collection.

Compliance Schedule

The permit holder shall have until May 14, 1978 to make any necessary preparations for meeting the permit requirements, as described on page 3, (if required).

E 000315

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501

RALPH G. CASO
County Executive
JOHN J. DOWLING, M.D., M.P.H.
Commissioner
FRANCIS V. PADAR, P.E.
Asst. Deputy Commissioner
Div. of Environmental Health

November 15, 1977

New York State Department of
Environmental Conservation
Pollutant Discharge Elimination
System Section
50 Wolf Road
Albany, New York 12233

Attention: Mr. George Hansen

Gentlemen:

In accordance with the UPA effective November 1, 1977, we have sent SPDES applications to five industrial firms, list attached.

Also sent and attached here were:

1. the cover letter used
2. the list of fees taken from UPA
3. the Project Permit Requirement Questionaire.

A copy of the organic chemical survey for each company is also enclosed for your refrence in evaluating the applications when returned to you.

Very truly yours,

L. Sama
SPDES Coordinator
Bureau of Water Pollution Control

LS/lhg
enc.

E 000316

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501

FRANCIS T. PURCELL
County Executive
JOHN J. DOWLING, M.D., M.P.H.
Commissioner
FRANCIS V. PADAR, P.E.
Asst. Deputy Commissioner
Div. of Environmental Quality

January 5, 1979

Island Transportation
290 Main St.
Westbury, N.Y., 11590

Att: Mr. T. Cropper

Gentlemen:

You were issued a permit, NY-#0140155, which requires you to report periodically on the storage and removal of industrial chemical and/or solvent wastes by licensed scavenger. This is to remind you to submit the data indicated by the monitoring requirements of the permit.

Please review your records and the permit and fill out the attached form with the necessary information as indicated, and return to this office within 30 days.

Very truly yours,

L. Sama
SPDES Coordinator
Bureau of Wastewater Management

LS/lhg
encs.

E 000317

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501

FRANCIS T. PURCELL
County Executive
JOHN J. DOWLING, M.D., M.P.H.
Commissioner
FRANCIS V. PADAR, P.E.
Asst. Deputy Commissioner
Div. of Environmental Quality

CERTIFIED

June 5, 1978

Island Transportation
299 Main Street
Westbury, N. Y. 11590

Att: Mr. T. Cropper

Re: Permit to Store and Remove Under New York State Pollutant Discharge Elimination System
Permit No. NY - 0140155

Gentlemen:

Enclosed for your facility is a copy of the above referenced SPDES permit. Please keep in mind that you must submit periodic monitoring reports in accordance with the permit. As a reminder, a note will be sent to you just prior to the end of each six-month period covered by your report.

If there are any questions, contact Mr. Marvin Fleisher at 535-2404 at the Bureau of Wastewater Management.

Very truly yours,

R. D. Cusumano, P. E.
Director
Bureau of Wastewater Management

RDC/LS/lhg
Enclosure

E 000318

SEMI-ANNUAL WASTE REPORT

Company: Island Transportation Corp. Date: July 9, 1979

Permit#: NY #0140155 Reporting Period: Previous 6 months

Item	Reporting Requirement	
	Name	Quantity
1. Waste generating chemicals and/or solvents purchased during reporting period.		
Solvents	Safety Kleen Corp. P.O. Box 768 Mineola, N.Y. 11501	10 gal./week approximately
Trichloroethylene	Discontinued use	

2. Waste Removal

Attach copies of manifests or receipts from registered industrial waste scavenger. Must include nature, name and amount of waste, date removed, registration number, and name of scavenger.

General Waste Oil Co., Inc.
Huntington, New York 11746

3. Final Disposal Site for Waste (obtain information from scavenger)

New Jersey Waste Oil Refinery

4. Occurrence of Accidental Spills (include date, nature, and approximate amount spilled)

None

Signed Timothy E. Kroeger

Title Vice-President, Maintenance

E 000319

Date 3-21 1979
M. Island Trans
No.
Reg. No. Clerk
Removed
Waste
oil $10.00
B.R.
109415
Your account stated to date, if error is found return at once.

Date 7-16-1979
M. Island Trans
No.
Reg. No. Clerk
Removed
Waste
oil $14.00
B.R.
40

GENERAL WASTE OIL CO. INC.
37 LONGWORTH AVENUE
DIE HILLS, N.Y. 11746
Date 11-30 1979
M. Island Trans
No.
Reg. No. Clerk
Removed
Waste oil
600 gal $25.00
103808-43
Your account stated to date, if error is found return at once.

GENERAL WASTE OIL CO. INC.
37 LONGWORTH AVENUE
DIE HILLS, N.Y. 11746
Date 9-21-1979
M. Island Trans
No.
Reg. No. Clerk
Removed
Waste oil
$15.00
109415-5
Your account stated to date, if error is found return at once.

GENERAL WASTE OIL CO. INC.
37 LONGWORTH AVENUE
DIE HILLS, N.Y. 11746
Date 1-8-1980
M. Island Trans
No.
Reg. No. Clerk
Removed
Waste oil
$25.00
103808-13
Your account stated to date, if error is found return at once.

E 000320

2632 RDC-01600

ASTM DATABASE SEARCHES

MAP FINDINGS SUMMARY SHOWING
ALL SITES

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.000	0	0	0	0	NR	0
RCRIS-TSD		1.000	0	0	0	0	NR	0
State Haz. Waste		1.000	0	0	0	1	NR	1
CERCLIS		0.500	0	0	0	NR	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	3	9	13	NR	NR	25
UST		0.125	2	NR	NR	NR	NR	2
RAATS		TP	NR	NR	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.125	4	NR	NR	NR	NR	4
RCRIS Lg. Quan. Gen.		0.125	6	NR	NR	NR	NR	6
HMIRS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0

TP = Target Property
NR = Not Requested at this Search Distance
* Sites may be listed in more than one database

E 000322

MAP FINDINGS SUMMARY SHOWING
ONLY SITES HIGHER THAN OR THE SAME ALTITUDE AS TP

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.000	0	0	0	0	NR	0
RCRIS-TSD		1.000	0	0	0	0	NR	0
State Haz. Waste		1.000	0	0	0	1	NR	1
CERCLIS		0.500	0	0	0	NR	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	3	9	13	NR	NR	25
UST		0.125	2	NR	NR	NR	NR	2
RAATS		TP	NR	NR	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.125	4	NR	NR	NR	NR	4
RCRIS Lg. Quan. Gen.		0.125	6	NR	NR	NR	NR	6
HMIRS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0

TP = Target Property
NR = Not Requested at this Search Distance
* Sites may be listed in more than one database

E 000323

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

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1 West < 1/8 Higher	PITTSTON PETROLEUM INC 80 GARDEN ST WESTBURY, NY 11590	FINDS RCRIS-LQG	1000421132 NYD000689042

RCRIS:
Owner: METROPOLITAN PETROLEUM CO INC
(212) 555-1212

Contact: JULIUS MALECKI
(516) 333-2122

Waste	Quantity	Info Source
D001	Not reported	Notification

A2 ENE < 1/8 Higher	FRANK & SONS AUTO WRECKING 132 HOPPER ST WESTBURY, NY 11590	RCRIS-SQG FINDS	1000554760 NYD986972388

RCRIS:
Owner: FRANK & SONS AUTO WRECKING
(516) 997-5736

Contact: FRANK MCCANN
(516) 997-5736

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D000	Not reported	Notification	D001	Not reported	Notification
D008	Not reported	Notification			

A3 ENE < 1/8 Higher	AVANEL INDUSTRY 121 HOPPER AVE WESTBURY, NY 11590	RCRIS-SQG FINDS	1000312609 NYD982532954

RCRIS: Not Reported

A4 ENE < 1/8 Higher	RAC MECHANICAL 120 HOPPER ST WESTBURY, NY 11590	RCRIS-SQG FINDS	1000791840 NYD987033651

RCRIS:
Owner: RAC MECHANICAL
(516) 997-9210

Contact: FRANK HELLER
(516) 997-9210

Waste	Quantity	Info Source
D001	Not reported	Notification

E 000324

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number
B5 ESE < 1 8 Higher	ROYAL GUARD FENCE 550 MAIN ST WESTBURY, NY 11590	LUST	S100781900 N/A

LUST:

Facility ID:	9308336	Spill Date:	10/08/1993
First notified:	ANSWERING SERVICE	Material class:	PETROLEUM
Material spilled:	GASOLINE	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	AIR	Notifier:	TANK TESTER
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	Not reported
Initiated clean up:	/ /	Close Date:	/ /
Last inspection:	/ /	Investigator:	T/T/F
PBS #:	0	UST Trust Fund:	No
Status:	Not reported	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK TEST FAILURE (BULK STORE. PRO.)		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	ACTIVE SPILL (ON GOING)		

B6 ESE < 1/8 Higher	ROYAL GUARD FENCE CO 550 MAIN ST WESTBURY, NY 11590	LUST	S100781988 N/A

LUST:

Facility ID:	9309079	Spill Date:	10/26/1993
First notified:	ANSWERING SERVICE	Material class:	PETROLEUM
Material spilled:	GASOLINE	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	GROUNDWATER	Notifier:	TANK TESTER
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	10/28/1993
Initiated clean up:	/ /	Close Date:	8//93/10/2
Last inspection:	/ /	Investigator:	T/T/F
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK TEST FAILURE (BULK STORE. PRO.)		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

B7 ESE < 1/8 Higher	BILTRITE STEEL BUCK CORP 95 HOPPER ST WESTBURY, NY 11590	FINDS RCRIS-LQG	1000552230 NYD986946259

RCRIS:

Owner: JACK GLASER
(516) 333-4333

Contact: JACK GLASER
(516) 333-4333

Waste	Quantity	Info Source

E 000325

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number
	BILTRITE STEEL BUCK CORP (Continued)		
	D001 Not reported Notification		1000552230
8 / SE / < 1/8 / Higher	CONTEMPORARY PACKAGING CORP 90 HOPPER ST WESTBURY, NY 11590	FINDS RCRIS-LOG	1000400247 NYD054997069
	RCRIS: Owner: Not reported Contact: HCONTFIRST HCONTLAST (212) 555-1212		
	Waste / Quantity / Info Source		
	D001 / Not reported / Notification		
9 / ENE / < 1/8 / Higher	HARMON ASSOCIATES CORP. 111 SWALM ST. WESTBURY, NY 11590	UST	U001855618 N/A

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number

HARMON ASSOCIATES CORP (Continued) U001855518

UST:

Facility ID:	056274	Facility Town:	Not reported
Facility Contact:	Not reported	Facility Tel:	Not reported
Facility Status:	Not reported		
Facility Type:	Not reported		
Total Tanks:	1	SWIS Number:	Not reported
Emergency Contact:	Not reported	Emergency Tel:	Not reported
Owner:	Not reported Not reported Not reported		
Owner Tel:	Not reported	Owner Type:	Not reported
Mailing Address:	Not reported Not reported Not reported Not reported		
Mailing Tel:	Not reported	Mail Contact:	Not reported
Legal Agent:	Not reported Not reported Not reported		
File Date:	Not reported	Data File:	Petroleum Bulk Storage Facility
Latitude:	Not reported	Longitude:	Not reported
CBS Number:	Not reported	SPDES Num:	Not reported
ICS Number:	Not reported	PBS Number:	Not reported
MOSF Number:	Not reported	Operator Name:	Not reported
Certif Issue Date:	Not reported	Cert Exp Date:	Not reported
Owner Subtype:	Not reported	Total Capacity:	00000250
Avg Daily Throughput:	Not reported	License Status:	Pending
Product Transfer:	Not reported	License Issued:	Not reported
Applic. Rcvd Date:	Not reported	Install date:	1255
Tank ID:	0002		
Tank Product:	UNLEADED GASOLINE		
Tank 1 Location:	ABOVEGROUND		
Tank 2 Location:	Not reported		
Tank Type:	Not reported		
Tank Status:	IN SERVICE		
Tank Int Protection:	RUBBER LINER		
Piping Type:	Not reported	Piping Int Prot:	Not reported
Piping Location:	Not reported		
Leak Detection:	CONCRETE PAD W/CHANNELS		
Piping Ext Protection:	Not reported		
Tank Ext Protection:	FIBERGLASS		
Tank Sec Containmt:	Not reported		
Piping Sec Containmt:	IMPERVIOUS UNDERLAYMENT		
Overfill Protection:	Not reported	Disp Method:	Suction
Next Test Date:	Not reported	Close Date:	Not reported
CAS Number:	Not reported	Percent of HW:	Not reported
Chemical:	WASTE OIL		
District:	Not reported	Section:	Not reported
Block:	Not reported	Lots 1 and 2:	Not reported
Tank Content:	Not reported	Tank Constr:	Not reported
Fill Type:	2	Issue Date:	Not reported
Remove Date:	Not reported	Owner Mark:	Not reported
Certification:	Not reported	Inspect Date:	Not reported
Inspector:	Not reported	Insp Result:	Not reported

E 000327

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number
	HARMON ASSOCIATES CORP. (Continued)		U001855618

Fed ID Number:	Not reported	Renew Status:	Not reported
Renew Date:	Not reported	Facility Amount:	F
Facility Screen:	Not reported	Owner Screen:	Not reported
Tank Screen:	Not reported	Dead Letter:	F
Updated:	F	Lot:	Not reported
Deleted:	F	Constr Mat:	1
Piping Type:	9	Material Type:	Fresh/Product
Testing Method:	Not reported		
Next Test:	Not reported	Action:	Not reported
Entry Date:	Not reported	Entry Time:	Not reported
Application Rcvd:	Not reported	Appl Procsd:	Not reported
Facility Amount:	0	Trans Type:	Not reported
Fiscal Number:	Not reported		
Remed History:			

C10 East < 1/8 Higher	ATLAS GRAPHICS INC 567 MAIN ST WESTBURY, NY 11590	FINDS RCRIS-LQG	1000157194 NYD060317895

RCRIS:
Owner: PAUL VAN HEUVEL AND RICHARD DEGEVHARDT
(212) 555-1212

Contact: RICHARD DEGENHARDT
(212) 895-9480

Waste	Quantity	Info Source
D002	Not reported	Notification

11 NE < 1/8 Higher	VARITEK MACHINE CO. 130 SWALM ST. WESTBURY, NY 11590	UST	U001855622 N/A

E 000328

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number
	VARITEK MACHINE CO. (Continued)		U001855622

UST:

Facility ID:	056404	Facility Town:	Not reported
Facility Contact:	Not reported	Facility Tel:	Not reported
Facility Status:	Not reported		
Facility Type:	Not reported		
Total Tanks:	1	SWIS Number:	Not reported
Emergency Contact:	Not reported	Emergency Tel:	Not reported
Owner:	Not reported		
	Not reported		
	Not reported		
Owner Tel:	Not reported	Owner Type:	Not reported
Mailing Address:	Not reported		
	Not reported		
	Not reported		
	Not reported		
Mailing Tel:	Not reported	Mail Contact:	Not reported
Legal Agent:	Not reported		
	Not reported		
	Not reported		
File Date:	Not reported	Data File:	Petroleum Bulk Storage Facility
Latitude:	Not reported	Longitude:	Not reported
CBS Number:	Not reported	SPDES Num:	Not reported
ICS Number:	Not reported	PBS Number:	Not reported
MOSF Number:	Not reported	Operator Name:	Not reported
Certif Issue Date:	Not reported	Cert Exp Date:	Not reported
Owner Subtype:	Not reported	Total Capacity:	00003000
Avg Daily Throughput:	Not reported	License Status:	Pending
Product Transfer:	Not reported	License Issued:	Not reported
Applic. Rcvd Date:	Not reported	Install date:	1279
Tank ID:	0001		
Tank Product:	LEADED GASOLINE		
Tank 1 Location:	ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE		
Tank 2 Location:	Not reported		
Tank Type:	Not reported		
Tank Status:	IN SERVICE		
Tank Int Protection:	RUBBER LINER		
Piping Type:	Not reported	Piping Int Prot:	Not reported
Piping Location:	Not reported		
Leak Detection:	CONCRETE PAD W/CHANNELS		
Piping Ext Protection:	Not reported		
Tank Ext Protection:	SACRIFICIAL ANODE		
Tank Sec Containmt:	Not reported		
Piping Sec Containmt:	IMPERVIOUS UNDERLAYMENT		
Overfill Protection:	Not reported	Disp Method:	Suction
Next Test Date:	Not reported	Close Date:	Not reported
CAS Number:	Not reported	Percent of HW:	Not reported
Chemical:	OIL, FUEL #2		
District:	Not reported	Section:	Not reported
Block:	Not reported	Lots 1 and 2:	Not reported
Tank Content:	Not reported	Tank Constr:	Not reported
Fill Type:	1	Issue Date:	Not reported
Remove Date:	Not reported	Owner Mark:	Not reported
Certification:	Not reported	Inspect Date:	Not reported
Inspector:	Not reported	Insp Result:	Not reported

E 000329

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number

VARITEK MACHINE CO. (Continued) — U001855622

Fed ID Number:	Not reported	Renew Status:	Not reported
Renew Date:	Not reported	Facility Amount:	F
Facility Screen:	Not reported	Owner Screen:	Not reported
Tank Screen:	Not reported	Dead Letter:	F
Updated:	F	Lot:	Not reported
Deleted:	F	Constr Mat:	1
Piping Type:	1	Material Type:	Fresh/Product
Testing Method:	Not reported		
Next Test:	Not reported	Action:	Not reported
Entry Date:	Not reported	Entry Time:	Not reported
Application Rcvd:	Not reported	Appl Procsd:	Not reported
Facility Amount:	0	Trans Type:	Not reported
Fiscal Number:	Not reported		
Remed History:			

C12 East < 1/8 Higher — I M C MAGNETICS CORP, 570 MAIN ST, WESTBURY, NY 11590 — FINDS / RCRIS-LQG — 1000105901 / NYD002041895

RCRIS:
Owner: Not reported
Contact: P ORTUSO
(212) 555-1212

Waste	Quantity	Info Source	Waste	Quantity	Info Source
F001	Not reported	Notification	F002	Not reported	Notification
F003	Not reported	Notification	F005	Not reported	Notification

D13 East < 1/8 Higher — PRE AC TOOL CO, 512 MAIN STREET, NEW CASSEL, NY 11590 — LUST — S100666506 / N/A

LUST:

Facility ID:	9007619	Spill Date:	10/10/1990
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	Not Reported	Release QTY:	5.00 GALLONS.
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	ON LAND	Notifier:	CITIZEN
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	02/06/1991
Initiated clean up:	/ /	Close Date:	6//91/02/0
Last inspection:	/ /	Investigator:	LUCE/NCDH
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

14 SSW < 1/8 Higher — GIFFORDS ENERGY CORP, 91 MAGNOLIA AVE, WESTBURY, NY 11590 — RCRIS-SQG / FINDS — 1000230054 / NYD982270118

E 000330

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number
	GIFFORDS ENERGY CORP (Continued)		1000230054

RCRIS.
Owner: WALLING REALTY CORP
(212) 555-1212
Contact: FRANK FELICETTA
(516) 354-5555

Waste	Quantity	Info Source
D001	Not reported	Notification

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number
D15 East < 1/8 Higher	MIDBURY INDUSTRIES INC 73 RUSHMORE ST WESTBURY, NY 11590	FINDS RCRIS-LQG	1000165320 NYD000021253

RCRIS:
Owner: DIANE JONES
(212) 555-1212
Contact: HAROLD JONES
(516) 997-5360

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D000	Not reported	Notification	D001	Not reported	Notification

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number
16 ESE 1/8-1/4 Higher	DIONICS INCORPORATED 65 RUSHMORE ST WESTBURY, NY 11590	FINDS LUST RCRIS-LQG UST	1000315646 NYD047645262

RCRIS:
Owner: DIONICS INCORPORATED
(516) 997-7474
Contact: BRIAN DAVIS
(516) 997-7474

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D000	Not reported	Notification	D001	Not reported	Notification
D002	Not reported	Notification	D003	Not reported	Notification
D007	Not reported	Notification	F002	Not reported	Notification
F003	Not reported	Notification	F005	Not reported	Notification
D002	4.10700 (M)	Part A	D007	392.64300 (P)	Part A
F002	3.61800 (M)	Part A	F003	3.49300 (M)	Part A
F005	.00100 (P)	Part A			

(P) = Pounds, (K) = Kilograms, (M) = Metric Tons, (T) = Tons, (N) = Not Reported

E 000331

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number
	DIONICS INCORPORATED (Continued)		1000315646

LUST:

Facility ID:	9005952	Spill Date:	08/20/1990
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	#2 FUEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	GROUNDWATER	Notifier:	TANK TESTER
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	07/18/1991
Initiated clean up:	/ /	Close Date:	8//91/07/1
Last inspection:	/ /	Investigator:	DEROSA
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK TEST FAILURE (BULK STORE. PRO.)		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

UST: Not Reported

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17 SSW 1/8-1/4 Higher	PETROLEUM HEAT & POWER 522 GRAND BLVD WESTBURY, NY 11590	RCRIS-SQG FINDS LUST UST	1000366206 NYD030286348

RCRIS:

Owner: GRAND BLVD ASSOC
(516) 333-7500

Contact: GEORGE RUSS
(516) 333-7500

Waste	Quantity	Info Source
D001	Not reported	Notification

LUST:

Facility ID:	8605257	Spill Date:	11/17/1986
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	#2 FUEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	GAS STATION.
Resource affected:	GROUNDWATER	Notifier:	TANK TESTER
Basin of spill:	17	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	11/16/1987
Initiated clean up:	/ /	Close Date:	6//87/11/1
Last inspection:	/ /	Investigator:	O'NEILL
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK TEST FAILURE (BULK STORE. PRO.)		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

UST: Not Reported

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18 South 1/8-1/4 Higher	ISLAND POLYETHYLENE 75 GARDEN ST WESTBURY, NY 11590	LUST	S100568092 N/A

E 000332

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number
	ISLAND POLYETHYLENE (Continued)		S100668092

LUST:

Facility ID:	8605013	Spill Date:	11/05/1986
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	#2 FUEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	GROUNDWATER	Notifier:	LOCAL AGENCY
Basin of spill:	17	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	03/11/1989
Initiated clean up:	/ /	Close Date:	1//89/03/1
Last inspection:	/ /	Investigator:	O'NEILL
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

19 / SW / 1/8-1/4 / Higher	ELM TRANSIT 482 GRAND BLVD NEW CASSEL, NY 11590	LUST	S100174386 N/A

LUST:

Facility ID:	9010469	Spill Date:	12/28/1990
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	DIESEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	GROUNDWATER	Notifier:	TANK TESTER
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	Not reported
Initiated clean up:	/ /	Close Date:	/ /
Last inspection:	/ /	Investigator:	T/T/F
PBS #:	0	UST Trust Fund:	Yes
Status:	Not reported	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK TEST FAILURE (BULK STORE. PRO.)		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	ACTIVE SPILL (ON GOING)		

E20 / East / 1/8-1/4 / Higher	NY TESTING 81 URBAN AVENUE NEW CASSEL, NY 11590	LUST	S100665153 N/A

E 000333

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number
	NY TESTING (Continued)		S100665153

LUST:

Facility ID:	8607973	Spill Date:	03/28/1987
First notified:	REGIONAL OFFICE	Material class:	NONPETRO\NONHAZ
Material spilled:	WASTE OIL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	SURFACE WATER	Notifier:	POLICE DEPARTMENT
Basin of spill:	17	Project ID:	0
Cleaner:	OTHER AGENCY	Date Cleaned:	03/30/1987
Initiated clean up:	/ /	Close Date:	0//87/03/3
Last inspection:	/ /	Investigator:	O'BRIEN
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

E21 / East / 1/8-1/4 / Higher	N.Y. TESTING LAB 75 URBAN AVE WESTBURY, NY 11590	LUST	S100149057 N/A

LUST:

Facility ID:	8704746	Spill Date:	09/08/1987
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	#2 FUEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	GROUNDWATER	Notifier:	TANK TESTER
Basin of spill:	17	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	01/06/1988
Initiated clean up:	/ /	Close Date:	6//88/01/0
Last inspection:	/ /	Investigator:	GOERTZ
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK TEST FAILURE (BULK STORE. PRO.)		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

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22 / SSE / 1/8-1/4 / Higher	UNIFLEX CORPORATION 474 GRAND BLVD WESTBURY, NY 11590	LUST	S100667797 N/A

E 000334

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number
	UNIFLEX CORPORATION (Continued)		S100667797

LUST:

Facility ID:	9204103	Spill Date:	07/09/1992
First notified:	REGIONAL OFFICE	Material class:	NONPETRO\NONHAZ
Material spilled:	Not Reported	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	ON LAND	Notifier:	FIRE DEPARTMENT
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	08/11/1992
Initiated clean up:	/ /	Close Date:	1//92/08/1
Last inspection:	/ /	Investigator:	RICE
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

23 WSW 1/8-1/4 Higher	CROSS READY MIX GRAND AVENUE/OR BLVD WESTBURY, NY	LUST	S100174473 N/A

LUST:

Facility ID:	9011207	Spill Date:	01/22/1991
First notified:	C	Material class:	PETROLEUM
Material spilled:	DIESEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	GROUNDWATER	Notifier:	TANK TESTER
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	03/17/1992
Initiated clean up:	/ /	Close Date:	7//92/03/1
Last inspection:	/ /	Investigator:	DEROSA
PBS #:	0	UST Trust Fund:	Yes
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK TEST FAILURE (BULK STORE. PRO.)		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

24 North 1/8-1/4 Higher	NEWELL ? 231 HOPPER ST WESTBURY, NY 11590	LUST	S100667717 N/A

E 000335

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number

NEWELL ? (Continued) S100667717

LUST:

Facility ID:	9201371	Spill Date:	04/27/1992
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	#2 FUEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	PRIVATE DWELLING
Resource affected:	ON LAND	Notifier:	CITIZEN
Basin of spill:	1700	Project ID:	0
Cleaner:	NO ACTION TAKEN	Date Cleaned:	Not reported
Initiated clean up:	/ /	Close Date:	/ /
Last inspection:	/ /	Investigator:	KISPERT
PBS #:	0	UST Trust Fund:	No
Status:	Not reported	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	ACTIVE SPILL (ON GOING)		

25 East 1/4-1/2 Higher — QUAD. SOUND, MAIN / SYLVESTER ST., NEW CASSEL, NY 11590 — LUST — S100665823 N/A

LUST:

Facility ID:	8901953	Spill Date:	05/26/1989
First notified:	REGIONAL OFFICE	Material class:	HAZARDOUS MATERIAL
Material spilled:	UNKNOWN	Release QTY:	0.00
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	ON LAND	Notifier:	LOCAL AGENCY
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	05/30/1989
Initiated clean up:	/ /	Close Date:	0//89/05/3
Last inspection:	/ /	Investigator:	PARISH
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

26 South 1/4-1/2 Higher — WISSER CORP, OLD COUNTRY ROAD, WESTBURY, NY — LUST — S100147950 N/A

E 000336

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number
	WISSER CORP (Continued)		S100147950

LUST:

Facility ID:	8905732	Spill Date:	09/11/1989
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	GASOLINE	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	GAS STATION
Resource affected:	GROUNDWATER	Notifier:	TANK TESTER
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	12/18/1989
Initiated clean up:	/ /	Close Date:	8//89/12/1
Last inspection:	/ /	Investigator:	LEUNG
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK TEST FAILURE (BULK STORE. PRO.)		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

27 South 1/4-1/2 Higher	PETRO FUEL 1116 WASHINGTON AVE WESTBURY, NY 11590	LUST	S100169967 N/A

LUST:

Facility ID:	8909341	Spill Date:	12/26/1989
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	#2 FUEL	Release QTY:	1.00 GALLONS
Water body affected:	Not reported	Origin:	PRIVATE DWELLING
Resource affected:	ON LAND	Notifier:	RESPONSIBLE PARTY
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	12/26/1989
Initiated clean up:	/ /	Close Date:	6//89/12/2
Last inspection:	/ /	Investigator:	NONE
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK OVERFILL		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

F28 East 1/4-1/2 Higher	LILCO BROOKLYN AVENUE WESTBURY, NY	LUST	S100668086 N/A

E 000337

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number

LILCO (Continued) S100668086

LUST:

Facility ID:	8607771	Spill Date:	03/20/1987
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	NON-PCB OIL	Release QTY:	10.00 GALLONS
Water body affected:	Not reported	Origin:	Not Reported
Resource affected:	ON LAND	Notifier:	RESPONSIBLE PARTY
Basin of spill:	17	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	03/23/1987
Initiated clean up:	/ /	Close Date:	3//87/03/2
Last inspection:	/ /	Investigator:	WALEK
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

F29 East 1/4-1/2 Higher — PERMAFUSE CORP THE, 675 MAIN ST, WESTBURY, NY 11590 — FINDS 1000294948; LUST NYD002038784; RCRIS-LQG

RCRIS:

Owner: CORPORATION S G TILDEN JR A STOCKHOLDER
(212) 555-1212

Contact: S G TILDAN JR
(516) 334-5500

Waste	Quantity	Info Source	Waste	Quantity	Info Source
D000	Not reported	Notification	D001	Not reported	Notification
F001	Not reported	Notification			

Other Pertinent Environmental Activity Identified at Site:
facility is involved with pesticide/toxic substances production

LUST:

Facility ID:	9103952	Spill Date:	07/12/1991
First notified:	REGIONAL OFFICE	Material class:	HAZARDOUS MATERIAL
Material spilled:	Not Reported	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	TANK TRUCK
Resource affected:	ON LAND	Notifier:	RESPONSIBLE PARTY
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	07/18/1991
Initiated clean up:	/ /	Close Date:	8//91/07/1
Last inspection:	/ /	Investigator:	DEROSA
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK OVERFILL		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

E 000338

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number
30 East 1/4-1/2 Higher	METPOR STEEL PRODUCTS COR 95 STATE ST WESTBURY, NY 11590	LUST	S100668629 N/A

LUST:

Facility ID:	8802438	Spill Date:	06/16/1988
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	#2 FUEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	GROUNDWATER	Notifier:	HEALTH DEPARTMENT
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	01/11/1990
Initiated clean up:	/ /	Close Date:	1//90/01/1
Last inspection:	/ /	Investigator:	O'NEILL
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

G31 SSW 1/4-1/2 Higher	BILL WOLF PETROLEUM 750 OLD COUNTRY RD WESTBURY, NY 11590	LUST	S100667552 N/A

LUST:

Facility ID:	8808864	Spill Date:	02/13/1989
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	GASOLINE	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	GAS STATION
Resource affected:	GROUNDWATER	Notifier:	DEC
Basin of spill:	1700	Project ID:	93304
Cleaner:	SPILLER	Date Cleaned:	Not reported
Initiated clean up:	/ /	Close Date:	/ /
Last inspection:	/ /	Investigator:	HAAS
PBS #:	0	UST Trust Fund:	No
Status:	Not reported	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	ACTIVE SPILL (ON GOING)		

32 ESE 1/4-1/2 Higher	HERTZ BROOKLYN AVENUE WESTBURY, NY	LUST	S100668625 N/A

E 000339

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number

HERTZ (Continued) S100668625

LUST:

Facility ID:	8800257	Spill Date:	04/07/1988
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	GASOLINE	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	COMM\INDUST
Resource affected:	GROUNDWATER	Notifier:	OTHER
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	04/18/1988
Initiated clean up:	/ /	Close Date:	8//88/04/1
Last inspection:	/ /	Investigator:	WALEK
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

G33 SSW 1/4-1/2 Higher — LOUBOULE CARPET CARRIER, 800 OLD COUNTRY RD, WESTBURY, NY 11590 — LUST — S100668643 N/A

LUST:

Facility ID:	8808684	Spill Date:	02/03/1989
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	DIESEL	Release QTY:	20.00 GALLONS
Water body affected:	Not reported	Origin:	COMM VEHICLE
Resource affected:	ON LAND	Notifier:	HEALTH DEPARTMENT
Basin of spill:	1700	Project ID:	0
Cleaner:	OTHER AGENCY	Date Cleaned:	02/07/1989
Initiated clean up:	/ /	Close Date:	7//89/02/0
Last inspection:	/ /	Investigator:	NCDH
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

34 ESE 1/4-1/2 Higher — TOWN OF HEMPSTEAD WATER, IRIS PLACE, WESTBURY, NY — LUST — S100172816 N/A

E 000340

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number
	TOWN OF HEMPSTEAD WATER (Continued)		S100172816

LUST.

Facility ID:	8805127	Spill Date:	09/13/1988
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	DIESEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	NON-COMM\INST
Resource affected:	ON LAND	Notifier:	HEALTH DEPARTMENT
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	04/30/1991
Initiated clean up:	/ /	Close Date:	0//91/04/3
Last inspection:	/ /	Investigator:	HOFMANN
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0 00		
Cause:	TANK OVERFILL		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

35 SSE 1/4-1/2 Same	SUNRISE OIL 1029 BOWLING GREEN DR WESTBURY, NY 11590	LUST	S100667915 N/A

LUST:

Facility ID:	9208182	Spill Date:	10/15/1992
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	#2 FUEL	Release QTY:	5.00 GALLONS
Water body affected:	Not reported	Origin:	TANK TRUCK
Resource affected:	ON LAND	Notifier:	OTHER
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	12/28/1992
Initiated clean up:	/ /	Close Date:	8//92/12/2
Last inspection:	/ /	Investigator:	GIBBONS
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	OTHER		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

H36 SW 1/4-1/2 Higher	KUBRICK, BREDINER & COHEN 10 ARLINGTON ST WESTBURY, NY 11590	LUST	S100148409 N/A

E 000341

Map ID / Direction / Distance / Altitude	Site	Database(s)	EDR ID Number / EPA ID Number
	KUBRICK, BREDINER & COHEN (Continued)		S100148409

LUST:

Facility ID:	8912273	Spill Date:	03/23/1990
First notified:	C	Material class:	PETROLEUM
Material spilled:	#2 FUEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	PRIVATE DWELLING
Resource affected:	GROUNDWATER	Notifier:	OTHER
Basin of spill:	1700	Project ID:	0
Cleaner:	OTHER AGENCY	Date Cleaned:	05/21/1990
Initiated clean up:	/ /	Close Date:	1//90/05/2
Last inspection:	/ /	Investigator:	MANCILLA
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK FAILURE		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

H37 SW 1/4-1/2 Higher	KUBRICK RESIDENCE 10 ARLINGTON ST WESTBURY, NY 11590	LUST	S100150646 N/A

LUST:

Facility ID:	9001414	Spill Date:	05/03/1990
First notified:	REGIONAL OFFICE	Material class:	PETROLEUM
Material spilled:	#2 FUEL	Release QTY:	0.00 GALLONS
Water body affected:	Not reported	Origin:	PRIVATE DWELLING
Resource affected:	ON LAND	Notifier:	HEALTH DEPARTMENT
Basin of spill:	1700	Project ID:	0
Cleaner:	SPILLER	Date Cleaned:	05/21/1990
Initiated clean up:	/ /	Close Date:	1//90/05/2
Last inspection:	/ /	Investigator:	GOMEZ
PBS #:	0	UST Trust Fund:	No
Status:	MEANS ITS BEEN RESOLVED	Penalty:	NO PENALTY
Quantity recovered:	0.00		
Cause:	TANK FAILURE		
Emergency response:	IT WAS NOT TAKEN		
Facility status:	COMPLETED SPILL (SPILL IS CLEANED UP AND ALL PAPERWORK IS COMPLETED)		

38 ENE 1/2-1 Higher	NEW CASSEL INDUSTRIAL AREA N OF OLD COUNTRY RD. S OF RAILROAD TRACK NEW CASSEL, NY 11590	SHWS	S100115743 N/A

E 000342

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number
	NEW CASSEL INDUSTRIAL AREA (Continued)		S100115743

HWS:

Facility ID:	130043	EPA ID:	Not reported
Class code	Significant threat to the public health or environment - action required.		
Facility Type:	OPEN DUMP-		
Owner:	** MULTI - OWNER SITE ** * * * * * Not reported		
Use Owner:	Not reported		
Use Operator:	** MULTI - SITE OPERATORS **		
Operator Address:	* * * * * Not reported		
HW Disposed:	CHLORINATED HYDROCARBONS UNKNOWN, ALIPHATIC SOLVENTS UNKNOWN		
Legal Act Type:	Not reported	Legal Act Status:	NEGOTIATION IN PROGRESS-
State Action:	No	Fed Action:	No
Order Signed:	Order Was Not Signed		
Prop Remedial Act:	UNDER DESIGN-		
Rem Act Progress:	Not In Progress	Rem Act Done:	Not Completed
Action Nature:	Not reported		
Soil Type:	Not reported		
Gndwater Depth:	RANGES FROM 25-50 FT. BELOW SURFACE		
Env Assessment:	GROUNDWATER CONTAMINATION HAS BEEN CONFIRMED. PUBLIC WATER SUPPLY WELLS ARE LOCATED DOWNGRADIENT FROM THE SITE.		

E 000343

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
HICKSVILLE	S100521025	MATTIACE PETROCHEMICALS-MEK SPILL	WEST JOHN STREET	11801	SHWS	
HICKSVILLE	S101008268	RUCO POLYMER CORP. (HOOKER CHEM)	NEW SOUTH ROAD	11801	SHWS	
NASSAU COUNTY	S100295906	BETHPAGE LF ENERGY ASSOC			SWF/LF	
NASSAU COUNTY	S100443773	ENERGY TACTICS OCEANSIDE			SWF/LF	
NASSAU COUNTY	S100116309	ROCKVILLE CENTER T.S.			SWF/LF	
NASSAU COUNTY	S100546641	GREAT NECK T.S. (V)			SWF/LF	
NASSAU COUNTY	S100443774	HEMPSTEAD (OCEANSIDE) (T)			SWF/LF	
NASSAU COUNTY	S100443775	NORTH HEMPSTEAD T.S.			SWF/LF	
NASSAU COUNTY	S100295909	GLEN COVE T.S.			SWF/LF	
OYSTER BAY/ HICKSVILLE	S101008284	BOWE SYSTEMS AND MACHINERY	200 FRANK ROAD	11801	SHWS	
WESTBURY	S100149096	ARK WIND INDUSTRIES	66 BROOKLYN AVE	11590	LUST	8705430
WESTBURY	U000726642	MID COUNTY TERMINAL	80 GARDEN STREET	11590	UST	
WESTBURY	U001855436	PETROLEUM HEAT&POWER CO.	522 GRAND BLVD.	11590	UST	039016
WESTBURY	U001855519	UNIFLEX INC	474 GRAND BLVD	11590	UST	054039
WESTBURY	U001855534	A-LINE ENTERPRISES	530 GRAND BLVD	11590	UST	055137
WESTBURY	S100151444	AID AUTO STORE	275 GRAND BLVD	11590	LUST	9008929
WESTBURY	S100150339	PETRO RITE	522 GRAND BLVD	11590	LUST	8904605
WESTBURY	1000199340	BODY LINE COLLISION	79 MAGNOLIA AVE	11590	RCRIS-SQG, FINDS	
WESTBURY	U000725049	ARKWIN INDUSTRIES	686 MAIN ST.	11590	UST	1-000101
WESTBURY	U001741286	THE PERMAFUSE CORP.	675 MAIN STREET	11590	UST	000035
WESTBURY	U001741314	ARKWIN INDUSTRIES	656 MAIN ST.	11590	UST	000397
WESTBURY	U001852975	UTILITY MFG. CO. INC.	700 MAIN STREET	11590	UST	1-000063
WESTBURY	U001855342	ADCHEM CORP.	625 MAIN ST.	11590	UST	000254
WESTBURY	1000243585	ANTHONSEUS ALL METAL PRODUCTS	1030 MAIN ST	11590	RCRIS-SQG	
WESTBURY	1000872184	E Z - EM INC	717 MAIN ST	11590	RCRIS-SQG	
WESTBURY	S100148182	ROYAL GUARD FENCE	550 MAIN ST	11590	LUST	8909190
WESTBURY	S100147485	I.M.C MAGNETICS CORP	570 MAIN ST	11590	LUST	8808166
WESTBURY	S101102911	SHAMIANA INTL. FACTORY	120 NEW YORK AVE	11590	LUST	9400745
WESTBURY	S100493315	ISLAND TRANSPORTATION	1200 OLD COUNTRY RD	11590	LUST	9200006
WESTBURY	S100879364	MICHAEL SKURNICK	1400 OLD COUNTRY RD	11590	LUST	9314334
WESTBURY	S100150127	AUTO PLAZA NISSAN	1025 OLD COUNTRY RD	11590	LUST	8807231
WESTBURY	S100493250	RAD OIL	549 OLD COUNTRY RD	11590	LUST	9112642
WESTBURY	S101174896	L.I AUTO REPAIR	660 OLD COUNTRY RD	11590	LUST	9405775
WESTBURY	S100669260	BAILEY'S S/S	701 PROSPECT AVE	11590	LUST	9005713
WESTBURY	S100153515	MACHINERY EXCHANGE CO	36 SYLVESTER ST	11590	LUST	9108583
WESTBURY	S100148390	SHANLEY RESIDENCE	886 WASHINGTON AVE	11590	LUST	8912021

E 000344

EPA Waste Codes Addendum

Code	Description
D000	NOT DEFINED
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D002	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
D003	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
D007	CHROMIUM
D008	LEAD
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A

EPA Waste Codes Addendum

Code	Description
	TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

GEOCHECK VERSION 1.2
SUMMARY

HYDROGEOLOGICAL INFORMATION

WELL QUADRANT	DISTANCE FROM TP	LITHOLOGY	DEPTH TO WATER TABLE
Northern	1 - 2 Miles	Not Reported	61 ft.
Eastern	1 - 2 Miles	Sand	Not Reported
Southern	>2 Miles	Not Reported	12 ft.
Western	1 - 2 Miles	Sand	42 ft.

AREA RADON INFORMATION

NASSAU COUNTY, NY

Living Area

Average Activity:	0.640 pCi/L
% <4 pCi/L:	98%
% 4-20 pCi/L:	2%
% >20 pCi/L:	0%

Basement Area

Average Activity:	1.100 pCi/L
% <4 pCi/L:	98%
% 4-20 pCi/L:	2%
% >20 pCi/L:	0%

E 000347

GEOCHECK VERSION 1.2

HYDROGEOLOGICAL INFORMATION

Well Closest to Target Property (Northern Quadrant)

BASIC WELL DATA

Site ID.	404622073343201	Distance from TP:	1 - 2 Miles
Site Type.	Single well, other than collector or Ranney type		
Year Constructed:	1935	County:	Nassau
Altitude:	142.00 ft.	State:	New York
Well Depth:	476.00 ft.	Topographic Setting:	Flat surface
Depth to Water Table:	61.00 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	05011935	Prim. Use of Water:	Public supply

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Unknown
Principal Lithology of Unit:	Not Reported
Further Description:	Not Reported

WATER LEVEL VARIABILITY

Not Reported

E 000348

GEOCHECK VERSION 1.2

HYDROGEOLOGICAL INFORMATION

Well Closest to Target Property (Eastern Quadrant)

BASIC WELL DATA

Site ID	404535073320101	Distance from TP:	1 - 2 Miles
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1956	County:	Nassau
Altitude	135.00 ft.	State:	New York
Well Depth:	84.00 ft.	Topographic Setting:	Flat surface
Depth to Water Table:	Not Reported	Prim. Use of Site:	Withdrawal of water
Date Measured	Not Reported	Prim. Use of Water:	Industrial

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Cenozoic-Quaternary
Principal Lithology of Unit:	Sand
Further Description:	GRAVELLY

WATER LEVEL VARIABILITY

Not Reported

E 000349

GEOCHECK VERSION 1.2

HYDROGEOLOGICAL INFORMATION

Well Closest to Target Property (Southern Quadrant)

BASIC WELL DATA

Site ID:	404340073361401	Distance from TP:	>2 Miles
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1913	County:	Nassau
Altitude:	79 00 ft.	State:	New York
Well Depth:	35 00 ft.	Topographic Setting:	Flat surface
Depth to Water Table:	12.00 ft.	Prim. Use of Site:	Observation
Date Measured:	05011913	Prim. Use of Water:	Unused

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Cenozoic-Quaternary-Pleistocene
Principal Lithology of Unit:	Not Reported
Further Description:	Not Reported

WATER LEVEL VARIABILITY

Not Reported

E 000350

GEOCHECK VERSION 1.2

HYDROGEOLOGICAL INFORMATION

Well Closest to Target Property (Western Quadrant)

BASIC WELL DATA

Site ID:	404554073351401	Distance from TP:	1 - 2 Miles
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Nassau
Altitude:	123.00 ft.	State:	New York
Well Depth:	51.00 ft.	Topographic Setting:	Flat surface
Depth to Water Table:	42.00 ft.	Prim. Use of Site:	Destroyed
Date Measured:	03011913	Prim. Use of Water:	Unused

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Cenozoic-Quaternary-Pleistocene
Principal Lithology of Unit:	Sand
Further Description:	Not Reported

WATER LEVEL VARIABILITY

Not Reported

E 000351

GEOCHECK VERSION 1.2

PUBLIC WATER SYSTEM INFORMATION

Searched by Nearest Well.

PWS SUMMARY:

PWS ID:	NY0002856	PWS Status:	Active	Distance from TP:	1/4 - 1/2 Mile
Dir relative to TP:	West	Date Initiated:	Not Reported	Date Deactivated	Not Reported
PWS Name:	WESTBURY WATER DISTRICT 160 DREXEL AVENUE WESTBURY, NY 11590				
Addressee / Facility Type:	System Owner/Responsible Party				
Facility Name:	DONALD CROUCHLEY A 160 DREXEL AVENUE WESTBURY, NY 11590				

Facility Latitude:	40.4452	Facility Longitude:	073.3525
Facility Latitude:	40.4519	Facility Longitude:	073.3424
Facility Latitude:	40.4519	Facility Longitude:	073.3426
Facility Latitude:	40.4526	Facility Longitude:	073.3533
Facility Latitude:	40.4527	Facility Longitude:	073.3532
Facility Latitude:	40.4541	Facility Longitude:	073.3335
Facility Latitude:	40.4542	Facility Longitude:	073.3336
Facility Latitude:	40.4542	Facility Longitude:	073.3549
Facility Latitude:	40.4551	Facility Longitude:	073.3419
Facility Latitude:	40.4555	Facility Longitude:	073.3411
City Served:	NORTH HEMPSTEAD (T)		
Treatment Class	Not Reported	Population Served:	Not Reported:

Well currently has or has had major violation(s): No

E 000352

Photographs

E 000353

SITE PHOTOGRAPHS

1. View of front of subject site and neighboring properties along Main Street, as seen looking east.

2. Close up view of front of subject building.

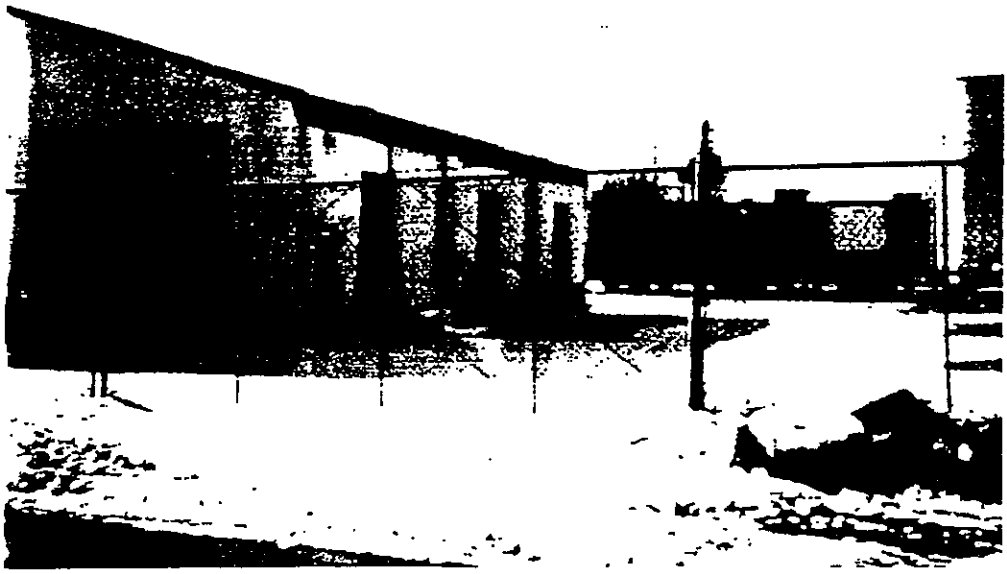
E 000355

3. View of right (east) side of subject site, as seen looking north from Main Street.

4. View of left (west) side of subject site, as seen looking north from Main Street.

5. View of rear (north) side of subject site, as seen looking southwest from Hopper Street. Note: plastic drums in foreground and metal drums stored in background.

6. View of neighboring property (salvage yard) east of subject site, along Main Street.

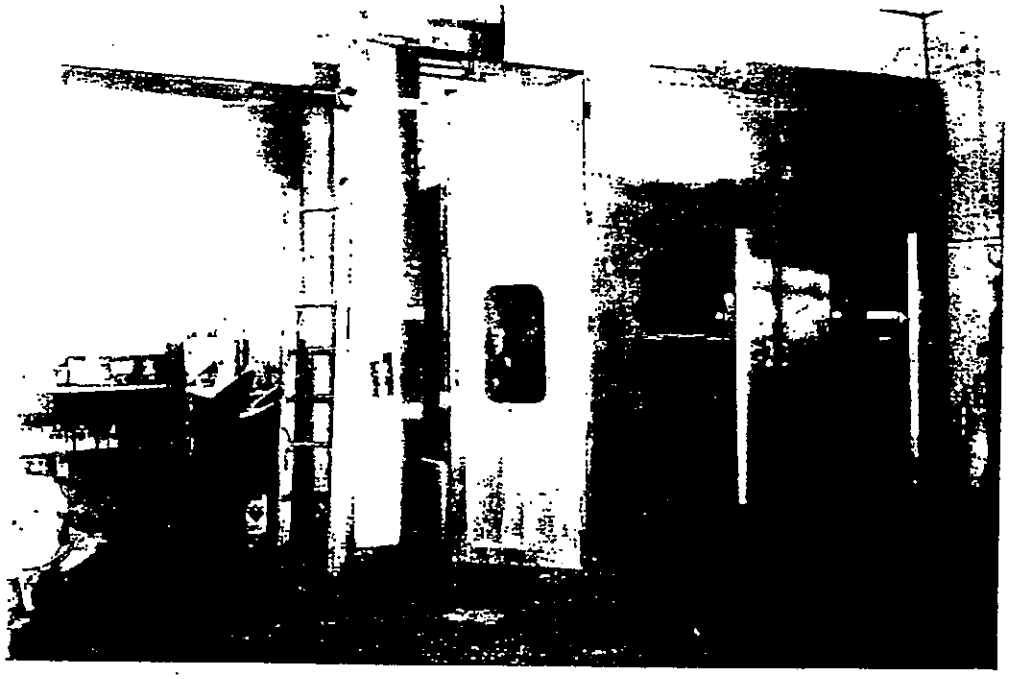


7. View of neighboring property west of subject site, along Main Street.

8. View of neighboring property northwest of subject site, along Garden Street.

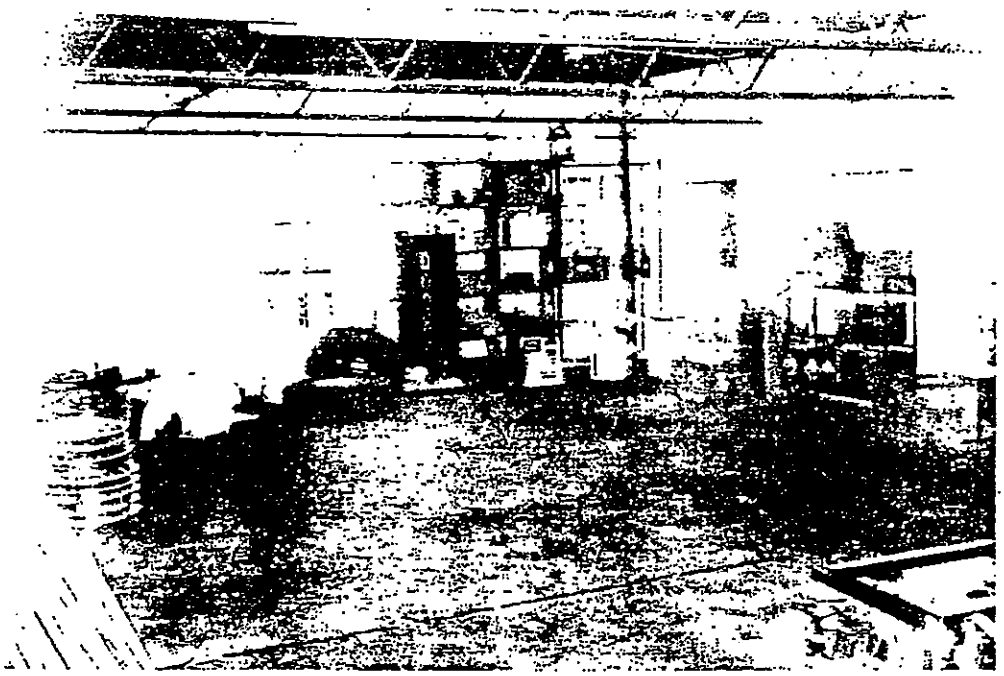
E 000358

9. View inside auto body repair shop, located at rear of subject building.

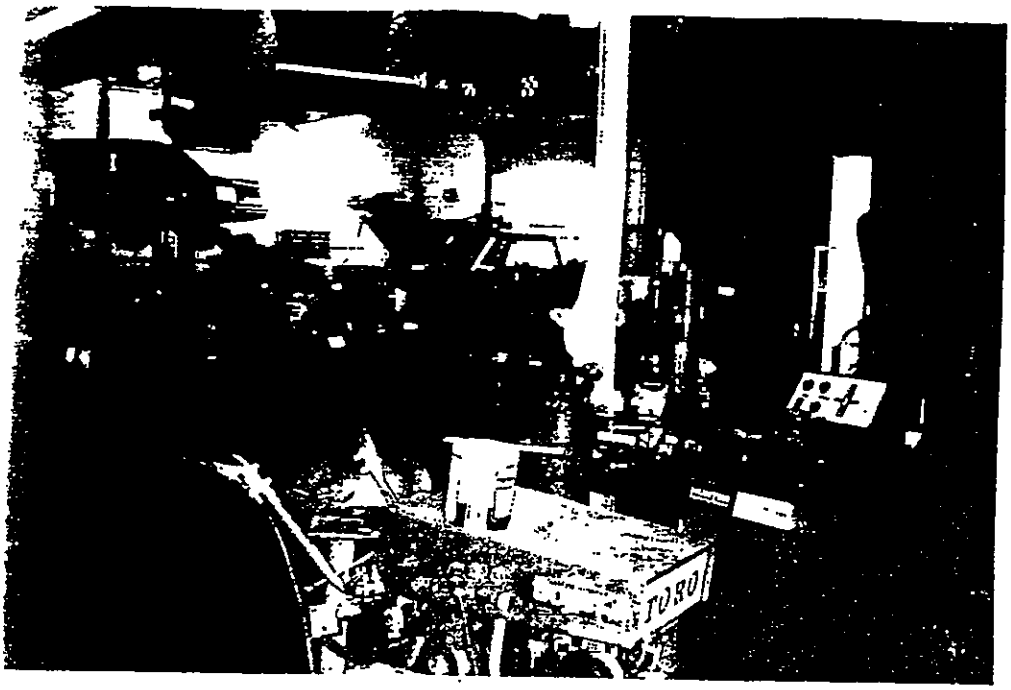


10. View of paint spray booth located at the N/W corner of subject building. Note: chemical storage in background.

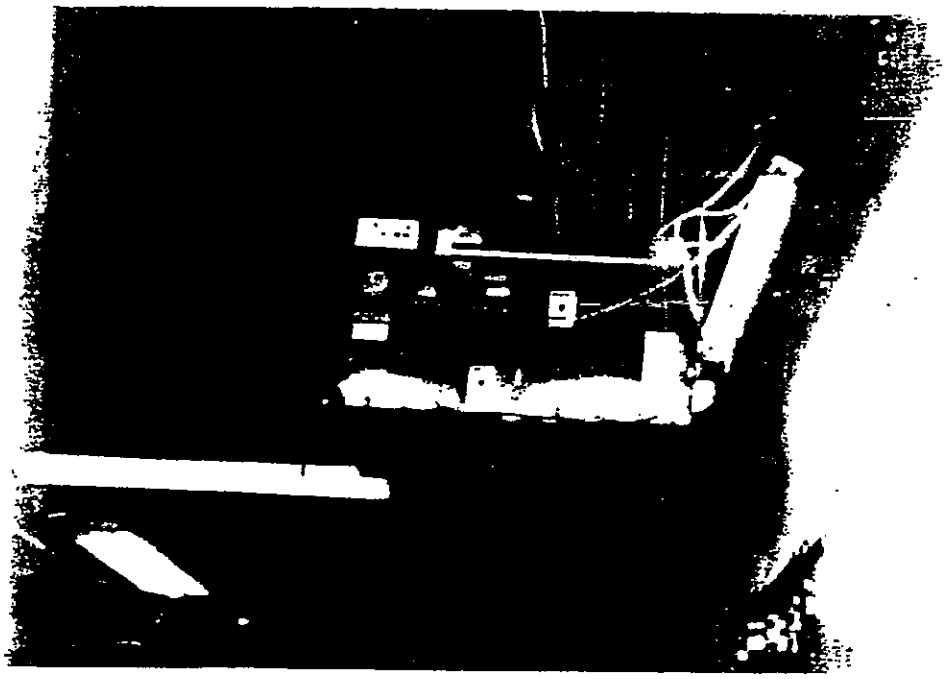
11. View of SAFETY CLEAN spray-gun cleaner/vapor extraction system in shop area.



12. View of second floor storage area, showing chemical storage on shelving.

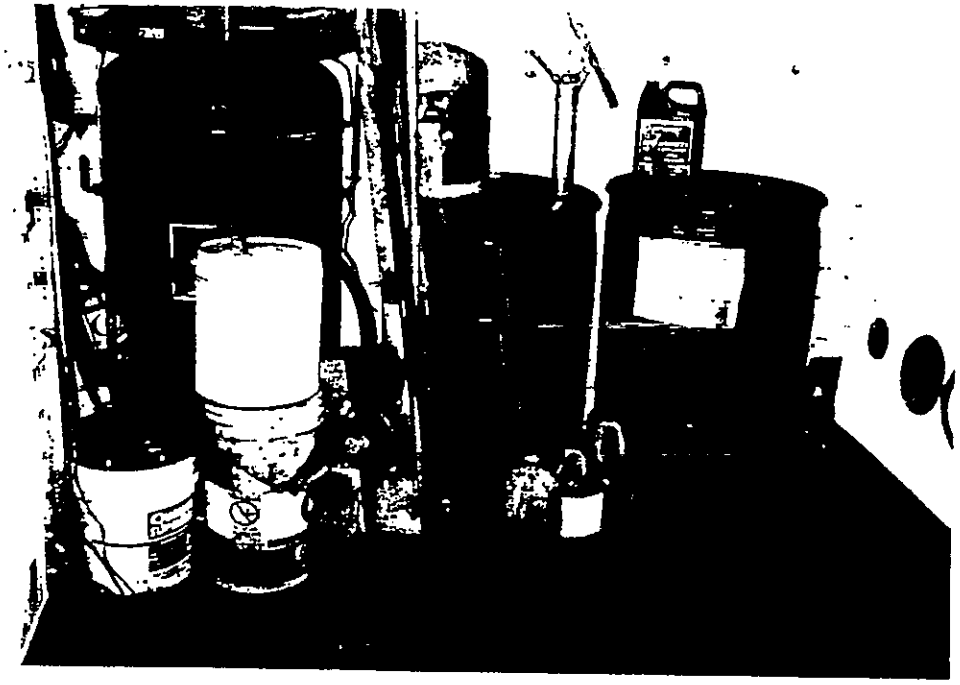


13. View inside auto service area, located at the east side of the subject building.



14. View inside auto service area, showing waste oil fired, hot air furnace.

15. View inside auto service area, showing 55 & 25 gallon storage drums.



16. View inside auto service area, showing 55 gallon storage drums, 5 gallon pails, staining and general poor house keeping.

E 000362

17. View of 275 gallon oil storage tank, located in concrete block room, at far east end of subject building (see photo 3). Note: staining below tank.

18. View inside auto service area, showing location of SAFETY CLEAN parts washers.

19. View of rear yard of subject site, showing salvage yard, as seen looking west through gate on Hopper Street.

20. Close up view of rear yard of subject site, showing salvage yard, as seen looking north.

21. Close up view of east side yard of subject site, showing salvage/junk yard, as seen looking south. note: storage drum in foreground.

22. View of typical soil staining at rear of subject site.

E 000365

23. Close up view of reported location of past fuel dispenser. Note: trench drain located along left side bay.

24. Close up view of trench drain, located along left side bay.

E 000366

25. View of waste oil tanks, and location of second trench drain, located along north wall and extending to bay door.

26. View of abandoned tank and location of 55 gallon drums outside fence of subject site, along west side.

27. View of 12-13, 55 gallon drums, located outside west side fence of subject site, as seen looking east from Garden Street.

28. Close up view of 12-13, 55 gallon drums, located outside west side fence of subject site, showing puddling of oil on ground below leaking drums.

E 000368

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Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

New Cassel Industrial Area Sites
Town of North Hempstead
Nassau County, New York
Off-site Groundwater
South of the New Cassel Industrial Area
Operable Unit No. 3

Site Numbers 1-30-043A, 1-30-043B, 1-30-043C, 1-30-043D, 1-30-043E, 1-30-043H, 1-30-043I, 1-30-043K, 1-30-043L, 1-30-043M, 1-30-043P, 1-30-043S, 1-30-043U, & 1-30-043V

October 2003

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* ERIN M. CROTTY, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

New Cassel Industrial Area (NCIA)
Inactive Hazardous Waste Disposal Sites

Town of North Hempstead, Nassau County, New York
Operable Unit 03 - Off-site Groundwater South of the NCIA
Site Nos. 1-30-043A, 1-30-043B, 1-30-043C, 1-30-043D, 1-30-043E, 1-30-043H, 1-30-043I, 1-30-043K, 1-30-043L, 1-30-043M, 1-30-043P, 1-30-043S, 1-30-043U, & 1-30-043V

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for Operable Unit 03 (OU3) of the New Cassel Industrial Area sites, Class 2 inactive hazardous waste disposal sites. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for OU3 of the New Cassel Industrial Area inactive hazardous waste disposal sites, and the public's input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from these sites, if not addressed by implementing the response action selected in this ROD, presents a current or potential significant threat to public health and the environment.

Description of Selected Remedy

Based on the results of the Remedial Investigation and Feasibility Study (RI/FS) for OU3 of the New Cassel Industrial Area sites and the criteria identified for evaluation of alternatives, the NYSDEC has selected full plume remediation of upper and deep portions of the aquifer (to 225 feet below ground surface) with in-well vapor stripping/localized vapor treatment. The elements of the remedy are:

- A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation, and maintenance and monitoring of the remedial program. Any uncertainties identified during the RI/FS process will be resolved;

- Installation of one 225-ft vapor stripping well with ancillary systems, for the purpose of a pilot study to determine the radius of influence, and the number of additional stripping wells needed;

- Based on the pilot test data, the effectiveness of the in-well vapor stripping system will be evaluated. If, for engineering or economic reasons, in-situ treatment should prove to be less practical, ex-situ extraction and treatment (treatment at the surface, possibly at a centralized location) will be substituted without impairing the overall effectiveness of treatment system;

- Based on the results of the pilot test, design and installation of three additional 225-ft vapor stripping wells, four 200-ft vapor stripping wells, and three 140-ft vapor stripping wells, plus their ancillary systems. Actual number and locations of these wells will be determined by the pilot test results. The wells will be placed approximately as shown in Figure 22, subject to revision due to the results of the pilot test, the final design parameters and access restrictions;

- Operation and maintenance of the treatment system until the remediation goals are achieved or the NYSDEC and NYSDOH determine that further operation of the treatment system is not necessary;

- Continued monitoring of two (2) existing Bowling Green Water District supply wells, located directly downgradient of the NCIA;

- Installation of nine (9) new monitoring wells at locations downgradient of Old Country Road;

- Implementation of a long term groundwater monitoring program requiring quarterly sampling of nine (9) new and thirteen (13) existing groundwater monitoring wells for the first two years and periodically thereafter, and;

- Institutional controls in the form of existing use restrictions limiting the use of groundwater as a potable or process water without necessary water quality treatment as determined by the Nassau County Department of Health from the affected areas.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy selected for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

NOV - 7 2003

Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

2632 RDC-01653

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APPENDICES APPENDIX A - RESPONSIVENESS SUMMARY
APPENDIX B - ADMINISTRATIVE RECORD

2632 RDC-01654

RECORD OF DECISION

New Cassel Industrial Area Sites
Town of North Hempstead, Nassau County, New York
Operable Unit No. 03 - Off-site Groundwater South of the NCIA
Site Nos.: 1-30-043A, 1-30-043B, 1-30-043C, 1-30-043D, 1-30-043E, 1-30-043H, 1-30-043I, 1-30-043K, 1-30-043L, 1-30-043M, 1-30-043P, 1-30-043S, 1-30-043U & 1-30-043V
October 2003

SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the New Cassel Industrial Area Site, OU 03 - Off-site Groundwater, for the area south of Old Country Road and Grand Boulevard. The presence of hazardous waste has created significant threats to human health and/or the environment that are addressed by this selected remedy. As more fully described in Sections 3 and 4 of this document, a variety of disposal activities within the New Cassel Industrial Area (NCIA) have resulted in the disposal of hazardous wastes, including 1,1,1-trichloroethane (1,1,1-TCA), tetrachloroethylene (PCE) and trichloroethylene (TCE), some of which were released or have migrated from the sites to surrounding areas, including the area bordering the NCIA south of Old Country Road and Grand Boulevard. This area includes the Bowling Green Water District well field. These wastes have contaminated the groundwater at the site, and have resulted in:

- a significant threat to human health associated with this site's contravention of groundwater standards in a sole source aquifer.
- a significant environmental threat associated with contravention of groundwater standards in a sole source aquifer.

The contaminated groundwater at the NCIA presents a potential route of exposure to humans. The area is served by public water, however, the underlying aquifer is the source of the water supply for the Bowling Green Water District customers. A supplemental treatment system, air stripping followed by carbon polishing, was constructed in 1996 to mitigate the impact of the groundwater contamination on the Bowling Green Water District water supply wells. The Bowling Green water supply wells are routinely monitored for volatile organic contamination. Presently, no site specific contaminants exceeding drinking water standards have been detected in water distributed to the public. Early warning monitoring wells have been installed south of Old Country Road, in locations downgradient of the NCIA hazardous waste disposal sites and upgradient of the water supply wells, as a precautionary measure. Because of the supplementary treatment system, use of the groundwater in the area is not currently considered to be an exposure pathway of concern. Additionally, existing use and development restrictions prevent the use of groundwater as a

source of potable or process water without necessary treatment as required by the Nassau County Department of Health (NCDH).

Currently, there are eleven (11) class 2 sites in the NCIA. A Class 2 site is a site at which hazardous waste constitutes a significant threat to the environment or the public health and action is required. The NYSDEC has been using a three-prong strategy in remediating the Class 2 sites in the NCIA. The first action identifies source areas of contamination at each site which have been remediated; the second action investigates groundwater contamination at and beneath each site and takes appropriate remedial measures; and the third action consists of a detailed Remedial Investigation(RI) of groundwater contamination that is migrating from all Class 2 sites in the NCIA. This investigation is now complete as is a comprehensive Feasibility Study (FS) evaluating possible treatment systems for contaminant plumes originating from the NCIA.

The following remedy has been selected to address the impact of groundwater contamination that has migrated from the NCIA sites: Full plume remediation of upper and deep portions of the aquifer (to 225 feet below ground surface) with in-well vapor stripping/localized vapor treatment. The elements of the remedy are:

- A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation, and maintenance and monitoring of the remedial program. Any uncertainties identified during the RI/FS process will be resolved;

- Installation of one 225-ft vapor stripping well with ancillary systems, for the purpose of a pilot study to determine the radius of influence, and the number of additional stripping wells needed;

- Based on the pilot test data, the effectiveness of the in-well vapor stripping system will be evaluated. If, for engineering or economic reasons, in-situ treatment should prove to be less practical, ex-situ extraction and treatment (treatment at the surface, possibly at a centralized location) will be substituted without impairing the overall effectiveness of treatment system;

- Based on the results of the pilot test, design and installation of three additional 225-ft vapor stripping wells, four 200-ft vapor stripping wells, and three 140-ft vapor stripping wells, plus their ancillary systems. Actual number and locations of these wells will be determined by the pilot test results. The wells will be placed approximately as shown in Figure 22, subject to revision due to the results of the pilot test, the final design parameters and access restrictions;

- Operation and maintenance of the treatment system until the remediation goals are achieved or the NYSDEC and NYSDOH determine that further operation of the treatment system is not necessary;

- Continued monitoring of two (2) existing Bowling Green Water District supply wells, located directly downgradient of the NCIA;

- Installation of nine (9) new monitoring wells at locations downgradient of Old Country Road;

- Implementation of a long term groundwater monitoring program requiring quarterly sampling of nine (9) new and thirteen (13) existing groundwater monitoring wells for the first two years and periodically thereafter, and;

- Institutional controls in the form of existing use restrictions limiting the use of groundwater as a potable or process water without necessary water quality treatment as determined by the NCDH from the affected areas.

The selected remedy, discussed in detail in Section 8, is intended to attain the remediation goals identified for this site in Section 6. The remedy must conform with officially promulgated standards and criteria that are directly applicable, or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, criteria and guidance are hereafter called SCGs.

SECTION 2: SITE LOCATION AND DESCRIPTION

The New Cassel Industrial Area (NCIA) is located in the Town of North Hempstead, Nassau County (Figure 1). It encompasses approximately 170 acres of land. It is bounded by the Long Island Railroad to the north, Frost Street to the east, Old Country Road to the south, and Grand Boulevard to the southwest. The NCIA is a heavily developed industrial and commercial area. Development in this area dates back to the 1950's and many of the properties have housed various businesses over the years. The topography is generally flat. A total of seventeen (17) sites within the NCIA were listed as Class 2 sites in the New York State Registry of Inactive Hazardous Waste Disposal Sites (the Registry). The listing of the 17 Class 2 sites, occurred between May 1995 and September 1999. Of the 17 Class 2 sites, three (3) were investigated and delisted from the Registry. Two sites were investigated, remediated and delisted from the Registry. Another site was investigated, remediated and reclassified as a Class 4 site.

Operable Unit (OU) No. 3, which is the subject of this ROD, consists of off-site groundwater primarily located to the south of the NCIA. An operable unit represents a portion of the site remedy that for technical or administrative reasons can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination. The remaining operable units are associated with the individual sites located within the NCIA, and are described in section 3.2.1 below.

This ROD addresses off-site groundwater contamination that has migrated from the Class 2 sites within the NCIA. In general terms, this area includes the commercial and residential areas south of Old Country Road and Grand Boulevard. The properties along Old Country Road are primarily commercial with residential neighborhoods to the south. The area south of Grand Boulevard and the area north of the NCIA are also residential areas.

Site locations and descriptions for the seventeen sites are provided in Section 3. The sites are divided into three areas, the western area located between Grand Street and Urban Avenue, the central area located between Urban Avenue and Bond Street and the eastern area located between Bond Street and Frost Street sites. See Figure 2 for the site locations.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The NCIA was first developed during the early 1950s. Past light industrial activities conducted within the NCIA have resulted in extensive VOC contamination of groundwater in the vicinity of the NCIA. The

specific activities carried out at the 17 constituent sites located within the NCIA are described in section 3.2.1 below.

3.2: Remedial History

The NCIA was first recognized as an area with widespread groundwater contamination during a county-wide groundwater investigation conducted by the NCDH in 1986.

In 1988, the NYSDEC listed the NCIA as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites in New York.

In order to identify the sources of the contamination within the NCIA, and hence the responsible parties, the NYSDEC conducted Preliminary Site Assessments (PSAs) within the NCIA. Field investigations were completed in fall 1994, fall 1995 and fall 1996. The NYSDEC also collected several soil and groundwater samples in December 1998, January 1999 and December 1999. Based on the findings of these PSAs, a total of 17 sites were identified and listed as Class 2 sites in the Registry between May 1995 and September 1999. Of the 17 Class 2 sites, three were investigated and delisted from the Registry and two sites were investigated, remediated and delisted from the registry. Another site was investigated, remediated and reclassified as a Class 4 site. As described in Section 3.2 below, remedial activities have been conducted at several of the sites by the NYSDEC and individual potentially responsible parties (PRPs). For a more detailed description of these investigations and their results, see section 3.2.1 of this document, the New Cassel Industrial Area Off-site Groundwater Remedial Investigation Report, and the Records of Decision (RODs) and ancillary documentation for individual sites within the NCIA. Figure 3 shows active and planned groundwater remediation systems for individual sites.

Individual site descriptions, operational/disposal histories and remedial histories for sites at which past practices have led to inappropriate disposal of hazardous waste follow.

3.2.1: Operational/Disposal and Remedial History of Individual Class 2 Sites within the NCIA

3.2.1.1: IMC Magnetics (Site No. 1-30-043A)

This site is located at 570 Main St. in the western part of the NCIA. The site is a little over two acres, with one manufacturing building and a paved parking area covering most of the area. The site was occupied by IMC Magnetics Inc. from the early 1950s until 1992. Products made during IMC's occupation of the site included induction motors, fans and blowers, stepper motors and other rotating machines. Soils and groundwater at the site are contaminated with chlorinated hydrocarbons, petroleum hydrocarbons and metals. This site was listed on the Registry as a Class 2 site in 1995. Further investigations on this site revealed that the soils and groundwater were contaminated with chlorinated VOCs. Beginning in October 1997, IMC has operated a soil vapor extraction (SVE) system to remediate on-site soil contamination. The ROD for OU-1, On-Site Soil Contamination, incorporating the SVE system, was issued in January of 1998. A focused on-site groundwater RI/FS at this site confirmed the presence of an on-site chlorinated VOC groundwater plume. The ROD for OU-2 On-Site Groundwater, was issued by NYSDEC in March 2000. The remedy selected for groundwater remediation at this site is in-situ oxidation using hydrogen peroxide injection. Treatment began in December 2001 and is on-going. This site is considered to be a contributor to the western groundwater plume.

3.2.1.2: Atlas Graphics (Site No. 1-30-043B)

This site is located at 567 Main Street in the western part of the NCIA. The site is approximately one acre, with one manufacturing building and a paved parking area covering most of the area. The building was built in 1950, and used as a warehouse for construction vehicles until 1997. In 1997, the property was purchased by Atlas Graphics Inc., which currently operates a photo engraving manufacturing operation. This operation uses a reported 312 gallons per year of TCE. At the time of its purchase, the building was connected to a cesspool for its sanitary waste disposal. In 1977, there was a documented discharge of approximately 50 gallons of TCE to the cesspool. This site was listed on the Registry as a Class 2 site in 1995. The analytical results for this site indicated that elevated levels of TCE were found on-site in both the soil and groundwater. The ROD for this site, issued in February 2000, selected air sparging/soil vapor extraction (AS/SVE) as the remedy to address the on-site contaminated soil and groundwater. The system was constructed in October 2000 and has been treating on-site groundwater since November 2000. This site is considered to be a contributor to the western groundwater plume.

3.2.1.3: Tishcon Corp. (Site No. 1-30-043C)

The site is located at 125 State Street in the central part of the NCIA. The site is approximately one acre and is occupied by a two-story building. Tishcon Corporation was a tenant in this location from 1984 to 1996. Tishcon produced dietary supplements and vitamin products in the form of powders and tablets. The powders and tablets were produced in a dry blending process. From 1985 to 1993, the chemicals methylene chloride, 1,1,1-trichloroethane and methanol were used in the tablet coating process. Equipment used in the process was rinsed out in the driveway where the storm drains are located. Based on the presence of chlorinated VOCs and metals in four storm drains at the site, the NCDH requested that contaminated sediment be removed from storm drains and a distribution box on the property in August 1993. The site was placed on the Registry in 1995. The excavation and restoration of the contaminated source areas of two storm drains and a distributor was completed as an Interim Remedial Measure (IRM) in October 1997. The ROD for the site was issued in January of 1998 and required the excavation and restoration of the remaining contaminated source area. Excavation and disposal of this material was conducted in Spring of 1999. In March of 2000, the site was reclassified as a Class 4 site. Class 4 indicates that the site was properly closed and monitoring is required. This site is considered to be a contributor to the central groundwater plume.

3.2.1.4: Arkwin Industries (Site No. 1-30-043D)

This site includes a number of individual lots located at 648, 656, 662 and 670 Main Street and 66 Brooklyn Ave in the central part of the NCIA. The site is approximately four acres and is occupied by five separate buildings. Arkwin began operations in the NCIA in 1955. Arkwin receives metal stock which is then machined, fabricated, degreased, polished, painted and assembled into finished products. Arkwin used 1,1,1-trichloroethane, tetrachloroethene and other solvents in their production process. Based on the presence of chlorinated VOCs and petroleum hydrocarbons in the soils and groundwater at the site, the Arkwin site was added to the Registry as a Class 2 site in May 1995. The contaminated soil was excavated in June 1997 as part of an IRM. The No Action ROD for OU-1, On-Site Soil, was issued in January 1998. A focused RI/FS for the on-site groundwater (OU 2) was subsequently conducted. The RI results indicated the presence of several VOCs and their breakdown products above the groundwater standard in both the upper glacial aquifer (UGA) and the Magothy aquifer. The focused FS evaluated a number of remedial

alternatives for the groundwater. Based on the FS, NYSDEC selected air sparging and soil vapor extraction (AS/SVE) as the remedy for the groundwater. The ROD for OU 2 was issued in December 1999.

A pilot test for AS/SVE was conducted in July 2002, and the system began continuous operation in December 2002. This site is considered to be a contributor to the central groundwater plume.

3.2.1.5: Tishcon Corporation at Brooklyn Avenue (Site No. 1-30-043E)

This site is located at 30-36 New York Avenue and 30-33 Brooklyn Avenue in the central part of the NCIA. The site is approximately 1.5 acres, and is almost entirely occupied by a single structure. Tishcon has operated at this site from 1982 to present. As part of their gelatin capsule manufacturing process, the Tishcon Corporation used 1,1,1-trichloroethane (1,1,1-TCA) to remove mineral oil from the gelatin capsules. In May 1997, Tishcon phased out the use of 1,1,1-TCA and incorporated a closed loop, petroleum based process into their manufacturing. Based on information obtained from a NCIA-wide PSA, Tishcon was added to the Registry as a Class 2 site in 1995. Sampling results showed high levels of chlorinated VOCs (including 1,1,1-TCA) in the soils and groundwater. An IRM, completed in November 1997, removed the soil contamination in an out-of-service cesspool, a sealed storm drain, and an exterior floor drain. A ROD for OU-1, On-Site Soils, was issued by NYSDEC in January 1998. This ROD required the installation of an AS/SVE system to address remaining on-site soil and groundwater contamination. Construction of the on-site AS/SVE system was completed in December 1999, and system operation began in January 2000. A focused off-site groundwater RI/FS was finalized in September 1999. The ROD for OU-2, Off-site Groundwater, was issued in March 2000. The selected remedy consists of the installation of an AS/SVE system to remove the VOC contamination in the off-site groundwater near Old Country Road. Pilot tests for the selected remedy were carried out in July 2002, and full system installation is scheduled to begin in the fall of 2003. This site is considered to be a contributor to the central groundwater plume.

3.2.1.6: Former Tishcon (Site No. 1-30-043F)

This site is located at 68 Kinkel Street in the central part of the NCIA. The one-quarter acre site is occupied by a single story, 2-bay garage. In 1982 and 1983, Tishcon encapsulated materials at this site, utilized 1,650 gallons of TCE as well as 8,000 gallons of methylene chloride and 3,000 gallons of shellac in its manufacturing process. This site was added to the Registry as a Class 2 site in 1995. A State Superfund investigation was completed in July 1996. In January 1997, a ROD requiring no action was issued for this site. The site was delisted from the Registry in December of 1997.

3.2.1.7: Metpar Steel Corp. (Site No. 1-30-043G)

This site is located at 95, 97 and 99 State Street in the in the central part of the NCIA. Metpar manufactures metal toilet components. This site was listed on the Registry in 1995. The RI for the site was completed in July 1996 and a ROD was issued in January 1997, requiring no action. The site was delisted from the Registry in December of 1997.

3.2.1.8: Utility Manufacturing/Wonder King Site (Site No. 1-30-043H)

This site is located at 700-712 Main Street in the eastern part of the NCIA. The site is approximately one acre, most of which is occupied by a single building. The remainder of the site is paved. The original

building on this site was constructed in 1967. The property was leased to Radalabs, which manufactured communications equipment. In 1975, Utility Manufacturing sublet part of the building. In February 1976, Utility Manufacturing became the sole occupant. The Utility Manufacturing Company manufactures a variety of cleaning and lubricating products.

A NYSDEC monitoring well sampling program and a PSA confirmed that soil and groundwater were contaminated with PCE and other related VOCs above standards and guidelines. Consequently, the NYSDEC listed the site as a Class 2 site in 1996. A subsequent field investigation was complete in May 1998 and included the collection of soil samples and installation and sampling of monitoring wells. The NYSDEC required Utility Manufacturing to conduct an additional investigation to delineate the on-site groundwater contamination (completed December 2000) and perform an IRM (AS/SVE) to remediate the on-site groundwater. The AS/SVE system was constructed and began operation in November 2001. A ROD for this site, calling for continued operation of the AS/SVE system and no further action, was signed in March 2003. This site is considered to be a contributor to the eastern groundwater plume.

3.2.1.9: Former LAKA Industries, Inc. (Site No. 1-30-043K)

The site is located west of the intersection of Old Country Road and the Wantagh State Parkway at 62 Kinkel Street in the central part of the NCIA. The site is entirely paved or covered with the footprint of the one story main building with the exception of a small landscaped area on the west side of the building. The LAKA Tool and Stamping Co., Inc., occupied the site from 1971 to 1978, performing precision metal stamping operations as a defense contractor. LAKA Industries, Inc., the parent company, operated the site from 1979 to 1984 as a machine shop specializing in tools, dies and precision stamping. Both companies used TCE and lubricating oils. As the NCIA was not serviced by public sewers until the 1980s, subsurface disposal was the common means of waste disposal in the area. The site was added to the Registry as a Class 2 site in 1996. A focused RI/FS was conducted to define the nature and extent of contamination at the site. The RI (finalized May 1999) confirmed that contamination existed in the vicinity of an on-site cesspool and that an additional source area existed in a catch basin located downgradient of the site. The NYSDEC issued a ROD for On-Site Soils in February 2000. The ROD selected excavation of the cesspool and the source area, and did not include any groundwater remediation. The selected remedy was implemented in May 2001. This site is considered to be a contributor to the central groundwater plume.

3.2.1.10: Frost Street Sites: Former Autoline Automotive (Site No. 1-30-043I), 89 Frost Street (Site No. 1-30-043L), Former Applied Fluidics (Site No. 1-30-043M)

The Frost Street sites include three adjacent sites which are located at 89 Frost Street, 101 Frost Street and 770 Main Street in the eastern part of the NCIA. The NYSDEC designated the sites as Class 2 sites in 1996.

Former Autoline Automotive (Site No. 1-30-043I)

This site is located at 101 Frost Street in the eastern part of the NCIA. The site is approximately one acre, most of which is occupied by one-story building. The rest of the site is paved. Several tenants occupied the building at this site including a toy warehouse, a home laboratory supply company, a textiles manufacturer and an automobile ignition parts manufacturer. National Bassen Textiles, which occupied the property from 1974 to 1983, had documented use of degreasers and other unknown chemicals. Autoline Automotive occupied the site from 1984 to 1992, manufacturing ignition wires and wire harness sets.

89 Frost Street (Site No. 1-30-043L)

This site is located at 89 Frost Street in the eastern part of the NCIA. This site is entirely paved. The 55,000 sq. ft structure which formerly occupied the site was built in 1968 and rented by several facilities. Adchem Corporation, a double coated adhesive tape manufacturer, occupied the site from 1971 to 1973. Unicord, a manufacturer of music amplifiers, occupied the site from 1980 to 1987. Marvex Corporation, a processing and finishing company, occupied the site sometime during the life of the structure, although the exact time period is unknown. The last known occupant of the building was Korg Electronics from 1988 to 1994.

Former Applied Fluidics (Site No. 1-30-043M)

This site is located at 770 Main Street in the eastern part of the NCIA. The site is approximately one acre, and is currently occupied by a department store built in 1998. The rest of the site is paved. Applied Fluidics occupied this site from 1974 to 1982. Applied Fluidics was a defense contractor that manufactured research instruments and leak detectors. The company used trichloroethylene, paint thinners and petroleum distillates. The building was demolished in 1998 and excavated to a depth of 20 ft below ground surface (bgs) as part of the redevelopment of the site. All drainage structures were removed.

In 1998, a State funded RI/FS was conducted at the Frost Street sites. The investigation determined that the VOC contaminants of concern were PCE, TCE, and xylene. Based on the FS, NYSDEC issued three separate RODs in March 2000 that described the selected remedies for the contaminated soils at each of the three sites. The remedies consist of:

- Soil Vapor Extraction of deep soils with excavation and off-site disposal of surface soil for the Former Autoline site.
- Soil Vapor Extraction of deep soils for the 89 Frost Street site.
- No Action for the Former Applied Fluidics site.

The groundwater contamination was addressed as a combined operable unit since the contamination emanating from the three Frost Street sites co-mingle, such that the contamination from an adjacent site forms a common plume of VOC contamination. Based on the RI/FS, in March 2000, the NYSDEC issued a groundwater ROD that requires the installation of an AS/SVE system to address VOC contamination in the groundwater source areas and an in-well vapor stripping system to address the deeper contamination along Old Country Road. The PRP for these sites signed a Remedial Design/Remedial Action consent order in January 2003 to implement the soil and groundwater remedies selected in the March 2000 RODs. These three sites are considered to be contributors to the eastern groundwater plume.

3.2.1.11: 118-130 Swalm Street Site (Site No. 1-30-043P)

This site is located at 118-130 Swalm Street in the western part of the NCIA. The site is approximately 3 acres, with a one story building. The property is bordered by the Long Island Railroad to the north. Tenants of the Swalm Street site include All Records Distributors from 1971 to 1974, Allomatic Industries from 1979 to 1992, Louis Jordan Labs (a vitamin manufacturer) from 1978 to 1980, and Varitek from 1979 to 1992. The current tenant, Liqui-Mark has occupied the building since 1994. The site was listed on the

Registry as a Class 2 site in 1997. Field work was completed in January 1999. RI results indicated low levels of VOC contamination in on-site cesspools and that the groundwater contamination had decreased over time. Additional investigation near the cesspool located in the southwest corner of the site and at the drains inside the building was undertaken in April of 2001. Additional groundwater sampling was carried out during September of 2002. Based on the results of the RI, a PRAP addressing on-site soil and groundwater at this site is expected in the fall of 2003. This site is considered to be a contributor to the western groundwater plume.

3.2.1.12: 299 Main Street Site (Site No. 1-30-043S)

The site is located at 299 Main Street in the western part of the NCIA. The site is approximately two acres and is occupied by a one story building. The site was developed between 1950 and 1962. It is currently occupied by One Stop Auto and Truck Center. The property was formerly used as a junk yard and a transportation company (dates unknown). Island Transport Corporation used large quantities of petroleum related compounds including gasoline and approximately 275 gallons of TCE between July and December 1978 to clean trucks.

The NYSDEC listed the 299 Main Street site on the Registry as a Class 2 site in 1997. Field work was completed in October 1999 and a draft focused RI report was submitted which indicated the soils and groundwater at the site were contaminated with chlorinated compounds, predominantly TCE. Additional investigations were undertaken in the spring of 2001, and the RI report was finalized in September 2001. Contamination was found in an on-site injection well and in an equipment repair bay within the building. Based on the RI results, the PRP submitted an IRM work plan which includes removal of contaminated material from the site and installation of an AS/SVE system, which began in the spring of 2003 and is scheduled to be completed in the fall of 2003. This site is considered to be a contributor to the western groundwater plume.

3.2.1.13: Northeast Corner of Hopper and Main Streets (Site No. 1-30-043T)

This site is located at the intersection of Hopper and Main Streets in the western part of the NCIA. There are no permanent structures located on the property. The site was added to the Registry as a Class 2 site in 1997. The site was investigated from December 1998 to January 1999. No on-site contamination was found, and a ROD requiring no action at this site was issued in February 2000. The site was delisted from the Registry in December of 2000.

3.2.1.14: 36 Sylvester Street Site (Site No. 1-30-043U)

The site is located at 36 Sylvester Street in the central part of the NCIA. The site is approximately one half acre and is occupied by a one-story building. The site was initially developed in 1952 with a one story masonry building. The building covers most of the lot, with the exception of alleys on the north and south sides of the property, and a loading area on the east side. Historically, the site was used for industrial applications that included the manufacturing of precision machinery. Former occupants of the site include American Express Warehousing Corp., Universal Transistor Products Corp., National Machinery Exchange and National Gear Products. The property was occupied by National Gear Products from 1980 to 1996 and is currently occupied by GEL-TEC (a division of Tishcon Corp.). The results of the PSA indicated that past site operations have contaminated the groundwater beneath and downgradient of the site with 1,1,1-TCA.

The NYSDEC listed the site as a Class 2 site on the Registry in 1999. The NYSDEC negotiated a Consent Order with the PRP to conduct a RI/FS which was signed in March of 2000. An IRM to remove contaminated material from an on-site drywell was completed in May 2002. Based on the results of the IRM, a no further action ROD was signed in March 2003, and the site was delisted from the Registry in September 2003. This site is considered to be a contributor to the central groundwater plume.

3.2.1.15: Tishcon Corporation Site at 29 New York Avenue (Site No. 1-30-043V)

This site is located at 29 New York Avenue in the central part of the NCIA, is approximately one acre and is occupied by a single building. The site was developed in 1952, and was used to manufacture electronic equipment until the late 1970s, after which it was occupied by Tishcon from 1979-1991. The site was sold to Equity 1 Associates in 1991.

This site was listed on the Registry as a Class 2 site in 1995 as part of the Tishcon Corporation at Brooklyn Avenue site. The 29 New York Avenue site was investigated further as part of another PSA conducted in 1996. A soil/sediment sample from an on-site catch basin had 1,1,1-TCA-related compounds above cleanup guidelines. Based on these results, the NYSDEC listed the Tishcon Corporation at 29 New York Avenue site as a separate Class 2 site on the Registry in March 1998. The RI report was received by NYSDEC in December 1999. An IRM was carried out in August 2000, consisting of the clean out of a cesspool on the site. Based on the results of the IRM, a no further action ROD for this site was signed in March 2002, and the site was delisted from the Registry in December 2002. This site is considered to be a contributor to the central groundwater plume.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The following sites are considered to be contributors to the western plume. The PRPs for the western plume sites, documented to date, include:

Site # 1-30-043A, IMC Magnetics **PRP: IMC Magnetics**

Consent Order Index Number	Subject	Date
WI-0750-96-02	OU1RI/FS	2/96
WI-0750-00-03	OU2RD/RA	4/01

Site # 1-30-043B, Atlas Graphics **PRP: Atlas Graphics, Inc.**

Consent Order Index Number	Subject	Date
WI-0861-99-16	RD/RA	9/00

Site # 1-30-043P, 118-130 Swalm St. **PRP: Barouh Eaton Allen Corp.**

Consent Order Index Number	Subject	Date
WI00816-97-09	RI/FS	10/98

Site # 1-30-043S, 299 Main St. **PRP: 2632 Realty Development Corp.**

Consent Order Index Number	Subject	Date
WI-0843-98-06	RI/FS	5/99

The following sites are considered to be contributors to the central plume. The PRPs for the central plume sites, documented to date, include:

Site # 1-30-043C, Tishcon at 125 State St. **PRP: Tishcon Corp.**

Consent Order Index Number	Subject	Date
WI-0757-95-05	RI/FS	6/96
WI-0757-98-02	RD/RA	5/98

Site # 1-30-043D, Arkwin Industries **PRP: Arkwin Industries Inc.**

Consent Order Index Number	Subject	Date
WI-0754-95-06	OU1RI/FS	7/96
WI-0861-00-02	OU1RD/RA	2/02

Site # 1-30-043E, Tishcon at Brooklyn and New York Avenue **PRP: Tishcon Corp.**

Consent Order Index Number	Subject	Date
WI-0758-95-05	OU1RI/FS	6/96
WI-0799-97-06	OU2RI/FS	1/98
WI-0799-98-02	OU1RD/RA	5/98
WI-0799-00-03	OU2RD/RA	1/03

2632 RDC-01665

Site # 1-30-043K, Former LAKA Industries
PRPs: LAKA Tool & Stamping Inc.
LAKA Industries, Inc.
DermKraft, Inc.

No Consent Order is associated with this site.

Site # 1-30-043U, 36 Sylvester St. **PRP: Grand Machinery (owner)**

Consent Order Index Number	Subject	Date
WI-0863-00-01	RI/FS	3/00

Site # 1-30-043V, Tishcon at 29 New York Ave. **PRP: Tishcon Corp.**

Consent Order Index Number	Subject	Date
WI-0828-98-05	FRI/FS	5/98

The following sites are considered to be contributors to the eastern plume. The PRPs for the eastern plume sites, documented to date, include:

Site # 1-30-043H, Utility Manufacturing Wonder King
PRPs: Nest Equities, Inc. (owner)
Wilbur Kranz,(operator)
Utility Manufacturing Co.

Consent Order Index Number	Subject	Date
WI-0785-97-06	RI/FS	1/97

Site # 1-30-043I, Former Autoline Automotive
PRPs: K.B. Company (owner)
Filco/Cobra, Inc., Formerly known as (fka) Autoline Automotive Corp. (former occupant)
Fabric Bonanza, fka National Bassen Textiles Inc. (former occupant)
101 Frost Street Associates LP. (Current Occupant)

Consent Order Index Number	Subject	Date
WI-0799-00-05	RD/RA	1/03

Site # 1-30-043L, 89 Frost Street
PRPs: Adchem Corp. (former occupant)
Jerry Speigel (former owner)
Emily Spiegel Trust et al
89 Frost Street Associates (former owner)
Millenium Realty, LLC (Current owner)

Consent Order Index Number	Subject	Date
WI-0799-00-05	RD/RA	01/03

Site # 1-30-043M, Former Applied Fluidics
PRPs: Applied Fluidics, Inc.
AFI Corp.
LeBlari Associates, L. P.
Emily Spiegel, Trust, et al.
Next Millenium Realty, LLC.

Consent Order Index Number	Subject	Date
WI-0893-01-07	RD/RA	01/03

The PRPs declined to implement the off-site groundwater RI/FS at the site when requested by the NYSDEC. After the remedy is selected, the PRPs will again be contacted to assume responsibility for the remedial program. If an agreement cannot be reached with the PRPs, the NYSDEC will evaluate the site for further action under the State Superfund. The PRPs are subject to legal actions by the state for recovery of all response costs the state has incurred. Please refer to Table 1 for a summary of the remedial activities and enforcement status.

SECTION 5: CONTAMINATION

A remedial investigation/feasibility study (RI/FS) has been conducted to evaluate the alternatives for addressing the significant threats to human health.

5.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of groundwater contamination that is migrating from all Class 2 sites within the NCIA.

State funded remedial investigations at the NCIA began in 1995. Major investigations included the sampling of 41 groundwater monitoring wells in the summer of 1996 by NYSDEC personnel, additional groundwater monitoring during the summer of 1997 which included the sampling of eleven hydropunch (a sampling method appropriate for deeper sampling in the Long Island geological environment) locations south of Old Country Road and Grand Boulevard, and the installation of two pairs of early warning groundwater monitoring wells upgradient of the Bowling Green water supply wells in the summer of 1998. The next phases of the off-site groundwater investigation were conducted during April of 1999, August of 1999, and

the final phase was conducted during January of 2000. These last three phases consisted of the sampling from 41 existing groundwater monitoring wells, several hydropunch points, and installation of four new groundwater monitoring wells. A report entitled Remedial Investigation for Off-site Groundwater in the New Cassel Industrial Area, September 2000, has been prepared which describes the field activities and findings of the RI in detail.

The following activities were conducted during the RI:

- Installation of four shallow monitoring wells and fifteen hydropunch locations downgradient of the NCIA (summer 1996).
- Five rounds of groundwater monitoring well sampling. The first round (summer 1996) sampled 41 existing wells, including the four new shallow wells.
- The second round (summer 1997) sampled the same wells as the first round, and eleven hydropunch locations south of Old Country Road.
- Early warning monitoring wells south of Old Country Road and upgradient of the Bowling Green water supply wells were installed and sampled in July of 1998.
- The third round (spring 1999) sampled 41 existing wells, and the four Bowling Green early warning wells. Four new wells were installed and sampled.
- The fourth round (summer 1999) sampled 41 existing groundwater monitoring wells, plus the four Bowling Green early warning monitoring wells.
- The fifth round (January 2000) sampled 22 existing monitoring wells and the four Bowling Green early warning monitoring wells.

After the completion of the RI report in September 2000, the Bowling Green early warning monitoring wells have continued to be monitored on a quarterly basis. In addition, eight (8) groundwater monitoring wells (one well quadruplet and two well couplets) were installed to the southwest of the Bowling Green production wells in October 2001, and an additional 300 foot deep monitoring well was installed in July of 2002. See Figure 3 for the location of these wells. These wells are also sampled on a quarterly basis.

To determine whether the groundwater contains contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater, drinking water, and surface water SCGs are based on NYSDEC "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.

Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, the groundwater south of Old Country Road requires remediation. More complete information can be found in the RI report.

5.1.1: Site Geology and Hydrogeology

The Upper Pleistocene deposits poorly sorted sand and gravel that make up the Upper Glacial Aquifer (UGA) are found from the surface to a depth of approximately 80 ft below ground surface (bgs). The UGA is an unconfined aquifer consisting of poorly sorted sands and gravel. The Magothy is located beneath the UGA and consists of finer sands, silt and small amounts of clay.

At the NCIA sites there are no other hydro-geologic units located between the UGA and the underlying Magothy formation. In general, the top of the Magothy formation is found at least 100 ft bgs. However, based on observations during installation of wells for this investigation, the Magothy is sometimes found at significantly shallower depths (60-80 ft bgs) in the NCIA than in many other areas of Long Island. The UGA and the Magothy are in direct hydraulic connection; however, clay lenses are often found in the upper Magothy in this area. Depth of water table is between 55-65 ft bgs in the NCIA, and groundwater flows in a southwesterly direction. Both the UGA and the Magothy have been designated as sole source aquifers and are protected under state and federal legislation.

5.1.2: Nature of Contamination

As described in the RI report, over 1,850 groundwater samples were collected at the NCIA since 1996 from over 100 separate monitoring wells, approximately 25 hydropunch locations, and over 50 geoprobe locations to characterize the nature and extent of contamination. The investigation included on-site sampling for individual sites within the NCIA, as well as work performed for the NCIA off-site groundwater investigation. The main categories of contaminants which exceed their SCGs are volatile organic compounds (VOCs).

The VOCs of concern are PCE, 1,1,1-TCA and TCE. Also present are smaller quantities of the breakdown products of PCE and TCE, and an assortment of minor constituents all within the VOC category. For more detailed descriptions, please refer to the RI.

5.1.3: Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated.

Several extensive sampling efforts have been conducted at the NCIA to determine the sources and extent of this contamination. A major portion of the effort of this off-site groundwater RI has been to compile and interpret the historical data to determine the fate and transport of the contaminants as they relate to off-site locations. For the purpose of this PRAP, on-site is defined as the area within the NCIA as described in Section 2. Off-site refers to the area south of Old Country Road and Grand Boulevard, downgradient of the NCIA.

5.1.3.1: Area of Historically Impacted Groundwater: 1977 to 2000

The area of historically impacted groundwater is shown on Figures 4 through 7. Overall this set of figures shows the maximum area of impacted groundwater using the highest noted concentration of total VOCs over the years. Based on analysis of the groundwater data, four depth intervals were chosen to provide a comparative analysis. The contouring resulted in three individual plume areas over three of the depth

intervals examined (0-64 ft bgs, 64-100 ft bgs, 100-125 ft bgs) with the exception of the deepest level (125-200 ft bgs) where only two apparent plume areas were found.

The eastern most plume is located west of Frost Street and south of Summa Street with its source area centered about the Frost Street sites (#1-30-043I, -M, and -L) (Figure 4). The primary contaminant of concern in this plume area is PCE and its associated breakdown products. The total VOC concentrations in the shallow groundwater in this area exceeded 10,000 ppb at four sampling locations in the shallow groundwater. The shallow groundwater contamination associated with this plume area extends just south of Old Country Road (Figure 4). The axis of the plume is generally in the direction of the flow of shallow groundwater.

The total VOC concentration increases with depth in the eastern plume and reaches its highest concentration at the 65-99 ft interval with the highest single measurement of over 10,000 ppb at the center of this plume area (Figure 5). The extremely high concentrations noted in the area may be the result of DNAPL within the fine-grained matrix of the transition zone between the UGA and Magothy Aquifer. The maximum extent of this plume is slightly smaller than the noted plume in the shallow groundwater. At the deeper intervals (100-124 ft and 125-200 ft bgs), the contaminant concentrations decrease within the NCIA (north of Old Country Road). It appears that the plume has not migrated vertically downward in this area (Figures 6 and 7). It is not known whether this is a function of the time required to migrate to this depth or whether the fine-grained nature of the material at this depth is preventing downward migration. The planned groundwater remediation at the Frost Street sites should facilitate source removal and limit the further potential for downward migration on the site. At the deeper depths off-site, the eastern plume and the central plume are co-mingled. Generally the highest total VOC concentrations are located south of Old Country Road just north of the Bowling Green well field. Hydropunch data collected during the installation of the early warning wells indicate that below 150 ft bgs, the contaminant concentrations drop off rapidly.

The second plume area is located in the central section of the industrial area with the highest levels of contamination concentrated in the area south of Main Street (Figure 4). The major source area of this plume appears to be the Arkwin Industries site (#1-30-043D), and the Tishcon Corporation sites (#1-30-043V and -E). The contamination north of Main Street is attributable to the Tishcon Corporation site (#1-30-043C). The former LAKA site (#1-30-043K), the 36 Sylvester Street site (#1-30-043U) and the 29 New York Avenue site (#1-30-043V) are also located within the western portion of this central plume area. In this plume area the primary contaminant of concern is 1,1,1-TCA and its breakdown products. Significant concentrations of TCE and PCE were also found at certain sampling locations, especially at the deeper depths off-site. The total VOC concentrations in the shallow groundwater in this area exceeded 10,000 ppb at three sampling locations and exceeded 1,000 ppb at two locations in the shallow groundwater (Figure 4). The highest concentrations are located directly downgradient of the Tishcon Corporation site (#1-30-043E). The high concentrations found on-site also suggest that the on-site areas will continue to act as a source of contamination to the off-site groundwater. The on-going and planned remedial measures at Class 2 sites within the NCIA would serve to reduce the mass of contaminants available as a source for the off-site groundwater contamination.

Since this plume area extends into the vicinity of the Bowling Green well field the contaminant distribution with depth is critical. Both of the deeper depth intervals (Figures 6 and 7) indicate that a large plume with high concentrations (total VOCs in excess of 1,000 ppb) exists south of Old Country Road. The hydropunch sampling location completed in February 2000 on Myron Street (GWHP-01) indicates that total VOC

concentrations range from 856 to 5,480 ppb between 100-140 ft bgs. At these depths the primary contaminant of concern is TCE and 1,1-DCE. An additional groundwater hydropunch sampling location (GWHP-02) was located downgradient of the Bowling Green water supply wells. This hydropunch sampling location exhibited significantly lower concentrations at the deeper depths than GWHP-01. Total VOC concentrations at this location ranged from non-detect to 8 ppb between 100-140 ft bgs. The highest total VOC concentration found at this location was 31 ppb in the deepest sample (150 ft bgs) that was collected. Sampling conducted by hydropunch during the installation of the early warning wells (August 1998) indicate that at the two early warning well locations, the total VOC concentrations tend to decrease below 150 ft bgs.

The final plume area is located in the western section of the industrial area and extends from the Long Island Railroad to just south of Old Country Road (Figure 4). The most up-gradient source area for this plume appears to be the 118-130 Swalm Street site (#1-30-043P). Several other Class 2 sites including Atlas Graphics (#1-30-043B), IMC Magnetics (#1-30-043A), and 299 Main Street (#1-30-043S), are also located within this plume area. The primary contaminants of concern in this plume depends on location; significant concentrations of TCE, PCE, and 1,1,1-TCA are found throughout the plume. The total VOC concentrations in the shallow groundwater in this area exceeded 1,000 ppb at six sampling locations. Three of the six are located on the 118-130 Swalm Street site while the other three are located downgradient south of Main Street. The shallow groundwater contamination associated with this plume area extends approximately 100 ft south of Old Country Road. Between Grand Boulevard and Old Country Road the plume extends beneath a seven block residential area (Figure 4). This plume area reaches its apparent maximum extent in the shallow groundwater which may indicate that this plume is representative of more recent discharges or that the contaminants were released as dissolved product and have not vertically migrated downward.

5.1.3.2: Area of Impacted Groundwater: 1998 to 2000

The current area of impacted groundwater, based on data collected from 1998 to 2000 (Figures 8 to 11), is very similar to the area of historically impacted groundwater. Three plume areas are present including the eastern, central, and western plumes and they are of generally the same areal extent and shape. In some cases, the plume areas have decreased in apparent size from the historically impacted area. This is caused either by a lack of data in certain locations or by an actual decrease in contaminant concentrations. In the four depth ranges examined, the contaminant levels are very similar during this time period to the historically impacted groundwater areas.

The plume contours for the eastern area plume are essentially the same when comparing the historically impacted area and the data collected from 1998 to 2000 over the two shallow depths (Figures 4 and 8, Figures 5 and 9). The differences at the deeper depths (Figures 6 and 10, Figures 7 and 11) are attributable to a lack of sampling points over the time period of 1998 to 2000. The data collected during 1998 to 2000 is consistent with the previous data in that PCE is the primary contaminant of concern both on-site and off-site. At off-site locations, significant concentrations of breakdown products were also found from 1998 to 2000. As noted in the historical data, the apparent source areas for this contamination are the Class 2 sites in the vicinity of the Frost Street sites.

When comparing the available data for the shallow depth (0-64 ft bgs) for the central plume during the period 1998 to the present (Figure 8) against the historical data (Figure 4), only minor differences in the

plume configurations are noted. It is believed the differences are attributable to the limited number of sampling points available from 1998 to the present for on-site locations within the industrial area.

For the depth range between 65-99 ft bgs significant differences are noted between the historical data (Figure 5) and the current data (Figure 9). A trend toward lower total VOC concentrations in the primary source area is apparent. This may be due to the removal of contamination sources at the Arkwin Industries site (#1-30-043D) and the Tishcon site (#1-30-043E).

For the two deeper depths of the central plume, the primary differences in the present plume configuration vs the historical plume configuration appear to be in the lower (less than 1000 ppb) concentration fringe areas of the plume. For example, the historical data indicate that the maximum extent of the 100-124 ft plume area should extend 300 ft downgradient of Washington Avenue. In this case, it is not known whether this indicates a decrease in concentration with time.

Comparing the various plume configurations with depth for the western plume is difficult since little data were historically collected downgradient of the source areas for this plume. This RI focused on the potential off-site impacts from the western plume and the data indicated that this plume does not appear to extend to the deeper depths at high concentrations (greater than 1,000 ppb). Hydropunch data collected in February 2000 at GWHP-03 located on Fieldstone Street indicate that the highest concentration area of this plume extends from 78-100 ft bgs with total VOC concentrations ranging from 123 ppb to 315 ppb. At the deeper depths the concentrations appear to be decreasing with the exception of 138-140 ft bgs (total VOCs 134 ppb).

Please refer to Table 2 for a summary of the historical groundwater data.

5.1.3.3: Early Warning Monitoring Wells

In response to the public's concerns regarding the impact of the groundwater plumes on the Bowling Green water supply wells during the summer of 1997, the NYSDEC installed four early warning monitoring wells between Old Country Road and the Bowling Green water supply wells. These wells are in two pairs, each pair consists of a shallow well (150-165 ft) and a deep well (500 ft). The locations were chosen to intercept known contaminant plumes from the NCIA sites that are migrating in the direction of the Bowling Green water supply wells, which extract water at depths in excess of 500 ft. Sampling results indicate the presence of VOCs in the deep wells. NYSDEC is monitoring these wells on a quarterly basis. Total VOCs in the shallow wells have ranged from 76 ppb to 1,401 ppb while total VOCs in the deep wells have ranged from non-detect to 18 ppb (See Table 3).

5.1.3.4 Off-site Groundwater Monitoring Wells: 2001-2002

Eight (8) groundwater monitoring wells (one well quadruplet and two well couplets were installed in October 2001, and one 300 ft deep monitoring well was installed in July 2002. These wells have been sampled concurrently with the early warning wells since their installation. See Figure 3 for the well locations, and Table 4 for the sampling results. The nine new wells show high concentrations of VOC contamination at depths from the groundwater table to 200 ft bgs in the area immediately to the southwest of the Bowling Green production wells with less contamination west of Washington Ave. These results are consistent with previous data as described above, and show the continued presence of groundwater

contamination at depths of up to over 200 ft bgs in the area immediately southwest of the Bowling Green public water supply wells. This area may act as a reservoir for VOC contamination which eventually reached the Bowling Green water supply wells.

5.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS.

The potential for contaminated groundwater to affect the public drinking water supply wells is the primary health concern from the NCIA sites. The Bowling Green Water District has water supply wells located downgradient of the NCIA.

VOC contamination from the NCIA sites has been impacting the Bowling Green Water District wells since 1992. Table 5 provides a summary of the major contaminants and total VOCs detected at the Bowling Green water supply wells. A supplemental water treatment system was constructed in 1996 using State Superfund (SSF) money to ensure the protection of the public water supply. The supplemental water treatment system uses an air stripper to remove the contaminants, followed by carbon polishing, when necessary, to achieve drinking water standards. All Bowling Green Water District customers are provided with drinking water which is routinely monitored to ensure continued safety.

Removal of sources at several sites within the NCIA will prevent further release of contamination into the groundwater. NYSDEC believes that once all individual site remedies discussed above are implemented, all the sources of groundwater contamination will be eliminated and further migration of the contaminant plumes will be controlled.

5.3: Summary of Human Exposure Pathways

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the human exposure pathways can be found in Section 8.3.1 of the RI report.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

Pathways which are known to or may exist include:

- Ingestion of contaminated groundwater.

Since an active treatment system is in place that prevents the completion of this exposure pathway, no known completed exposure pathways exist.

The contaminated groundwater at the NCIA sites and at locations downgradient of these sites presents a potential route of exposure to humans. The area is served by public water, however, the underlying aquifer is the source of the water supply for the Bowling Green Water District customers. A supplemental treatment system, air stripping followed by carbon polishing, was constructed in 1996 to mitigate the impact of the groundwater contamination on the Bowling Green water supply wells. Bowling Green water supply wells are routinely monitored for VOCs and other contaminants. As of to date, no site specific contaminants exceeding groundwater or drinking water standards were detected in water distributed to the public. Early warning monitoring wells have been installed south of Old Country Road, upgradient of the water supply wells as a precautionary measure. Therefore, use of the groundwater in the area is not currently considered to be an exposure pathway of concern.

5.4: Summary of Environmental Impacts

This section summarizes the existing and potential future environmental impacts presented by the NCIA sites. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

Due to the density of commercial and industrial buildings in the NCIA, there are no significant sources of surface water in close proximity to the sites. Virtually every open space in the industrial area has been covered by asphalt, concrete or buildings. Since the industrial area is highly developed, no wildlife habitat exists in or near the sites. The nearest surface water sources are several small ponds in and around Eisenhower Memorial Park, approximately two miles southwest of the NCIA across Old Country Road.

Site-related contamination has entered the groundwater. The Magothy aquifer is a sole source aquifer, providing virtually all the groundwater used for private, public and industrial groundwater on Long Island. The on-going contamination of this aquifer from the NCIA sites and other sources has resulted in contravention of groundwater standards, rendering much of the groundwater unusable without treatment. The contaminated groundwater at the sites, as well as in the entire NCIA, presents a potential route of exposure to the environment. There are no known exposure pathways of concern between the contaminated groundwater and the environment. The potential for plants or animal species being exposed to site-related contaminants is highly unlikely.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

The NYSDEC has been using a three-prong strategy in remediating the Class 2 sites in the NCIA. The first action identifies source areas of contamination at each site which have been remediated; the second action investigates groundwater contamination at and beneath each site and takes appropriate remedial measures; and the third action consists of a detailed Remedial Investigation(RI) of groundwater contamination that is migrating from all Class 2 sites in the NCIA. The RI and FS reports from this investigation are now completed, and form the primary basis for this ROD.

The remediation goals selected for Off-site Groundwater south of the NCIA are:

- Elimination of ingestion of groundwater affected by the sites in the NCIA that does not attain NYSDEC Class GA Ambient Water Quality and New York State drinking water standards as outlined in 10 NYCRR Part 5, Subpart 5-1.

- Elimination of, to the extent practicable, off-site migration of groundwater that does not attain NYSDEC Class GA Ambient Water Quality Standards.

SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The selected remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. Potential remedial alternatives for the New Cassel Industrial Area Off-site Groundwater were identified, screened and evaluated in the FS report which is available at the document repositories identified in Section 1.

A summary of the remedial alternatives that were considered for the NCIA sites is discussed below. The present worth represents the amount of money invested in the current year at 5% interest that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved.

7.1: Description of Remedial Alternatives

The following potential remedies were considered to address the contaminated groundwater at the NCIA sites.

7.1.0: Elements of Remediation that are Common to All Remedial Alternatives

All remedial alternatives discussed below rely upon the implementation of the following:

(i) active source removal and/or groundwater remediation that is in place or planned at the following source sites within the NCIA:

1. At the IMC Magnetics site (1-30-043A), a Soil Vapor Extraction (SVE) treatment system has been remediating the soil contamination since October 1997. An on-site groundwater remediation system was also constructed in December 2001, and one round of treatment was completed in January 2002.

2. At the Atlas Graphics site (1-30-043B), an AS/SVE treatment system was constructed in October 2000 and has been treating the contaminated soil and groundwater at and beneath the site.

3. At the Arkwin Industries site (1-30-043D), contaminated soil was removed from an on-site drywell in June 1997, and an on-site groundwater remediation system was construct during the summer of 2002, and has been in operation since December 2002.

4. Contaminated soil and sediments were removed from the out-of-service cesspool, outdoor floor drain, and the sealed storm drain at the Tishcon Corporation Site at Brooklyn and New York Avenues (1-30-043E). Construction of an Air Sparging/Soil Vapor Extraction (AS/SVE) treatment system was completed in December 1999. Since January 2000, the treatment system has been remediating the remaining soil and groundwater contamination at and beneath the site.

5. At the Utility Manufacturing/Wonder King site (1-30-043H), an on-site groundwater remediation system was constructed in October 2001 and has been treating the groundwater since November 2001.

6. Excavation and SVE have been selected to remove and treat the contaminated soil at and beneath the Former Autoline Automotive Corp. site (1-30-043I).

7. SVE has been selected to treat the contaminated soil at and beneath the 89 Frost Street site (1-30-043L).

8. At the 299 Main Street site (1-30-043S), an IRM requiring the removal of contaminated soil and AS/SVE to address contaminated soil and groundwater on-site is planned for the Summer of 2003.

9. At the Former Applied Fluidics site (1-30-043M), contaminated soil was excavated and removed from the site in the spring of 1998.

10. At the 36 Sylvester Street Site (1-30-043U), an IRM was completed on May 9, 2002 to remove contaminated sediment from an underground dry well.

11. In 1996, a supplemental treatment system consisting of air stripping followed by carbon polishing, was constructed to mitigate the impact of the groundwater contamination leaving the NCIA sites on the Bowling Green Water District supply wells.

(ii) institutional controls in the form of existing use restrictions preventing the use of groundwater as a potable or process water without necessary water quality treatment as determined by the NCDH.

7.1.1: **Alternative 1: No Further Action**

Present Worth:	*$1,500,000*
Capital Cost:	*$ 0*
Annual O&M:	*$ 83,000*
Time to Implement:	*30 years*

Alternative 1 is the no further action alterative. As discussed above, active source removal and groundwater remediation is completed or in-place or planned at 14 source sites within the NCIA. Alternative 1 includes institutional controls in the form of existing development and groundwater use restrictions. These controls would prohibit the use of groundwater for potable or industrial use. Groundwater use restrictions would be implemented to prevent development of the underlying groundwater as a potable or a process water source without necessary water quality treatment as determined by NCDH.

The cost estimate developed for this no further action alternative assumes operation and maintenance, including replacement of equipment as needed, of the supplemental treatment system which is currently in-place at the Bowling Green Water District.

The No Further Action alternative recognizes remediation of the site conducted under previously completed IRMs and remedial actions (see section 7.1.0).

7.1.2: **Alternative 2: Long Term Monitoring**

Present Worth:	*$2,326,000*
Capital Cost:	*$ 230,000*
Annual O&M:	*$ 225,000*
Time to Implement:	*30 years*

As described above, active contaminant source removal and groundwater remediation is completed or in-place or planned at 14 source sites within the NCIA. Alternative 2 would include all elements as described in Section 7.1.0. Under this alternative, groundwater quality would be assessed by a long-term monitoring program. Bowling Green water supply wells are screened at depths of 540-550 ft bgs. The purpose of the long-term groundwater monitoring program is to monitor any migration of the off-site contaminant plumes and their impact on the public health and the environment. Four existing early warning monitoring wells, that are located downgradient from Old Country Road and upgradient from the Bowling Green water supply wells, would be monitored. The early warning wells are screened at 142, 164, 514 and 516 ft bgs. Nine additional groundwater monitoring wells (one quadruplet, two couplets and one singlet, screened at depths from 90-300 ft bgs) were installed in 2001 and 2002, in the area to the west of the Bowling Green production wells (see Figure 3 for the locations of the monitoring wells). Nine additional wells would be installed (screened from 90-200 ft bgs) for the monitoring program. The monitoring program (developed here for cost estimating purposes) would include a total of 24 monitoring wells (13 existing and 9 new wells ranging in depth from 90-516 feet bgs) at locations south of the NCIA. The locations of the new monitoring wells would be within and downgradient of the existing off-site plumes.

The cost estimate is based on the assumption that the 24 monitoring wells would be sampled quarterly during the first two years, semi-annually for the next three years and every fifth quarter for years 6-20. These assumptions were used for cost estimation purposes, however, the actual monitoring schedule would

be determined during the design process. The continued need for monitoring would be re-evaluated at any time during the project time frames.

The capital cost ($230,000) for this alternative includes the installation of nine new groundwater monitoring wells. The present worth cost estimate ($2,326,000) for this long-term groundwater monitoring program assumes replacement of three of the monitoring wells being sampled every five years during the estimated 30 years of monitoring. The replacement cost is necessary because a monitoring well could become plugged, the casing could collapse, or the well could be damaged.

The cost estimate developed for this no further action alternative assumes operation and maintenance, including replacement of equipment as needed, of the supplemental treatment system which is currently in-place at the Bowling Green Water District.

7.1.3: **Alternative 3: Monitored Natural Attenuation, Assessment and Contingent Remediation**

Present Worth:	*$2,326,000*
Capital Cost:	*$ 230,000*
Annual O&M:	*$ 225,000*
Time to Implement:	*30 years*

Alternative 3, Monitored Natural Attenuation (MNA), Assessment and Contingent Remediation, would combine continued active contaminant source removal and groundwater remediation with long-term monitoring of the natural attenuation processes, and a contingency for active remediation should the long-term monitoring data show this to be necessary.

Alternative 3 would also include all elements as described in Section 7.1.0.

7.1.3.1: **Monitored Natural Attenuation (MNA)**

Natural attenuation processes may include a variety of physical, chemical, or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, and/or concentration of contaminants in the groundwater.

The natural attenuation processes may include biological processes such as aerobic or anaerobic biodegradation; physical phenomena such as dispersion, dilution, sorption, and volatilization; and chemical reactions such as hydrolysis and dehydrohalogenation. Natural attenuation processes typically occur at all sites, but to varying degrees of effectiveness depending on the types and concentrations of contaminants present and the physical, chemical, and biological characteristics of the soil and groundwater.

Natural attenuation processes may reduce the potential risk posed by site contaminants in three ways:

1. Transformation of contaminants to less toxic forms through biodegradation or chemical transformations;

2. Reduction of contaminant concentrations through dispersion, dilution and volatilization whereby potential exposure levels may be reduced; and,

3. Reduction of contaminant mobility and bioavailability through sorption onto the soil.

7.1.3.2: **Assessment**

Although MNA would not include an active treatment of the contaminated off-site groundwater, it would include the monitoring and evaluation of natural attenuation processes in the subsurface that can diminish contaminant concentrations in groundwater.

The long-term monitoring program would include a total of 24 monitoring wells, 13 existing and 9 new wells, at locations south of the NCIA. Please see Alternative 2 for the rationale for this long-term monitoring program.

For preparation of the cost estimate it is assumed that the 24 monitoring wells would be sampled quarterly during the first two years, semi-annually for the next three years and every fifth quarter for years 6-20. These assumptions were used for cost estimation purposes, however, the actual monitoring schedule would be determined during the design process. The continued need for monitoring would be re-evaluated at any time during the project time frames. The long-term MNA monitoring program would test for and track the following parameters: VOCs including potential VOC transformation compounds, total organic carbon (TOC), carbon dioxide, electron acceptors (such as dissolved oxygen, nitrate, sulfate, ferrous iron, methane), alkalinity, redox potential, chloride, pH, temperature, and conductivity.

Although a 30-yr time frame has been assumed for comparison purposes, a number of factors should be addressed in the detailed final design of the monitoring program to help define what is a reasonable time frame for long-term monitoring of natural attenuation to take place in the off-site groundwater plumes. For example, records of contaminant concentrations over time would be kept and periodically evaluated to monitor trends. Uncertainties regarding the mass of contaminants in the subsurface and predictive analyses (e.g., remediation time frame, i.e., travel time for contaminants to reach downgradient points of exposure appropriate for the area) would be assessed. In addition, factors relating to the affected drinking water resources and institutional controls would also be monitored. Data would be integrated into a model, which would be developed during the design, to more accurately assess natural attenuation on- and off-site. The final design would also better define the locations and number of wells to be included in the long-term MNA monitoring program.

7.1.3.3: **Contingent Remediation**

A technical assessment of acquired data would be conducted annually. If it is determined that additional remediation is necessary to protect human health and the environment, and in particular to protect the Bowling Green Water District supply wells, an appropriate remediation system would be designed and implemented.

After operating the off-site groundwater remediation system within the NCIA north of Old Country Road for one year, the following procedures and criteria would be used in determining if the off-site groundwater contamination downgradient of Old Country Road needs to be actively remediated:

- Bowling Green Water District supply wells would continue to be monitored twice a month;

- Four (4) early warning monitoring wells (EW 01B, EW 01C, EW 02B, and EW 02C) and nine(9) existing monitoring wells would continue to be monitored on a quarterly basis;

- Nine (9) new monitoring wells will be monitored on a quarterly basis;

- Monitoring results, with a focus on Bowling Green District supply wells and early warning monitoring wells, would be compared with results from the previous sampling events;

- If the monitoring results, especially from Bowling Green District supply wells and early warning monitoring wells, indicate a significant upward trend, all 24 monitoring wells would be re-sampled within 30 days and analyzed for MNA parameters;

- If the re-sampling results indicate a significant increase, all 24 monitoring wells would be re-sampled again within 30 days and analyzed for MNA parameters;

- The NYSDEC, in consultation with the NYSDOH, would evaluate all monitoring data and determine if any active groundwater remediation downgradient of Old Country Road, is required;

- If it is determined that active off-site groundwater remediation is required, it would be implemented in accordance with the following procedure;

- The NYSDEC, in consultation with the NYSDOH, would determine which of the monitoring wells would be converted to treatment wells;

- An active groundwater remediation system for monitoring wells preferred by the NYSDEC and NYSDOH would be proposed to the public in accordance with the 6 NYCRR Part 375 citizen participation requirements; and

- After giving consideration to all public comments, an off-site groundwater remediation system would be selected, designed, constructed and operated;

- If it is determined that active remediation is not required, subsequent sampling of all monitoring wells would be conducted on a quarterly basis until the upward trend is reversed. Once this occurs, long term monitoring would resume.

The capital cost ($230,000) for this alternative includes the installation of nine new groundwater monitoring wells. The calculated present worth cost estimate ($2,326,000) was arrived using the same assumptions as Alternative 2. The cost estimate does not include the cost associated with the implementation of the contingent remedy.

7.1.4: Alternative 4A: Remediation of Upper Portion of Aquifer (to 125 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment

Present Worth:	*$2,926,000*
Capital Cost:	*$ 964,000*
Annual O&M years 1-7:	*$ 83,000*
Annual O&M years 8-30:	*$ 25,000*
Time to Implement:	*Seven years*

Alternative 4A includes remediating the upper portion (i.e., at depths from the water table to 125 ft bgs) of the off-site groundwater contaminant plumes by implementing in-well vapor stripping, an in-situ remediation technology, and localized off-gas treatment. Alternative 4A would also include all elements as described in Section 7.1.0.

This alternative would further include long-term monitoring of the groundwater plumes, as discussed in Section 7.1.4.2.

7.1.4.1: In-Well Vapor Stripping

In-well vapor stripping (also known as in-situ vacuum, vapor, or air stripping) is a demonstrated in-situ physical/chemical treatment alternative for remediating contaminated groundwater, as per EPA's Superfund Innovative Technology Evaluation (SITE) program. This in-well air stripping technology is most applicable to VOCs (such as PCE and TCE). The technology involves the creation of groundwater circulation patterns, or "cells", in the subsurface surrounding specially designed wells and simultaneous aeration within the wells to volatilize VOCs from the circulating groundwater. Contaminated vapors are typically extracted from the wells and treated at the surface, however, unlike conventional groundwater remediation systems, in-well vapor stripping does not require groundwater to be pumped to be treated at the surface. In-well vapor stripping has been used in unconfined and confined aquifers and applied to geologic materials with a range of characteristics. A schematic of the in-well vapor stripping process is shown in Figure 12.

For the NCIA off-site groundwater, Alternative 4A includes the treatment of the contaminated groundwater to a depth of approximately 125 ft bgs via in-well vapor stripping well screened to a maximum depth of 125 ft bgs. This alternative addresses "hot-spot" areas within the off-site contaminant plumes and assumes that natural attenuation would remediate a portion of the off-site groundwater over time. Alternative 4A would include the installation of four (4) circulation/stripping wells (8-in. diameter) to address the off-site groundwater contamination, based on contaminant depths and radii of influence expected to be achieved at each well. Figure 13 shows approximate locations of the stripping wells for Alternative 4A.

As depicted, two different stripping well configurations would be used in Alternative 4A. A total of one 80 ft bgs and three 125 ft bgs wells would be installed within the off-site plumes, at areas of high VOC concentrations. Each well would be mounted flush with the existing ground surface and installed to varying depths, as indicated above. The vertical distances, between the screened intervals in the 80 ft wells and 125 ft wells, are estimated at 20 ft and 55 ft, respectively. Figure 13 also displays the average total VOC concentration contours for groundwater depths of 65-125 ft bgs (from years 1996 – 2000) and the proposed treatment wells, along with approximate radii of influence.

Prior to final design of Alternative 4A, pilot-scale treatability studies should be performed to determine the off-site groundwater remediation time frames and system specifications of the in-well vapor stripping systems. Pilot scale tests would also determine optimal system configurations and design parameters, such as number/location of wells, operating pressures, and flow rates to remove contaminants from the groundwater. The results of a pilot study would also be used to evaluate the airflow distribution and vapor phase treatment approaches. In addition, potential impacts from natural iron and pH in the subsurface could be evaluated. The results of the pilot tests would also be used to better estimate the power requirements of the systems. For this alternative, it was assumed that a total of three in-well vapor stripping pilot tests (i.e., one per off-site contaminant plume) would be conducted.

For cost estimating purposes, it was assumed that the in-well vapor stripping system would run for seven years under Alternative 4A. The actual time frame may differ based on the pilot tests.

7.1.4.2: **Vapor Phase Treatment**

For Alternative 4A, vapors from the in-well vapor stripping processes would be collected from each stripping well and transferred with a vacuum extraction blower to a Granular Activated Carbon (GAC) treatment system within each local vault. The vapors containing VOCs are passed through the GAC medium, adsorbed, and then vented to the atmosphere. The GAC medium would be periodically replaced as its adsorption potential is reached. GAC was selected as the optimal vapor phase treatment option for Alternative 4A based on anticipated flow rates and contaminant concentrations.

7.1.4.3: **System Performance Monitoring**

To confirm that the in-well vapor stripping system described above for Alternative 4A and natural attenuation are achieving remedial objectives, periodic groundwater sampling would be conducted. For cost estimating purposes, it was assumed that groundwater samples would be collected from 13 existing and 9 new monitoring wells in the off-site area and analyzed for VOCs. In addition, periodic monitoring well sampling, as outlined under Alternative 2, would be conducted to ensure that the groundwater treatment system and natural attenuation are remediating the off-site groundwater contaminant plumes. The results of these analyses would be used to determine whether remedial action objectives are being satisfied, and whether changes in system design, configuration, and operation are required. In Alternative 4A, groundwater monitoring is assumed to be conducted quarterly for the first two years after remediation system startup, semi-annually for the next three years and every fifth quarter for years 6-20 (i.e., to cover life of remedial system and thirteen additional years to evaluate natural attenuation). These assumptions were used for cost estimation purposes, however, the actual monitoring schedule would be determined during the design process. The continued need for monitoring would be re-evaluated at any time during the project time frames.

The capital cost ($964,000) for this alternative includes the installation of 9 new groundwater monitoring wells. The calculated present worth cost estimate ($2,926,000) was arrived using the same assumptions as Alternative 2.

7.1.5: Alternative 4B: Remediation of Upper Portion of Aquifer (to 125 ft bgs) with Groundwater Extraction/Centralized Air Stripping and Vapor Treatment/Effluent Re-Injection

Present Worth:	*$5,626,000*
Capital Cost:	*$2,954,000*
Annual O&M years 1-2:	*$ 114,000*
Annual O&M years 3-9:	*$ 64,000*
Annual O&M years 9-20:	*$ 14,000*
Time to Implement:	*Nine Years*

Alternative 4B includes the treatment of the contaminated groundwater to a depth of 125 ft bgs via extraction wells. Alternative 4B addresses "hot-spot" areas within the off-site contaminant plumes and assumes that natural attenuation would remediate a portion of the off-site groundwater over time. Alternative 4B would also include all elements as described in Section 7.1.0.

Alternative 4B has been developed to evaluate the feasibility of using a groundwater extraction system to capture the off-site groundwater contamination in the upper portion (i.e., at depths from the water table to 125 ft bgs) of the aquifer and treat it at the surface (i.e., ex-situ) at one centralized treatment plant location. Treatment of the groundwater via air stripping would typically generate an air emission, which would also require treatment to remove vapor phase contaminants. Active source removal and groundwater remediation is completed or in-place or planned at 14 source sites within the NCIA, as previously described.

The objective of groundwater extraction is to draw contaminated groundwater into the capture zone of one or more extraction wells. The flow rate of the extraction well(s) is increased until the capture zone(s) is believed to exceed the contaminated area of concern. The extraction well should ideally be located sufficiently downgradient of the highest contaminated area in the plume so that the majority of the contaminated groundwater would naturally flow into the capture zone. Alternative 4B includes extraction well patterns designed to reduce the VOC concentrations in the off-site groundwater.

7.1.5.1: Extraction Wells

Alternative 4B would include the installation of four extraction wells within the contaminant plume. Three 110-ft 6-in diameter steel construction extraction wells with pumping rates of 20 gpm and screened intervals of 90-110 ft bgs and one 80-ft. 6-in diameter steel construction extraction well with a pumping rate of 40 gpm and a screened interval of 60-80 ft bgs would be installed. All extraction wells would be mounted flush with the existing ground surface. This should provide for a maximum treatment depth of about 125 ft bgs. Figure 14 shows a cross-section of a typical extraction well. Figure 15 shows approximate locations of the extraction wells for Alternative 4B. On Figure 15, average total VOC plumes, derived from plume maps for groundwater depths between 65-125 ft bgs, are also shown. The wells were located based on the natural direction of groundwater flow and hydraulic conductivity. The 80-ft extraction well was situated to assist in remediating the elevated VOC levels in the western plume.

An estimate of the remediation time was calculated based on assumptions in aquifer characteristics, well placement, flow rates, and contaminant properties. An estimated time frame for active remediation of 9 years was used for Alternative 4B. Because of the uncertainty in the hydrological parameters (i.e., hydraulic conductivity), the results of this estimation should be confirmed in the design phase, after an aquifer pump

test and a pilot study have been completed. In addition, the pilot study would also help identify potential impacts of the extraction wells on the Bowling Green water supply wells or other remediation systems (i.e., within the NCIA).

7.1.5.2: Groundwater Treatment and Discharge

In order to satisfy SCGs, specifically groundwater treatment effluent criteria, the extracted groundwater must be treated to remove groundwater contaminants.

Treatment for Alternative 4B would occur in a central location within the NCIA off-site area, as described above. The exact location and configuration of the central treatment building would be confirmed during the design phase. The central treatment building (approximately 3200 sf) would likely be located to the east of the Bowling Green water supply wells (same location as central treatment building described for other centralized treatment scenarios). The structure size and location shall be confirmed in the final design.

7.1.5.3: System Performance Monitoring

For the purposes of this PRAP, it is assumed that the extraction and treatment system for Alternative 4B would operate for nine years. Results of pilot tests should be used to better estimate the Alternative 4B time frame.

In addition, periodic monitoring well sampling, as outlined under Alternative 4A, would be conducted to ensure that the groundwater treatment system and natural attenuation are remediating the off-site groundwater contaminant plumes. The results of these analyses would be used to determine whether remedial action objectives are being satisfied, and whether changes in system design, configuration, and operation are required. The continued need for monitoring would be re-evaluated at any time during the project time frames.

The capital cost ($2,454,000) for this alternative includes the installation of 9 new groundwater monitoring wells. The calculated present worth cost estimate ($5,626,000) was arrived at using the same assumptions as Alternative 2.

7.1.6: Alternative 5A: Remediation of Upper and Deep Portions of Aquifer (to 200 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment

Present Worth:	*$3,726,000*
Capital Cost:	*$1,290,000*
Annual O&M year 1:	*$ 219,000*
Annual O&M years 2-9:	*$ 100,000*
Annual O&M years 9-20:	*$ 14,000*
Time to Implement:	*Nine Years*

Alternative 5A is very similar to Alternative 4A presented above but utilizes in-well vapor stripping to address contaminated groundwater in both the upper and deep portions of the aquifer. Alternative 5A would also include all elements as described in Section 7.1.0. It addresses "hot-spot" areas within the off-site contaminant plumes and assumes that natural attenuation will remediate a portion of the off-site groundwater

over time. Figure 16 shows approximate locations of the stripping wells for Alternative 5A. Figure 16 shows total VOC contaminant plumes (averaged from depths of 65 – 200 ft bgs) from years 1996-2000. Figure 16 displays treatment well radii of influence and portions of the off-site plumes addressed in Alternative 5A.

Alternative 5A includes the installation of three 140-ft and three 200-ft treatment wells to provide groundwater treatment to about 200 ft bgs.

Vapor Phase Treatment and System Performance Monitoring required for Alternative 4A would also be required for Alternative 5A.

For cost estimating purposes, it is assumed that the in-well vapor stripping system would operate for nine years under Alternative 5A.

Pilot studies and field measurements in the design phase of work would more accurately determine the construction details, system operation period, and placement of each of the in-well vapor stripping wells in Alternative 5A, along with specific groundwater circulation/treatment patterns.

The capital cost ($1,290,000) for this alternative includes the installation of 9 new groundwater monitoring wells. The calculated present worth cost estimate ($3,726,000) was arrived at using the same assumptions as Alternative 2.

7.1.7: Alternative 5B: Remediation of Upper and Deep Portions of Aquifer (to 200 ft bgs) with Groundwater Extraction/Centralized Air Stripping and Vapor Treatment/Effluent Re-Injection

Present Worth:	*$5,926,000*
Capital Cost:	*$3,126,000*
Annual O&M years 1–2:	*$ 260,000*
Annual O&M years 3-12:	*$ 144,000*
Annual O&M years 13-20:	*$ 14,000*
Time to Implement:	*Twelve Years*

Alternative 5B is similar to Alternative 4B presented above but includes treatment of the contaminated groundwater in both the upper and deep portions of the aquifer. It addresses "hot-spot" areas within the off-site contaminant plumes and assumes that natural attenuation will remediate a portion of the off-site groundwater over time. Alternative 5B would also include all elements as described in Section 7.1.0.

Figure 17 shows approximate locations of the extraction wells and the centralized treatment structure for Alternative 5B. On Figure 17, average total VOC plumes were derived from contaminant plume maps for groundwater at depths of 65-200 ft bgs. As shown, four extraction wells (one 80-ft well and three 150-ft wells) would be included under Alternative 5B, to provide groundwater treatment to a maximum depth of 200 ft bgs. Details and construction of the extraction wells used in Alternative 5B are as described in Alternative 4B. As in Alternative 4B, the bottom 20 ft of each extraction well would be screened. It is assumed under Alternative 5B that the 150-ft extraction wells would remove groundwater contamination from depths as great as 200 ft bgs. This assumption, and final extraction well details, should be confirmed during pilot studies and in the design phase of work. The central treatment building (approximately 3200

sf) would likely be located to the east of the Bowling Green water supply wells (same location as central treatment building described for other centralized treatment scenarios). The structure size and location shall be confirmed in the final design.

For cost estimating purposes in this PRAP, an estimated time frame for active remediation of 12 years was used for Alternative 5B. This 12-year time frame accounts for the fact that extraction wells would be placed only in "hot spot" areas.

7.1.7.1: System Performance Monitoring

The long-term monitoring program included in this alternative is intended to assess the effectiveness of groundwater extraction and treatment and natural attenuation on the contaminant levels in the aquifer over time. The monitoring program for Alternative 5B would be identical to that described for Alternative 4A above.

The capital cost ($2,926,000) for this alternative includes the installation of 9 new groundwater monitoring wells. The calculated present worth cost estimate ($5,926,000) was arrived at using the same assumptions as Alternative 2.

7.1.8: Alternative 6A: Full Plume Remediation of Upper Portion of Aquifer (to 125 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment

Present Worth:	*$3,826,000*
Capital Cost:	*$1,560,000*
Annual O&M years 1-2:	*$ 197,000*
Annual O&M years 3-5:	*$ 125,000*
Annual O&M years 6-20:	*$ 14,000*
Time to Implement:	*5 years*

Alternative 6A is similar to Alternative 4A presented above (i.e., addresses contamination in the upper portion of the aquifer with in-well vapor stripping) but includes the full capture and treatment of contaminated off-site groundwater to the designated depths to achieve Class GA groundwater criteria. Alternative 6A would also include all elements as described in Section 7.1.0.

Figure 18 shows approximate locations of the stripping wells for Alternative 6A. In addition to 80-ft and 125-ft treatment wells that provide groundwater treatment to about 125 ft bgs, containment stripper wells (installed to 150 ft bgs) would also be employed under this alternative along the southern extent of the contamination (i.e., curtain wall) to achieve remedial objectives. Figure 18 also shows average total VOC contaminant plumes (years 1996-2000) for depths of 65-125 ft bgs and displays treatment well locations and radii of influence and portions of the off-site plumes addressed in Alternative 6A.

Alternative 6A includes the installation of one 80-ft stripper well, three 125-ft stripper wells, and five 150-ft containment wells. Pilot studies and field measurements in the design phase of work would more accurately determine the construction details and placement of each of the in-well vapor stripping wells in Alternative 6A, along with the specific groundwater circulation/treatment patterns.

Prior to the final design of Alternative 6A, pilot-scale treatability studies would be performed to determine the off-site groundwater remediation time frame and specifications of the in-well vapor stripping system. Any potential effects from in-well vapor stripping on the Bowling Green water supply wells or other remediation systems (i.e., within the NCIA) would also be evaluated. For this PRAP, it was assumed that a total of three in-well vapor stripping pilot tests (i.e., one per off-site contaminant plume) would be conducted under Alternative 6A. It was also assumed that a full-time in-well vapor stripping system operator would be required. For the Alternative 6A cost estimate, an operation period of 5 years was assumed.

7.1.8.1: **System Performance Monitoring**

To confirm that the in-well vapor stripping system described above for Alternative 6A is achieving remedial objectives, periodic groundwater sampling would be conducted, in the same fashion as described for Alternative 4A above. The results of these analyses will be used to determine whether remedial action objectives are being satisfied, and whether changes in system design, configuration, and operation are required.

The capital cost ($1,560,000) for this alternative includes the installation of 9 new groundwater monitoring wells. The calculated present worth cost estimate ($3,826,000) was arrived at using the same assumptions as Alternative 2.

7.1.9: **Alternative 6B: Full Plume Remediation of Upper Portion of Aquifer (to 125 ft bgs) with Groundwater Extraction/Centralized Air Stripping and Vapor Treatment/Effluent Re-Injection**

Present Worth:	*$7,726,000*
Capital Cost:	*$4,474,000*
Annual O&M years 1-2:	*$ 475,000*
Annual O&M years 3-7:	*$ 249,000*
Annual O&M years 7-20:	*$ 14,000*
Time to Implement:	*Seven Years*

Alternative 6B is similar to Alternative 4B presented above (i.e., addresses contamination in the upper portion of the aquifer with a pump and treat system) but includes the full capture and treatment of contaminated off-site groundwater to the designated depths to achieve Class GA groundwater criteria. Alternative 6B would also include all elements as described in Section 7.1.0.

Figure 19 shows approximate locations of the extraction wells and the centralized treatment structure for Alternative 6B. On Figure 19, average total VOC plumes were derived from contaminant plume maps for groundwater at depths of 65-125 ft bgs. As shown, twelve extraction wells (one 80-ft well and eleven 110-ft wells) would be included under Alternative 6B to provide groundwater treatment to about 125 ft bgs. Details and construction of the extraction wells used in Alternative 6B are as described in the other extraction and treatment alternatives. The bottom 20 ft of each extraction well would be screened. The central treatment building (approximately 4000 sf) would likely be located to the east of the Bowling Green water supply wells (same location as central treatment building described for other extraction and treatment alternatives). The structure size and location shall be confirmed in the final design.

For cost estimating purposes in this FS, an operation time of 7 years is assumed for Alternative 6B. This estimated remediation time should be confirmed after an aquifer pump test establishes better values for the hydrological parameters.

7.1.9.1: **System Performance Monitoring**

The long-term monitoring program included in this alternative is intended to assess the effectiveness of groundwater extraction and treatment on the contaminant levels in the aquifer over time. Monitoring would consist of system performance monitoring and effluent quality monitoring. For Alternative 6B, during the first three months that the treatment plant is in operation, VOC samples would be collected from the equalization tank and the effluent pipe once per week to evaluate the efficiency and effectiveness of the treatment plant. The effluent sample analysis would be used to demonstrate that all discharge requirements are being met. For the remainder of the project lives of the alternatives, VOC sampling at each of the influent pipes and the single effluent pipe at the treatment plant would be collected once per month. Samples would be analyzed for conventional parameters (e.g., pH, solids, and alkalinity) as well as VOC content.

To confirm that the groundwater extraction/air stripping system described above for Alternative 6B is achieving the remedial objectives, groundwater sampling would be conducted in the same fashion as described for Alternative 4A. The results of these analyses would be used to determine whether remedial action objectives are being satisfied, and whether changes in system design, configuration, and operation are required.

The capital cost ($4,474,000) for this alternative includes the installation of 9 new groundwater monitoring wells. The calculated present worth cost estimate ($7,726,000) was arrived at using the same assumptions as Alternative 2.

7.1.10: **Alternative 7A: Full Plume Remediation of Upper and Deep Portions of Aquifer (to 200 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment**

Present Worth:	*$5,026,000*
Capital Cost:	*$2,234,000*
Annual O&M years 1-2:	*$ 183,000*
Annual O&M years 3-7:	*$ 133,000*
Annual O&M years 8-20:	*$ 14,000*
Time to Implement:	*Seven Years*

Alternative 7A is similar to Alternative 5A presented above (i.e., addresses contamination in the upper and deep portions of the aquifer with in-well vapor stripping) but includes the full capture and treatment of contaminated off-site groundwater to the designated depths to achieve Class GA groundwater criteria. Alternative 7A would also include all elements as described in Section 7.1.0.

Figure 20 shows approximate locations of the stripping wells for Alternative 7A. Treatment and containment wells (installed to 140 ft, 200 ft, and 225 ft bgs) would be employed under this alternative to achieve remedial objectives. Groundwater upgradient of the Bowling Green water supply wells would be treated to about 200 ft bgs. Figure 20 shows average total VOC contaminant plumes (years 1996-2000) for

depths of 65-200 ft bgs. Figure 20 displays treatment well locations and radii of influence and portions of the off-site plumes addressed in Alternative 7A.

Alternative 7A includes the installation of four 140-ft stripper wells, four 200-ft stripper wells, and five 225-ft containment wells. Pilot studies and field measurements in the design phase of work would more accurately determine the construction details and placement of each of the in-well vapor stripping wells in Alternative 7A, along with the specific groundwater circulation/treatment patterns expected to result.

Prior to the final design of Alternative 7A, pilot-scale treatability studies should be performed to determine the off-site groundwater remediation time frame and specifications of the in-well vapor stripping system. It was assumed that a total of three in-well vapor stripping pilot tests (i.e., one per off-site contaminant plume) would be conducted under Alternative 7A. It was also assumed that a full-time system operator would be needed. For the Alternative 7A cost estimate, a project life of 7 years was assumed.

7.1.10.1: **System Performance Monitoring**

To confirm that the in-well vapor stripping system described above for Alternative 7A is achieving remedial objectives, periodic groundwater sampling would be conducted as outlined in Alternative 4A. The results of these analyses would be used to determine whether remedial action objectives are being satisfied, and whether changes in system design, configuration, and operation are required. The continued need for monitoring would be re-evaluated at any time during the project time frames.

The capital cost ($2,234,000) for this alternative includes the installation of 9 new groundwater monitoring wells. The calculated present worth cost estimate ($5,026,000)was arrived at using the same assumptions as Alternative 2.

7.1.11: **Alternative 7B: Full Plume Remediation of Upper and Deep Portions of Aquifer (to 200 ft bgs) with Groundwater Extraction/Centralized Air Stripping and Vapor Treatment/Effluent Re-Injection**

Present Worth:	*$8,812,000*
Capital Cost:	*$4,877,000*
Annual O&M years 1-2:	*$ 400,000*
Annual O&M years 3-10:	*$ 320,000*
Annual O&M years 11-20:	*$ 14,000*
Time to Implement:	*Ten Years*

Alternative 7B is similar to Alternative 5B presented above (i.e., addresses contamination in the upper and deep portions of the aquifer with a pump and treat system) but includes the full capture and treatment of contaminated off-site groundwater to the designated depths to achieve Class GA groundwater criteria. Alternative 7B would also include all elements as described in Section 7.1.0.

Figure 21 shows approximate locations of the extraction wells and the centralized treatment structure for Alternative 7B. On Figure 21, average total VOC plumes were derived from contaminant plume maps for groundwater at depths of 65-200 ft bgs. As shown, thirteen extraction wells (one 80-ft well and twelve 150-ft wells) are included under Alternative 7B to provide groundwater treatment to about 200 ft bgs. Details and construction of the extraction wells used in Alternative 7B are as described in the other extraction and

treatment alternatives. The bottom 20 ft of each extraction well would be screened. It is assumed under Alternative 7B that the 150 ft extraction wells would remove groundwater contaminants from depths as great as 200 ft bgs. This assumption, and final extraction well details, should be confirmed during pilot studies and in the final design phase of work. The central treatment building (approximately 4000 sf) would likely be located to the east of the Bowling Green water supply wells (same location as central treatment building described for other pump and treat alternatives). The structure size and location shall be confirmed in the final design.

As for the other groundwater extraction/air stripping scenarios presented, aquifer pump tests and pilot studies (i.e., one per plume) in the design phase of work would more accurately determine the construction details and placement of each of the extraction wells and recharge wells in Alternative 7B.

The treatability/pilot studies would help to evaluate the ability of the treatment processes to meet discharge requirements near the treatment building. Pilot studies can also help determine re-injection schedules and potential impacts of re-injection on the Bowling Green water supply wells or other remediation systems (i.e., within the NCIA). If discharge limitations are not satisfied, polishing via carbon adsorption may be necessary. The treated effluent will be periodically monitored to ensure that discharge limits are met.

For cost estimating purposes in this PRAP, a project life of 10 years is assumed for Alternative 7B. Although overall flow rates and numbers of extraction wells are similar to the Alternative 6B scenario, a longer project life was assumed for Alternative 7B since greater quantities of contaminated groundwater are addressed. This estimated remediation time should be confirmed after an aquifer pump test establishes better values for the hydrological parameters.

7.1.11.1: **System Performance Monitoring**

The long-term monitoring program included in this alternative is intended to assess the effectiveness of groundwater extraction and treatment on the contaminant levels in the aquifer over time. Monitoring would consist of system performance monitoring and effluent quality monitoring. For Alternative 7B, during the first three months that the treatment plant is in operation, VOC samples would be collected from the equalization tank and the effluent pipe once per week to evaluate the efficiency and effectiveness of the treatment plant. The effluent sample analysis would be used to demonstrate that all discharge requirements are being met. For the remainder of the project lives of the alternatives, VOC sampling at each of the influent pipes and the single effluent pipe at the treatment plant would be collected once per month. Samples will be analyzed for conventional parameters (e.g., pH, solids, and alkalinity) as well as VOC content.

To confirm that the groundwater extraction/air stripping system described above for Alternative 7B is achieving the remedial objectives, groundwater sampling would be conducted in the same fashion as described for Alternative 4A. The results of these analyses would be used to determine whether remedial action objectives are being satisfied, and whether changes in system design, configuration, and operation are required. The continued need for monitoring would be re-evaluated at any time during the project time frames.

The capital cost ($4,877,000) for this alternative includes the installation of 9 new groundwater monitoring wells. The calculated present worth cost estimate ($8,812,000) was arrived at using same assumptions as Alternative 2.

7.1.12: Alternative 8: Full Plume Remediation of Upper and Deep Portions of the Aquifer (to 225 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment

Present Worth:	*$6,500,000*
Capital Cost:	*$3,500,000*
Annual O&M years 1-7:	*$ 200,000*
Annual O&M years 8-20:	*$ 15,000*
Time to Implement:	*Seven Years*

Alternative 8 is similar to Alternative 7A presented above (i.e., it addresses contamination in the upper and deep portions of the aquifer with in-well vapor stripping) but includes the full capture and treatment of contaminated off-site groundwater to greater designated depths to achieve Class GA groundwater standards. Alternative 8 would also include all elements as described in Section 7.1.0.

Figure 22 shows approximate locations of the stripping wells for Alternative 8. Treatment and containment wells (installed to 140 ft, 225 ft and 250 ft bgs) would be employed under this alternative to achieve remedial objectives. Figure 22 shows average total VOC contaminant plumes (years 1996-2000) for depths of 65-200 ft bgs. Figure 22 also displays treatment well locations and radii of influence and portions of the off-site plumes addressed in Alternative 8.

Under this alternative, the groundwater contaminant plume would be treated in-situ using a series of groundwater circulation wells (also referred to as in-well stripping systems) to capture and circulate groundwater within the aquifer. The figure shows approximate locations of the stripping wells. Stripping wells (installed to 140 ft, 225 ft, and 250 ft bgs) would be employed under this alternative to achieve remedial objectives. Groundwater upgradient of the Bowling Green water supply wells will be treated to about 225 ft bgs.

Alternative 8 includes the treatment of the contaminated off-site groundwater via eleven in-well vapor stripping wells. This includes the installation of three 140-ft stripper wells, four 225-ft stripper wells, and four 250-ft containment wells. Pilot studies and field measurements in the design phase of work would more accurately determine the construction details, radii of influence and optimum placement of each of the in-well vapor stripping wells, along with the specific groundwater circulation/treatment patterns expected to result. In-well vapor stripping treatment systems can be designed to recirculate treated water, thus avoiding a decrease in groundwater levels in the areas being treated.

The groundwater circulation well system creates in-situ vertical groundwater circulation cells by drawing groundwater from an aquifer formation through one screen section of a double-screened well and discharging it through the second screen section. While groundwater circulates in and out of the stripping cell, no groundwater is removed from the ground. The upward groundwater flow experienced within a cell is achieved via an air-lift effect using a blower. Bubbling air within a cell creates a hydrostatic head gradient along the well bore which drives aerated water out of the upper well screen while simultaneously drawing groundwater in through the lower screen. The density gradient between the well bore fluid (air and water mixture) with the formation water creates the driving force for groundwater circulation. The air would capture the VOC contamination. For illustrative purposes, a schematic diagram of the Density Driven Convection (DDC) type in-well stripping system is included in Figure 12.

The wellhead of each well would be connected to a vacuum blower, which would collect the air from the air-groundwater mixture by providing a negative pressure in the section of the well above the upper screen. One vacuum blower would be required for each of the three well systems. The blower would direct the air to a granulated activated carbon (GAC) filtration system, which would remove the VOCs from the air. The air would then be discharged into the atmosphere.

Prior to the final design, pilot-scale treatability studies should be performed to determine the off-site groundwater remediation time frame and specifications of the in-well vapor stripping system. It was assumed that a total of three in-well vapor stripping pilot tests (i.e., one per off-site contaminant plume) would be conducted. It was also assumed that a full-time system operator would be needed. A project life of seven years was assumed.

If, for engineering or economic reasons, in-situ treatment should prove to be less practical, ex-situ treatment (treatment at the surface, possibly at a centralized location) would be substituted without impairing the overall effectiveness of treatment system. The central treatment building (approximately 4000 sf) would likely be located to the east of the Bowling Green water supply wells (same location as central treatment building described for other pump and treat alternatives). The structure size and location would be confirmed in the final design.

7.1.12.1: **System Performance Monitoring**

To confirm that the in-well vapor stripping described above for Alternative 8 is achieving remedial objectives, periodic groundwater sampling would be conducted as outlined in Alternative 4A. The results of these analyses would be used to determine whether remedial action objectives are being satisfied, and whether changes in system design, configuration, and operation are required. The continued need for monitoring would be re-evaluated at any time during the project time frame.

The capital cost ($3,500,000) for this alternative includes the installation of 9 new groundwater monitoring wells. The calculated present worth cost estimate ($6,500,000) was arrived at using the same assumptions as Alternative 2.

7.2: Evaluation of Remedial Alternatives

The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375, which governs the remediation of inactive hazardous waste disposal sites in New York State. A detailed discussion of the evaluation criteria and comparative analysis follows.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

Institutional control measures included in all Alternatives (1, 2, 3, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B and 8) would protect human health by preventing human contact with the contaminants that would remain in the off-site groundwater. While the potential for human exposure to the contaminants in the groundwater would

remain, treatment of the groundwater (i.e., air stripping and GAC adsorption) by the Bowling Green Water District prior to distribution into the public water supply system would prevent exposure to groundwater contaminants. In Alternatives 2 and 3, the off-site contamination may continue to impact the surrounding environment through the groundwater. Protection of human health would be provided through institutional controls. Alternative 3 would provide protection of human health and the environment by institutional controls combined with the option of active remediation should assessment of the groundwater monitoring data show that this is necessary. Alternatives 4A, 4B, 5A, 5B, 6A, 6B, 7A , 7B and 8 would all offer varying degrees of protection of human health and the environment through active remediation of off-site groundwater contamination.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the NYSDEC has determined to be applicable on a case-specific basis.

Removal of the contaminant source at the sites will prevent further release of contamination into the groundwater. NYSDEC believes that once all individual site remedies discussed above are implemented, all the sources of groundwater contamination will be eliminated and further migration of the contaminant plumes will be controlled.

Since Alternative 1 does not include an active remedial measure or long-term monitoring for off-site groundwater, it is unlikely that NYSDEC Class GA groundwater standards would be achieved. Alternative 2 also does not provide for any active remedial measure, however, Alternative 2 includes long-term monitoring which would enable NYSDEC to determine if Class GA standards are achieved within a reasonable time frame. Alternative 3 provides for implementation of an active groundwater remedial measure if groundwater monitoring indicates that active remediation is required. Alternative 3 would also provide data to assess the extent of attenuation due to natural processes such as bio-degradation, dispersion, dilution, sorption and volatilization. Alternatives 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B and 8 all provide for active groundwater treatment and would therefore comply with NYSDEC Class GA groundwater standards within a reasonable time frame. Alternatives 6A, 6B, 7A ,7B and 8 would comply with NYSDEC Class GA groundwater standards earlier than Alternatives 4A, 4B, 5A and 5B. Alternative 8 would offer the most rapid and complete compliance with NYSDEC Class GA groundwater standards.

The next five "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Short-term Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Alternatives 1 and 2 would take the longest time to meet the remedial goals because of their lack of active remediation. The estimated implementation time to meet the remedial goals under Alternative 3 would be nine years if active remediation was implemented. Alternatives 4A and 4B have and estimated implementation time of seven and nine years, respectively. Alternatives 5A and 5B would also meet the remedial goals within a reasonable time frame, with estimated implementation times of 9 and 12 years, respectively. Alternatives 6A

and 6B would meet the remedial goals in a timely fashion, with implementation times of 5 and 7 years, respectively, and Alternatives 7A, 7B and 8 would reach the remedial goals within a time frame of 7 and 10 years, respectively.

Alternatives 1 and 2 would have no impact on workers or the community since there would be no construction required. Alternative 3 would have an impact on workers or the community only if the contingency were implemented. Alternatives 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B and 8 would have some impact on workers and the public during construction. These alternatives would have a significant impact on the immediate residential areas where the off-site remedies are to be constructed.

4. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

Alternative 1 would rely on institutional controls and assumed natural attenuation for long term effectiveness. Without monitoring to determine the extent of natural attenuation, it would be difficult to assess the adequacy of the institutional controls. Therefore, Alternative 1 would provide poor long term effectiveness. Alternatives 2 and 3 would provide long term monitoring in addition to institutional controls. Alternative 3, however, would provide a mechanism for requiring additional groundwater controls should the long term monitoring show active remediation to be necessary. This approach would ensure long term effectiveness. Like Alternative 3, all the remaining Alternatives (4A through 8) would provide long term effectiveness through active remediation. Alternatives 5A and 5B and 7A and 7B, which allow for treatment to about 125-200 ft bgs, and Alternative 8, which provides treatment to a depth of 225 ft bgs, are likely to provide better long term effectiveness than Alternatives 4A and 4B and 6A and 6B, which provide active remediation to shallower depths.

5. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternatives 1 and 2 would provide no reduction of the toxicity, mobility or volume of the contaminant plumes. Alternative 3 would provide a reduction of all three factors if the contingent remedy was implemented. Alternatives 4A and 4B would provide good reduction in toxicity and volume, with some reduction in mobility. Alternatives 5A and 5B would improve on 4A and 4B in all three categories. Alternatives 6A and 6B would provide better mobility reduction that 4A and 4B, combined with volume and toxicity reductions comparable to those achieved in 4A and 4B. Alternatives 7A, 7B and 8 would provide the most reduction of mobility, toxicity and volume of contaminated groundwater.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

All of the options considered would be technically and administratively feasible. Of the active options, it is likely that Alternatives 4A, 5A, 6A and 7A and 8 are more easily implemented than 4B, 5B, 6B and 7B. This is because Alternatives 4B, 5B, 6B and 7B require centralized, above ground extraction and treatment systems, and a network of piping from the treatment wells to the centralized treatment facilities, which are not required for Alternatives 4A, 5A, 6A, 7A and 8. Vendor availability may effect the implementability of options 4A, 5A, 6A, 7A and 8. Alternative 8, however, allows for an alternative approach in the event that these difficulties arise. In addition, implementation of Alternatives, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B and 8 would require the location of extraction wells, treatment wells and treatment facilities within the densely populated residential neighborhood.

7. Cost-Effectiveness. Capital costs and operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision. The costs for each alternative are presented in Table 6.

This final criterion is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

8. Community Acceptance. Concerns of the community regarding the RI/FS reports and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the NYSDEC will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

SECTION 8: SUMMARY OF THE SELECTED REMEDY

Based on the results of the RI/FS, and the evaluation presented in Section 7, the NYSDEC has selected Alternative 8: Full Plume Remediation of Upper and Deep Portions of the Aquifer (to 225 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment as the remedy for OU3 - Off-site Groundwater that has migrated from the NCIA sites. The elements of this remedy are described at the end of this section.

Alternative 8 has been selected because, as described below, it satisfies the threshold criteria and provides the best balance of the primary balancing criteria described in Section 7.2. It will achieve the remediation goals for the NCIA sites by creating the conditions needed to restore groundwater quality to the extent practicable.

8.1: Application of the Selection Criteria

NYSDEC believes that once all individual site remedies discussed in Section 7 of the ROD are implemented, all the sources of groundwater contamination will be eliminated over a period of time and further migration of the contaminant plumes beyond Old Country Road will be controlled. To address the remainder of the off-site groundwater plumes originating from the NCIA, NYSDEC has selected Alternative 8: Full Plume Remediation of Upper and Deep Portions of the Aquifer (to 225 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment. The selected remedy, discussed in detail in Section 7 of this document, in conjunction with the completed and planned on-site soil and groundwater remedies within the NCIA discussed above, will attain the remediation goals over a reasonable period of time.

This selection is based on the evaluation of the alternatives developed for OU3 of the NCIA sites.

Alternative 1: No Further Action was eliminated since it would not be protective of human health, and would therefore not meet the threshold criteria. Because Alternative 2 does not provide for any active remedial measure, compliance with New York State SCGs is poor, consequently, Alternative 2 is only minimally compliant with the threshold criteria. Alternative 2 is therefore also eliminated from further consideration.

Alternative 3, which provides for no immediate substantive remedial actions, while allowing for future remediation through contingency, provides poor short term effectiveness. Alternatives 4A, 4B, 6A and 6B would not address the full depth of the contaminant plumes, leaving the remaining (deep) groundwater affected by the plume to be remediated only by natural attenuation. Similarly, Alternatives 5A and 5B do not provide sufficient areal coverage. These alternatives, therefore, provide only limited short term effectiveness.

Alternatives 7A, 7B and 8 provide the maximum short term effectiveness.

Alternative 3 would provide adequate long term effectiveness, if necessary, through the activation of the contingency. Alternatives 4A, 4B, 5A, 5B, 6A and 6B would provide some long term effectiveness, however, the limited areas or depths covered by these options would prevent them from achieving full long term effectiveness. Better long term effectiveness would be provided by Alternatives 7A, 7B and 8. Because the information provided by the off-site groundwater monitoring wells shows high levels of contamination at depths of at least 200 ft bgs, and because the western plume probably has little effect on contaminant concentrations in the Bowling Green water supply wells, Alternative 8 provides the best long term effectiveness. Alternative 8 provides for greater treatment depths than the Alternatives 7A and 7B, while providing fewer shallow treatment wells for the western plume.

Similarly, Alternatives 7A, 7B and 8 would provide good reduction of the toxicity, mobility and volume of the contaminant plumes, with Alternative 8 again being the best choice.

All of the options considered would be technically and administratively feasible to implement. Of the active remedial options, it is likely that Alternatives 4A, 5A, 6A, 7A and 8 are more easily implemented than 4B, 5B, 6B and 7B. This is because Alternatives 4B, 5B, 6B and 7B require centralized, above ground extraction and treatment systems, and a network of piping from the treatment wells to the centralized treatment facilities, which are not required for Alternatives 4A, 5A, 6A, 7A and 8. Vendor availability may effect the implementability of Alternatives 4A, 5A, 6A, 7A and 8. Alternative 8 provides the flexibility to adopt a conventional, centralized treatment system should vendor availability prove to present an obstacle.

Costs for the alternatives are provided in Table 6. In general, the costs of each alternative are proportional to the degree to which the other balancing criteria are facilitated. Alternative 8 was considered to be the most appropriate alternative.

The estimated present worth of the selected remedy is $6,500,000. The cost to construct the remedy is estimated at $3,500,000 and the estimated average annual operation, maintenance and monitoring costs is $200,000 for the first seven years, and $15,000 for the following twenty three years.

8.2: Elements of the Selected Remedy

The elements of the selected remedy are as follows:

- A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation, and maintenance and monitoring of the remedial program. Any uncertainties identified during the RI/FS process will be resolved;

- Installation of one 225-ft vapor stripping well with ancillary systems, for the purpose of a pilot study to determine the radius of influence, and the number of additional stripping wells needed;

- Based on the pilot test data, the effectiveness of the in-well vapor stripping system will be evaluated. If, for engineering or economic reasons, in-situ treatment should prove to be less practical, ex-situ extraction and treatment (treatment at the surface, possibly at a centralized location) will be substituted without impairing the overall effectiveness of treatment system;

- Based on the results of the pilot test, design and installation of three additional 225-ft vapor stripping wells, four 200-ft vapor stripping wells, and three 140-ft vapor stripping wells, plus their ancillary systems. The actual number and locations of these wells will be determined by the pilot test results. The wells will be placed approximately as shown in Figure 22, subject to revision due to the results of the pilot test, the final design parameters and access restrictions;

- Operation and maintenance of the treatment system until the remediation goals are achieved or the NYSDEC and NYSDOH determine that further operation of the treatment system is not necessary;

- Continued monitoring of two (2) existing Bowling Green Water District supply wells, located directly downgradient of the NCIA;

- Installation of nine (9) new monitoring wells at locations downgradient of Old Country Road;

- Implementation of a long term groundwater monitoring program requiring quarterly sampling of nine (9) new and thirteen (13) existing groundwater monitoring wells for the first two years and periodically thereafter, and;

- Institutional controls in the form of existing use restrictions limiting the use of groundwater as a potable or process water without necessary water quality treatment as determined by the NCDH from the affected areas.

SECTION 9: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken to inform and educate the public about conditions at the NCIA sites and the potential remedial alternatives. The following public participation activities were conducted for the sites:

- Repositories for documents pertaining to the NCIA sites were established.

- A public contact list, which included nearby property owners, elected officials, local media and other interested parties, was established.

- A public meeting was held on June 12, 2003 to present and receive comment on the PRAP.

- The period during which the public comments on the PRAP were received was originally from May 29, 2003 through June 30, 2003. This comment period was later extended to July 30, 2003.

- Public information meetings regarding the entire New Cassel Industrial Area were held in May 1995, January 1996, May 1996, October 1996, May 1997, December 1997, May 1998, December 1998, May 1999, September 1999, February 2000, May 2000, January 2001, December 2001 and December 2002.

- A responsiveness summary (Appendix A) was prepared to address the comments received during the public comment period for the PRAP.

Table 1 Summary of Remedial History and Enforcement Status			
Sites Located in Western part of the New Cassel Industrial Area			
Site Number	**Site Name and Location**	**Operable Unit 01 Soil/Source**	**Operable Unit 02 Groundwater**
1-30-043A	IMC Magnetics Site 570 Main Street	SVE has been remediating the on-site soil since Oct. 1997. ROD was issued in Jan. 1998. PRP has performed the investigation and remediation.	ROD was issued in Mar. 2000. In-situ oxidation is the selected remedy. The system was installed in December 2001, and is operating. RI/FS and RD/RA were conducted by the PRP.
1-30-043B	Atlas Graphics Site 567 Main Street	NYSDEC conducted the RI/FS using SSF money.. ROD was issued in Feb. 2000. AS/SVE is selected to remediate on-site soil and groundwater. Design and construction of the AS/SVE is being implemented by the PRP. RD/RA consent order was signed by the PRP in Sep. 2000. AS/SVE has been operating since October 2000.	On-site groundwater was addressed under operable unit 01. AS/SVE has been operating since October 2000.
1-30-043P	118-130 Swalm St Site 118-130 Swalm St	FRI/FS consent order was signed by the PRP in Oct. 1998. The original FRI/FS was completed during Summer 2000, with additional work carried out in the summer of 2002. ROD expected September 2003.	On-site groundwater is being addressed under operable unit 01.
1-30-043S	299 Main St Site 299 Main St	FRI/FS consent order was signed by the PRP in May 1999. The RI was completed fall 2001. An IRM requiring soil removal and AS/SVE is scheduled to be completed by August 2003.	On-site groundwater is being addressed under operable unit 01.

Table 1 (cont.) Summary of Remedial History and Enforcement Status			
Sites Located in Central and Eastern parts of the New Cassel Industrial Area			
Site Number	**Site Name and Location**	**Operable Unit 01 Soil/Source**	**Operable Unit 02 Groundwater**
1-30-043C	Tishcon Corp. Site 125 State Street	Contamination sources were removed in Oct. 1997 as an IRM. ROD was issued in Jan. 1998. Remediation conducted in Spring 1999. Site is reclassified to a Class 4 in May 2000. PRP completed the investigation and remediation.	No remediation was necessary.
1-30-043D	Arkwin Industries Site 648,656,662,&670 Main Street 66 Brooklyn Ave	Contaminated soil was excavated in June 1997 as part an IRM. A no further action ROD was issued in Jan. 1998	NYSDEC conducted the RI/FS with SSF money. The RI was completed during Summer 1999. A ROD (AS/SVE) was issued in Dec. 1999. The PRP installed the AS/SVE system in December 2002. The system is currently operating.
1-30-043E	Tishcon Corp. Site 30-36 New York Ave 30-33 Brooklyn Ave	An IRM was completed in Nov. 1997 which removed soil contamination. NYSDEC issued ROD in Jan. 1998. AS/SVE has been in operation since Jan. 2000. The PRP completed the investigation and the remediation.	AS/SVE on-site has been in operation since Jan. 2000. Focused RI/FS for off-site groundwater was finalized in Sept. 1999. ROD for off-site groundwater was issued in Mar. 2000. Selected remedy consisted of installation of AS/SVE. The AS/SVE system is scheduled to be installed in the spring of 2003.
1-30-043H	Utility Manufacturing/Wonder King Site 700-712 Main Street	On-site soils investigation completed in May 1998. An AS/SVE IRM was installed in November 2001, and is currently operating. A ROD for this site, requiring continued operation of the AS/SVE system and no further action, was signed in March 2003.	PRP refused to undertake an off-site groundwater RI/FS. NYSDEC is awaiting State funds to start the RI/FS.

Table 1 (cont.) Summary of Remedial History and Enforcement Status			
Sites Located in Central and Eastern parts of the New Cassel Industrial Area			
Site Number	**Site Name and Location**	**Operable Unit 01 Soil/Source**	**Operable Unit 02 Groundwater**
1-30-043K	Former LAKA Industries Site 62 Kinkel Street	RI finalized in May 1999. ROD was issued in Feb. 2000. Selected remedy consists of excavating the cesspool and removing source area. The State, using SSF money, completed the investigation and remediation.	No remediation was necessary.
1-30-043I	Former Autoline Automotive Site 101 Frost Street	State Funded RI/FS completed in 1998. Remediation set forth by the ROD that was issued in Mar. 2000 involved excavation, off-site disposal, and utilizing SVE. The PRP signed an RD/RA consent order in January 2003.	ROD issued in Mar. 2000 required AS/SVE and an in-well vapor stripping system. The PRP signed an RD/RA consent order in January 2003.
1-30-043L	89 Frost Street Site 89 Frost Street	State Funded RI/FS completed in 1998. Remediation set forth by the ROD that was issued in Mar. 2000 required SVE. The PRP signed an RD/RA consent order in January 2003.	See site no. 1-30-043I.
1-30-043M	Former Applied Fluidics Site 770 Main Street	.State Funded RI/FS completed in 1998. The ROD that was issued in Mar. 2000 required no action.	See site no. 1-30-043I.
1-30-043U	36 Sylvester Street Site 36 Sylvester Street	RI/FS consent order signed in March 2000. An IRM to remove contaminated material was carried out in May 2002. A no further action ROD was signed in March 2003.	No remediation was necessary.

Table 1 (cont.) Summary of Remedial History and Enforcement Status			
Sites Located in Central and Eastern parts of the New Cassel Industrial Area			
Site Number	**Site Name and Location**	**Operable Unit 01 Soil/Source**	**Operable Unit 02 Groundwater**
1-30-043V	Tishcon Corp. Site 29 New York Ave	RI/FS Consent Order signed in March 1999. RI report submitted in Dec. 1999 and an IRM to clean up the cesspool was completed in Aug. 2000. A ROD (no further action) was signed in March 2002.	No remediation was necessary.

Table 2
Nature and Extent of VOC Groundwater Contamination

Western Plume
1996 - 2000 Data

Contaminant of Concern	Range of Detected Concentration North of Old Country Road (ppb)				Range of Detected Concentration South of Old Country Road (ppb)				SCGs (ppb)
	50-99 ft	100-124 ft	125-200 ft	200+ ft	50-99 ft	100-124 ft	125-200 ft	200+ft.	
Trichloroethylene	2 j-73	2 j-8 j	-	-	ND	ND	ND	-	5
Tetrachloroethylene	1 j-96	1 j-4 j	-	-	1 j	ND	ND	-	5
Trichloroethane	1 j-52	3 j	-	-	1 j-2 j	2 j	2 j	-	5
Total VOC's*	1-207	1-38	-	-	1-3	ND	1-3	-	100

Eastern and Central Plumes
1996 - 2000 Data

Contaminant of Concern	Range of Detected Concentration (ppb) North of Old Country Road				Range of Detected Concentration (ppb) South of Old Country Road				SCGS (ppb)
	50-99 ft	100-124 ft	125-200 ft	200+ ft	50-99ft.	100-124 ft	125-200 ft	200+ft.	
Trichloroethylene	2 j-31	42-100	ND	ND	2 j	ND	41-220	9-10	5
Tetrachloroethylene	1 j-160	43-150	52	ND	3 j-11	ND	10-1100 d	-	5
Trichloroethane	2 j-26000 d	3 j-64	ND	ND	1 j-97	ND	6 j-85	-	5
Total VOC's*	2-29227	95-331	58.5	ND	1-158	ND	75.7-1400.6	9-10	

j - Estimated concentration; compound present below quantitation level
d - Concentration recovered from diluted sample
ND - signifies that contaminant was not detected
All depths are below grade surface.
* Total VOCs include chlorinated and non-chlorinated compounds that are listed in the Table

Table 3
Early Warning Monitoring Wells - Sampling Results
EW1B Shallow Well at 164 ft bgs - Flower and Iris Streets

Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis 1,2-DCE	1,1,1-TCA	Vinyl Chloride	TVOC
June 1997	459	216	380	147	ND	1291
Nov. 1997	N/A	N/A	N/A	N/A	N/A	N/A
Nov. 1998	487	197	138	133	ND	1060
April 1999	620	75	63	51	ND	836
Aug. 1999	750	90	ND	56	ND	1002
Jan. 2000	1100 d	150	1 j	85	ND	1401
May 2000	287	140	71	58	<0.5	611
Sept. 2000	986	138	<0.5	67	<0.5	1327
Sept. 2001	630	66	58	40	ND	839
Jan. 2002	1000	120	87	59	ND	1337
April 2002	780	91	64	52	ND	1037
July 2002	640	67	44	41	ND	840
Oct. 2002	ND	830	68	59	ND	1024

j - Estimated concentration; compound present below quantitation level
d - Concentration recovered from diluted sample
N/A - Due to equipment difficulties, sampling of this well was not conducted in November 1997.
ND - signifies that contaminant was not detected
* Total VOCs include chlorinated and non-chlorinated compounds that are listed in the Table

Due to the lack of a standby contractor, sampling was not conducted by the NYSDEC between November 1997 and November 1998.

Table 3 (contd.)
Early Warning Monitoring Wells - Sampling Results
EW1C Deep Well at 516 ft bgs - Flower and Iris Streets

Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis 1,2-DCE	1,1,1-TCA	Vinyl Chloride	TVOC
June 1997	12	ND	3	1	ND	18
Nov. 1997	<0.5	3	<0.5	<0.5	<0.5	3
May 1998	1	6	<0.5	<0.5	<0.5	7
Nov. 1998	ND	9	ND	ND	ND	9
April 1999	ND	ND	ND	ND	ND	ND
Aug. 1999	ND	10	ND	ND	ND	10
Jan. 2000	ND	10	ND	ND	ND	10
May 2000	<0.5	7	<0.5	<0.5	<0.5	7
Sept. 2000	<0.5	9	<0.5	<0.5	<0.5	9
Sept. 2001	ND	12	ND	ND	ND	12
Jan. 2002	0.6	13	ND	ND	ND	13.6
April 2002	5	15	ND	ND	ND	20
July 2002	ND	13	ND	ND	ND	13
Oct. 2002	ND	18	ND	ND	ND	20.5

j - Estimated concentration; compound present below quantitation level
d - Concentration recovered from diluted sample
N/A - Due to equipment difficulties, sampling of this well was not conducted in November 1997.
ND - signifies that contaminant was not detected
* Total VOCs include chlorinated and non-chlorinated compounds that are listed in the Table

Due to the lack of a standby contractor, sampling was not conducted by the NYSDEC between November 1997 and November 1998.

Table 3 (contd.)
Early Warning Monitoring Wells - Sampling Results
EW2B Shallow Well at 142 ft bgs - Aster street

Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis 1,2-DCE	1,1,1-TCA	Vinyl Chloride	TVOC
June 1997	10	79	25	4	ND	169
Nov. 1997	N/A	N/A	N/A	N/A	N/A	N/A
May 1998	28	166	41	13	72	396
Nov. 1998	65	373	79	7	200	757
April 1999	31	220	ND	ND	130	446
Aug. 1999	20	130	ND	ND	53	245
Jan. 2000	10	41	ND	8	6 j	76
May 2000	15	101	15	5	35	221
Sept. 2000	22	130	23	13	50	300
Sept. 2001	20	140	36	85	51	532
Jan. 2002	21	130	25	16	32	261
April 2002	17	100	19	8	245	209
July 2002	21	84	18	5	29	181
Oct. 2002	17	98	19	4	32	182

j - Estimated concentration; compound present below quantitation level
d - Concentration recovered from diluted sample
N/A - Due to equipment difficulties, sampling of this well was not conducted in November 1997.
ND - signifies that contaminant was not detected
* Total VOCs include chlorinated and non-chlorinated compounds that are listed in the Table

Due to the lack of a standby contractor, sampling was not conducted by the NYSDEC between November 1997 and November 1998.

Table 3 (contd.)
Early Warning Monitoring Wells - Sampling Results
EW2C Deep Well at 514 ft bgs - Aster Street

Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis 1,2-DCE	1,1,1-TCA	Vinyl Chloride	TVOC
June 1997	ND	ND	ND	ND	ND	2
Nov. 1997	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
May 1998	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nov. 1998	ND	1	ND	ND	ND	1
April 1999	ND	ND	ND	ND	ND	ND
Aug. 1999	ND	ND	ND	ND	ND	ND
Jan. 2000	ND	ND	ND	ND	ND	ND
May 2000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sept. 2000	<0.5	<0.5	<0.5	<0.5	<0.5	<0..5
Sept. 2001	ND	ND	ND	ND	ND	ND
Jan. 2002	ND	ND	ND	ND	ND	ND
April 2002	ND	ND	ND	ND	ND	ND
July 2002	1	ND	ND	ND	ND	1
Oct. 2002	ND	ND	ND	ND	ND	ND

j - Estimated concentration; compound present below quantitation level
d - Concentration recovered from diluted sample
N/A - Due to equipment difficulties, sampling of this well was not conducted in November 1997.
ND - signifies that contaminant was not detected
* Total VOCs include chlorinated and non-chlorinated compounds that are listed in the Table

Due to the lack of a standby contractor, sampling was not conducted by the NYSDEC between November 1997 and November 1998.

Table 4
Monitoring Wells - Sampling Results

MW-1 (90 ft bgs)						
Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis- 1,2 DCE	1,1,1-TCA	Vinyl Chloride	TVOC
Nov. 2001	4	21	1	8	ND	53
Jan. 2002	3	16	1	4	ND	34
April 2002	9	52	3	10	ND	105
July 2002	9	55	3	10	ND	106
Oct. 2002	13	79	5	15	ND	169

MW-2 (130 ft bgs)						
Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis- 1,2 DCE	1,1,1-TCA	Vinyl Chloride	TVOC
Nov. 2001	49	580	48	230	ND	1598
Jan. 2002	53	500	35	220	ND	1393
April 2002	52	450	42	210	ND	1382
July 2002	26	190	17	75	ND	552
Oct. 2002	50	360	39	140	ND	1113

MW-3 (150 ft bgs)						
Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis- 1,2 DCE	1,1,1-TCA	Vinyl Chloride	TVOC
Nov. 2001	67	1200	54	350	ND	2822
Jan. 2002	74	1000	40	350	ND	2490
April 2002	28	490	25	160	ND	1273
July 2002	70	920	40	270	ND	2190
Oct. 2002	22	322	21	107	ND	823

ND - signifies that contaminant was not detected

Table 4 (contd.)
Monitoring Wells - Sampling Results

MW-4 (200 ft bgs)						
Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis- 1,2 DCE	1,1,1-TCA	Vinyl Chloride	TVOC
Nov. 2001	150	1000	82	350	ND	3015
Jan. 2002	130	790	64	280	ND	2301
April 2002	38	550	43	180	ND	1576
July 2002	77	4809	38	170	ND	1496
Oct. 2002	130	895	44	320	ND	2652

MW-5 (90 ft bgs)						
Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis- 1,2 DCE	1,1,1-TCA	Vinyl Chloride	TVOC
Nov. 2001	4	3	ND	15	ND	34
Jan. 2002	16	2	0.5	15	ND	46
April 2002	25	2	1	4	ND	36
July 2002	19	1	6	3	ND	31
Oct. 2002	9	7	12	7	ND	45

MW-6 (130 ft bgs)						
Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis- 1,2 DCE	1,1,1-TCA	Vinyl Chloride	TVOC
Nov. 2001	80	93	22	240	ND	761
Jan. 2002	37	54	13	80	ND	301
April 2002	68	43	9	96	ND	351
July 2002	47	51	9	90	ND	330
Oct. 2002	60	59	21	122	ND	428

ND - signifies that contaminant was not detected

Table 4 (contd.)
Monitoring Wells - Sampling Results

MW-7 (110 ft bgs)						
Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis- 1,2 DCE	1,1,1-TCA	Vinyl Chloride	TVOC
Nov. 2001	5	2	23	ND	ND	31
Jan. 2002	6	2	18	0.5	ND	29
April 2002	4	3	15	0.6	ND	24
July 2002	6	8	18	2	ND	40
Oct. 2002	ND	4	22	0.5	ND	28

MW-8 (140 ft bgs)						
Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis- 1,2 DCE	1,1,1-TCA	Vinyl Chloride	TVOC
Nov. 2001	1	1	2	1	ND	6
Jan 2002	1	2	2	1	ND	9
April 2002	1	ND	2	1	ND	7
July 2002	1	1	2	ND	ND	5
Oct. 2002	2	2	4	1	ND	13

MW-9 (300 ft bgs)						
Sampling Date	Contaminant (ppb)					
	PCE	TCE	cis- 1,2 DCE	1,1,1-TCA	Vinyl Chloride	TVOC
July 2002	1	15	1	2	ND	20
Oct 2002	1	21	1	2	ND	27

ND - signifies that contaminant was not detected

Table 5
Bowling Green Water Supply Wells
Maximum Annual Concentration (ppb)

WELL #1 (Screened from 480 to 530 ft bgs)

Date	PCE	TCE	cis 1,2- DCE	1,1,1-TCA	Vinyl Chloride	TVOC
1992	2	13	1	2	<0.5	20.5
1993	1	3	<0.5	1	<0.5	6.5
1994	4	11	2	5	<0.5	26.5
1995	5	26	2	5.5	<0.5	44.0
1996	7	26	2	8	<0.5	52.5
1997	6	30	2	9	<0.5	61.0
1998	6	31	2	9	<0.5	66.0
1999	7	51	2	8	<0.5	86.0
2000	14	43	1	7	<0.5	87.0
2001	20	79	8	8	<0.5	136.0
2002	26	65	1	5	<0.5	117.0

WELL #2 (screened from 520 to 570 ft bgs)

Date	PCE	TCE	cis 1,2- DCE	1,1,1-TCA	Vinyl Chloride	TVOC
1992	<0.5	9	<0.5	<0.5	<0.5	9.0
1993	0.5	10	<0.5	<0.5	<0.5	11.5
1994	1	13	<0.5	<0.5	<0.5	14.5
1995	1	20	<0.5	1	<0.5	23.0
1996	2	21	1	1	<0.5	25.5
1997	1	24	<0.5	1	<0.5	27.0
1998	3	42	1	1	<0.5	47.5
1999	4	33	1	2	<0.5	40.0
2000	3	34	1	1	<0.5	39.5
2001	8	62	32	3	<0.5	106
2002	9	55	1	2	<0.5	69

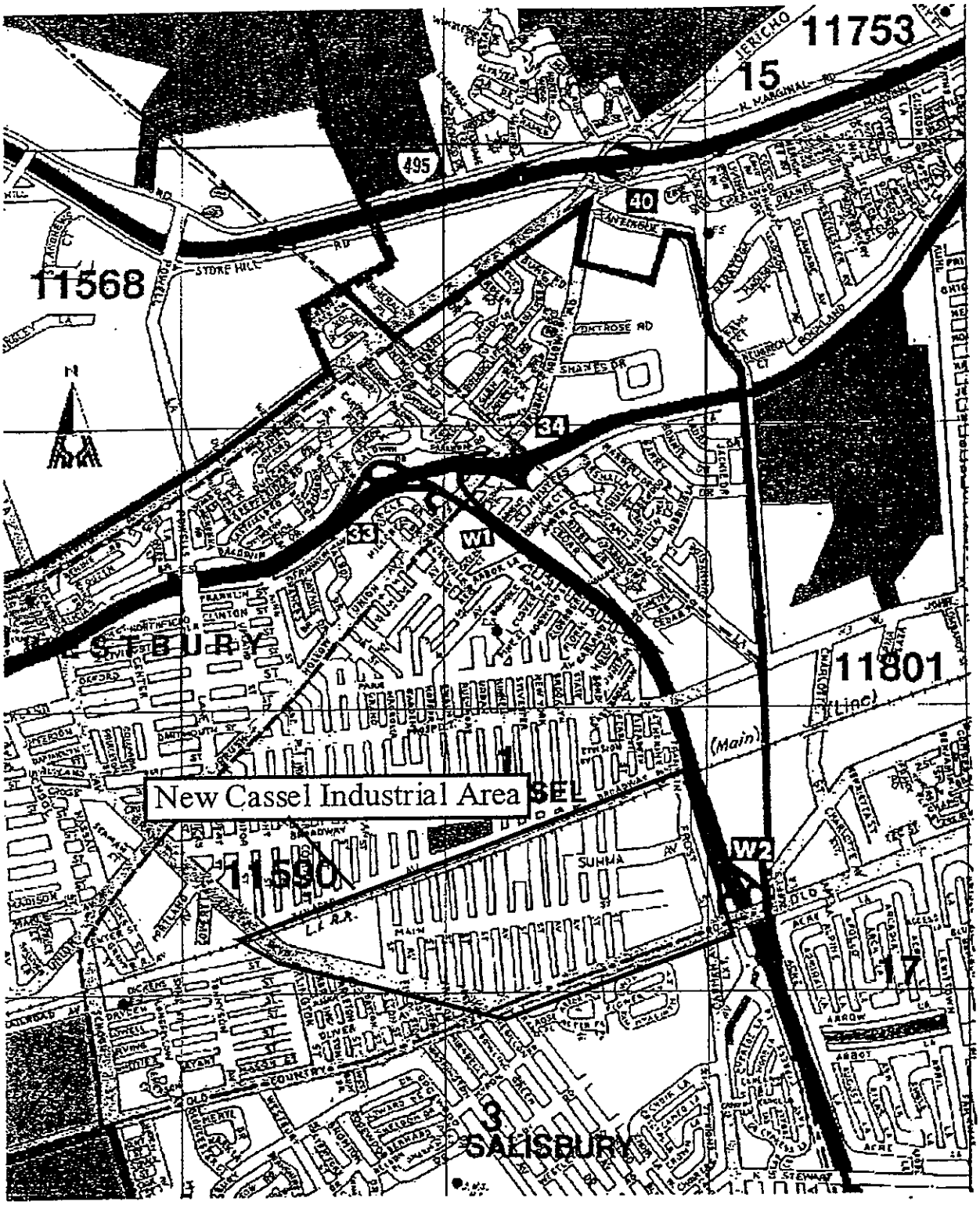
TVOCs include chlorinated and non-chlorinated compounds that are listed in the Table

Table 6
Comparison of Alternative Cost

Remedial Alternative	Time To Implement (years)	Total Present Worth ($)	Capital Cost ($)
1. No Further Action	30	1,500,000	0
2. Long Term Monitoring	30	2,326,000	230,000
3. Monitored Natural Attenuation, Assessment, and Contingent Remediation	30	2,326,000	230,000
4A. Remediation of Upper Portion of Aquifer (to 125 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment	7	2,926,000	964,000
4B. Remediation of Upper Portion of Aquifer (to 125 ft bgs) with Groundwater Extraction/Centralized Air Stripping & Vapor Treatment/Effluent Re-Injection	9	5,626,000	2,954,000
5A. Remediation of Upper & Deep Portions of Aquifer (to 200 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment	9	3,726,000	1,290,000
5B. Remediation of Upper & Deep Portions of Aquifer (to 200 ft bgs) with Groundwater Extraction/Centralized Air Stripping & Vapor Treatment/Effluent Re-Injection	12	5,926,000	3,126,000
6A. Full Plume Remediation of Upper Portion of Aquifer (to 125 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment	5	3,826,000	1,560,000
6B. Full Plume Remediation of Upper Portion of Aquifer (to 125 ft bgs) with Groundwater Extraction/Centralized Air Stripping & Vapor Treatment/Effluent Re-Injection	7	7,726,000	4,474,000
7A. Full Plume Remediation of Upper & Deep Portions of Aquifer (to 200 ft bgs) with In-Well Vapor Stripping/Localized Vapor Treatment	7	5,026,000	2,234,000
7B. Full Plume Remediation of Upper & Deep Portions of Aquifer (to 200 ft bgs) with Groundwater Extraction/Centralized Air Stripping and Vapor Treatment/Effluent Re-Injection	10	8,812,000	4,877,000
8. Full Plume Remediation of Upper and Deep Portions of the Aquifer (to 225 ft bgs) with In-well Vapor Stripping/Localized Vapor Treatment.	7	6,500,000	3,500,000

Note: Please refer to Section 7 for detailed information on Present Worth, Operation/Maintenance and Time to Implement.

Figure 1 - Site Location Map
New Cassel Industrial Area



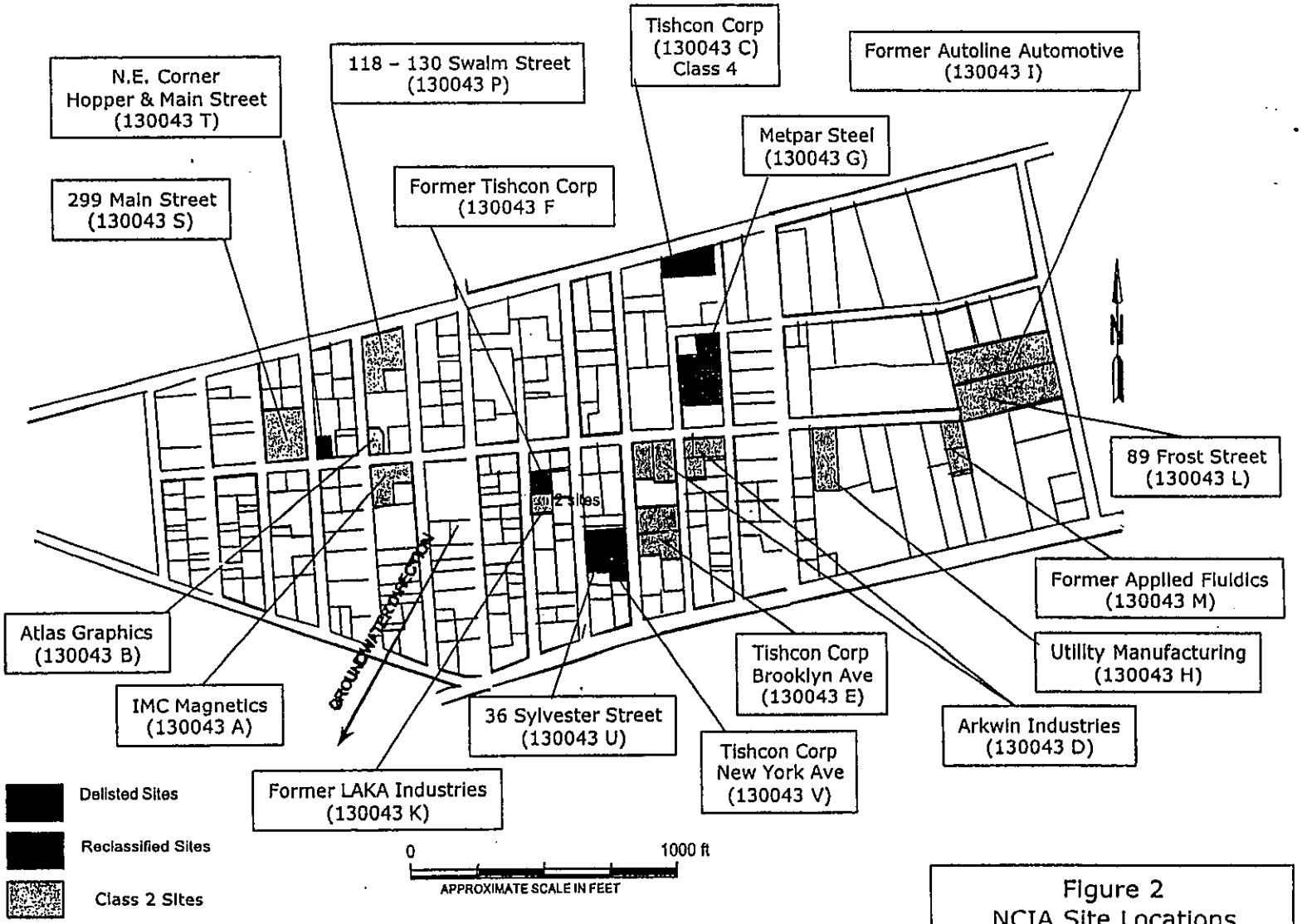


Figure 2
NCIA Site Locations
June 2003
New Cassel Industrial Area

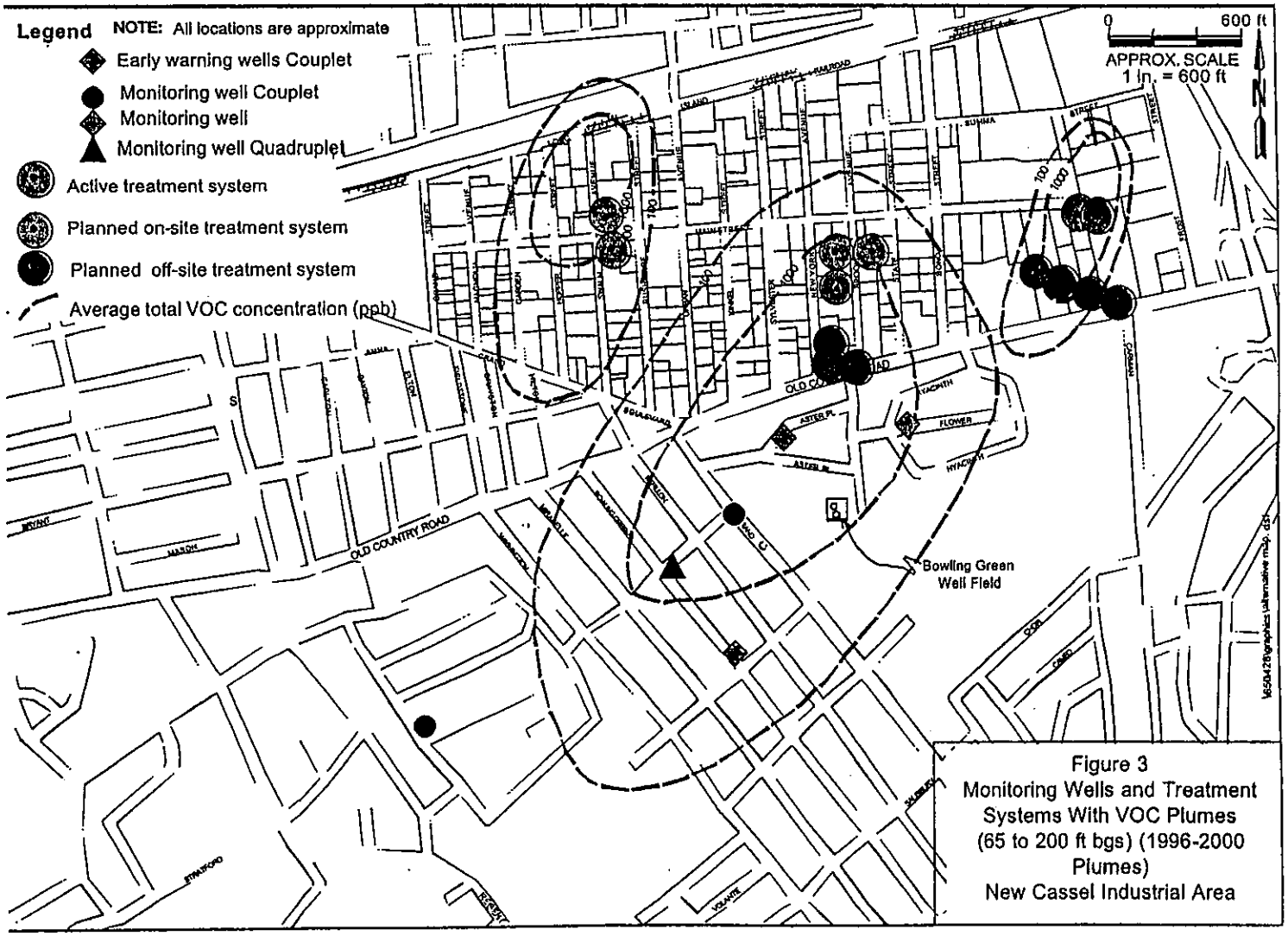


Figure 3
Monitoring Wells and Treatment Systems With VOC Plumes (65 to 200 ft bgs) (1996-2000 Plumes)
New Cassel Industrial Area

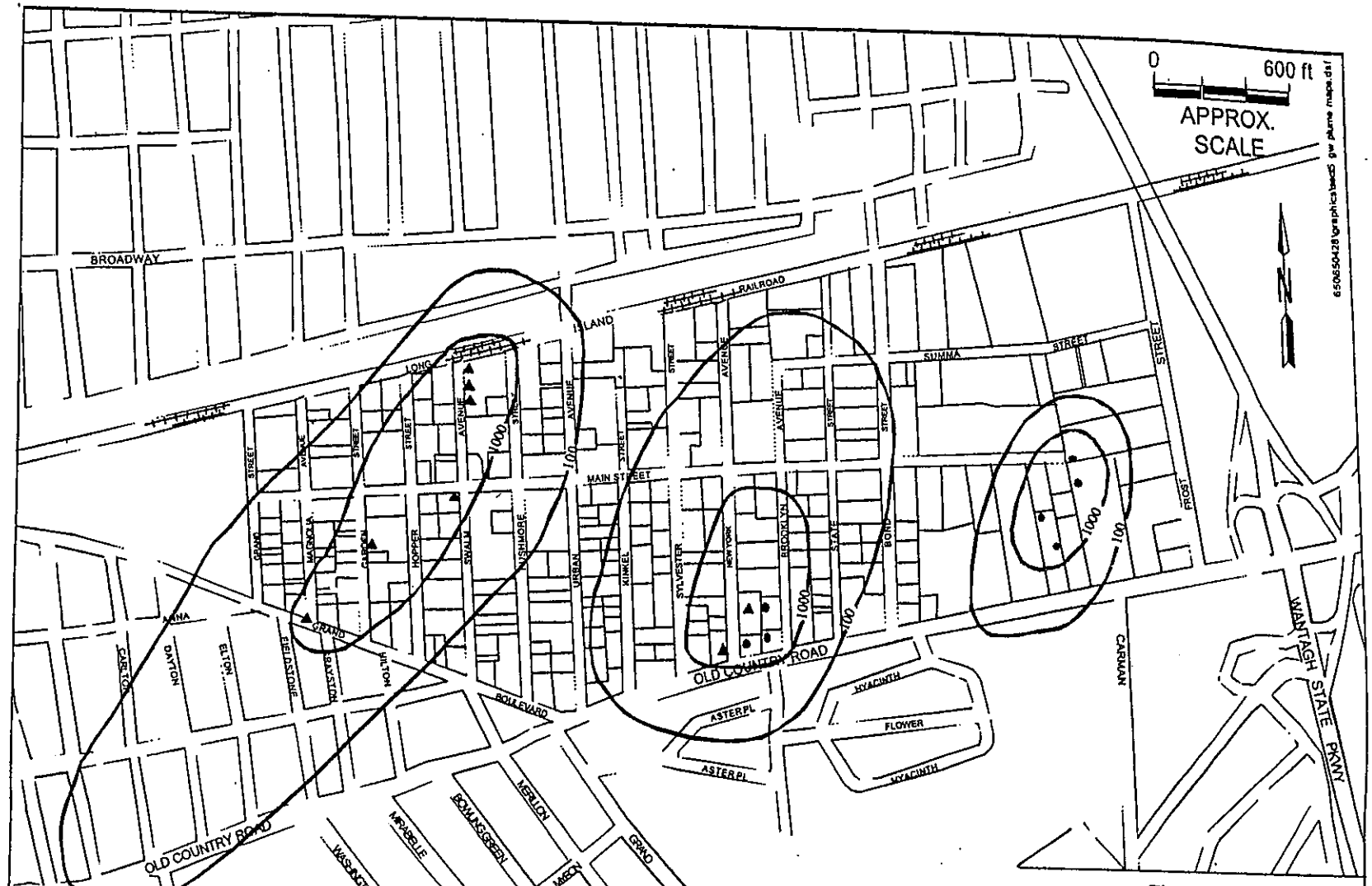


Figure 4
Area of Historically Impacted Groundwater (1977 to 2000)
0-64 ft bgs
New Cassel Industrial Area

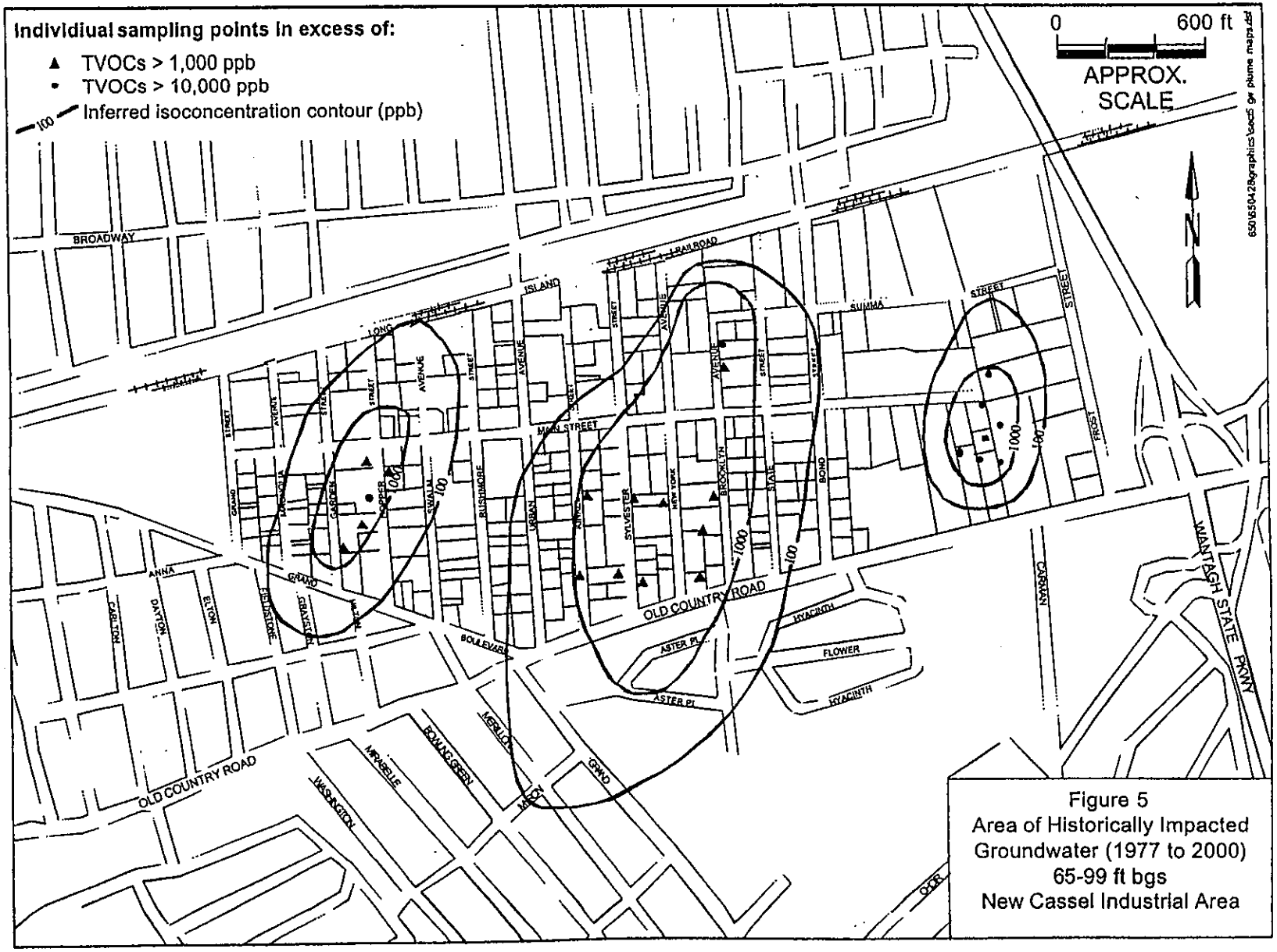


Figure 5
Area of Historically Impacted Groundwater (1977 to 2000)
65-99 ft bgs
New Cassel Industrial Area

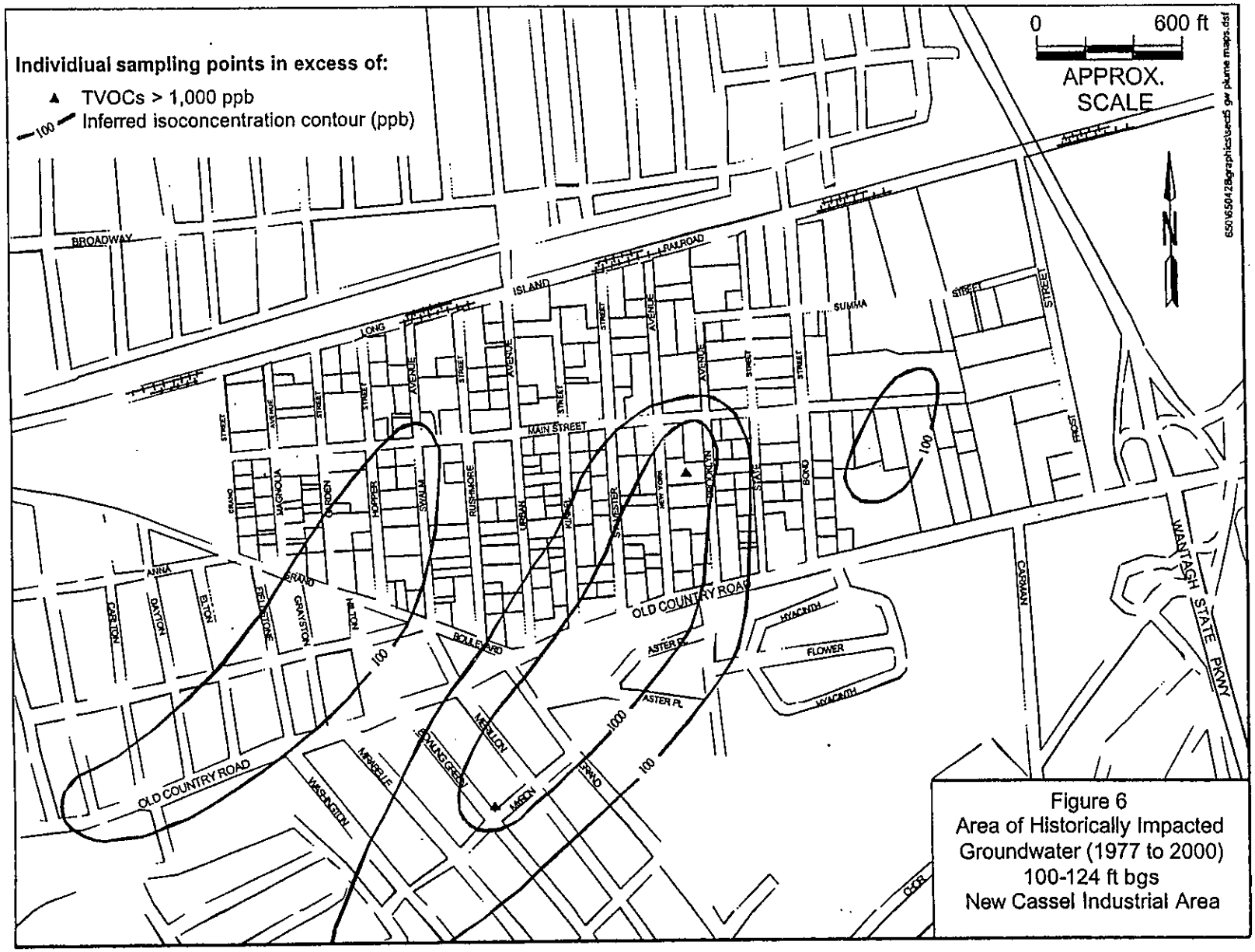


Figure 6
Area of Historically Impacted Groundwater (1977 to 2000)
100-124 ft bgs
New Cassel Industrial Area

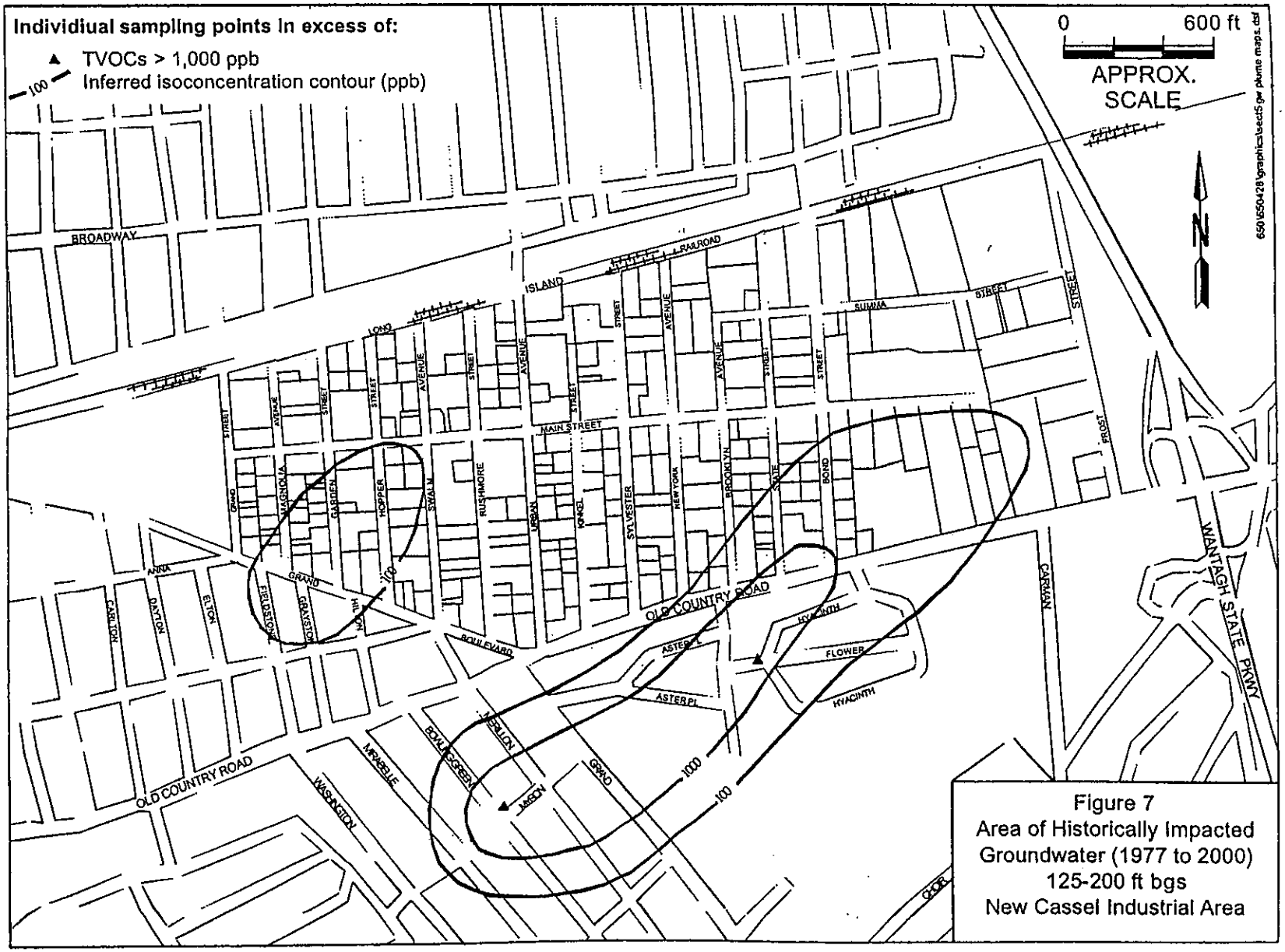


Figure 7
Area of Historically Impacted Groundwater (1977 to 2000)
125-200 ft bgs
New Cassel Industrial Area

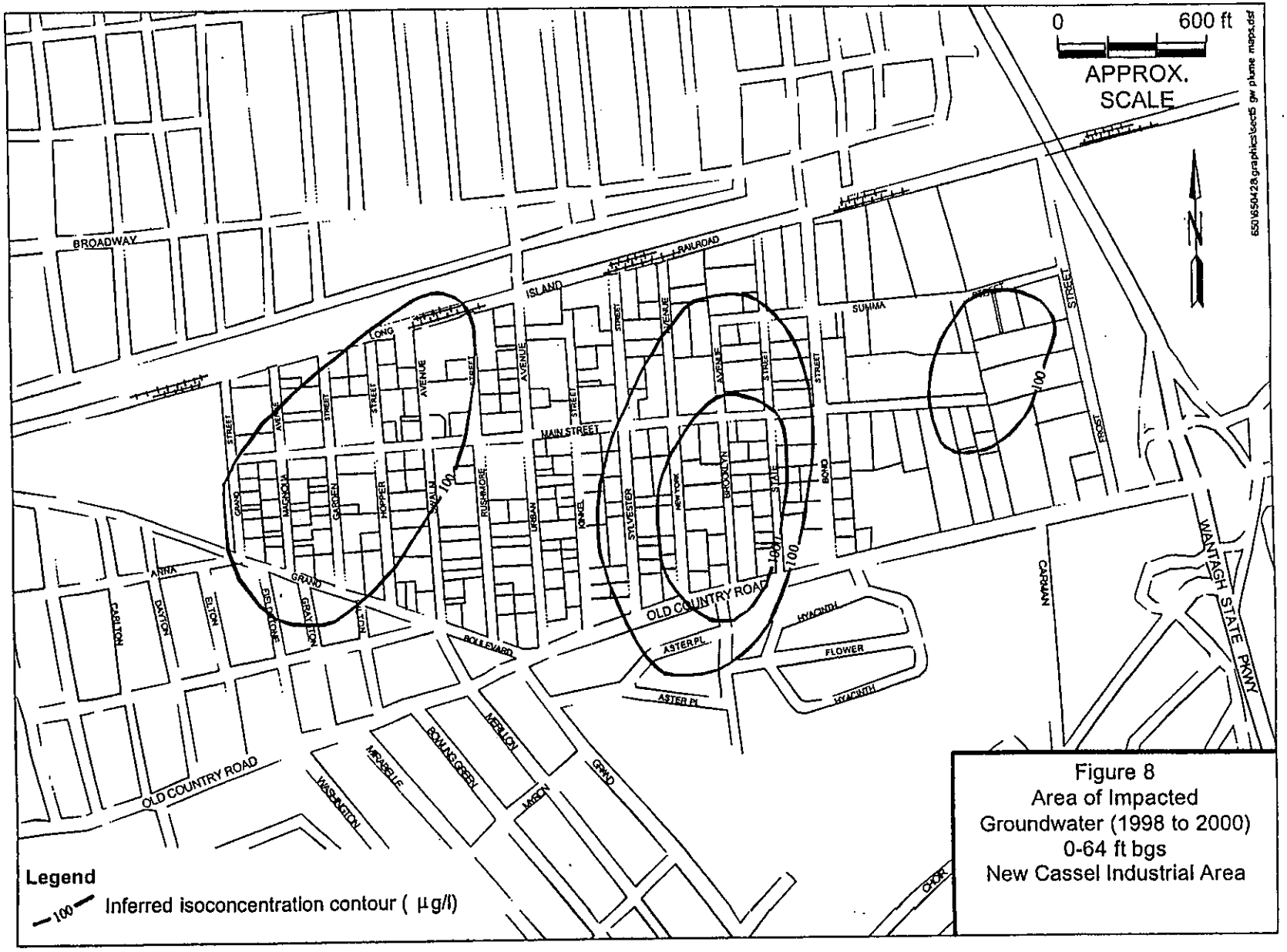


Figure 8
Area of Impacted
Groundwater (1998 to 2000)
0-64 ft bgs
New Cassel Industrial Area

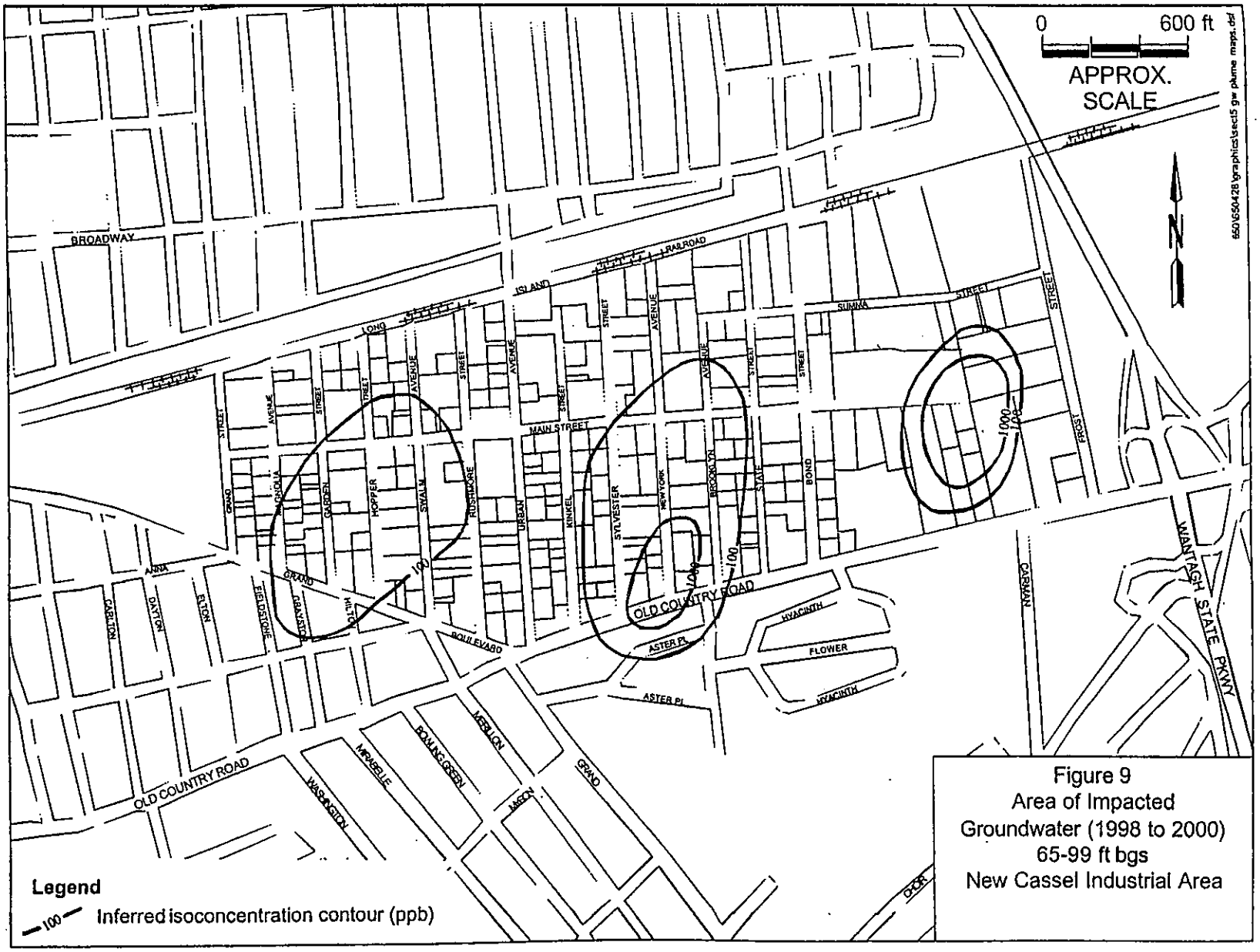


Figure 9
Area of Impacted Groundwater (1998 to 2000)
65-99 ft bgs
New Cassel Industrial Area

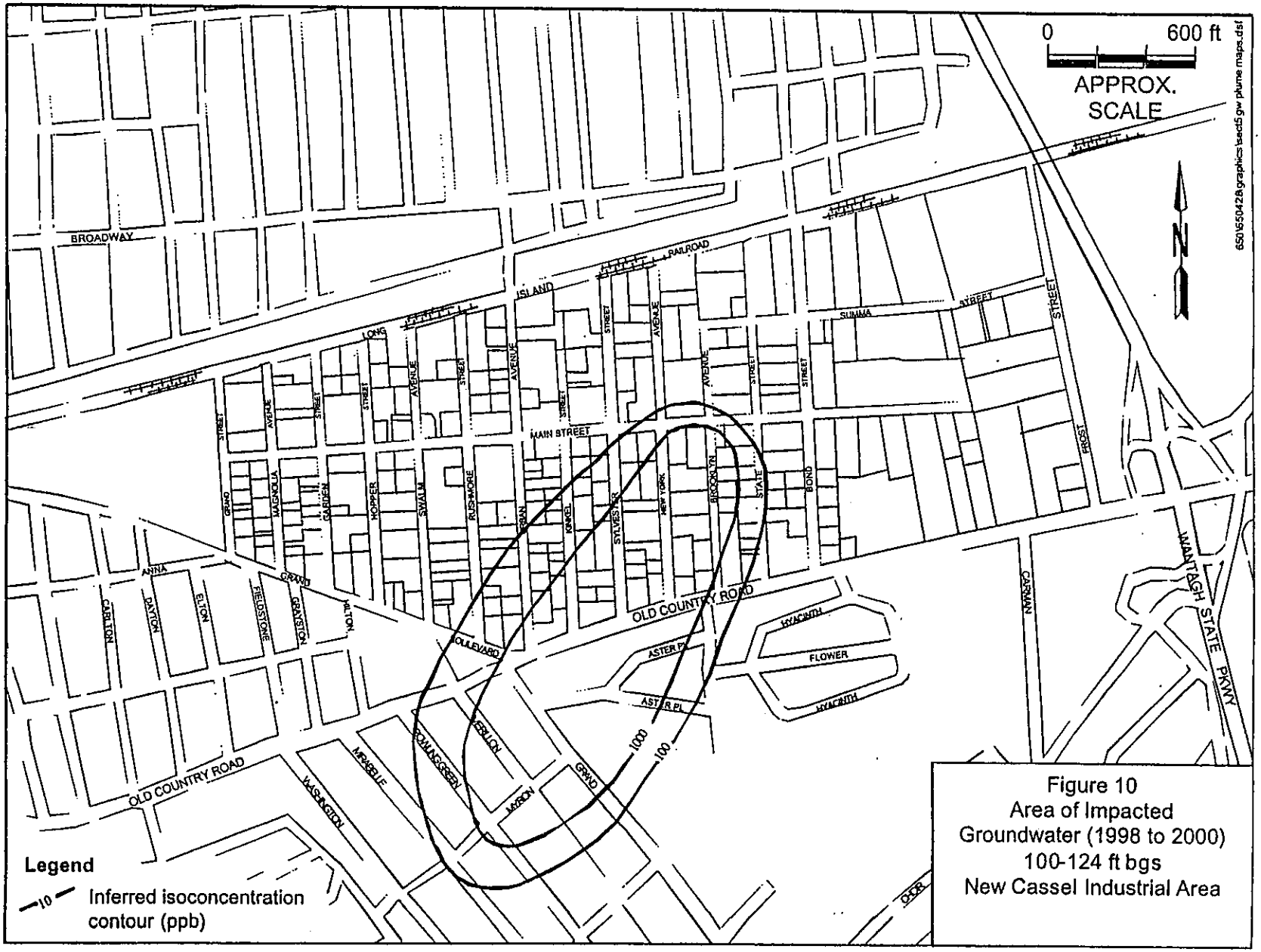


Figure 10
Area of Impacted Groundwater (1998 to 2000)
100-124 ft bgs
New Cassel Industrial Area

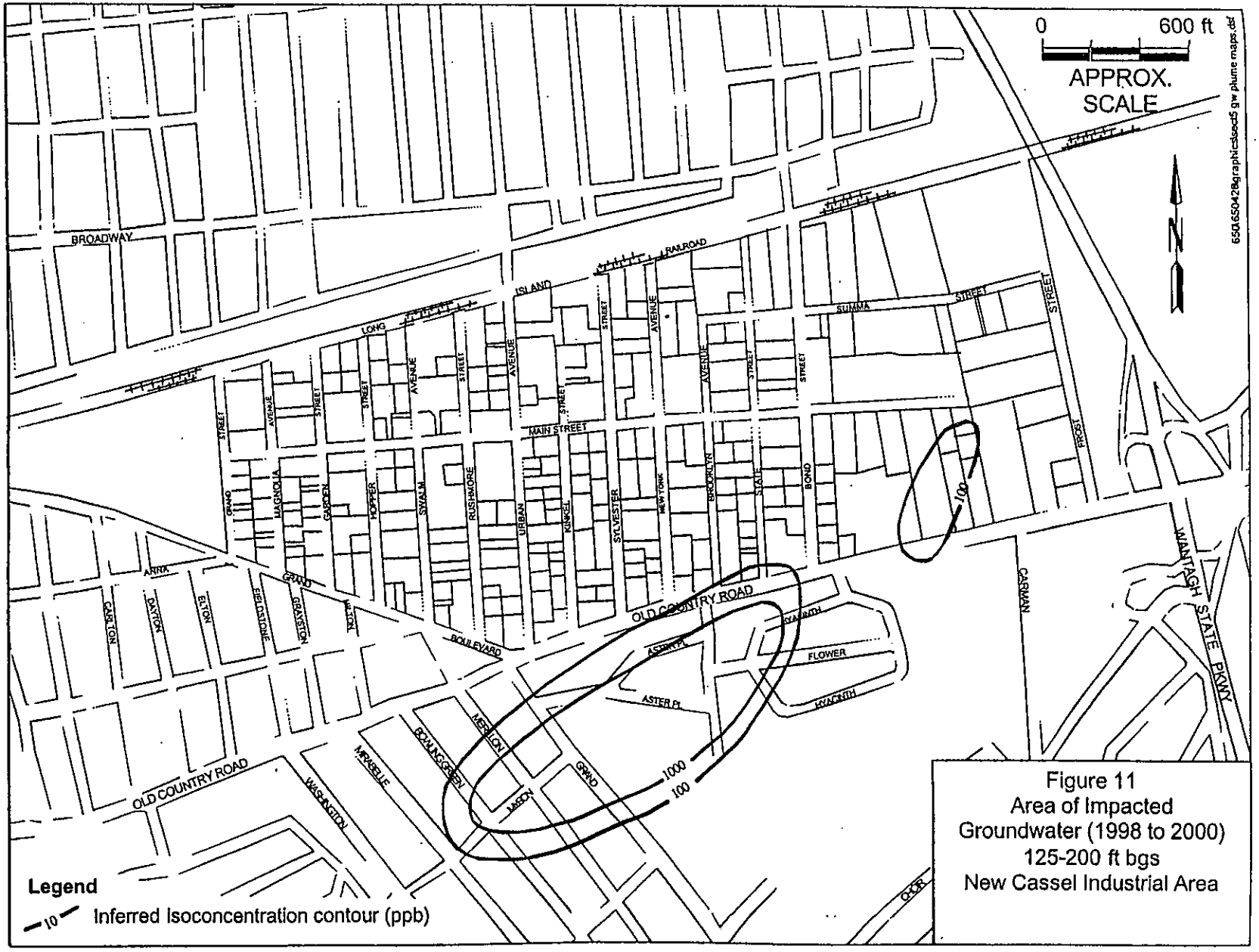
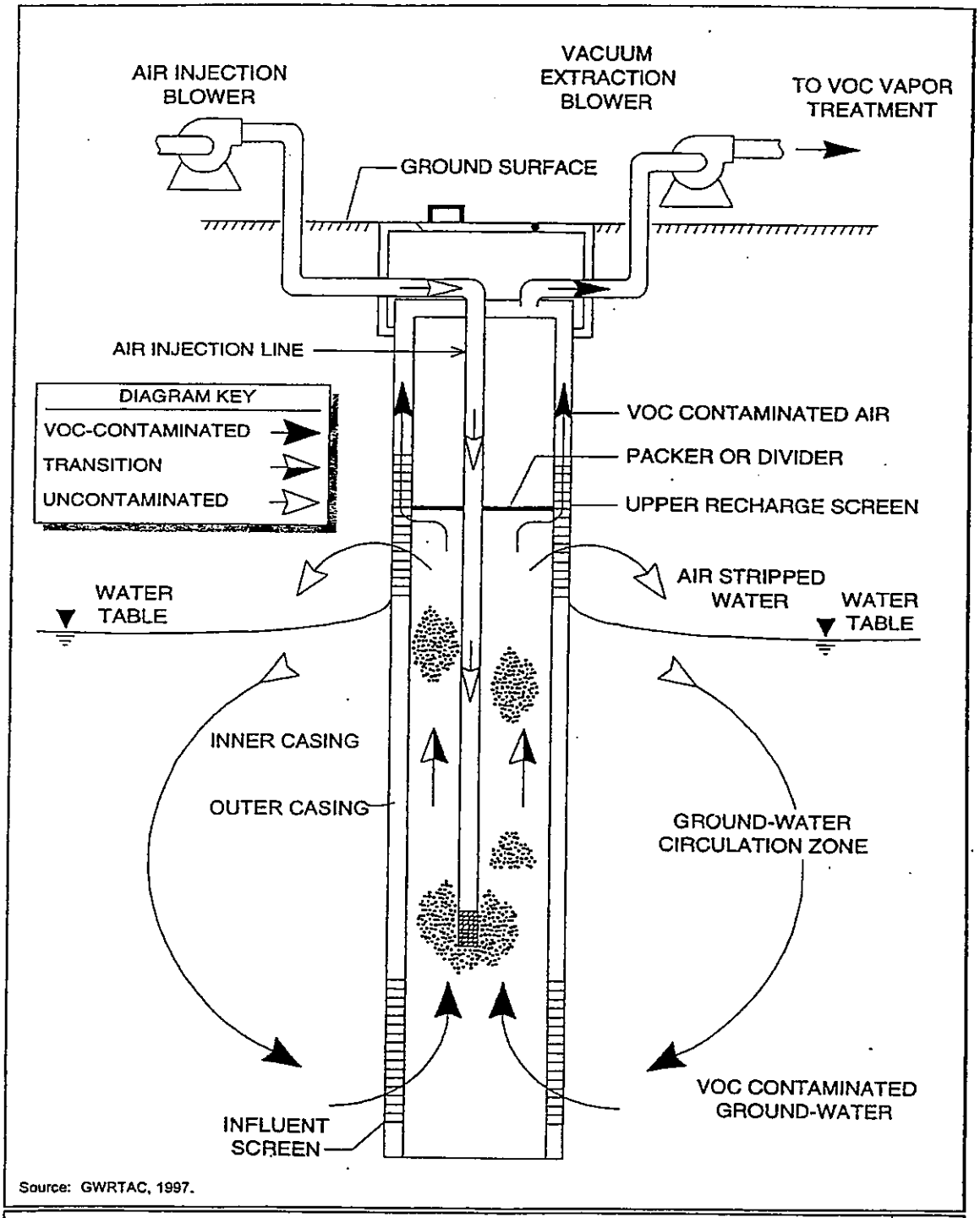


Figure 11
Area of Impacted Groundwater (1998 to 2000)
125-200 ft bgs
New Cassel Industrial Area



Source: GWRTAC, 1997.

In-Well Vapor Stripping Process New Cassel Industrial Area | Figure 12

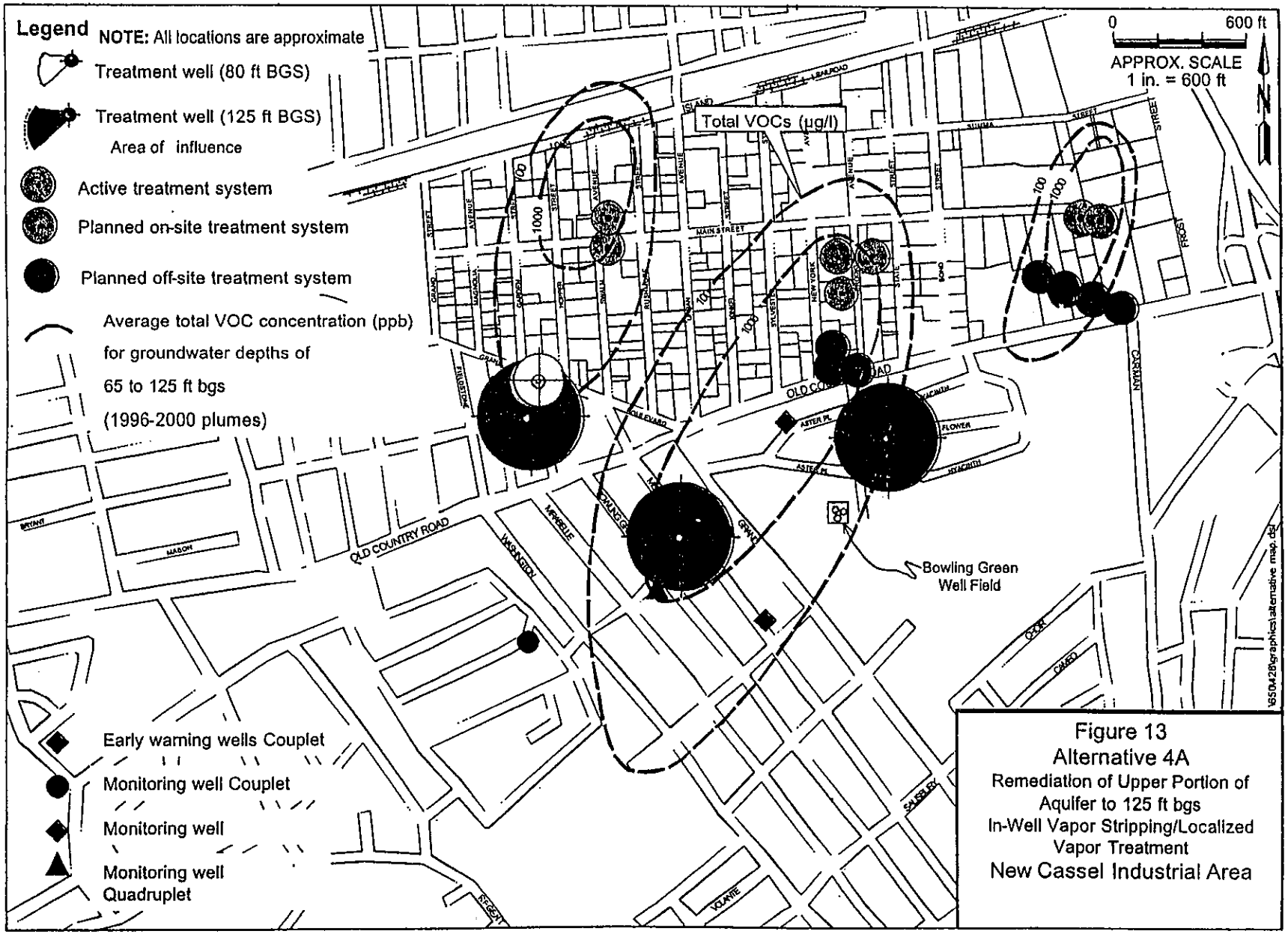


Figure 13
Alternative 4A
Remediation of Upper Portion of
Aquifer to 125 ft bgs
In-Well Vapor Stripping/Localized
Vapor Treatment
New Cassel Industrial Area

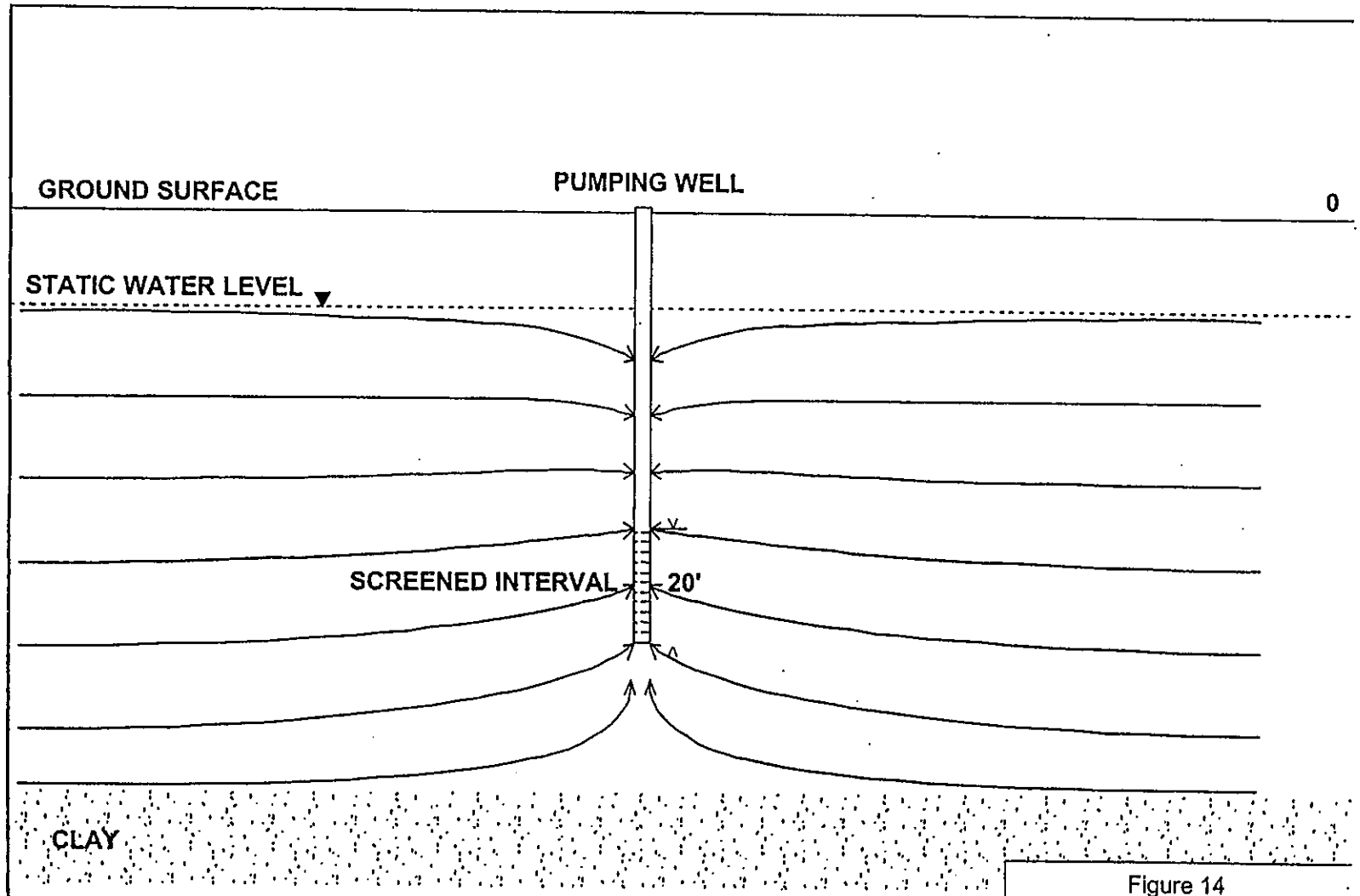


Figure 14
Groundwater Monitoring Well
Influence on Groundwater
New Cassel Industrial Area

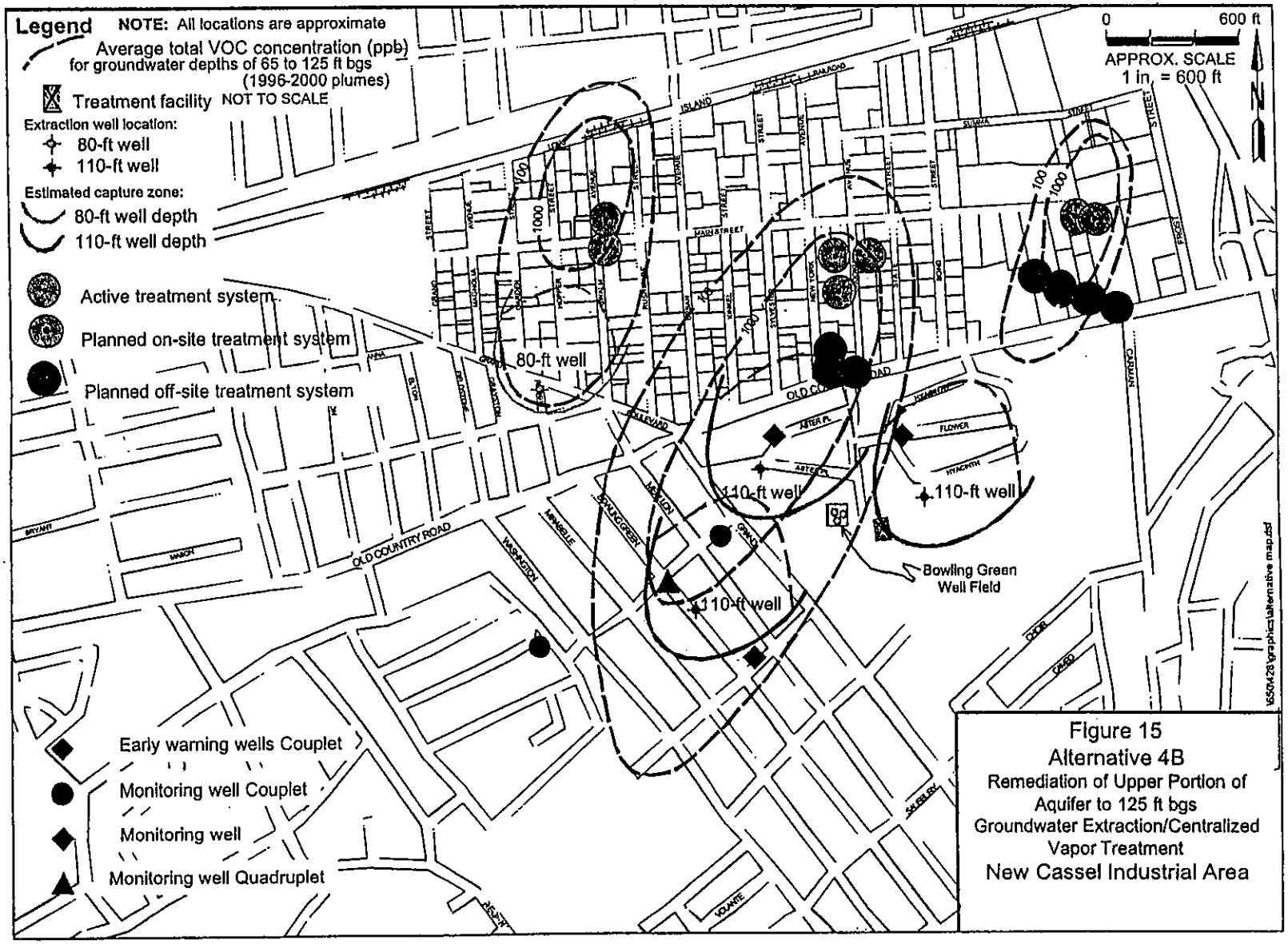


Figure 15
Alternative 4B
Remediation of Upper Portion of Aquifer to 125 ft bgs
Groundwater Extraction/Centralized Vapor Treatment
New Cassel Industrial Area

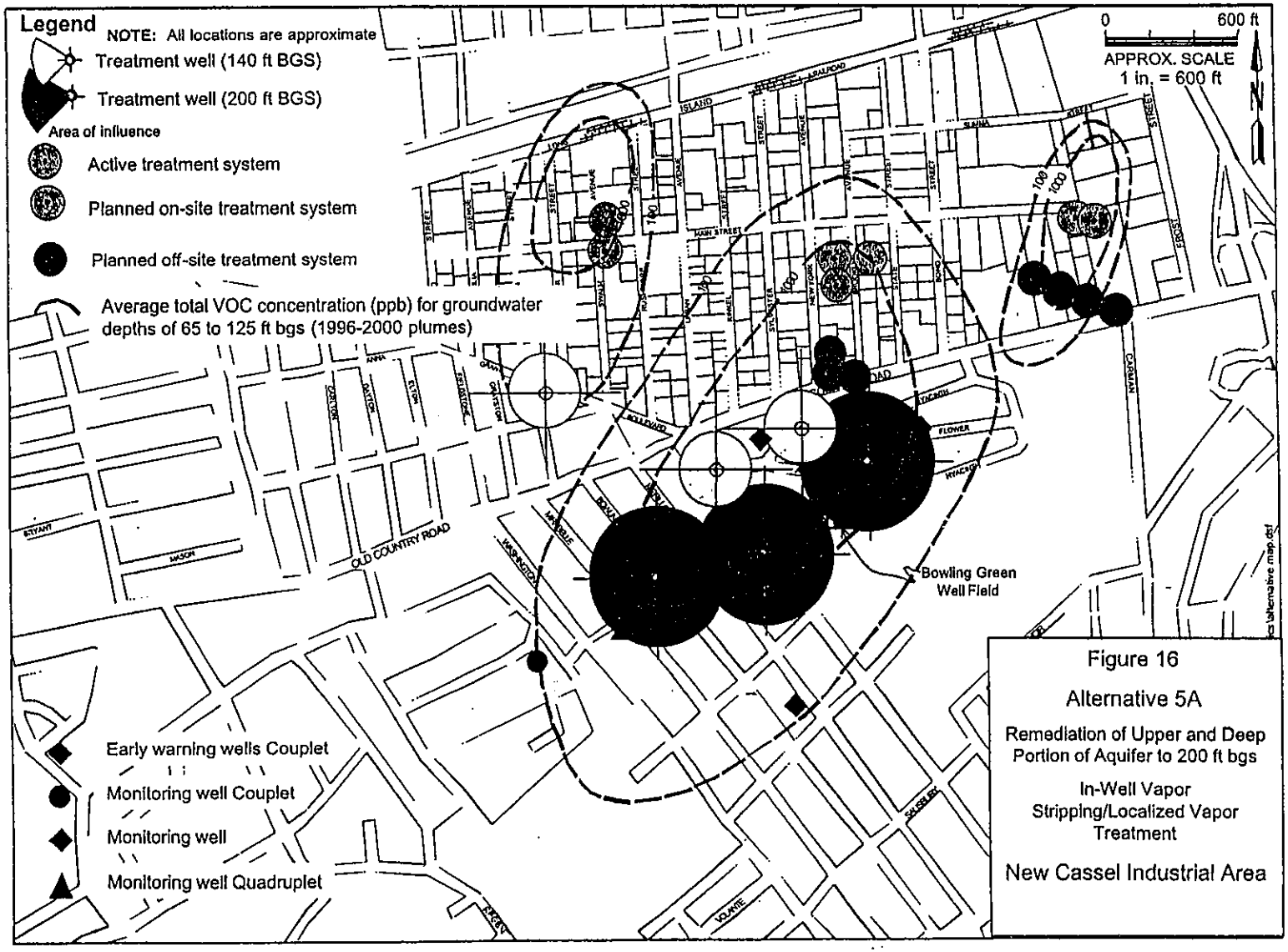


Figure 16

Alternative 5A

Remediation of Upper and Deep Portion of Aquifer to 200 ft bgs

In-Well Vapor Stripping/Localized Vapor Treatment

New Cassel Industrial Area

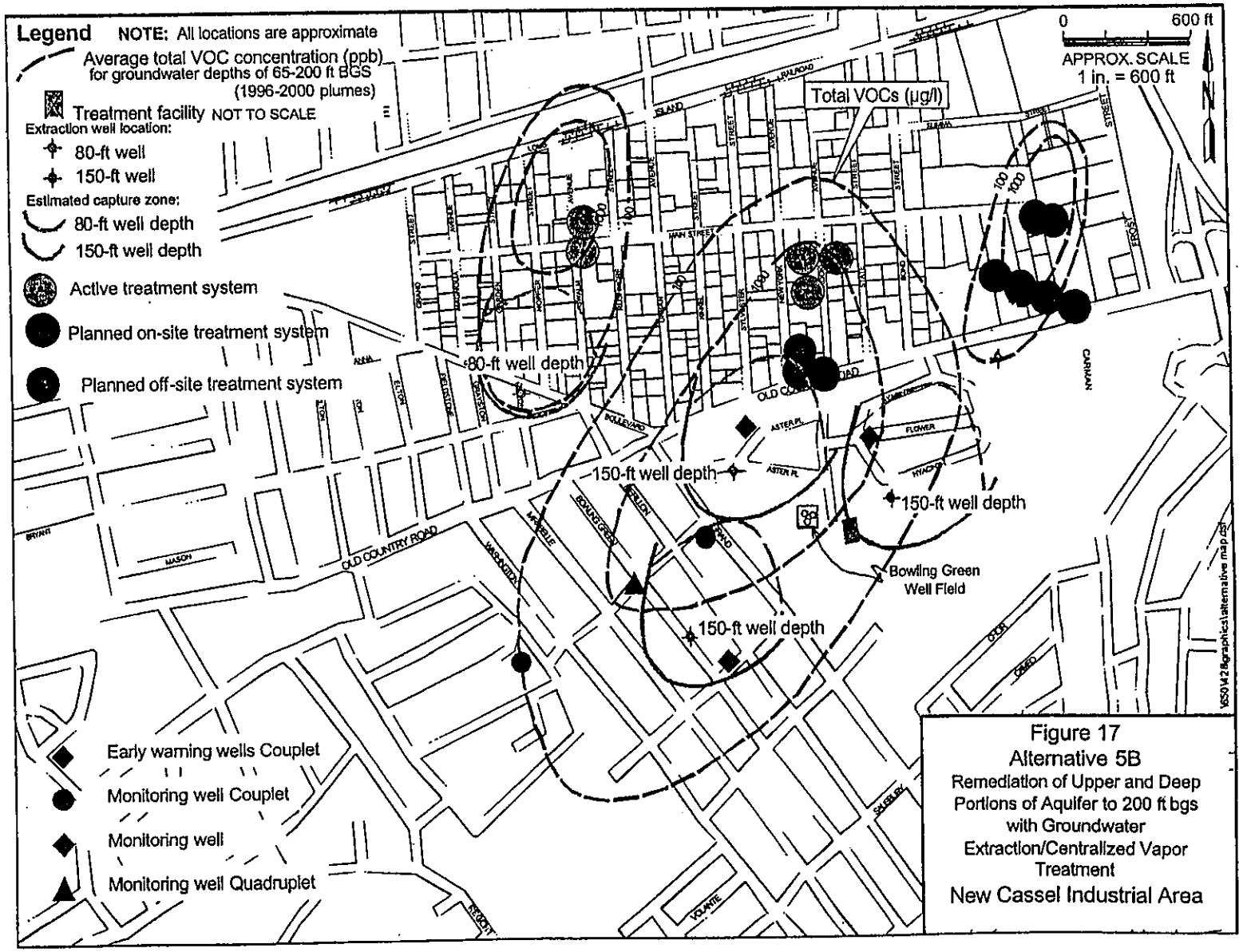


Figure 17
Alternative 5B
Remediation of Upper and Deep Portions of Aquifer to 200 ft bgs with Groundwater Extraction/Centralized Vapor Treatment
New Cassel Industrial Area

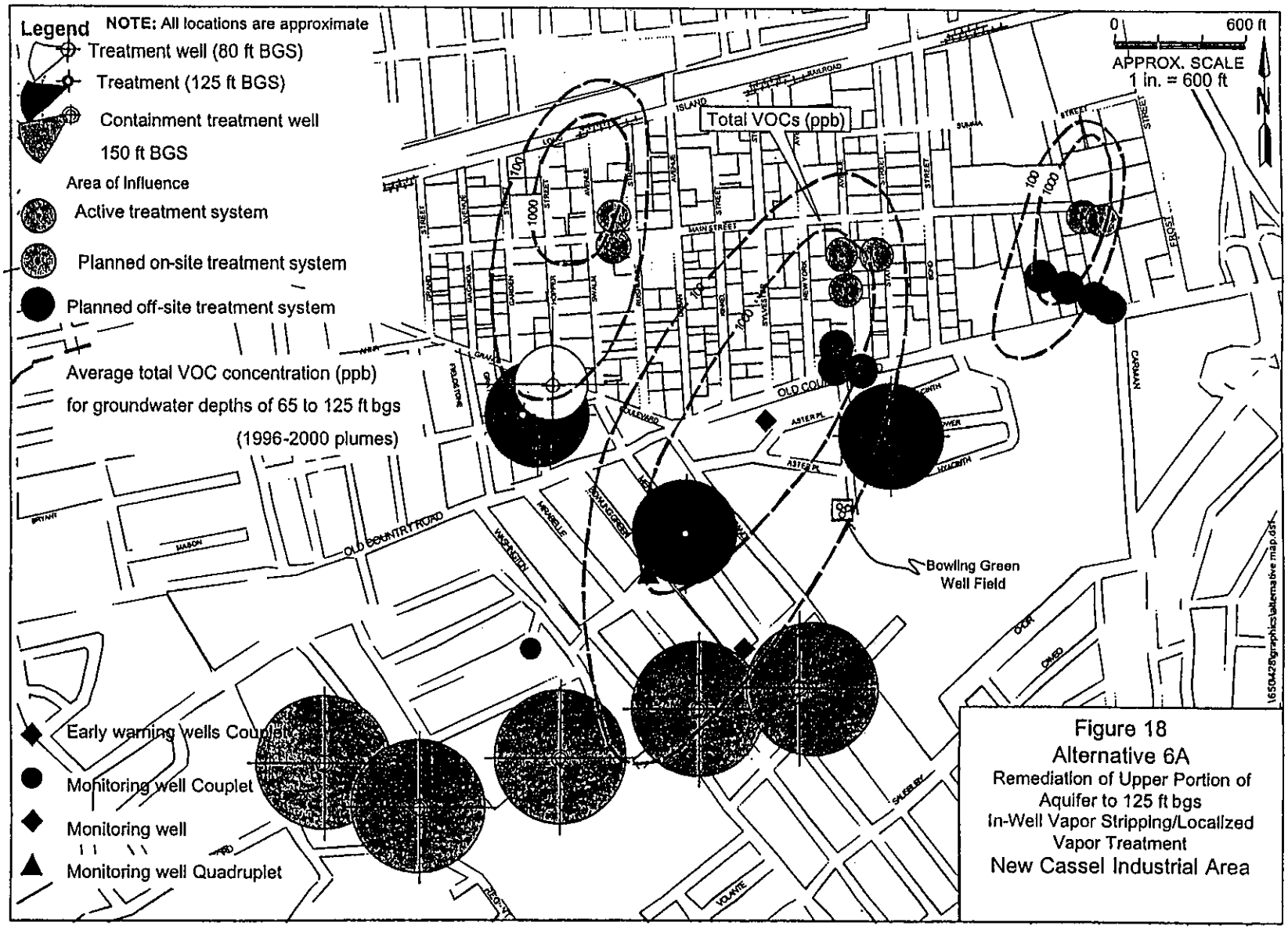


Figure 18
Alternative 6A
Remediation of Upper Portion of Aquifer to 125 ft bgs
In-Well Vapor Stripping/Localized Vapor Treatment
New Cassel Industrial Area

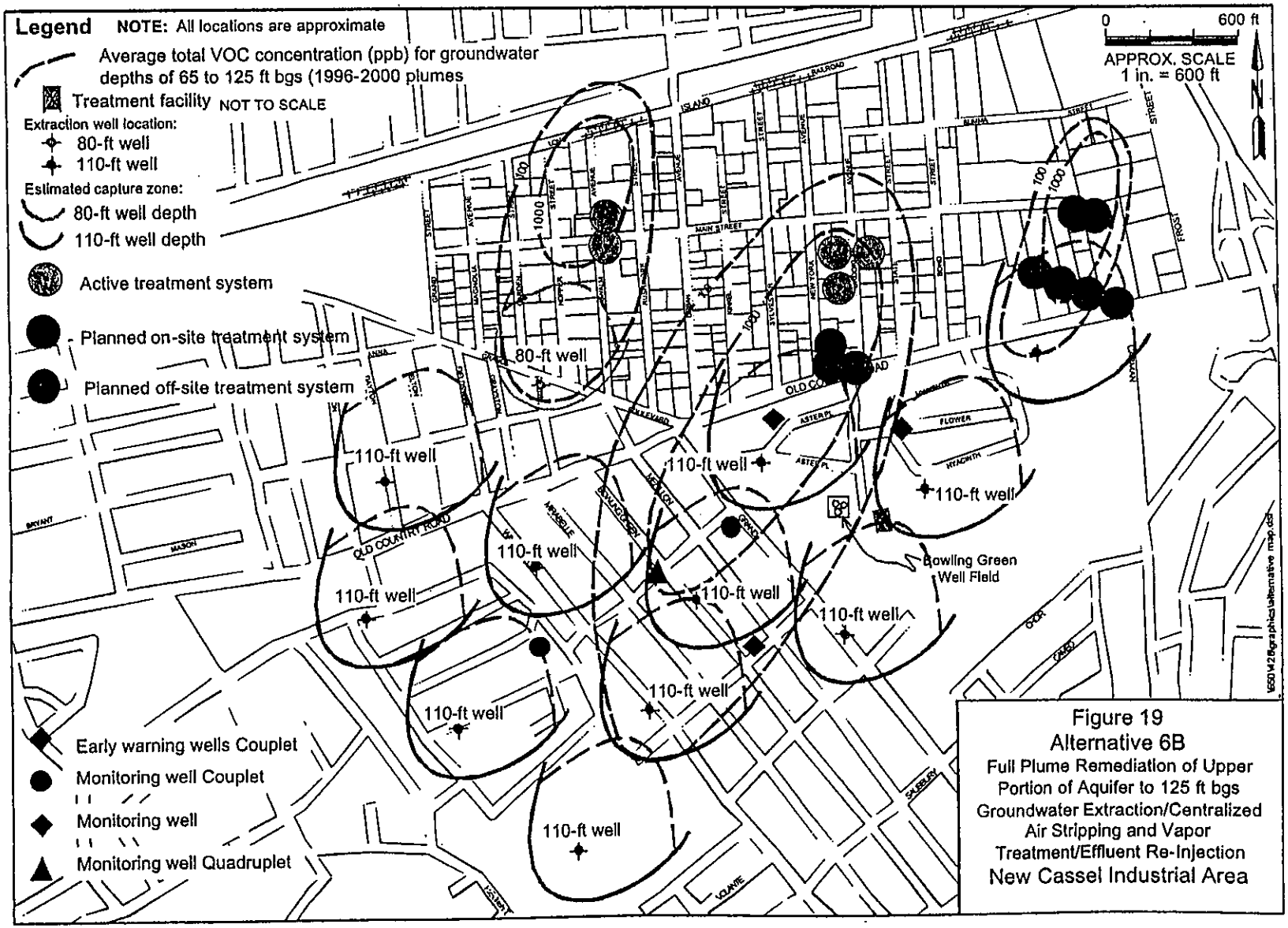


Figure 19
Alternative 6B
Full Plume Remediation of Upper Portion of Aquifer to 125 ft bgs
Groundwater Extraction/Centralized Air Stripping and Vapor Treatment/Effluent Re-Injection
New Cassel Industrial Area

Figure 20
Alternative 7A
Full Plume Remediation of Upper and Deep Aquifer to 200 ft bgs
In-Well Vapor Stripping/Localized Vapor Treatment
New Cassel Industrial Area

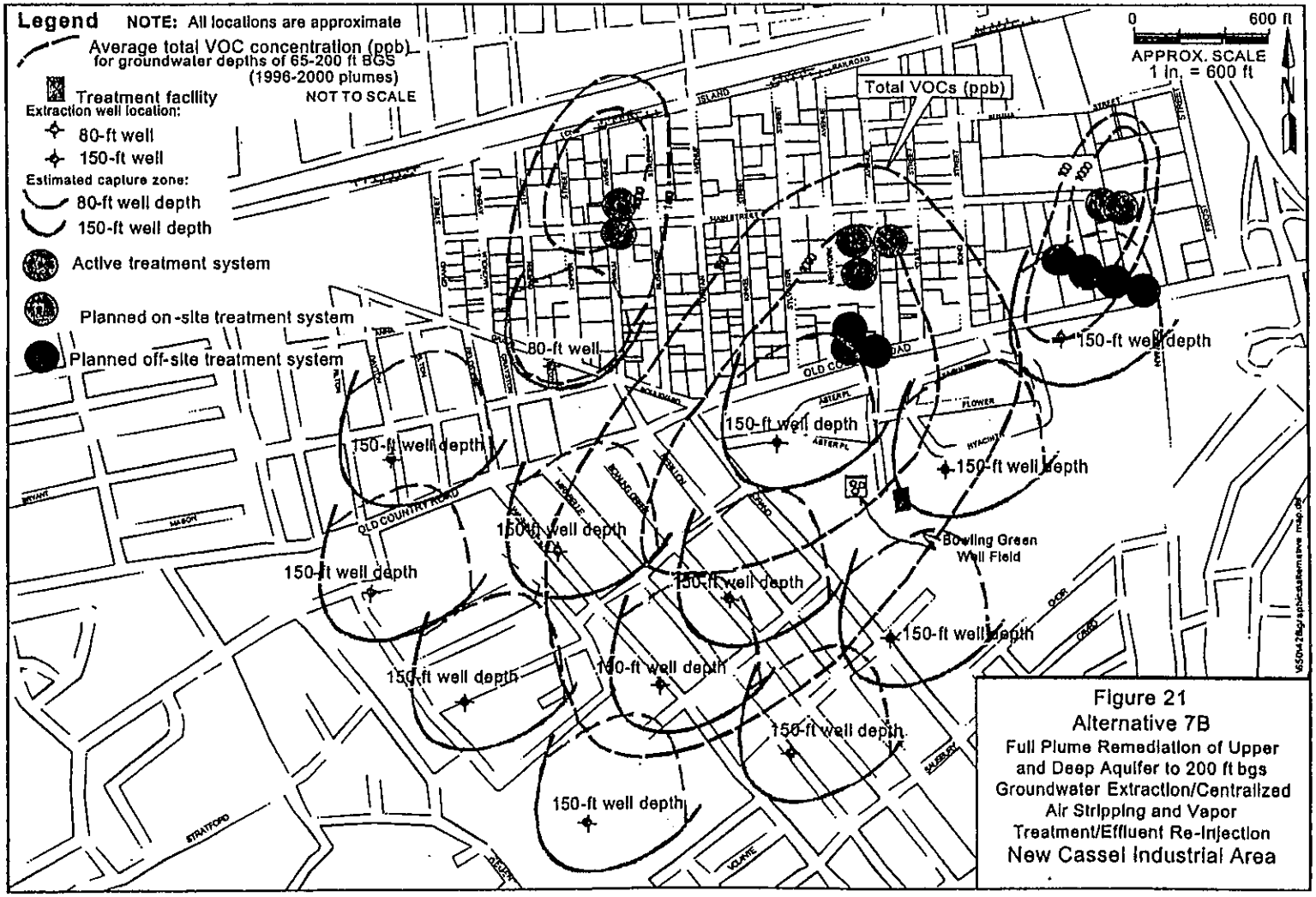


Figure 21
Alternative 7B
Full Plume Remediation of Upper and Deep Aquifer to 200 ft bgs Groundwater Extraction/Centralized Air Stripping and Vapor Treatment/Effluent Re-Injection
New Cassel Industrial Area

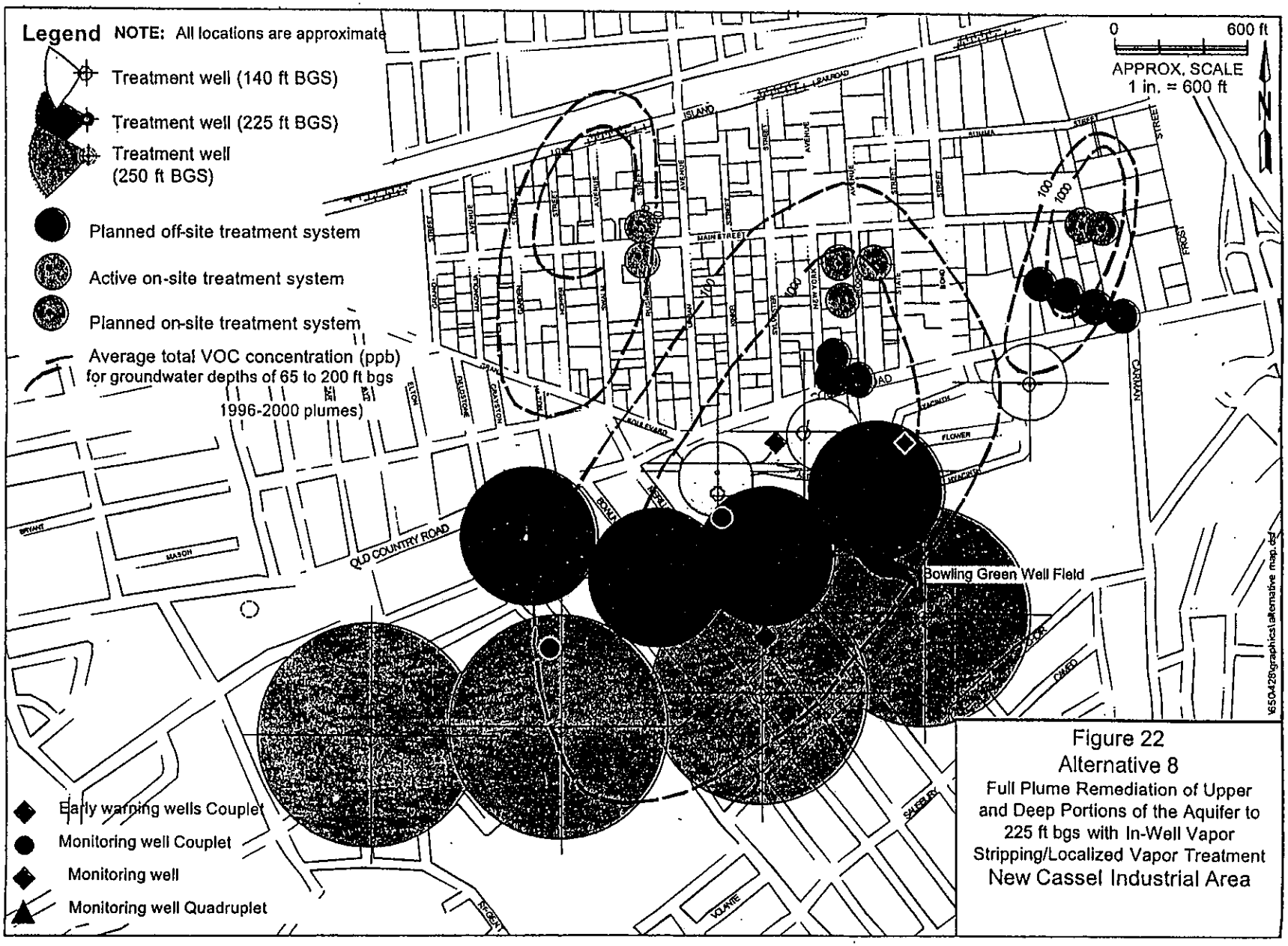


Figure 22
Alternative 8
Full Plume Remediation of Upper and Deep Portions of the Aquifer to 225 ft bgs with In-Well Vapor Stripping/Localized Vapor Treatment
New Cassel Industrial Area

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

New Cassel Industrial Area Inactive Hazardous Waste Disposal Sites
Town of North Hempstead, Nassau County, New York
Operable Unit No. 03 - Off-site Groundwater South of the NCIA
Site Nos.: 1-30-043A, 1-30-043B, 1-30-043C, 1-30-043D, 1-30-043E, 1-30-043H, 1-30-043I, 1-30-043K, 1-30-043L, 1-30-043M, 1-30-043P, 1-30-043S, 1-30-043U & 1-30-043V
October 2003

The Proposed Remedial Action Plan (PRAP) for the New Cassel Industrial Area sites, Operable Unit No. 03 - Off-site Groundwater, was prepared by the New York State Department of Environmental Conservation (NYSDEC) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on May 29, 2003. The PRAP outlined the remedial measure proposed for the contaminated groundwater migrating from the New Cassel Industrial Area sites.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on June 12, 2003, which included a presentation of the Remedial Investigation (RI) and the Feasibility Study (FS) as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for the NCIA sites. The public comment period for the PRAP ended June 30, 2003, however, the comment period was extended to accommodate requests from interested parties, until July 30, 2003.

This responsiveness summary responds to all questions and comments raised during the public comment period. In addition to comments received at the June 12, 2003 meeting, four letters conveying comments on the PRAP were received, from which specific questions were derived. Copies of these letters are attached. The following are the comments received, with the NYSDEC's responses:

COMMENT 1: Why not let the treatment on the Bowling Green water supply wells perform the treatment of the off-site groundwater instead of installing a separate remedial system?

The cost of installation of a replacement potable well within the Bowling Green water district at an alternate site along with potential transmission of water back to the Bowling Green well field site would be considerably cheaper than installation of area wide treatment and the associated operation and maintenance costs.

RESPONSE 1: This would necessitate perpetual operation and maintenance of the Bowling Green water supply treatment system at the water supply wells, with attendant costs. Additionally, while human health would be protected by the treatment system, this approach would not address the groundwater contamination outside the radii of influence of the Bowling Green water supply wells and hence would not mitigate

the environmental threat posed by contravention of groundwater standards in a sole source aquifer. The NYSDEC and NYSDOH are opposed to using public water supply wells as remedial treatment systems for contaminated groundwater.

The suggested approach would leave a significant contaminant plume in a sole source aquifer untreated. Additionally, the Town of Hempstead has indicated that there exists a shortage of suitable locations for water supply wells in the area in question and on Long Island in general. The Bowling Green water district is currently searching for ways to increase total capacity, and all currently active water supply wells are needed.

COMMENT 2: The lower portions of the Glacial and the upper Magothy have a lot of silt and clay lenses in them. Will the proposed remedy work here? Where else has this technology been used?

RESPONSE 2: The selected remedy will work in this environment given careful selection of treatment well locations and screening intervals. A pilot test will be run on the first well to be installed to ensure that the selected treatment is working properly. This treatment technology has been used at other sites, including the Brookhaven National Laboratories and General Instruments sites located on Long Island.

COMMENT 3: Is the DEC going to use a tracer during the pilot testing phase?

RESPONSE 3: This will be determined during the design of the treatment system.

COMMENT 4: Is the DEC considering groundwater remediation for the NCIA sites at depths of greater than 225 feet?

RESPONSE 4: The information currently available does not indicate significant contaminant reservoirs at depths of greater than 225 feet bgs. Therefore, such treatment is not currently anticipated.

COMMENT 5: When did the comment period start for this PRAP?

RESPONSE 5: The comment period began on May 29, 2003 and ran through July 30, 2003.

COMMENT 6: Was the installation of new water supply wells considered for the Water District at a new location as an alternative to the existing supply and then using the treatment of the existing water supply wells as a remedy?

RESPONSE 6: Installation of new water supply wells in the New Cassel area is difficult and cost prohibitive due to the lack of suitable locations, the prevalence of contamination in

the Upper Glacial and Magothy aquifers, and construction costs. The current water supply wells are not ideally situated for the purposes of remediation, nor is their construction optimized for this usage.

COMMENT 7: Other than VOCs has anything else such as pesticides been tested for in the groundwater during the investigation?

RESPONSE 7: Pesticides, metals and semi-volatiles have been tested for in several sampling locations. Some metal and semi-volatile contamination was found within the NCIA, however, these do not make a significant contribution to the off-site groundwater contamination.

COMMENT 8: How often are the Bowling Green water supply wells sampled?

RESPONSE 8: The water supply wells are sampled on a monthly basis.

COMMENT 9: The PRAP draws conclusions by using historic data while ignoring current groundwater monitoring data. Groundwater acquired after issuance of the September 2000 Remedial Investigation Report and Focused Feasibility Study is not used in generating the plume maps.

RESPONSE 9: Groundwater data has been acquired on a quarterly basis for thirteen monitoring wells located downgradient of the NCIA for the time interval between issuance of the Remedial Investigation Report and Focused Feasibility Study in September 2000 and July of 2003. The data for the period up to October 2002 is presented in Table 4 of the PRAP. Additionally, the Bowling Green water supply wells are monitored on a monthly basis. In addition, data acquired from individual site investigations during the period in question was reviewed before issuance of the PRAP. It was determined that the plume maps were not materially affected by the new data.

COMMENT 10: To date, the NYSDEC has not demonstrated that the eastern plume commingles with the central plume and contaminates the Bowling Green water supply wells.

RESPONSE 10: The path of the eastern plume lies within the radius of the cone of influence of the Bowling Green water supply wells. The eastern plume reached concentrations of greater than 10,000 ppb of total VOCs. Given the high contaminant levels reached by the eastern and central plumes and the intersection of the eastern and central plume's path with the cone of influence of the production wells it is evident that contaminants from the two plumes commingle near the production wells and that both the eastern and central plumes make a major contribution to the contamination found in the production wells.

COMMENT 11: If the basis of presuming that the eastern plume commingles with the central plume and contaminates the Bowling Green water supply wells is its geographic location (upgradient) and the regional groundwater flow direction (SW), then the General Instrument site, located northwest of the eastern plume must be considered as contributing to the NCIA sites off-site "regional" plume.

RESPONSE 11: The General Instruments site is located northeast, not northwest of the eastern plume. Ongoing groundwater investigations downgradient of the General Instrument site indicate that the General Instruments plume does not intersect the NCIA sites off-site "regional" plume.

COMMENT 12: A review of NYSDEC requirements in similar cases of groundwater contamination on Long Island indicates that the NYSDEC is taking a unique approach to the NCIA. The proposal to install a treatment system to address area wide groundwater contamination is not consistent with the NYSDECs formerly established precedent of frequently deferring treatment of large defined plumes in favor of "hot spot" treatment unless the plume is an immediate threat to a potable supply well.

RESPONSE 12: The Bowling Green water supply wells have clearly been affected by the NCIA sites off-site groundwater plume. The NYSDEC and NYSDOH do not consider indefinite treatment of the Bowling Green water supply wells in lieu of active groundwater remediation practicable. Moreover, there is a potential for contaminant levels to rise above the capacity of the current treatment system, resulting in a serious loss of capacity for the Bowling Green water district if left unremediated.

COMMENT 13: A PRP's recently completed monitoring well installation and groundwater sampling data indicates that plume mapping should be done based on a shorter and more current timeframe. Further, it would be more accurate and useful to plot data from the same geologic units or from a shorter vertical horizon.

RESPONSE 13: As described in the RI and summarized in section 5 of the PRAP, the RI effort included over 1,850 groundwater samples collected since 1996 from over 100 separate locations. Several rounds of sampling were conducted in which large numbers of samples were taken within a short timeframe, most recently in January 2000. Groundwater monitoring has continued after issuance of the RI with quarterly sampling of 13 groundwater monitoring wells. The locations and screening intervals for the 13 wells were chosen to coincide with high levels of groundwater contamination based on hydropunch data. There are only two generally recognized geological units involved: the Upper Glacial and the Magothy. Although in theory the groundwater could be plotted for shorter vertical horizons, the number of monitoring wells, hydropunch points and volume of samples required to make plume maps based on such shorter vertical horizons would be economically prohibitive.

COMMENT 14: It appears that the proposed area wide groundwater treatment system will treat groundwater to a maximum depth of 250 ft bgs. It was noted during the PRAP public meeting that MW-9 was installed to a depth of 300 ft bgs and that it contained total VOCs of 27 ppb. Since the current proposal does not address the deeper impact, at this time prior to finalizing the PRAP, additional investigation should be conducted so that a second investigation is not needed after remediation of the groundwater above 250 ft bgs begins.

RESPONSE 14: Although the concentrations found in MW-9 are above groundwater standards, the NYSDEC does not believe it would be cost effective to treat the groundwater downgradient of the NCIA to this depth. Treatment depths up to 250 ft bgs will ultimately result in lower contaminant levels at 300 ft bgs, as treated water from shallower depths enters the cone of depression of the Bowling Green water supply wells. Groundwater monitoring will be continued to assure that the treatment system has been effective.

COMMENT 15: The NYSDEC asserts that circulation wells driven by density driven convection (DDC) type in-well stripping systems are the appropriate circulation models to be used below 100 feet submergence. The DDC wells are not appropriate for this application. Note that the circulation well technology recommended by the NYSDEC consultant and mandated by NYSDEC's ROD for the Frost Street sites called for the use of a submersible pump supporting a UVB in-well stripping system. The NYSDEC's PRAP including the DDC system indicates either a change in treatment recommendation or a loss of faith in UVB.

RESPONSE 15: The NCIA sites Off-site Groundwater ROD selects in-well vapor stripping, and does not make a determination between UVB and DDC systems. During the design phase, a determination will be made as to the exact method to be employed. If during the pilot test it is shown that the in-well vapor stripping process is not effective, ex-situ extraction and treatment will be substituted. The ROD for the Frost Street sites only specified in-well vapor stripping and did not specify DDC or UVB. The Frost Street sites ROD included an alternative with a description of a DDC system. The PRP's consultant had proposed a UVB system in their Remedial Design work plan for the Frost Street sites. Therefore, the DEC did not express a preference for UVB over DDC in the Frost Street Sites ROD.

COMMENT 16: The NYSDEC PRAP Figure 22 shows the DDC wells at a depth of 250 feet below grade and with a radius of influence (ROI) of more than 500 ft. Review of literature on circulation well hydraulics indicated that this ROI would occur on only rare occasions and that the actual radius of influence may be closer to 250 or 300 ft. With this smaller radius it is likely that many more DDC wells would be required to provide the required area coverage.

RESPONSE 16: The radius of influence for the treatment wells was derived from vendor estimates. A pilot test will be conducted on the first well installation to determine whether the

projected ROI is accurate. The final number and location of wells to be installed will depend on the results of the pilot test.

COMMENT 17: The PRAP proposed DDC system relies on air compressors to drive air down to a depth of treatment. The more economical operation is to utilize a traditional rotary vane air compressor.

RESPONSE 17: During the design phase, various variables will be evaluated.

COMMENT 18: The reference to the Utility Manufacturing site on page 15, column 2, paragraph 2, should be deleted since the Utility site is not located north of Main Street.

RESPONSE 18: The NYSDEC concurs and the appropriate change has been made in the Record of Decision.

COMMENT 19: What method of monitoring will be employed during the pilot tests to confirm that the circulation cells displayed on Figure 12 have been achieved.

RESPONSE 19: Monitoring methods will be determined prior to the pilot tests.

COMMENT 20: The decision on a final remedial work plan should be postponed until all area wide contributions are assessed.

RESPONSE 20: The NYSDEC believes that sufficient groundwater data has been acquired. Further delay in implementation of active remediation of the groundwater contamination plume from the NCIA would allow the plume to migrate further downgradient and would allow the plume to continue to impact the Bowling Green water supply wells.

COMMENT 21: On page 10 of the PRAP, the NYSDEC indicates that the area of the 36 Sylvester street site is approximately one acre. That is incorrect. The site is 0.4591 acres.

RESPONSE 21: The NYSDEC concurs and the appropriate change has been made in the Record of Decision.

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS
e-mail: eweinstock@carichinc.com
website: www.carichinc.com

June 26, 2003

NYSDEC
Division of Hazardous Waste Remediation
625 Broadway
Albany, New York 12233-7015

RECEIVED
JUN 30 2003
BUREAU OF EASTERN
REMEDIAL ACTION

Attention: Joseph Jones

Re: **PRAP for the New Cassel Industrial Area**
OU-3 – Off-Site Groundwater

Dear Mr. Jones:

On behalf of Utility Manufacturing, we have reviewed the above-referenced PRAP and offer the following comments.

It is our experience that most of the New Cassel area has extensive silt and clay layers at depths of 50 to 100 feet below grade. Does the NYSDEC have any case histories they can share with us where the selected technology – in-well vapor stripping – has been successfully applied in similar geologic environments. Furthermore, what method of monitoring will be employed during the pilot tests to confirm that the circulation cells displayed on Figure 12 of the document have been achieved? If the circulation cells cannot be achieved, will this still be considered a viable technology?

The reference to the Utility Manufacturing site on page 15, column 2, paragraph 2, should be deleted since Utility is not located north of Main Street.

If there are any questions regarding this letter, please do not hesitate to call our office.

Sincerely,

CA RICH CONSULTANTS, INC.

Eric A. Weinstock
Associate

cc: Audie Kranz
Miriam Villani, Esq.

Users\Eric\Docs\Utility\Off-site prap comments

17 DUPONT STREET, PLAINVIEW, NEW YORK 11803 • TEL 516/576-8844 • FAX 516/576-0093

NEW YORK STATE LEGISLATIVE COMMISSION ON WATER RESOURCE NEEDS OF NEW YORK STATE AND LONG ISLAND

ASSEMBLYMAN
THOMAS P. DiNAPOLI
Co-Chair

RICHARD D. MORSE
Executive Director

RECEIVED
AUG 1 2003

July 30, 2003

Joseph Jones, Project Manager
NYSDEC Central Office
625 Broadway, 11th Floor
Albany, NY 12233-7015

Re: New Cassel Industrial Area, Site 1-30-043
Proposed Remedial Action Plan, May 2003

Dear Mr. Jones,

I attempted to review the Proposed Remedial Plan for the off-site groundwater contamination migrating from the New Cassel Industrial site, at the Town Clerk's office in the Town of North Hempstead. However the staff person in the Town's document repository had no record of receiving this document. In spite of being unable to review the plan, I would like to submit the following general comments.

The overall process that DEC has followed to address the multiple sites located in this area, has resulted in considerable progress in addressing many of the long-standing problems that have plagued the New Cassel community. DEC staff is to be commended for their efforts on this project.

Based on information presented at a number of public meetings, significant off-site groundwater contamination still remains and will not be remediated by the systems already in place. It is essential that installation of an active remedial system to address the off-site groundwater contamination proceed as quickly as possible, in order to minimize damage to the aquifer and protect near by public supply wells. If an agreement cannot be reach with the responsible parties to undertake this work, then DEC should proceed, using State Superfund monies as soon as these funds become available.

I thank you for the opportunity to submit these comments. I will continue to follow the progress in cleaning up the contamination associated with the New Cassel Industrial Area.

Yours truly,

Rosemary Konatich
Senior Environmental Analyst

Suite 200, 11 Middle Neck Road
Great Neck, New York 11021
(516) 829-3368
FAX (516) 482-6975

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Agency 4, 5th Floor
Albany, New York 12248
(518) 455-3711
FAX (518) 455-3837

WALDEN ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
16 SPRING STREET
OYSTER BAY, NEW YORK 11771
(516) 624-7200, FAX (516) 624-3219
EMAIL: INQUIRIES@WALDEN-ASSOC.COM

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July 31, 2003

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AUG 4 2003
BUREAU OF EASTERN REMEDIAL ACTION

Mr. Joseph Jones
Project Manager
NYSDEC Central Office
625 Broadway, 11th Floor
Albany, New York 12233-7015

Re: Public Comments on New Cassel Industrial Area Site #1-30-043
OU3 Off Site Groundwater Proposed Remedial Action Plan

Dear Mr. Jones:

In response to the May 28th release of the New Cassel Industrial Area (NCIA) Site Number 1-30-043 OU3 Off Site Groundwater Proposed Remedial Action Plan (PRAP) Walden has prepared the following comments on behalf of Next Millennium Realty, LLC and 101 Frost Street Associates. The initial comments are general followed by more specific issues that should be addressed prior to a final decision on remediation.

General Comments

The PRAP contemplates an area wide groundwater remedial plan based on a limited area wide study and draws conclusions by using historic data while ignoring current groundwater monitoring data. To date, the NYSDEC has not demonstrated that the Eastern plume commingles with the Central plume and contaminates the Bowling Green Supply Wells. To date, there is no mapped data supporting this assumed linkage, only postulation supported by the figures presented in the PRAP that were created using data from five years ago. If the basis of presuming that the Eastern plume commingles with

the Central plume and contaminates the Bowling Green Supply Well is its geographic location (up gradient) and the regional groundwater flow direction (SW), then the General Instrument site (GI), located northwest of the Eastern plume, must be considered as contributing to the NCIA off site "regional" plume. The GI plume includes high PCE (>1000 ppb) concentrations in deep groundwater (>350 ft BG). NYSDEC must review its conclusions and include current groundwater data to justify its conclusions.

The GI property, located on the east side of Wantagh State Parkway has a substantial groundwater PCE plume which has been detected at depths ranging to greater than 350 feet below grade. Walden further notes the public records regarding investigative work on the GI plume indicates that the plume is not delineated to the southwest and south. This plume is primarily comprised of PCE and its by-products, which are the same constituents of the NCIA eastern and central plumes. Based on the southwesterly groundwater flow direction relied upon by the NYSDEC, the depth and the PCE concentration of the GI plume it is reasonable for NYSDEC to include the GI plume in its area wide study and remedial plan considerations. Clearly the NYSDEC must consider the potential for deep PCE contaminated groundwater being drawn to the west and under the Wantagh State Parkway by the far reaching influence of the Bowling Green public supply wells and the natural area flow gradient. Walden suggests that a groundwater map covering a wider area be drawn at varying depths to 500 plus feet below grade and include all General Instruments groundwater data. The decision on a final remedial work plan would be postponed until all areawide contributions are assessed.

A review of NYSDEC requirements in similar cases of groundwater contamination on Long Island indicates that the NYSDEC is taking a unique approach to the NCIA. The proposal to install a treatment system to address area wide groundwater contamination is not consistent with the NYSDECs formerly established precedent of frequently deferring treatment of large defined plumes in favor of "hot spot" treatment unless the plume is an immediate threat to a potable supply well. It was clearly stated in LMS's September

2000 Feasibility Study that groundwater in the area does not pose a threat of exposure to any populations, as the Bowling Green wells have both air stripping and GAC treatment acting on all pumped potable water. If the NYSDEC has additional information refuting LMS's findings, such as the presence of another supply well in the area or groundwater-modeling data that shows that the Eastern Plume is a threat to the Bowling Green Supply Well, Walden requests a copy of that data. If the NYSDEC does not have additional data that supports the area wide remediation plan, it appears that the NYSDEC's PRAP for off site groundwater at NCIA is a departure from its approach on similar projects. Note that responsible parties for the Frost Street sites have signed a consent order and are currently investigating and planning for remedial pilot testing and on site remediation work and that these plans should be coordinated with the most recent NYSDEC analysis and data associated with area wide groundwater contamination.

It was noted during the PRAP public meeting that the use of the Bowling Green potable well field as the primary treatment system is not considered to be an appropriate use of a potable well and this seems to be the justification for the area wide aquifer restoration approach. Walden believes that the cost of installation of a replacement potable well within the Bowling Green Water District at an alternate site along with potential transmission of water back to the Bowling Green well field site would be considerably cheaper than installation of area wide treatment and the associated operation and maintenance costs. Walden believes that a new well could be located and drilled and put into use with Bowling Green for less than $2,000,000 including land acquisition. Has NYSDEC considered an approach like this in its areawide off site groundwater plan?

Specific Comments on Alternate 8

The plume designation map which is used to show the extent of contamination and the layout of treatment wells is based on the average total VOCs recorded in study related monitoring wells from 1996 through 2000 and covers a depth horizon of 65 – 200 feet

below grade. Walden's recently completed monitoring well installation and groundwater sampling data indicates that plume mapping should be done based on a shorter and more current timeframe (*i.e.* all data collected from the year 2000 or data collected from a single event). Further, it would be more accurate and useful to plot data from the same geologic units or from a shorter vertical horizon (*i.e.* 65 – 85 feet below grade or 120 – 140 feet below grade), as is standard hydrogeologic practice. Walden's current groundwater data should be considered before a final PRAP is formulated, as the current remedial proposal is based on outdated data. LMS's contract to perform the off site RI/FS work concluded September 2000. NYSDEC's conclusions based on LMS's work are dated and current data does not support the plume mapping presented in the PRAP.

It appears that the proposed area wide groundwater treatment system will treat groundwater to a maximum depth of 250 feet below grade. This depth is indicated as the maximum depth of circulation well placement. It was noted during the PRAP public meeting that MW-9 was installed to a depth of 300 feet BG and that it contained total VOC's of 27 ppb. NYSDEC further indicated that this level of contamination was above Class GA groundwater standards (the stated treatment goal) and would require treatment. Since the current proposal does not address the deeper impact, at this time prior to finalizing the PRAP, additional investigation should be conducted so that a second investigation is not needed after remediation of the groundwater above 250 ft below grade begins.

The NYSDEC asserts that circulation wells driven by density driven convection (DDC) type in-well stripping systems are the appropriate circulation models to be used below 100 feet of submergence. Based on extensive research of both the hydraulics and the mechanical limitation of DDC wells, Walden's professional engineering opinion is that the DDC wells are not appropriate for this application. Note that the circulation well technology recommended by the NYSDEC consultant (LMS), and mandated by NYSDEC's ROD for the Frost Street sites called for the use of a submersible pump

supporting a UVB in-well stripping system. The NYSDEC's PRAP including the DDC system indicates either a change in treatment recommendation or a loss of faith in UVB.

The NYSDEC PRAP Figure 22 (DDC wells) shows the DDC wells at a depth of 250 feet below grade and with a radius of influence of more than 500 feet. Walden questions how this number was obtained. Review of literature on circulation well hydraulics indicates that this ROI would occur on only rare occasions and that the actual radius of influence may be closer to 250 to 300 feet as the maximum range. With this smaller radius it is likely that many more DDC wells would be required to provide the required area coverage. Walden constructed a modified DDC well layout in which an ROI of 250 feet was used and the total number of required treatment wells increased from 5 to 10. The increase in the number of treatment wells would then increase the estimated capital costs of alternative 8 by at least 100%, while the O&M cost would also increase approximately 100%. If Alternative 8 was selected with any consideration for its cost, these revised costs must be added to the scheme to ensure that it remains the most appropriate alternative.

The PRAP proposed DDC system relies on air compressors to drive air down to a depth of treatment. The more economical operation is to utilize a traditional rotary vane air compressor, which is the only type of compressor that can be utilized for this application and does not work when the required discharge pressure exceeds 30 psi. The DDC system relies on use of both an air compressor to drive air to a depth of treatment and a vacuum blower to remove contaminated air from the well. Use of two pneumatic machines would require an unreasonable amount of consumption of electricity over the life of the system.

In summary, Walden strongly recommends that NYSDEC delay adoption of a final remedial action plan for the off site groundwater plumes south of Old Country Road until more data on the dynamics of the plume and potential contributions of still unmapped

areas are considered. There is no need for the perception of a "belt and suspenders" approach to cleanup of an area where various remedial measures have already been in effect for 7 years. Walden would be available at NYSDEC's request to discuss these issues or aid in any way. Please feel free to call us if you should have any questions regarding these comments.

Very Truly Yours;

Walden Associates Inc.
Environmental Consultants

Joseph M. Heaney III, PE
Principal

Cc: F. Werfel
M. Rubin, Esq.

H:\Spgl100 - Frost St\100\Mis\SPGL00100publiccomments7-31.doc

FARRELL FRITZ, P.C.

EAB Plaza
Uniondale, New York 11556-0120
PHONE: (516) 227-0700
FACSIMILE: (516) 227-0777
www.farrellfritz.com

290 Broad Hollow Road
Melville, NY 11747
Phone: (631) 547-8400
Fax: (631) 547-0501

2488 Montauk Highway
P.O. Box 1980
Bridgehampton, NY 11932
Phone: (631) 537-3100
Fax: (631) 537-5049

August 25, 2003

AUG 28 2003

CHARLOTTE BIBLOW
PARTNER
DIRECT DIAL: (516) 227-0686
DIRECT FAX: (516) 336-2266
cbiblow@farrellfritz.com

OUR FILE NUMBER
16606-100

VIA CERTIFIED MAIL - RRR

Mr. Joseph G. Jones
Project Manager
New York State Department of Environmental Conservation
625 Broadway, 11th Floor
Albany, New York 12233-7015

Re: **Grand Machinery, 36 Sylvester Street**
Site # 1-30-043U, New Castle Industrial Area

Dear Mr. Jones:

We represent Grand Machinery Exchange, the owner of the 36 Sylvester Street site mentioned above. We are writing to advise you of an error in the most recent Proposed Remedial Action Plan ("PRAP"). On page 10 of that document, you indicate that the 36 Sylvester Street site is approximately one acre. That is incorrect. The site is 0.4591 acres (20,000 square feet). Attached is a listing of the property from the Nassau County Assessor's Office which documents the size of the property. In addition, the reports previously submitted to the Department indicate that it is 20,000 square feet. Furthermore in figure two of the PRAP, you have the 36 Sylvester Street site as being a Class 2 site. That is also incorrect. As indicated in the PRAP, pursuant to a Record On Decision issued in March 2003, that site has now been delisted. Accordingly I would appreciate you updating your figure to indicate the correct status of the property.

Thank you for your attention to this matter.

Very truly yours,

Charlotte Biblow

Charlotte Biblow

CB/sd
Enc.
cc: Chittibabu Vasudevan, PhD, PE (w/enc.)
Alali Tamuno, Esq. (w/enc.)
Paul Merandi (w/enc.)

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HEL

NASSAU COUNTY
LONG ISLAND NY

Home Property Search

Address Section,Block,Lot

RECORD DETAILS

- ▶ Parcel Data
- Residential
- Commercial
- Other Buildings
- Values
- Sketch
- Photo

11077 00210

36 SYLVESTER ST

Ret

Parcel

Property Location	36 SYLVESTER ST
Parcel ID	11077 00210
Classification	COMMERCIAL
Land Use Code	4-Light Manufacturing, Small Factory Bld
Land Area (acres)	.4591
School District	WESTBURY UFSD
Municipality	NORTH HEMPSTEAD

Data [Disclaimer] [Privacy Policy] Last Updated: 4/30/2003
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APPENDIX B

Administrative Record

Administrative Record

New Cassel Industrial Area Inactive Hazardous Waste Disposal Sites
Town of North Hempstead, Nassau County, New York
Operable Unit No. 03 - Off-site Groundwater South of the NCIA
Site Nos.: 1-30-043A, 1-30-043B, 1-30-043C, 1-30-043D, 1-30-043E, 1-30-043H, 1-30-043I, 1-30-043K, 1-30-043L, 1-30-043M, 1-30-043P, 1-30-043S, 1-30-043U & 1-30-043V,
October 2003

1. Record of Decision-Metpar Steel, Inc., Site No. 130043G, January 1997
2. Record of Decision-Former Tishcon, Site No. 130043F, January 1997
3. Record of Decision-Tishcon Corporation, 30-36 New York Avenue and 31-33 Brooklyn Avenue, Site No. 130043E, Operable Unit 01-Soil Removal, January 1998
4. Record of Decision-IMC Magnetics, Site No. 130043A, Operable Unit 01-Soils, January 1998
5. Record of Decision-Tishcon Corporation 125 State Street, Site No. 130043C, January 1998
6. Record of Decision-Arkwin Industries Site, Site No. 130043D, Operable Unit 01-Soil, January 1998
7. Record of Decision-Arkwin Industries Site, Site No. 130043D, Operable Unit 02-Groundwater, December 1999
8. Record of Decision-Northeast Corner of Hopper & Main Street, Site No. 130043T, February 2000
9. Record of Decision-Former LAKA Industries, Inc., Site No. 130043K, Operable Unit 01-On-Site Soil and Groundwater, February 2000
10. Record of Decision-Atlas Graphics, Site No. 130043B, Operable Unit 01, Operable Unit 01- On-Site Soil and Groundwater, February 2000
11. Record of Decision-Former Autoline Automotive, Site No. 1-30-043I, Operable Unit 01-Soil, March 2000
12. Record of Decision-IMC Magnetics, Site No. 130043A, Operable Unit 02-On-Site Groundwater, March 2000

13. Record of Decision-Tishcon @ Brooklyn Avenue, Site No. 130043E, Operable Unit 02-Off-site Groundwater, March 2000

14. Record of Decision-89 Frost Street, Site No. 130043L, Operable Unit 01-Soil, March 2000

15. Record of Decision-Former Applied Fluidics, Site No. 130043M, Operable Unit 01-Soil, March 2000

16. Record of Decision-Tishcon @ 29 New York Avenue, Site No. 130043V, March 2002

17. Record of Decision-36 Sylvester Street, Site No. 130043U, March 2003

18. Proposed Remedial Action Plan for the New Cassel Industrial Area sites, dated May 2003, prepared by the NYSDEC.

19. New York State Superfund Contract, Site Investigation Report, New Cassel Industrial Area Site, Work Assignment No. D002676-2.2, Lawler, Matusky and Skelly Engineers, February, 1995.

20. Multisite PSA Report, New Cassel Industrial Area Site, Work Assignment No. D002676-2.2, Lawler, Matusky and Skelly Engineers, March, 1996.

21. Comprehensive Citizen Participation Plan, New Cassel Industrial Area Site, Site ID: 1-30-043, New York State Department of Environmental Conservation, November 1995.

22. Focused Remedial Investigation Report for the 118-130 Swalm Street Site, No. 130043P, Fanning, Phillips and Molnar, May 1999

23. New Cassel Industrial Area Offsite Groundwater Remedial Investigation/Feasibility Study (RI/FS) Report, Volumes I, II and III, Lawler, Matusky and Skelly Engineers, September 2000.

CA RICH CONSULTANTS, INC.
-- CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS
email: eweinstock@carichinc.com
website: carichinc.com

November 8, 2002

NYSDEC
Division of Hazardous Waste Remediation
625 Broadway
Albany, New York 12233-7015

RECEIVED
RIVKin

Attention: Joe Jones, P.E.,

Re: **Monthly Progress Report – October 2002**
Site No.: 1-30-043S
299 Main Street
Agreement Index No.: WI-0843-98-06

Dear Mr. Jones:

In accordance with the above-referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes the following items outlined in Section V of the Agreement.

During the past month, the following activities were performed.

- CA RICH met with the owner of the 299 Main Street facility and was retained to perform an IRM at this site.

The following work is planned for the next month.

- We plan to access holes in locations PS-7 and PS-8 (the two interior pits) to collect liquid samples.
- We also plan to sample the liquid in these pits for waste characterization purposes and will provide you one-week advance notice before collecting these samples.

17 DUPONT STREET, PLAINVIEW, NEW YORK 11803 • TEL 516/576-8844 • FAX 516/576-0093

We look forward to working with you on this project. If there are any questions regarding this letter, please do not hesitate to call our office.

Sincerely,

CA RICH CONSULTANTS, INC.

Eric A. Weinstock

Eric A. Weinstock
Associate

/sgm

cc: Paula Scappatura
Richard Fedigan
Alali Tamuno, Esq.
Guy Bobersky
Ray Cowen
Charlotte Biblow, Esq.

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CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

February 10, 2003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report – January 2003**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-0843-98-06

Dear Mr. Jones:

In accordance with the above-referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section V. Progress Reports pursuant to the above-referenced Agreement.

During the past month (January 2003), the following activities were performed:

- We completed a geophysical survey at the Site to confirm the locations of the buried tanks and drywell "PS-1". The results of the survey indicate that the two (2) buried tanks located immediately adjacent to the building appear to be 1,000-gallons and 550-gallons in capacity. The tank found to be buried near the entranceway to the Site appears to be between 8,000-12,000 gallons in capacity. Due to magnetic interferences, the exact location of the drywell "PS-1" could not be confirmed, however, the general location of a buried structure was identified and is consistent with historical Site Plan maps.

- Consideration has been given to three facilities for the disposal of the petroleum contaminated material in "PS-7". Upon excavation and determination of the actual volume to be disposed, a facility will be selected.

- Attached is the IRM Work Schedule.

The following work is planned for February 2003:

- We anticipate excavation of the material from "PS-7" and "PS-8" in late February – early March and will notify you once a date has been scheduled.

17 DUPONT STREET, PLAINVIEW, NEW YORK 11803 • TEL 516/576-8844 • FAX 516/576-0093

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sgm
cc: see attached distribution

NT Server\Files\Users\Proj\299 MAIN ST\MPR\Jan-03 Progress Report

299 Main Street
NYSDEC Site # 1-30-043S
IRM Work Schedule

Schedule of IRM Activities	Estimated Time Frame	
Task #	Start Date	Completion Date
1) Waste Characterization: Service Pits PS-7 & 8	11/26/02	1/15/03
2) PS-7 & 8: Service Pit Cleanout	2/15/03	3/15/03
Excavate PS-7 & 8 and stockpile soil on-site pending off-site disposal.		
Sample soil below pits PS-7 & 8.		
Remove stockpiled soil.		
3) PS-5: UST Removals	3/15/03	4/15/03
Call in utility mark-outs.		
Open pavement and remove USTs & pipelines.		
Backfill with clean fill.		
4) PS-1: Drywell Cleanout	4/15/03	5/15/03
Call in utility mark-outs.		
Uncover lid to PS-1, excavate, stockpile soil on-site and collect end-point sample.		
~~Backfill PS-1 with clean fill.~~		
5) SVE System	6/1/03	8/15/03
Install SVE well at PS-5.		
Order materials.		
Install blower, piping and carbon.		
Run pilot test.		
Prepare IRM Report.		
Begin O & M.		

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Ray Cowen, P.E., Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Richard Fedigan
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River St., Room 300
Troy, New York 12180-2216

Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
EAB Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Paula Scappatura
2632 Realty Development Corp.
32 Bond Street
Westbury, NY 11590
(516) 333-4005

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

March 6, 2003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report – February 2003**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-0843-98-06

Dear Mr. Jones:

In accordance with the above-referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section V. Progress Reports pursuant to the above-referenced Agreement.

During the past month (February 2003), the following activities were performed:

- We have tentatively scheduled the excavation of the material from "PS-7" and "PS-8" for **Wednesday, March 19th.** We will contact you and confirm this date and time no later than March 12th.
- We have obtained price quotes from three facilities for the disposal of the petroleum contaminated material in "PS-7". Upon excavation and determination of the actual volume to be disposed, a facility will be selected and the material will be removed from the Site for proper disposal.
- We have provided you with the IRM Work Schedule.

The following work is planned for March 2003:

- We will excavate and arrange for the removal and proper disposal of the material from service pits "PS-7" and "PS-8".
- We will obtain price quotes for the excavation and removal of the three (3) existing USTs and schedule a removal date.

17 DUPONT STREET, PLAINVIEW, NEW YORK 11803 • TEL 516/576-8844 • FAX 516/576-0093

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sgm
cc: see attached distribution

NT Server\Files\Users\Proj\299 MAIN ST\MPR\Feb-03 Progress Report

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Ray Cowen, P.E., Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Richard Fedigan
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River St., Room 300
Troy, New York 12180-2216

Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
EAB Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Paula Scappatura
2632 Realty Development Corp.
32 Bond Street
Westbury, NY 11590
(516) 333-4005

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

April 10, 2003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report – March 2003**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-0843-98-06

Dear Mr. Jones:

In accordance with the above-referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section V. Progress Reports pursuant to the above-referenced Agreement.

During the past month (March 2003), the following activities were performed:

- On March 19th, we excavated the material from "PS-7". The material consisted mainly of broken concrete and brick, with some plastic and metal. The material appears to be related to demolition work from renovation to interior walls of the building. The debris is currently contained inside of the building and will be sorted for disposal. The floor of the service pit PS-7 is solid concrete and there were no drains or cracks observed. Cleanout of "PS-8" also commenced and the material removed from that former service pit consisted of clean imported sand down to approximately 4 feet. The clean sand is currently being stored in the garage area of the building. However, during the cleanout, the backhoe's engine failed and it could not be repaired on-Site. Thus, the cleanup has been temporarily suspended until the repairs are made.

The following work is planned for April 2003:

- We will excavate the remaining material from "PS-8" and when the contaminated material known to be at the bottom of the pit is encountered, we will keep it separate from the upper clean sand pending off-site removal and disposal.

- Once the material excavated from PS-7 & PS-8 is removed from the Site, we will schedule the removal of the three (3) existing USTs.

17 DUPONT STREET, PLAINVIEW, NEW YORK 11803 • TEL 516/576-8844 • FAX 516/576-0093

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sgm
cc: see attached distribution

NT Server\Files\Users\Proj\299 MAIN ST\MPR\Feb-03 Progress Report

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Ray Cowen, P.E., Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Richard Fedigan
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River St., Room 300
Troy, New York 12180-2216

Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
EAB Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Paula Scappatura
2632 Realty Development Corp.
32 Bond Street
Westbury, NY 11590
(516) 333-4005

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

April 9, 2003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Mr. Jeffrey Dyber, Project Manager
Remedial Section A

Re: **Monthly Progress Report – March 2003**
Hercules Dry Cleaning Equipment, Inc.
3188 Lawson Boulevard, Oceanside
Site # 1-30-083

Dear Mr. Dyber:

In accordance with the Order on Consent, Index W1-0928-02-07, CA RICH is pleased to provide you with the following Monthly Progress Report.

During the month (March 2003) the following activities were performed:

- CA RICH submitted to NYSDEC draft copies of the Investigation Work Plan, the Quality Assurance Project Plan (QAPP) and the Health & Safety Work Plan.

The following work is planned for April 2003:

- After the above-referenced draft documents are approved by NYSDEC, we will finalize all Plans and begin scheduling the fieldwork.

If there are any questions regarding this letter, please do not hesitate to call our office.

Sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

cc: Gary Litwin, NYSDOH
Ray Cowen, NYSDEC
Rosalie K. Rusinko, Esq., NYSDEC
David Goldman
Charlotte A. Biblow, Esq.

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17 DUPONT STREET, PLAINVIEW, NEW YORK 11803 • TEL 516/576-8844 • FAX 516/576-0093

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

May 8, 2003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report – April 2003**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-0843-98-06

Dear Mr. Jones:

In accordance with the above-referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section V. Progress Reports pursuant to the above-referenced Agreement.

During the past month (April 2003), the following activities were performed:

- On April 15th, we continued the excavation of the material from "PS-8". The excavated material that was removed consisted of clean imported sand down to approximately 4 feet. The clean sand is currently being stored in the garage area of the building. The bottom 6 to 12-inches of sand in the pit was stained and had a petroleum odor. This impacted material was excavated and stored separately on plastic sheeting in the garage. Once all of the material was removed from the pit, two (2) earth bottom floor drains were identified. Soil from within these drains was excavated until PID vapor readings were reported at less than 5 parts per million (ppm). Attached are photos illustrating the cleanout.

The following work is planned for May 2003:

- We will remove and properly dispose of the petroleum impacted material that has been excavated from "PS-7" and "PS-8".
- We will schedule and remove the three (3) existing USTs.

17 DUPONT STREET, PLAINVIEW, NEW YORK 11803 • TEL 516/576-8844 • FAX 516/576-0093

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

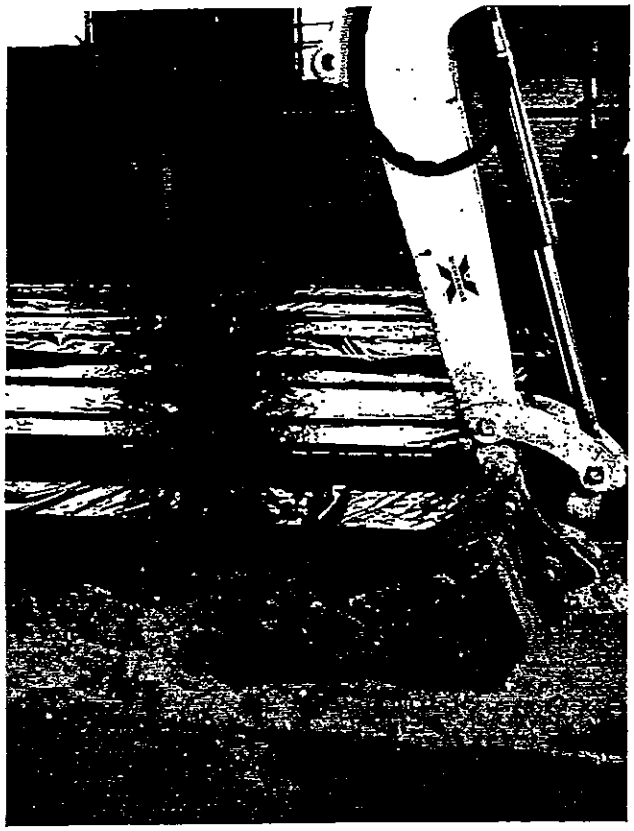
Yours sincerely,

CA RICH CONSULTANTS, INC.

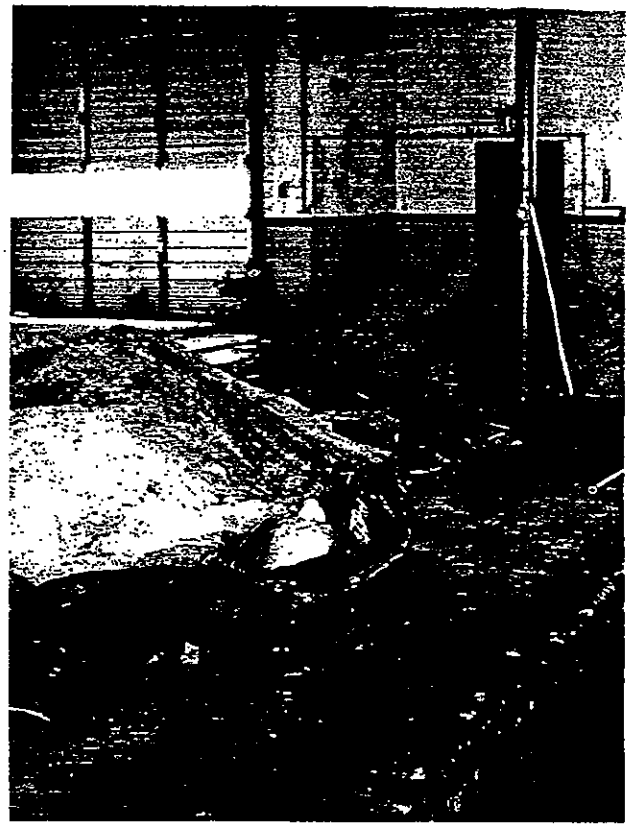
Steve Sobstyl
Project Manager

SS/sgm
cc: see attached distribution

NT Server\Files\Users\Proj\299 MAIN ST\MPR\April-03 Progress Report

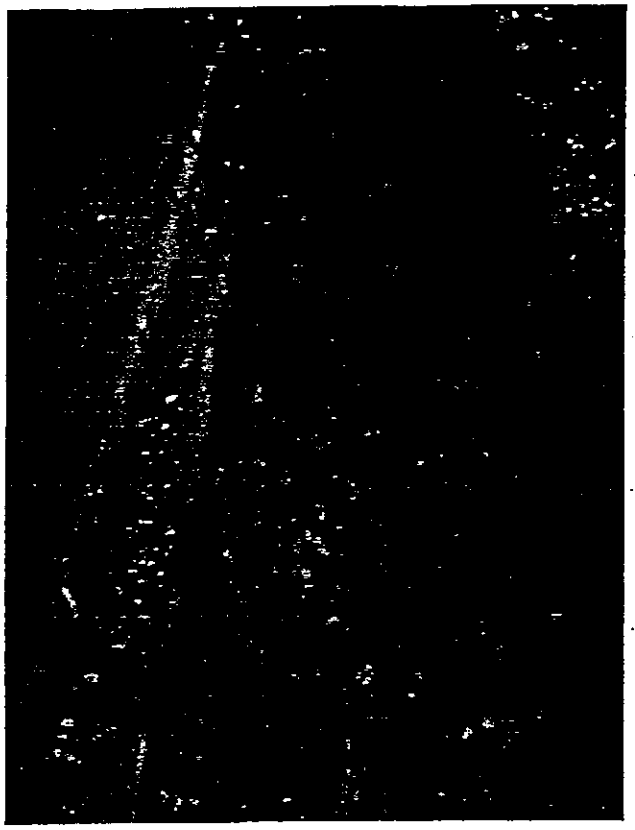


1. Former service pit "PS-7" prior to cleanout. Upper 4-feet of pit contained tan clean sand.

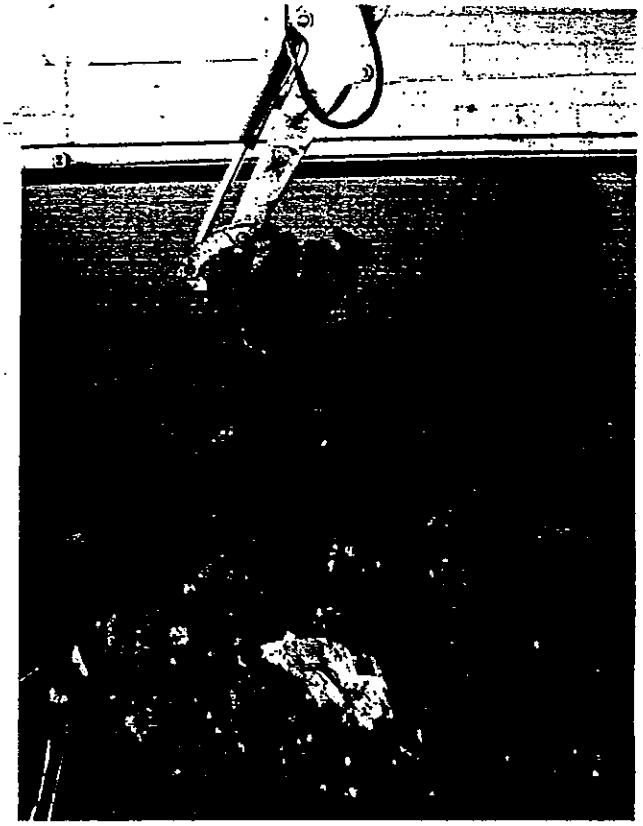


2. Service pit "PS-7" after upper 4-feet of clean sand was removed.

3. Service pit "PS-7" after cleanout.



4. Former service pit "PS-8" prior to cleanout. Service pit is filled with rubble, concrete and brick.



5. Service pit "PS-8" during cleanout.

6. Service pit "PS-8" after cleanout.

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Ray Cowen, P.E., Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Richard Fedigan
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River St., Room 300
Troy, New York 12180-2216

Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
EAB Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Paula Scappatura
2632 Realty Development Corp.
32 Bond Street
Westbury, NY 11590
(516) 333-4005

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

June 10, 2003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report - May 2003**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-0843-98-06

Dear Mr. Jones:

In accordance with the above-referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section V. Progress Reports pursuant to the above-referenced Agreement.

During the past month (May 2003), the following activities were performed:

- The owner of the property has retained the services of Innovative Recycling Technologies to profile, transport and dispose of the petroleum-impacted material removed from PS-7. Currently we are awaiting facility approval from Clean Earth of Maryland to accept the material. Clean Earth of Maryland is an asphalt plant that will incinerate the material for reuse as asphalt.

The following work is planned for June 2003:

- Upon receipt of facility approval, the material will be transported for disposal.

17 DUPONT STREET, PLAINVIEW, NEW YORK 11803 • TEL 516/576-8844 • FAX 516/576-0093

CA RICH CONSULTANTS, INC.

May '03 page

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sgm
cc: see attached distribution

NT Server\Files\Users\Proj\299 MAIN ST\MPR\May-03 Progress Report

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

July 9, 2003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report – June 2003**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-0843-98-06

Dear Mr. Jones:

In accordance with the above-referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section V. Progress Reports pursuant to the above-referenced Agreement.

During the past month (June 2003), the following activities were performed:

- All of the petroleum-impacted material was removed from the Site and transported to Clean Earth of Maryland for incineration and reuse as asphalt.

The following work is planned for July 2003:

- As requested and discussed, in response to identifying two open pits within service pit PS-7, which have been subsequently cleaned out, we will collect a soil sample from each bottom to confirm the adequacy of the cleanout. Also, in accordance with the IRM Work Plan dated October 2001, we plan on coring through the concrete base at two locations at each service pit (PS-7 and PS-8) for the purposes collecting soil samples from beneath the structures. Sample analysis will include USEPA Method 8260 for target volatile organic compounds (VOCs) and USEPA Method 8270 for base-neutral semi-volatile organic compounds (SVOCs).

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.A RICH CONSULTANTS, INC.

June 03 page

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sgm
cc: see attached distribution

NT Server\Files\Users\Proj\299 MAIN ST\MPR\June-03 Progress Report

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

August 4, 2003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report - July 2003**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-0843-98-06

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section V. Progress Reports pursuant to the above-referenced Agreement.

During the past month (July 2003), the following activities were performed:

- On July 29th we collected cleanout endpoint soil samples from the bottom of the floor pits in service pit PS-7. We also cored through the concrete base at two locations in each service pit (PS-7 and PS-8) and collected soil samples from beneath each structure. Samples were submitted to Accutest Laboratories in Dayton, New Jersey (NYSDEC ASP # 10983). All samples were analyzed using USEPA Method 8260 for target volatile organic compounds (VOCs) and USEPA Method 8270 for base-neutral semi-volatile organic compounds (SVOCs) in accordance with NYSDEC ASP Category B deliverable.

The following work is planned for August 2003:

- The owner of the property will retain the services of a licensed contractor to remove the three (3) underground storage tanks from the premises. This work will be completed under the auspices of the Nassau County Department of Health (NCDH). We will contact you once a removal date has been scheduled and confirmed.

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July '03 page 2

CA RICH CONSULTANTS, INC.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sgm
cc: see attached distribution

NT Server\Files\Users\Proj\299 Main St\MPR\July-03 Progress Report

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

September 5, 2003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report – August 2003**
299 Main St., Site 1-38-043S
New Cassel Industrial Area
Agreement Index # W1-0843-98-06

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section V. Progress Reports pursuant to the above-referenced Agreement.

During the past month (August 2003), the following activities were performed:

- We have received the analytical test results for the soil samples collected on July 29th in connection with the former service pits PS-7 and PS-8. We are currently reviewing the data and are in the process of preparing a letter report for submittal to your Office.

The following work is planned September 2003:

- We will submit a letter report summarizing the results of the soil samples collected from the former service pits PS-7 and PS-8.

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CA RICH CONSULTANTS, INC. Aug '03 page 2

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sgm
cc: see attached distribution

NT Server\Files\Users\Proj\299 MAIN ST\MPR\Aug-03 Progress Report

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

October 1, 2003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: Sample Results: PS-7 and PS-8
299 Main Street, Westbury, NY
Site # 1-30-043S

Dear Mr. Jones:

The purpose of this correspondence is to provide you with the sample results obtained from the interior service pits identified as PS-7 and PS-8 at the above-referenced Site. As you know, the service pits have been cleaned out and any petroleum-impacted material was removed from the Site and transported to Clean Earth of Maryland for incineration and reuse as asphalt.

As directed by the approved Work Plan, we also cored through the concrete base at two locations in each service pit (PS-7 and PS-8) and collected soil samples from beneath each structure. In addition, cleanout endpoint soil samples were collected from the bottom of two small floor pits located within service pit PS-7 (see Figure 1). All soil samples were submitted to Accutest Laboratories in Dayton, New Jersey (NYSDEC ASP # 10983). All samples were analyzed using USEPA Method 8260 for target volatile organic compounds (VOCs) and USEPA Method 8270 for base-neutral semi-volatile organic compounds (SVOCs) in accordance with NYSDEC ASP Category B deliverable. Soil sample results are summarized on Tables 1 and 2. A copy of the original laboratory data sheets is also attached.

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Review of the sample data indicates the presence of some VOCs and SVOCs at low levels in the soil beneath service pit PS-7. Any detections were well below NYSDEC TAGM #4046 cleanup objectives. There were no reported detections of VOCs or SVOCs in soil samples collected from beneath service pit PS-8. Based upon these sample results, the cleanout of service pits PS-7 and PS-8 was successful in removing any impacted material contained within the pits. Furthermore, sample results indicate that the subsurface soil beneath each pit has not been impacted to the extent further remediation is warranted. Upon your review of this data, we request permission to backfill both service pits with clean imported material.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

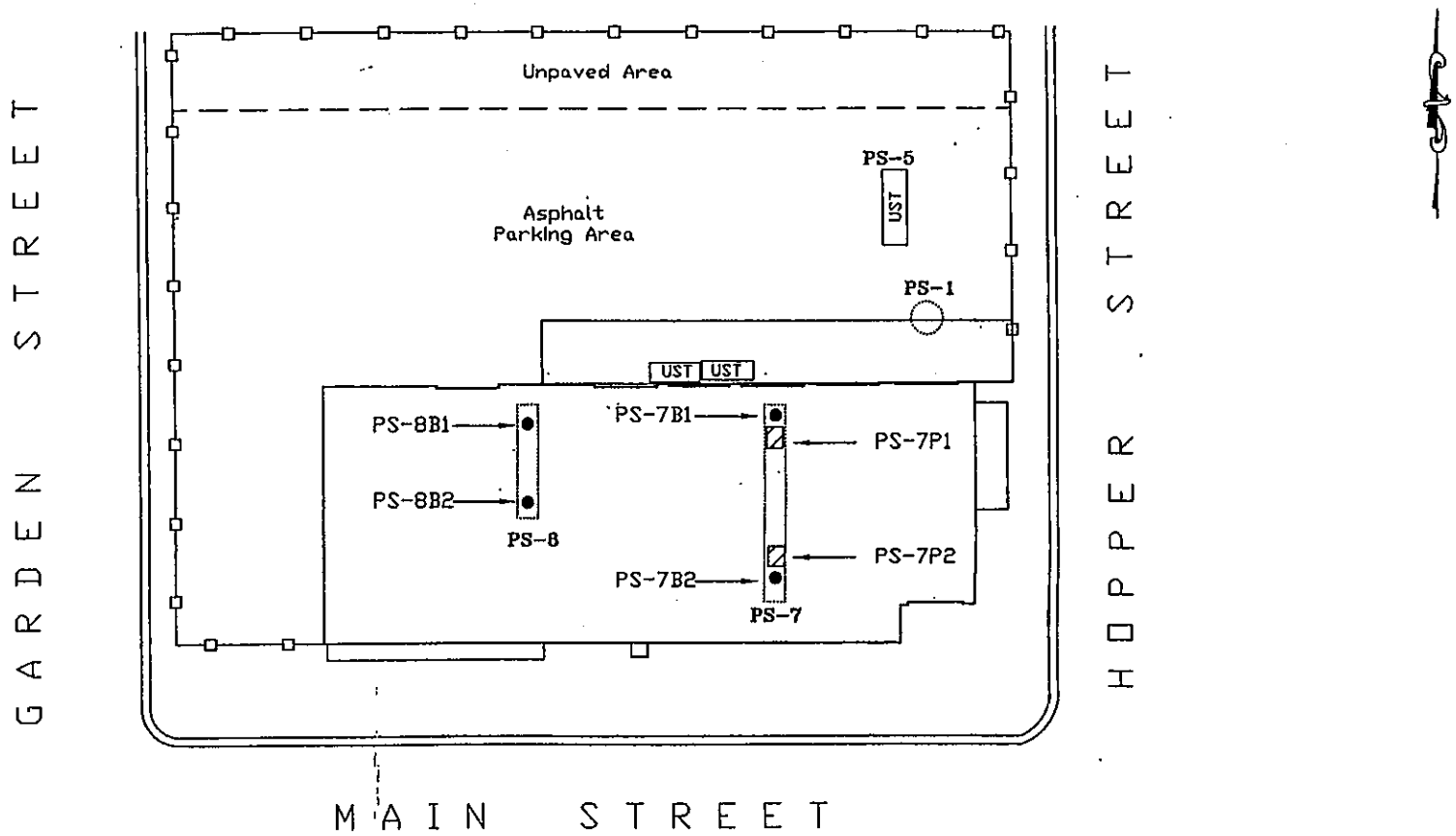
Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sgm
Attachments

NT Server\Files\Users\Proj\299 MAIN ST\PS7&8 Rept



Legend

Fence

Soil Boring Location

Floor Pit

0 20 40 60 80 100

Scale in Feet

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

TITLE: Sample Location Map Service Pits PS-7 & PS-8		DATE: 9/30/03
		SCALE: As Shown
FIGURE: 1	299 MAIN STREET WESTBURY, NEW YORK	DRAWN BY: S.T.M.
DWG NO. 2314-1A		APPR. BY: S.T.S.

2632 RDC-01783

TABLE 1

Analytical Summary - Volatile Organic Compounds
Soil Samples

299 Main Street
Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID	PS-7 B1	PS-7 B2	PS-7 P1	PS-7 P2	PS-8 B1	PS-8 B2	NYSDEC (1)
Date Sampled	07/29/03	07/29/03	07/29/03	07/29/03	07/29/03	07/29/03	TAGM #4046
Sample Type	Boring	Boring	Floor Pit	Floor Pit	Boring	Boring	Cleanup Obj.
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatile Organics (EPA Method 8260)							
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Acetone	ND	13	ND	ND	ND	ND	200
Benzene	ND	ND	ND	ND	ND	ND	60
Bromodichloromethane	ND	ND	ND	ND	ND	ND	No Value
Bromoform	ND	ND	ND	ND	ND	ND	No Value
Bromomethane	ND	ND	ND	ND	ND	ND	No Value
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	300
Carbon disulfide	ND	ND	ND	ND	ND	ND	2,700
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	600
Chlorobenzene	ND	ND	ND	ND	ND	ND	1,700
Chloroethane	ND	ND	ND	ND	ND	ND	1,900
Chloroform	ND	ND	ND	ND	ND	ND	300
Chloromethane	ND	ND	ND	ND	ND	ND	No Value
Dibromochloromethane	ND	ND	ND	ND	ND	ND	No Value
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	200
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	100
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	400
cis-1,2-Dichloroethene	ND	1.4 J	7	ND	ND	ND	300
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	300
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	No Value
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	No Value
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	No Value
Ethylbenzene	ND	ND	ND	ND	ND	ND	5,500
2-Hexanone	ND	ND	ND	ND	ND	ND	No Value
4-Methyl-2-pentanone(MIBK)	ND	ND	ND	ND	ND	ND	1,000
Methylene chloride	ND	ND	ND	ND	ND	ND	100
Styrene	ND	ND	ND	ND	ND	ND	No Value
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	600
Tetrachloroethene	ND	1.7 J	ND	ND	ND	ND	600
Toluene	ND	1.4	4.3	2	ND	ND	1,500
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	800
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	No Value
Trichloroethene	3.8 J	5.4	16.4	ND	ND	ND	700
Vinyl chloride	ND	ND	ND	ND	ND	ND	200
Xylene (total)	ND	ND	1.1 J	2.9	ND	ND	1,200

Notes:
(1) NYSDEC Technical and Administrative Guidance Memorandum #4046: Determination of Cleanup Objectives and Cleanup Levels; 1/24/94.
ND - Non Detect. Compound was analyzed but not detected.
J - Indicates an estimated value where the concentration is less than the reporting limit.
B - Indicates the compound was found in associated method blank as well as in the sample.

TABLE 2

Analytical Summary - SemiVolatile Organic Compounds
Soil Samples

299 Main Street
Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID Date Sampled Sample Type Matrix	PS-7 B1 07/29/03 Boring Soil	PS-7 B2 07/29/03 Boring Soil	PS-7 P1 07/29/03 Floor Pit Soil	PS-7 P2 07/29/03 Floor Pit Soil	PS-8 B1 07/29/03 Boring Soil	PS-8 B2 07/29/03 Boring Soil	NYSDEC (1) TAGM #4046 Cleanup Obj. Soil
Semi-Volatile Organics (EPA Method 8270)							
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Acenaphthene	ND	ND	ND	ND	ND	ND	50,000
Acenaphthylene	ND	ND	ND	ND	ND	ND	41,000
Anthracene	ND	ND	ND	ND	ND	ND	50,000
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	224 or MDL
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	61 or MDL
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	1,100
Benzo(g,h,i)perylene	ND	38.7 J	ND	ND	ND	ND	50,000
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	1,100
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	No Value
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	50,000
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	No Value
4-Chloroaniline	ND	ND	ND	ND	ND	ND	220 or MDL
Carbazole	ND	ND	ND	ND	ND	ND	No Value
Chrysene	ND	ND	ND	ND	ND	ND	400
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	No Value
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	No Value
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	No Value
4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	No Value
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	No Value
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	No Value
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	No Value
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	No Value
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	1,000
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	No Value
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	14 or MDL
Dibenzofuran	ND	ND	ND	ND	ND	ND	6,200
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND	8,100
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	50,000
Diethyl phthalate	ND	ND	ND	ND	ND	ND	7,100
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	2,000
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	50,000
Fluoranthene	ND	20.4 J	ND	ND	ND	ND	50,000
Fluorene	ND	ND	ND	ND	ND	ND	50,000
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	410
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	No Value
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	No Value
Hexachloroethane	ND	ND	ND	ND	ND	ND	No Value
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	3,200
Isophorone	ND	ND	ND	ND	ND	ND	4,400
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	36,400
2-Nitroaniline	ND	ND	ND	ND	ND	ND	No Value
3-Nitroaniline	ND	ND	ND	ND	ND	ND	500 or MDL
4-Nitroaniline	ND	ND	ND	ND	ND	ND	No Value
Naphthalene	ND	ND	ND	ND	ND	ND	13,000
Nitrobenzene	ND	ND	ND	ND	ND	ND	200 or MDL
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	No Value
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	No Value
Phenanthrene	ND	ND	ND	ND	ND	ND	50,000
Pyrene	ND	21.4 J	ND	ND	ND	ND	50,000
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	No Value

Notes:
(1) NYSDEC Technical and Administrative Guidance Memorandum #4046: Determination of Cleanup Objectives and Cleanup Levels; 1/24/94.
ND - Non Detect. Compound was analyzed but not detected.
J - Indicates an estimated value where the concentration is less than the reporting limit.
B - Indicates the compound was found in associated method blank as well as in the sample.

ew York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A
625 Broadway, 11th Floor
Albany, New York 12233-7015
Phone: (518) 402-9621 • Fax: (518) 402-9627
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

March 05, 2004

Steven Sobstyl
CA Rich Consultants, Inc.
17 Dupont Street
Plainview, New York 11803

Re: 299 Main Street, Site No. 1-30-043S

Dear Mr. Sobstyl:

The purpose of this correspondence is to provide written confirmation that based on the sample results obtained from the interior service pits identified as PS-7 and PS-8, as conveyed in your letter of October 1, 2003, the New York State Department of Environmental Conservation (NYSDEC) will permit the service pits to be backfilled with clean imported material. Please inform me as to the field schedule at least one week in advance of the work.

Should you have any questions regarding this matter, please contact me at (518)-402-9621.

Sincerely,

Joseph G. Jones
Remedial Section A
Remedial Bureau A

CA RICH
ENVIRONMENTAL SPECIALISTS

April 8, 2004

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report –March 2004**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-0843-98-06

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section V. Progress Reports pursuant to the above-referenced Agreement.

During the past month (March 2004), the following activities were performed:

- We have received authorization from NYSDEC to seal the service pits PS-7 and PS-8 with concrete and have scheduled this for one day during the week of April 26th.

The following work is planned April 2004:

- Attached to this monthly progress report is an estimated time schedule to complete the remaining work items approved in the IRM Work Plan.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sgm
cc: see attached distribution

N:\ Server\Files\Users\Proj\299 MAIN ST\MPR\March-04 Progress Report

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Richard Fedigan
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River St., Room 300
Troy, New York 12180-2216

Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
EAB Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Paula Scappatura
2632 Realty Development Corp.
32 Bond Street
Westbury, NY 11590
(516) 333-4005

RICH Environmental Specialists

299 Main Street
NYSDEC Site # 1-30-043S
IRM Work Schedule

Schedule of IRM Activities	Estimated Time Frame	
Task #	Start Date	Completion Date
1) Waste Characterization: Service Pits PS-7 & 8	Completed	6/10/03
2) PS-7 & 8: Service Pit Cleanout Excavate PS-7 & 8 and stockpile soil on-site pending off-site disposal. Remove stockpiled soil. Sample soil below pits PS-7 & 8.	Completed	10/1/03
3) Backfill and concrete former service pits	4/15/04	5/1/04
4) PS-5: UST Removals Open exterior pavement and remove USTs & pipelines. Backfill with clean fill.	5/15/04	7/1/04
5) PS-1: Drywell Cleanout Uncover lid to PS-1, excavate, stockpile soil on-site and collect end-point sample. Backfill PS-1 with clean fill.	7/15/04	8/15/04
6) SVE System Install SVE well at PS-5. Order materials. Install blower, piping and carbon. Run pilot test.	9/1/04	11/1/04
7) Prepare IRM Report Begin O & M	11/15/04	12/31/04

CA RICH
ENVIRONMENTAL SPECIALISTS

May 8, 2004

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report – April 2004**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-0843-98-06

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section V. Progress Reports pursuant to the above-referenced Agreement.

During the past month (April 2004), the following activities were performed:

- We have backfilled and sealed the service pits PS-7 and PS-8 with concrete.

The following work is planned May-June 2004:

- We will excavate and remove the USTs from the Site.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

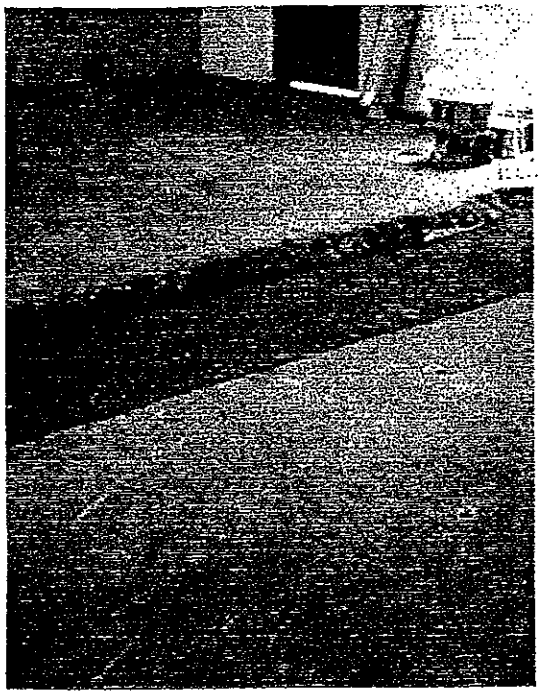
Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sgm
cc: see attached distribution
NT Server\Files\Users\Proj\299 MAIN ST\MPR\April-04 Progress Report

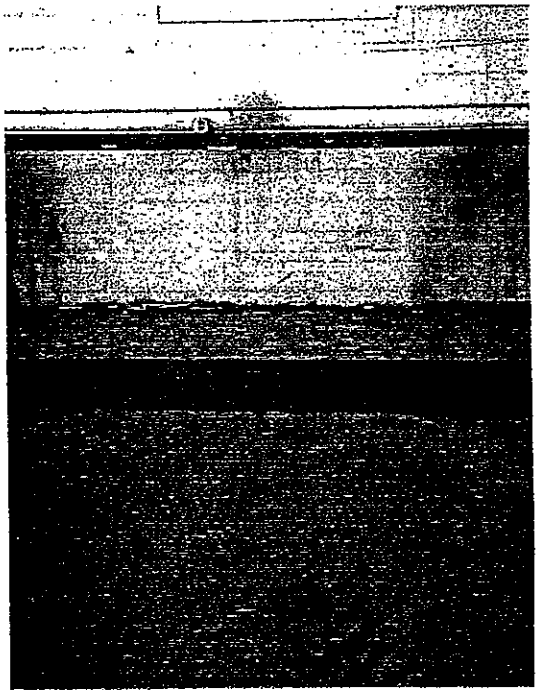
17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com



1. View of backfilled service pit PS-7.

2. View of concrete sealed service pit PS-7

3. View of backfilled service pit PS-8.



4. View of concrete sealed service pit PS-8

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Richard Fedigan
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River St., Room 300
Troy, New York 12180-2216

Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
EAB Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Paula Scappatura
2632 Realty Development Corp.
32 Bond Street
Westbury, NY 11590
(516) 333-4005

RICH
ENVIRONMENTAL SPECIALISTS

February 10, 2006

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report –January 2006**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the past month the following activities were performed:

- On December 10, 2005 the overflow drywell designated "OF-1" was excavated down to a depth of approximately 30 feet below the surface at which time an excavation endpoint soil sample was collected (see attached; photos). Based upon the excavation endpoint sample results (see attached; sample ID: OF-1 EP(30)), the soil vapor extraction system will be expanded to this area of the Site to remove residual volatile organic compounds associated with this former drywell.

The following work is planned February 2006:

- We will schedule the off-site removal of soil excavated from former drywell "OF-1".
- We will procure bids for the installation of the soil vapor extraction (SVE) well points. The SVE system will consist of three (3) soil vapor extraction wells installed at the location of former drywells "PS-1" and "OF-1", as well as, at the location of the former 1,000-gallon and 550-gallon USTs (see attached; Figures 1, 2 and 3).

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution
NT Server\Files\Users\Proj\299 MAIN ST\MPR 2006\Jan.-06 Progress Rept

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

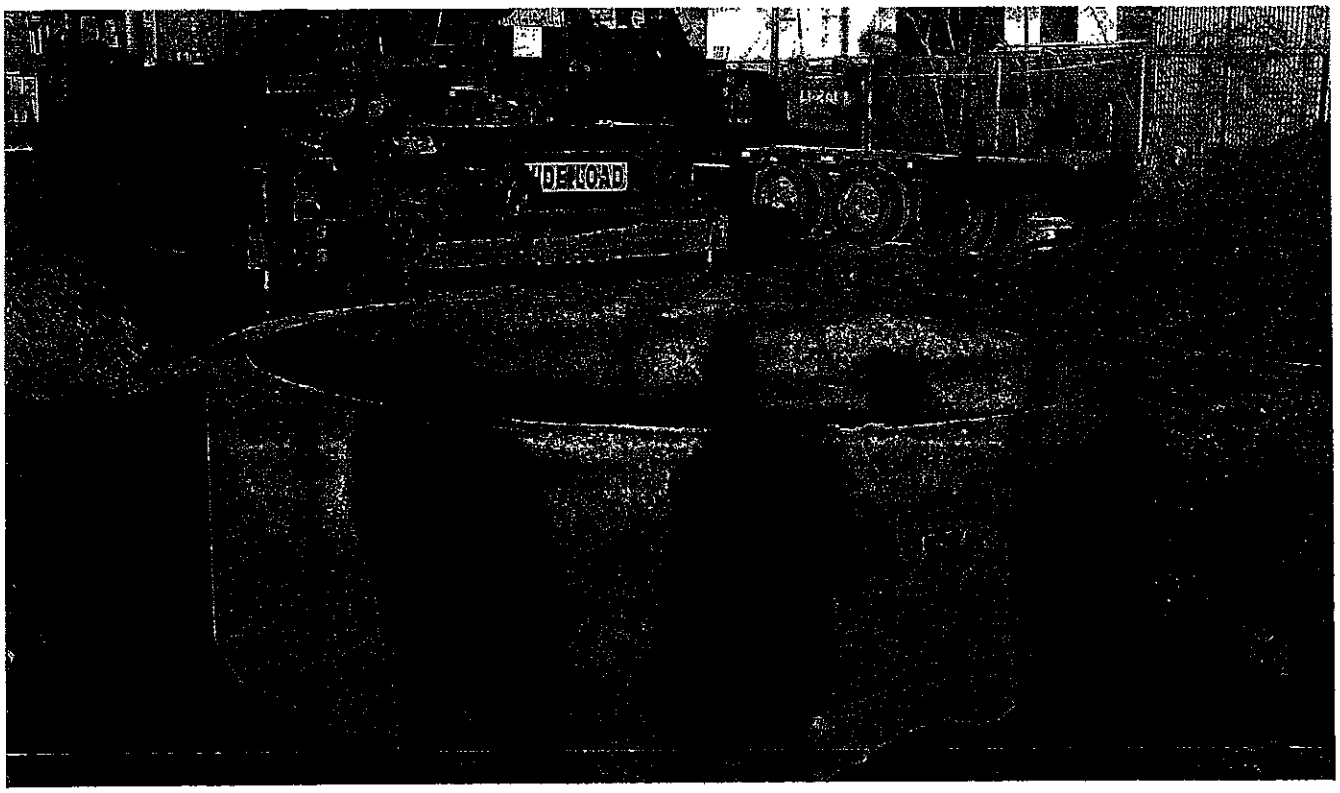
Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Lawrence P. Schnapf, Esq.
55 East 87th Street, # 8B/8C
New York, NY 11028
(212) 996-5395

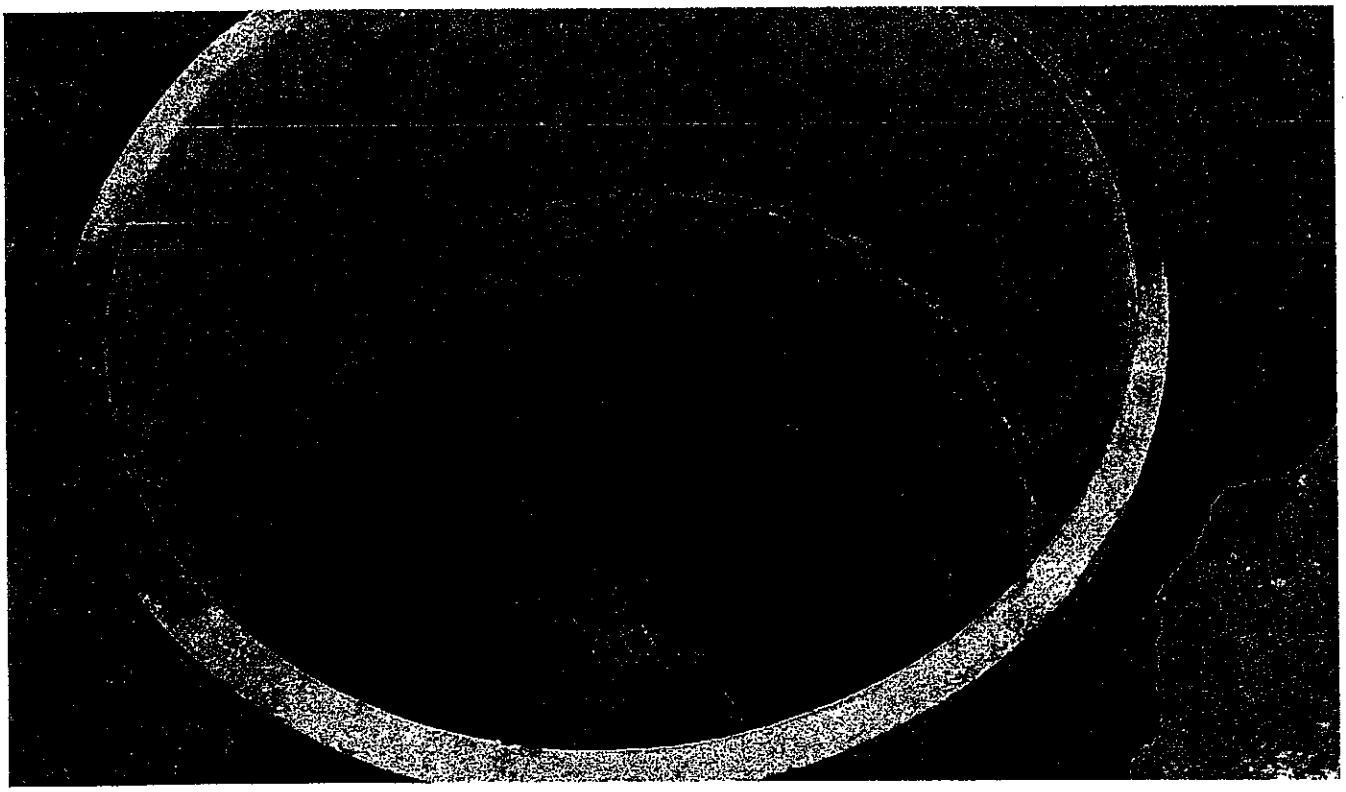
Alex Holuka
19 Liberty LTD
299 Main Street
Westbury, NY 11590

PHOTOGRAPHS

Remediation of drywell "OF-1" on December 10, 2005

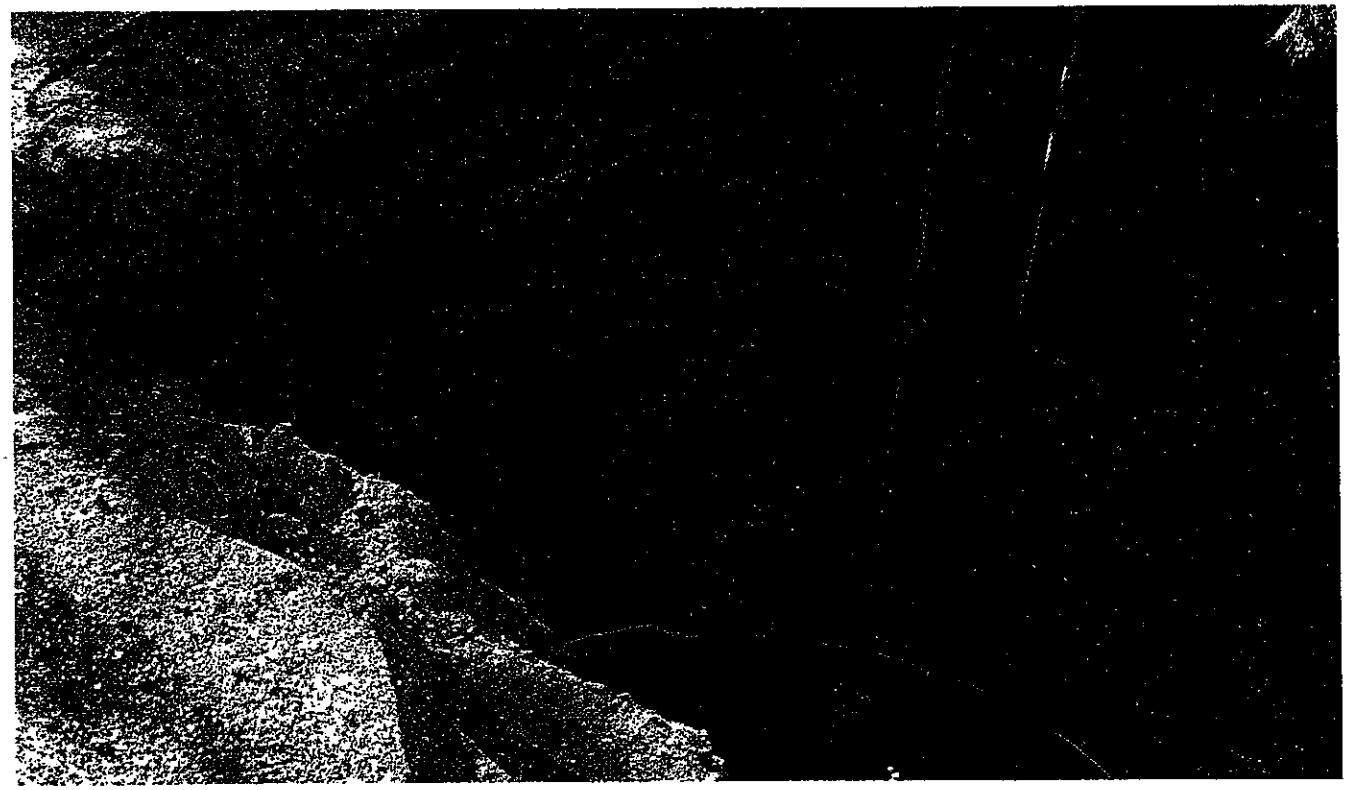


299 Main Street - Installation of oversized concrete rings during remediation drywell OF-1.

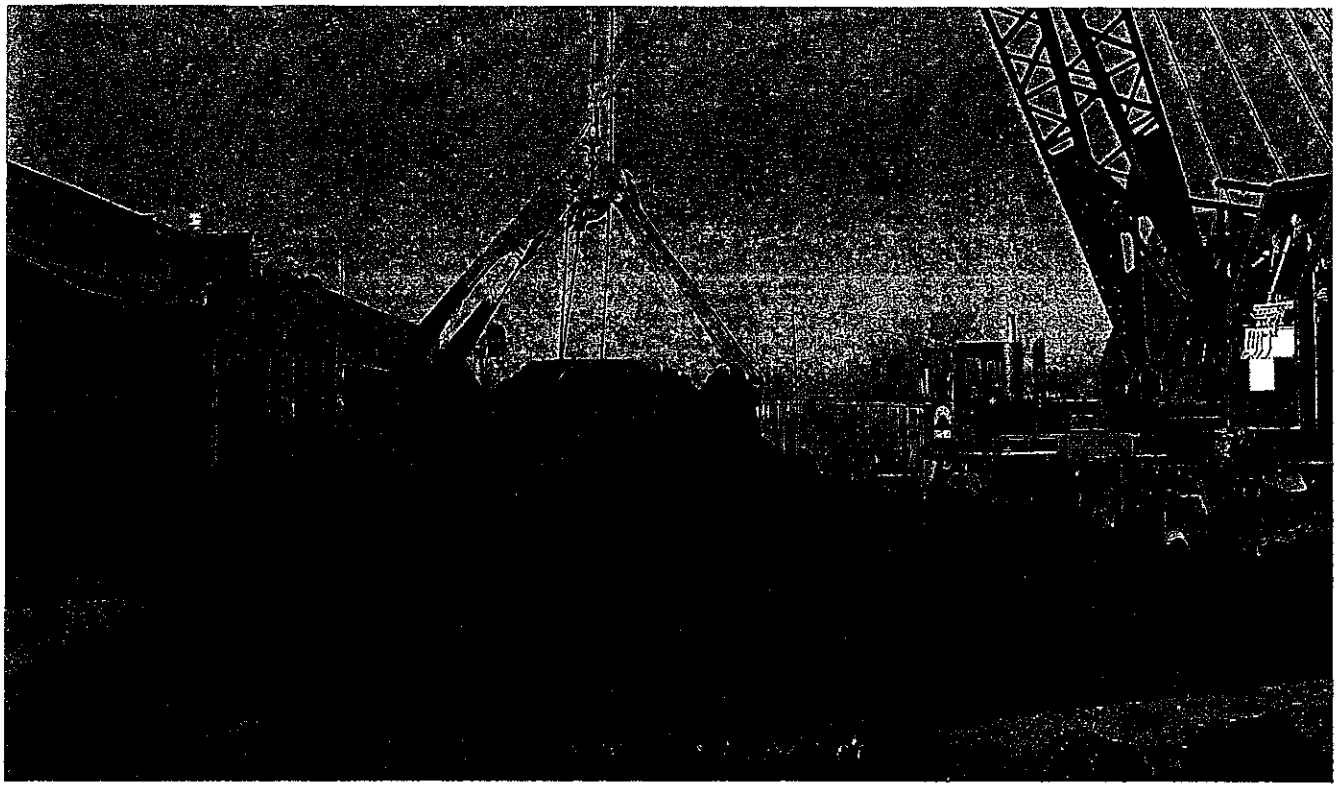


299 Main Street - Excavation of drywell OF-1.

299 Main Street - Excavation of drywell OF-1.



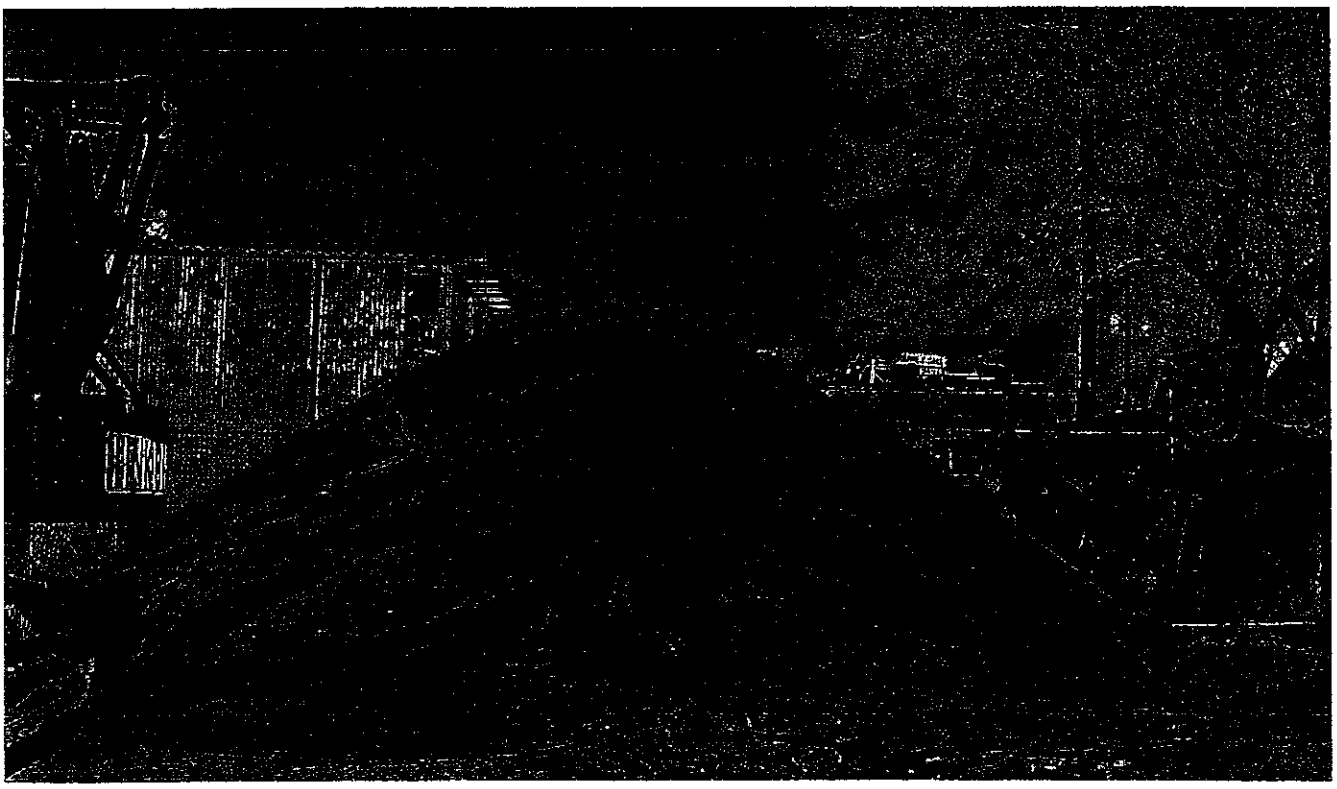
299 Main Street - Excavation of drywell OF-1.



299 Main Street - Installation of clean imported sand during the backfilling of drywell OF-1.

299 Main Street - Backfilling of drywell OF-1.

299 Main Street - Stockpile of excavated soil from drywell OF-1.



299 Main Street - Stockpile of excavated soil from drywell OF-1.

LABORATORY DATA

Excavation Enpoint Soil Sample "OF-1 EP (30)"

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.254720.01 12/30/05

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury
SOURCE OF SAMPLE: Job #299 Main Street
COLLECTED BY: Client DATE COL'D:12/10/05 RECEIVED:12/12/05
TIME COL'D:1030
MATRIX:Soil SAMPLE: OF-1 EP(30)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Chloromethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Vinyl Chloride	ug/Kg	< 100		12/13/05	104.16	EPA8260
Bromomethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Chloroethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Trichlorofluoromethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
1,1 Dichloroethene	ug/Kg	< 100		12/13/05	104.16	EPA8260
Methylene Chloride	ug/Kg	< 100		12/13/05	104.16	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 100		12/13/05	104.16	EPA8260
1,1 Dichloroethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
2,2-Dichloropropane	ug/Kg	< 100		12/13/05	104.16	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 100		12/13/05	104.16	EPA8260
Bromochloromethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Chloroform	ug/Kg	< 100		12/13/05	104.16	EPA8260
111 Trichloroethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Carbon Tetrachloride	ug/Kg	< 100		12/13/05	104.16	EPA8260
1,1-Dichloropropene	ug/Kg	< 100		12/13/05	104.16	EPA8260
Benzene	ug/Kg	< 100		12/13/05	104.16	EPA8260
1,2 Dichloroethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Trichloroethene	ug/Kg	< 100		12/13/05	104.16	EPA8260
1,2 Dichloropropane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Dibromomethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Bromodichloromethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
c-1,3Dichloropropene	ug/Kg	< 100		12/13/05	104.16	EPA8260
Toluene	ug/Kg	1500		12/13/05	104.16	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 32327 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO: 254720.01 12/30/05

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury
SOURCE OF SAMPLE: Job #299 Main Street
COLLECTED BY: Client DATE COL'D:12/10/05 RECEIVED:12/12/05
TIME COL'D:1030
MATRIX:Soil SAMPLE: OF-1 EP(30)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 100		12/13/05	104.16	EPA8260
112 Trichloroethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Tetrachloroethene	ug/Kg	< 100		12/13/05	104.16	EPA8260
1,3-Dichloropropane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Chlorodibromomethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
1,2 Dibromoethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
Chlorobenzene	ug/Kg	< 100		12/13/05	104.16	EPA8260
Ethyl Benzene	ug/Kg	2600		12/13/05	104.16	EPA8260
1112Tetrachloroethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
m + p Xylene	ug/Kg	16000		12/13/05	208.33	EPA8260
o Xylene	ug/Kg	8800		12/13/05	104.16	EPA8260
Styrene	ug/Kg	< 100		12/13/05	104.16	EPA8260
Bromoform	ug/Kg	< 100		12/13/05	104.16	EPA8260
Isopropylbenzene	ug/Kg	1500		12/13/05	104.16	EPA8260
Bromobenzene	ug/Kg	< 100		12/13/05	104.16	EPA8260
1122Tetrachloroethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
123-Trichloropropane	ug/Kg	< 100		12/13/05	104.16	EPA8260
n-Propylbenzene	ug/Kg	4500		12/13/05	104.16	EPA8260
2-Chlorotoluene	ug/Kg	7400		12/13/05	104.16	EPA8260
135-Trimethylbenzene	ug/Kg	14000		12/13/05	520.83	EPA8260
4-Chlorotoluene	ug/Kg	< 100		12/13/05	104.16	EPA8260
tert-Butylbenzene	ug/Kg	< 100		12/13/05	104.16	EPA8260
124-Trimethylbenzene	ug/Kg	42000		12/13/05	520.83	EPA8260
sec-Butylbenzene	ug/Kg	4900		12/13/05	104.16	EPA8260
p-Isopropyltoluene	ug/Kg	3900		12/13/05	104.16	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 32328 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.254720.01 12/30/05

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury
SOURCE OF SAMPLE: Job #299 Main Street
COLLECTED BY: Client DATE COL'D:12/10/05 RECEIVED:12/12/05
TIME COL'D:1030
MATRIX:Soil SAMPLE: OF-1 EP(30)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICA METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 100		12/13/05	104.16	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 100		12/13/05	104.16	EPA8260
n-Butylbenzene	ug/Kg	< 100		12/13/05	104.16	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	1000		12/13/05	104.16	EPA8260
Dibromochloropropane	ug/Kg	< 100		12/13/05	104.16	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 100		12/13/05	104.16	EPA8260
Hexachlorobutadiene	ug/Kg	< 100		12/13/05	104.16	EPA8260
Naphthalene(v)	ug/Kg	6500		12/13/05	104.16	EPA8260
123-Trichlorobenzene	ug/Kg	< 100		12/13/05	104.16	EPA8260
ter.ButylMethylEther	ug/Kg	< 100		12/13/05	104.16	EPA8260
p-Ethyltoluene	ug/Kg	30000		12/13/05	520.83	EPA8260
Freon 113	ug/Kg	< 100		12/13/05	104.16	EPA8260
1245 Tetramethylbenz	ug/Kg	4700		12/13/05	104.16	EPA8260
Acetone	ug/Kg	< 1000		12/13/05	1041.6	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 1000		12/13/05	1041.6	EPA8260
Methylisobutylketone	ug/Kg	< 1000		12/13/05	1041.6	EPA8260
Chlorodifluoromethane	ug/Kg	< 100		12/13/05	104.16	EPA8260
p Diethylbenzene	ug/Kg	< 100		12/13/05	104.16	EPA8260
% Solids		96		12/13/05	0.1	SM182540C

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 32329 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.254720.01 12/30/05

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury
SOURCE OF SAMPLE: Job #299 Main Street
COLLECTED BY: Client DATE COL'D:12/10/05 RECEIVED:12/12/05
TIME COL'D:1030
MATRIX:Soil SAMPLE: OF-1 EP(30)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Antimony as Sb	mg/Kg	< 1.0		12/15/05	1.0416	EPA6010
Arsenic as As	mg/Kg	< 2.1		12/15/05	2.0833	EPA6010
Beryllium as Be	mg/Kg	0.17		12/15/05	0.1041	EPA6010
Cadmium as Cd	mg/Kg	< 0.52		12/15/05	0.5208	EPA6010
Chromium as Cr	mg/Kg	4.2		12/15/05	0.5208	EPA6010
Copper as Cu	mg/Kg	13		12/15/05	1.0416	EPA6010
Lead as Pb	mg/Kg	5.8		12/15/05	0.5208	EPA6010
Mercury as Hg	mg/Kg	0.0058		12/14/05	0.0052	EPA7470A
Nickel as Ni	mg/Kg	< 1.0		12/15/05	1.0416	EPA6010
Selenium as Se	mg/Kg	< 0.42		12/20/05	0.4166	EPA7740
Silver as Ag	mg/Kg	< 0.52		12/15/05	0.5208	EPA6010
Thallium as Tl	mg/Kg	< 1.0		12/15/05	1.0416	EPA6010
Zinc as Zn	mg/Kg	7.2		12/15/05	1.0416	EPA6010

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 32330 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.254720.02 12/30/05

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury
SOURCE OF SAMPLE: Job #299 Main Street
COLLECTED BY: Client DATE COL'D:12/10/05 RECEIVED:12/12/05

MATRIX:Water SAMPLE: TB-12/10

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICA METHOD
Dichlordifluoromethane	ug/L	< 1		12/13/05	1	EPA8260
Chloromethane	ug/L	< 1		12/13/05	1	EPA8260
Vinyl Chloride	ug/L	< 1		12/13/05	1	EPA8260
Bromomethane	ug/L	< 1		12/13/05	1	EPA8260
Chloroethane	ug/L	< 1		12/13/05	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		12/13/05	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		12/13/05	1	EPA8260
Methylene Chloride	ug/L	< 1		12/13/05	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		12/13/05	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		12/13/05	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		12/13/05	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		12/13/05	1	EPA8260
Bromochloromethane	ug/L	< 1		12/13/05	1	EPA8260
Chloroform	ug/L	< 1		12/13/05	1	EPA8260
111 Trichloroethane	ug/L	< 1		12/13/05	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		12/13/05	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		12/13/05	1	EPA8260
Benzene	ug/L	< 1		12/13/05	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		12/13/05	1	EPA8260
Trichloroethene	ug/L	< 1		12/13/05	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		12/13/05	1	EPA8260
Dibromomethane	ug/L	< 1		12/13/05	1	EPA8260
Bromodichloromethane	ug/L	< 1		12/13/05	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		12/13/05	1	EPA8260
Toluene	ug/L	< 1		12/13/05	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 32331 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.254720.02 12/30/05

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury
SOURCE OF SAMPLE: Job #299 Main Street
COLLECTED BY: Client DATE COL'D:12/10/05 RECEIVED:12/12/05

MATRIX:Water SAMPLE: TB-12/10

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICA METHOD
t-1,3Dichloropropene	ug/L	< 1		12/13/05	1	EPA8260
112 Trichloroethane	ug/L	< 1		12/13/05	1	EPA8260
Tetrachloroethene	ug/L	< 1		12/13/05	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		12/13/05	1	EPA8260
Chlorodibromomethane	ug/L	< 1		12/13/05	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		12/13/05	1	EPA8260
Chlorobenzene	ug/L	< 1		12/13/05	1	EPA8260
Ethyl Benzene	ug/L	< 1		12/13/05	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		12/13/05	1	EPA8260
m + p Xylene	ug/L	< 2		12/13/05	2	EPA8260
o Xylene	ug/L	< 1		12/13/05	1	EPA8260
Styrene	ug/L	< 1		12/13/05	1	EPA8260
Bromoform	ug/L	< 1		12/13/05	1	EPA8260
Isopropylbenzene	ug/L	< 1		12/13/05	1	EPA8260
Bromobenzene	ug/L	< 1		12/13/05	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		12/13/05	1	EPA8260
123-Trichloropropane	ug/L	< 1		12/13/05	1	EPA8260
n-Propylbenzene	ug/L	< 1		12/13/05	1	EPA8260
2-Chlorotoluene	ug/L	< 1		12/13/05	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		12/13/05	1	EPA8260
4-Chlorotoluene	ug/L	< 1		12/13/05	1	EPA8260
tert-Butylbenzene	ug/L	< 1		12/13/05	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		12/13/05	1	EPA8260
sec-Butylbenzene	ug/L	< 1		12/13/05	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		12/13/05	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

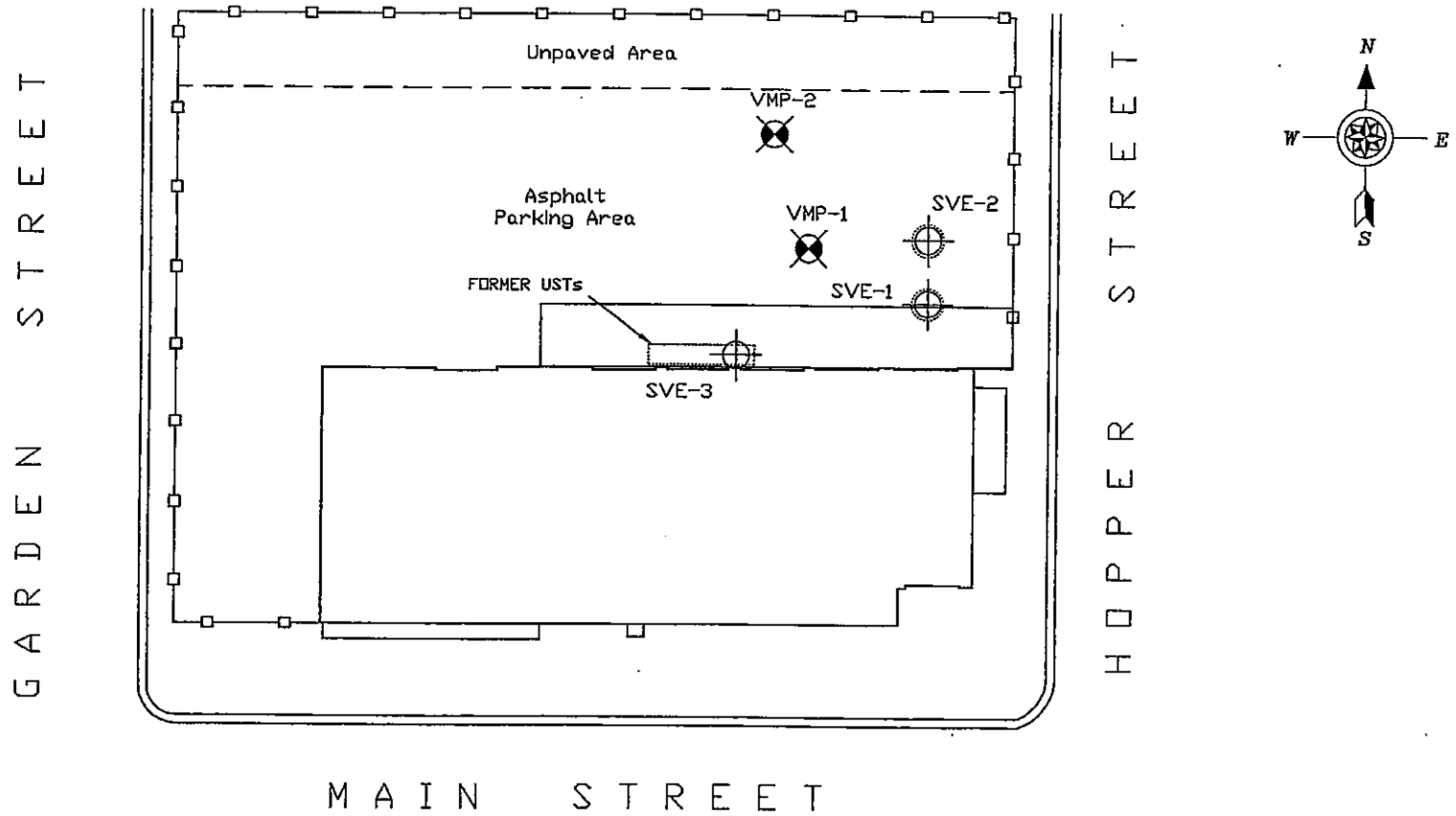
REMARKS:

DIRECTOR

rn = 32332 NYSDOH ID # 10320

FIGURES

Soil Vapor Extraction System



Legend

SOIL VAPOR EXTRACTION WELL (SVE)

FORMER DRAINAGE LOCATION

VACUUM MONITORING POINT

0 20 40 60 80 100

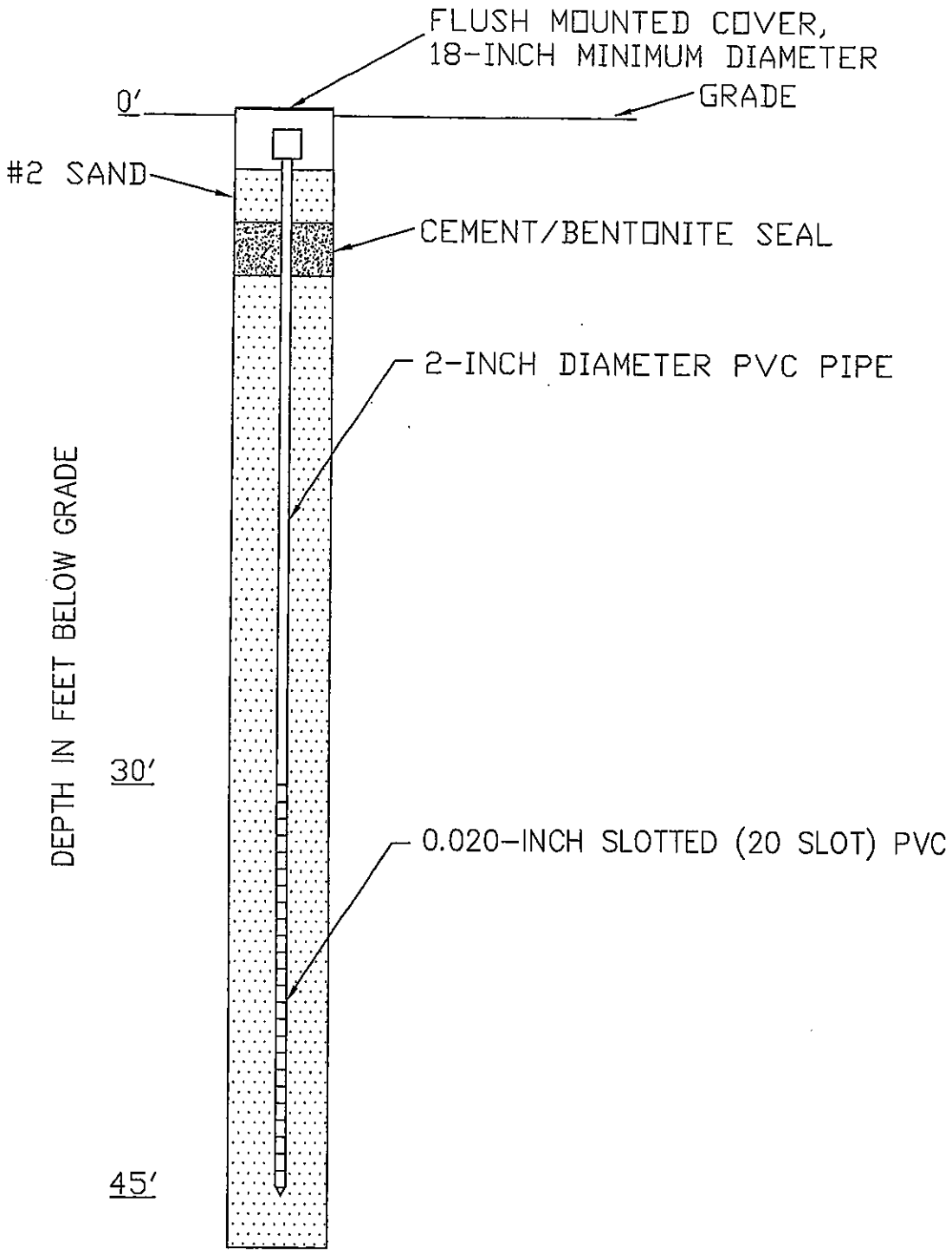
Scale in Feet

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

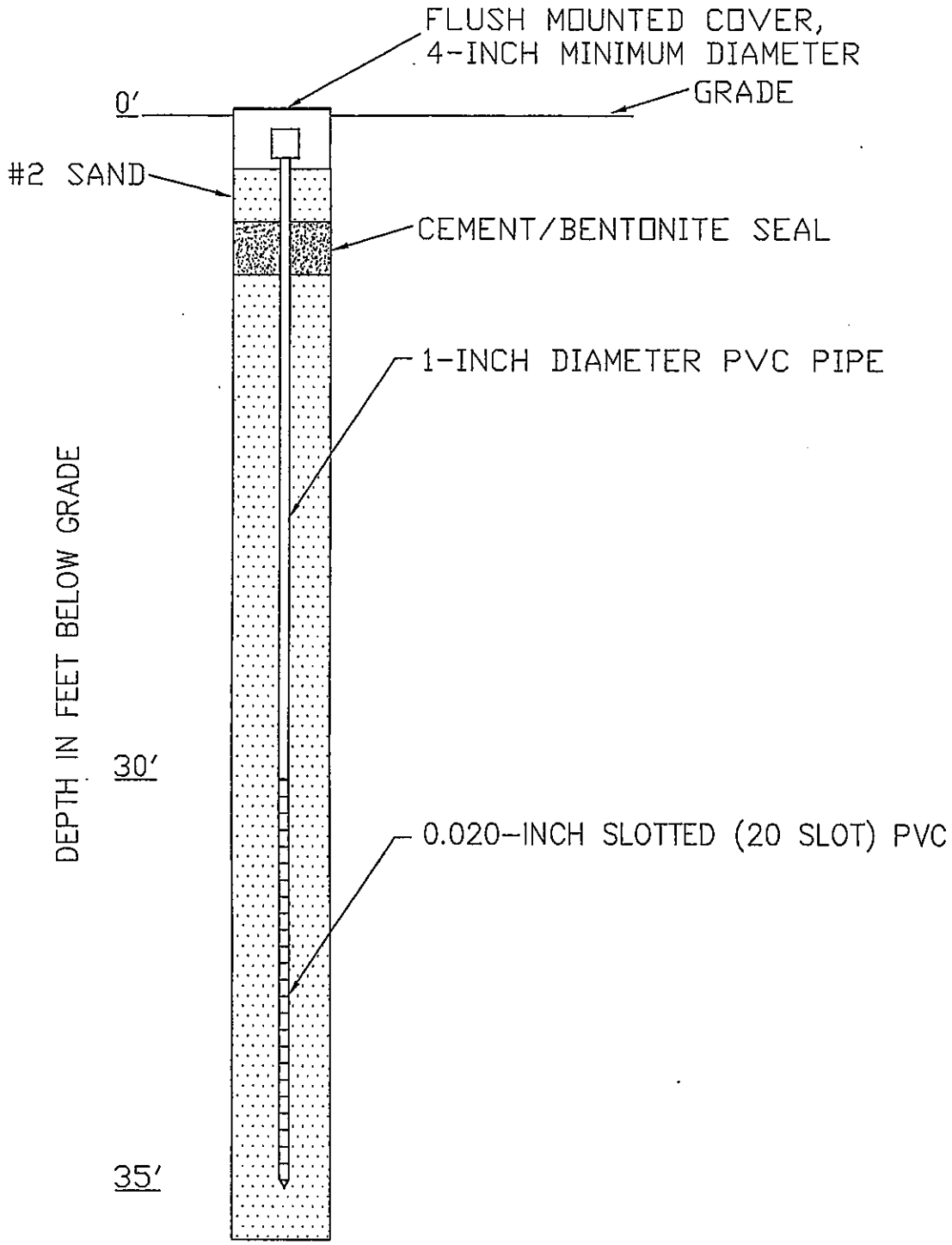
TITLE: SVE and VACUUM MONITORING POINT LOCATIONS		DATE: 2/13/06
		SCALE: As Shown
FIGURE: 1	299 MAIN STREET WESTBURY, NEW YORK	DRAWN BY: S.T.M.
DWG NO. 2006-5A		APPR. BY: S.T.S.

2632 RDC-01809



TYPICAL SVE WELL DETAILS
NOT TO SCALE

CA RICH CONSULTANTS, INC. Certified Ground-Water and Environmental Specialists 17 Dupont Street, Plainview, New York 11803		
TITLE: TYPICAL SVE WELL DESIGN		DATE: 2/7/06 SCALE: AS SHOWN
FIGURE: 2 DRAWING NO: 2006-3a	299 MAIN STREET WESTBURY, NEW YORK	DRAWN BY: S.T.M. APPR. BY: E.A.W.



TYPICAL VACUUM MONITORING POINT DETAILS
NOT TO SCALE

CA RICH CONSULTANTS, INC. Certified Ground-Water and Environmental Specialists 17 Dupont Street, Plainview, New York 11803		
TITLE: TYPICAL SVE WELL DESIGN		DATE: 2/7/06 SCALE: AS SHOWN
FIGURE: 3 DRAWING NO: 2006-4a	299 MAIN STREET WESTBURY, NEW YORK	DRAWN BY: S.T.M. APPR. BY: E.A.W.

RICH
ENVIRONMENTAL SPECIALISTS

February 15, 2006

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **299 Main St., Site 1-30-043S**
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

On February 1, 2006 we received a fully executed copy of the Order on Consent (the "Order") for the development and implementation of the Remedial Program for the 299 Main Street Site (the "Site"). The Order was signed on behalf of the Department by Dale A. Denoyers on January 6, 2006.

It is our understanding that on January 5, 2006 the former owner, 2632 Realty Development Corp. ("2632 Realty"), sold the Site. Please be advised that on January 25, 2006 the new owner of the Site, 299 Main St., LLC referred to as the "Respondent" under the new Agreement Index #W1-1072-05-07 retained the professional services of CA Rich Consultants, Inc. ("CA RICH") to assist with the implementation of Remedial Program.

We have reviewed the new Order Index #W1-1072-05-07 and request that the Department consider the following work items as already completed by others under the former Order Index #W1-0843-98-06.

Former Order Index #W1-0843-98-06

Records Search Report – completed as part of the RI Work Plan
Site Characterization Work Plan – completed as part of the RI Work Plan
Remedial Investigation/Feasibility Study Work Plan – completed
IRM Work Plan – completed

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

Once all of the work items outlined in the IRM Work Plan have been implemented, we propose to submit the following documents under the existing Order Index #W1-1072-05-07).

Existing Order Index #W1-1072-05-07

IRM Report Part A – This report will summarize the initial IRM activities including: UST removals; excavation and disposal of soil; the excavation endpoint soil sample results; the soil vapor extraction (SVE) well installation; the results of the SVE pilot test; and the proposes layout of the SVE system.

IRM Report Part B – This report will include the Final Engineering Report and the Operations, Maintenance and Monitoring (OM&M) Plan, as well as, the required as-built drawings for the SVE system.

Our most recent Monthly Progress Report (dated February 10, 2006) included figures illustrating our proposed design of the SVE well points and vacuum monitoring points. We anticipate the installation of the below ground plumbing for the SVE system in March and will notify you prior to conducting any Site work.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: Guy Bobersky, P.E.
Peter Scully
Gary Litwin
Alali M. Tamuno, Esq.
Lawrence P. Schnapf, Esq.
Alex Holuka

NT Server\Files\Users\Proj\299 MAIN ST\PCS\Consent let.

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

Alali M. Tamuno, Esq. Senior Attorney — via pdf @ amtamuno@gw.dec.state.ny.us
cc argilkse...
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Lawrence P. Schnapf, Esq.
55 East 87th Street, # 8B/8C
New York, NY 11028
(212) 996-5395

Alex Holuka
19 Liberty LTD
299 Main Street
Westbury, NY 11590

RICH
ENVIRONMENTAL SPECIALISTS

March 9, 2006

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report –February 2006**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the past month the following activities were performed:

- On February 22, 2006 the soil excavated from overflow drywell designated "OF-1" was removed from the Site and transported to Clean Earth of Carteret in New Jersey.
- We secured bids for the installation of the soil vapor extraction (SVE) well points. Submitted to NYSDEC drawings illustrating the proposed SVE System Layout (Figure 1), SVE Well Design (Figure 2) and Vacuum Monitoring Point Design (Figure 3).

The following work is planned March 2006:

- Installation of the SVE well points and vacuum monitoring points.
- Conduct a pilot test of the SVE well points.
- Begin site preparation activities and trench work for the SVE system.

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution
NT Server\Files\Users\Proj\299 MAIN ST\MPR 2006\Feb.-06 Progress Rept

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Lawrence P. Schnapf, Esq.
55 East 87th Street, # 8B/8C
New York, NY 11028
(212) 996-5395

Alex Holuka (via email)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

CA RICH
ENVIRONMENTAL SPECIALISTS

May 17, 2006

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Monthly Progress Report - April 2006**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Monthly Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the past months the following activities were performed:

- On April 26th and 27th we installed the soil vapor extraction (SVE) well points and vacuum monitoring points. On May 2nd we conducted a pilot test on the SVE points.

The following work is planned May 2006:

- We will begin preparation of the Interim Remedial Measures (IRM) Report - Part A as discussed in our letter to you dated February 15, 2006. This report will summarize the initial IRM activities including: UST removals; excavation and disposal of soil; the excavation endpoint soil sample results; the soil vapor extraction (SVE) well installation; the results of the SVE pilot test; and the proposed layout of the SVE system.

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution
NT Server\Files\Users\Proj\299 MAIN ST\MPR 2006\Mar-April-06 Progress Rept

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I - **NYSDEC**
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Lawrence P. Schnapf, Esq.
55 East 87th Street, # 8B/8C
New York, NY 11028
(212) 996-5395

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Alex Holuka (via email)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

RICH
ENVIRONMENTAL SPECIALISTS

January 8, 2009

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: December 2008**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the past several months the following activities were performed:

- On October 23rd, the quarterly soil vapor sample was collected from the SVE system which concluded 2-years of system operation and operation of the system in a pulse mode during the month of September. A complete summary of the soil vapor samples collected to date with a tabulated breakdown of the VOCs of concern and a graphic analysis of total VOCs concentrations over time was forwarded for your review on November 18, 2008. At that we requested that operation of the system be suspended for the purposes of collecting soil samples from within the remediation zones in accordance with the SVE system termination criteria presented in the Interim Remedial Measures (IRM) Report – Part B for the On-Site Soil Vapor Extraction System.

- All three (3) of the existing on-site groundwater monitoring wells were inspected and found to be intact and usable. The elevation of the wells was surveyed for the purposes of establishing groundwater elevation and flow direction beneath the site. On November 18th, we submitted a Groundwater Monitoring Work Plan for your review.

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

The following work is planned for the upcoming months:

- Upon receipt of NYSDEC approval, we will suspend operation of the SVE system for the purposes of collecting soil samples from within the remediation zones.

- Upon receipt of NYSDEC approval, we will proceed with the collection of groundwater samples as proposed in the Groundwater Monitoring Work Plan.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution
NT Server\Files\Users\Proj\299 MAIN ST\MPR 2008\Dec-08 Progress Rept

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq.
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email)
19 Liberty LTD d.b.a. Padilla Construction Services Corp.
299 Main Street
Westbury, NY 11590

RICH
ENVIRONMENTAL SPECIALISTS

February 4, 2009

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: January 2009**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the month of January the following activities were performed:

- We have received approval from NYSDEC to suspend operation of the SVE system for the purposes of collecting soil samples from within the remediation zones.

- We have received approval from NYSDEC to proceed with the collection of groundwater samples as proposed in the Groundwater Monitoring Work Plan.

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

The following work is planned for the upcoming month:

- We will suspend operation of the SVE system and collect the required soil samples from within the remediation zones. We will proceed with the collection of groundwater samples as proposed in the Groundwater Monitoring Work Plan. We will notify NYSDEC once a sampling date has been scheduled.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution
NT Server\Files\Users\Proj\299 MAIN ST\MPR 2009\Jan-09 Progress Rept

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq. (via email only)
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq. (via email only)
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

CA RICH
ENVIRONMENTAL SPECIALISTS

June 3, 2009

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: April-May 2009**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the months April and May the following activities were performed:

- On May 11, 2009 we suspended operation of the SVE system for the purposes of collecting soil samples from within the remediation zones. Prior to turning off the SVE system, a sample of the SVE air prior to carbon treatment was collected for documentation purposes.

- On May 12, 2009 we collected groundwater samples from the three existing on-site monitoring wells in accordance with the approved Groundwater Monitoring Work Plan.

- On May 12 and 13, 2009 we collected soil samples from within the SVE remediation zones in accordance with the approved Interim Remedial Measures (IRM) Report – Part B.

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

The following work is planned for the upcoming month:

- We are awaiting the analytical results for the groundwater and SVE system soil samples. Upon receipt of the data, we will prepare Groundwater Sampling and Soil Sampling Reports.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution
NT Server\Files\Users\Proj\299 MAIN ST\MPR 2009\AprilMay-09 Progress Rept

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq. (via email only)
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq. (via email only)
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

CA RICH
ENVIRONMENTAL SPECIALISTS

December 9, 2010

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: November-December 2010**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

As discussed in of SVE system letter report dated November 3, 2010, the following work is during the month of November the following activities were performed:

- The operation of the SVE system is now focused only on remediating soil at vapor point SVE-1. The system has been operating in a pulse mode. November 4th to 17th the system was off. November 17th to December 1st the system was turned on.

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

The following work is planned for the upcoming month:

- The system will be off from December 1st to December 15th and will be restarted on again on December 15th. In January 2011, we plan on collected another SVE system air sample and a fourth round of groundwater samples.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution

Distribution List
299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Jacqueline Nealon (electronic copy)
Bureau of Environmental Exposure Investigation
New York State Department of Health
Flanigan Square
547 River Street
Troy, New York 12180-2216
Jen02@health.state.ny.us

Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq. (via email only)
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq. (via email only)
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

CA RICH
ENVIRONMENTAL SPECIALISTS

February 10, 2011

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: January 2011**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the month of January the following activities were performed:

- After pulsing the SVE system on a 2-week cycle in November and December, the system has been running full-time since December 15, 2010. On January 17, 2011, CA RICH collected a sample of the untreated air from the system. The fourth round of groundwater samples scheduled to be collected in January was postponed due to weather and snow conditions.

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

The following work is planned for the upcoming month:

- We will submit the SVE air sample results. We will attempt to collect the fourth round of groundwater samples, weather conditions permitting.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution

Distribution List
299 Main Street, NCIA #1-30-043S, Westbury NY

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Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
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Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
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Uniondale, NY 11556-0111
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Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

CA RICH
ENVIRONMENTAL SPECIALISTS

April 4, 2011

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: February - March 2011**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the months of February and March, the following activities were performed:

- The SVE system continued to operate in a full-time mode and on February 16th, we submitted the SVE sample results. On March 29th, CA RICH collected the fourth round of groundwater samples.

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

The following work is planned for the upcoming month:

- Upon receipt of the groundwater sample results, we will prepare the groundwater monitoring report.

- Based on the SVE sample results, we propose to collect soil samples for laboratory analysis from the area of SVE-1 to determine if the remedial measures have reduced the concentrations of VOCs in the subsurface soil to satisfy the SVE system termination criteria as outlined in our Interim Remedial Measures Report – Part B, dated September 13, 2007. We plan on scheduling the sampling event in April 2011 and will contact you once a date is confirmed.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution

Distribution List
299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

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Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
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200 White Plains Road/5th Floor
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1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

CA RICH
ENVIRONMENTAL SPECIALISTS

June 16, 2011

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: May 2011**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the month of May, the following activities were performed:

- We finalized the fourth round Groundwater Monitoring Report (submitted on June 16, 2011).
- On May 8, 2011, we collected soil samples for laboratory analysis from the area of SVE-1 to determine if the remedial measures have reduced the concentrations of VOCs in the subsurface soil to satisfy the SVE system termination criteria.

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

The following work is planned for the upcoming months (June/July):

- Upon receipt of the analytical results for soil samples collected in connection with the SVE system, we will prepare a summary report.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution

Distribution List
299 Main Street, NCIA #1-30-043S, Westbury NY

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Albany, New York 12233-7015

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(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

CA RICH
ENVIRONMENTAL SPECIALISTS

September 6, 2011

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: July-August 2011**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the previous months of July and August, the following activities were performed:

- We finalized and submitted the following reports to NYSDEC:

  1) Groundwater Monitoring Results, 299 Main Street, Site 1-30-043S, New Cassel Industrial Area; June 16, 2011.

  2) Soil Sampling Results in connection with the Soil Vapor Extraction (SVE) System at 299 Main Street, Site 1-30-043S, New Cassel Industrial Area; August 4, 2011.

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

The following work is planned for the upcoming month of September:

- We are awaiting a response from NYSDEC in connection with the submittal of the above-referenced reports in consideration of the termination of both the groundwater monitoring program and the operation of soil vapor extraction system at the Site. No other work is currently planned at the Site pending NYSDEC's review and comment of the above mentioned matters.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution

Distribution List
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Joe Jones (via email only)
NYSDEC
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Bureau of Eastern Remedial Action
625 Broadway/11th Floor
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Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
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Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

CA RICH
ENVIRONMENTAL SPECIALISTS

June 16, 2011

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: May 2011**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the month of May, the following activities were performed:

- We finalized the fourth round Groundwater Monitoring Report (submitted on June 16, 2011).
- On May 8, 2011, we collected soil samples for laboratory analysis from the area of SVE-1 to determine if the remedial measures have reduced the concentrations of VOCs in the subsurface soil to satisfy the SVE system termination criteria.

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The following work is planned for the upcoming months (June/July):

- Upon receipt of the analytical results for soil samples collected in connection with the SVE system, we will prepare a summary report.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution

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19 Liberty LTD
299 Main Street
Westbury, NY 11590

CA RICH
ENVIRONMENTAL SPECIALISTS

February 6, 2012

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: January 2012**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

- We finalized and submitted the following reports to NYSDEC:

  1) Groundwater Monitoring Results, 299 Main Street, Site 1-30-043S, New Cassel Industrial Area; June 16, 2011.

  2) Soil Sampling Results in connection with the Soil Vapor Extraction (SVE) System at 299 Main Street, Site 1-30-043S, New Cassel Industrial Area; August 4, 2011.

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

The following work is planned for the upcoming month of February:

- We are awaiting a response from NYSDEC in connection with the submittal of the above-referenced reports in consideration of the termination of both the groundwater monitoring program and the operation of soil vapor extraction system at the Site. No other work is currently planned at the Site pending NYSDEC's review and comment of the above mentioned matters.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution

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299 Main Street, NCIA #1-30-043S, Westbury NY

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(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

RICH
ENVIRONMENTAL SPECIALISTS

July 8, 2008

NASSAU COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Protection
106 Charles Lindberg Boulevard
Uniondale, New York 11553

Attention: John Lovejoy

Re: **FINAL SUMMARY REPORT**
On-Site Sanitary System Cleanout & Abandonment
299 Main Street
Westbury, New York 11590

Dear Mr. Lovejoy:

As requested, CA RICH Consultants, Inc. is please to provide you with this Final Summary Report in connection with the cleanout and proper abandonment of the on-Site sanitary system located at the above-referenced Site. Please be advised that upon cleanout of the two sanitary leaching pools, the secondary cesspool identified as "SCP-02" was converted to receive stormwater roof drainage in accordance with the Nassau County Plumbers Handbook - Appendix A-1.

As you know, the cleanout of the two (2) cesspools was completed on January 24, 2008 and post remediation soil samples were collected in your presence. The sample results indicate levels of volatile organic compounds ("VOCs") that are below applicable NYSDEC TAGM # 4046 Soil Cleanup Objectives. Based upon these sample results and your letter dated February 8, 2008, the primary cesspool "PCP-01" structure was properly abandoned and backfilled with clean sand. The secondary cesspool identified as "SCP-02" was converted to receive stormwater roof drainage in accordance with applicable Nassau County regulations. Attached for the County's permanent record are copies of the following documents:

1) A Site Plan (Figure 1) along with selected site photographs.
2) Initial sludge/liquid sample laboratory data sheets.
3) Post remedial endpoint soil sample laboratory data sheets.
4) Liquid waste disposal approval from NCDPW – Bay Park Scavenger Waste Disposal Facilty.
5) Liquid waste disposal receipt for 2,000 gallons of sanitary wastewater.
6) Solid waste disposal manifest for 13.17 tons of sanitary soil/sludge.

If you require any additional detail, please do not hesitate to contact us.

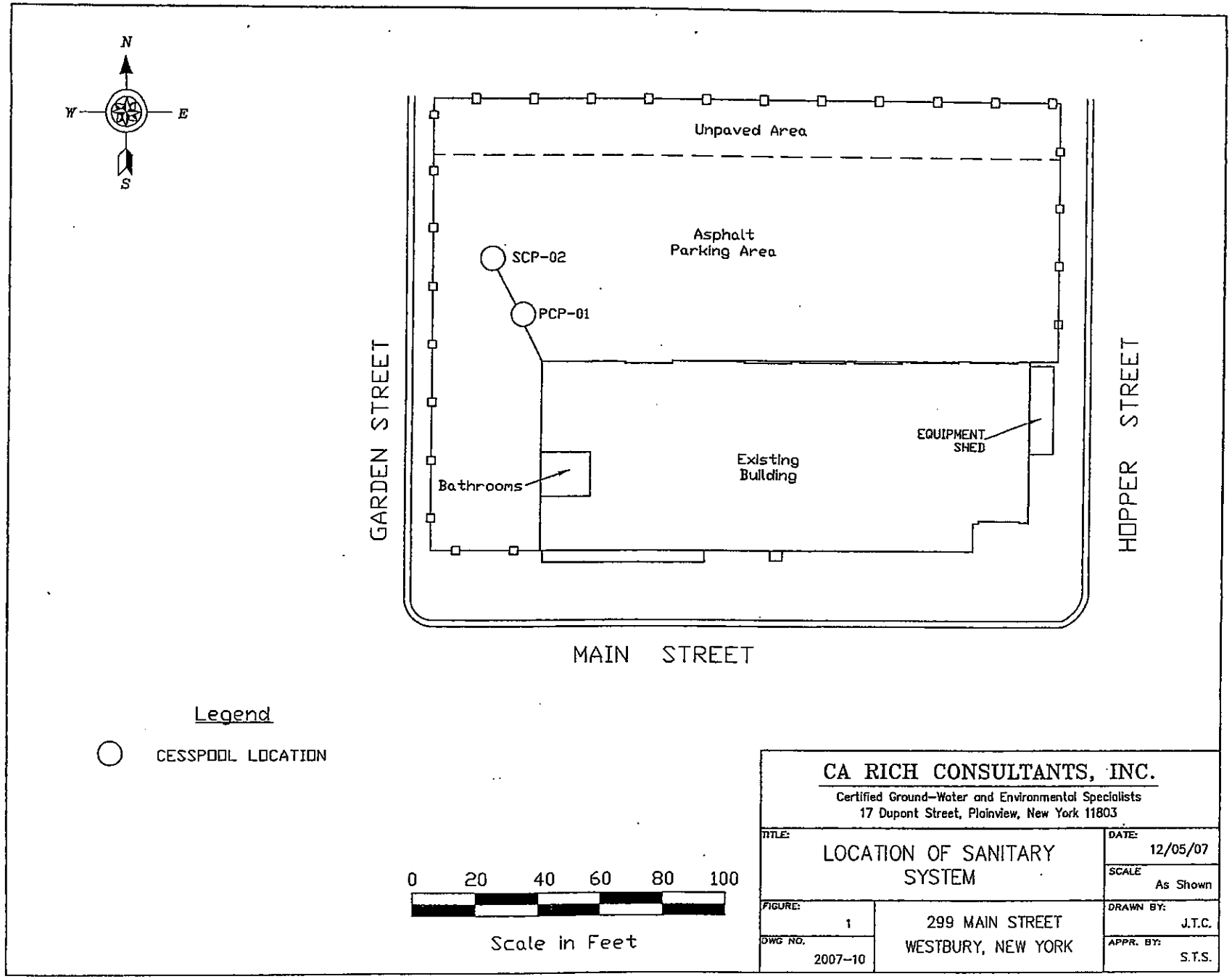
Sincerely,

CA RICH CONSULTANTS, INC.

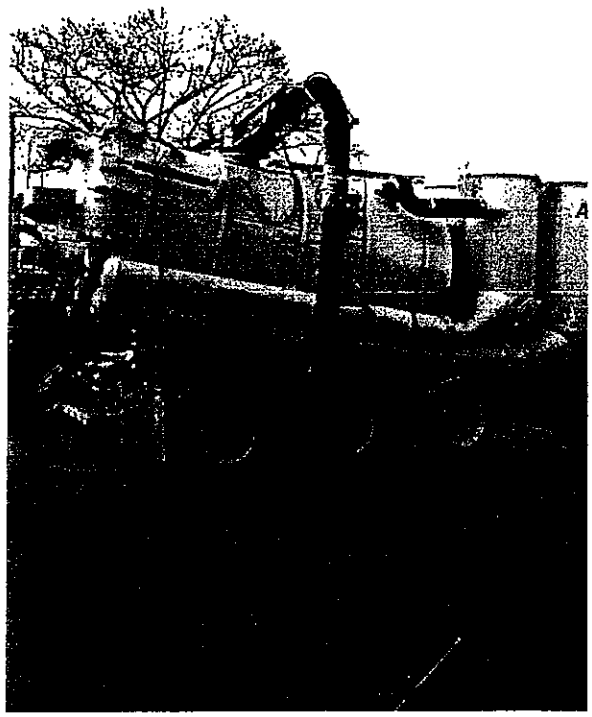
Steve Sobstyl
Sr. Project Manager

Enclosures
cc: Joe Jones, NYSDEC
Samuel Padilla
Alex Holuka
Lawrence P. Schnapf, Esq.
Charlotte A. Biblow, Esq.

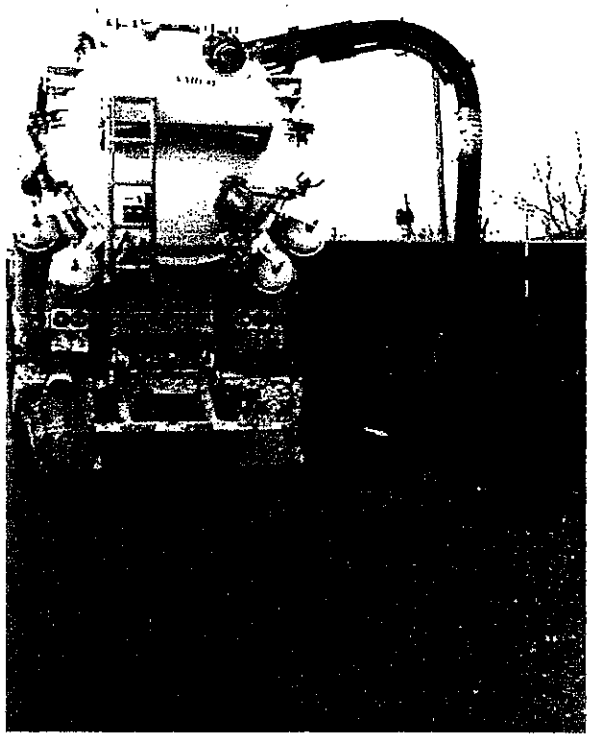
17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com



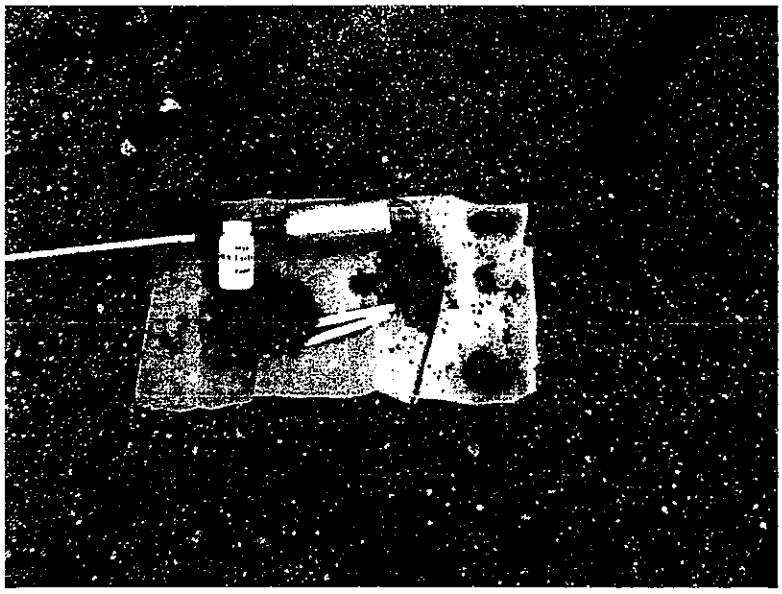
2632 RDC-01852



1. Active cleanout of the primary cesspool "PCP-01", January 24, 2008.



2. Active cleanout of the secondary cesspool "SCP-02", January 24, 2008.



3. View of post remediation endpoint soil samples.

INITIAL SLUDGE/LIQUID SAMPLE LABORATORY DATA

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.01 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1040
MATRIX:Soil SAMPLE: PCP-01

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Vinyl Chloride	ug/Kg	< 180		11/15/07	175.43	EPA8260
Trichlorofluoromethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
1,1 Dichloroethene	ug/Kg	< 180		11/15/07	175.43	EPA8260
Methylene Chloride	ug/Kg	< 180		11/15/07	175.43	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 180		11/15/07	175.43	EPA8260
1,1 Dichloroethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
2,2-Dichloropropane	ug/Kg	< 180		11/15/07	175.43	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 180		11/15/07	175.43	EPA8260
Bromochloromethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
Chloroform	ug/Kg	< 180		11/15/07	175.43	EPA8260
111 Trichloroethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
1,1-Dichloropropene	ug/Kg	< 180		11/15/07	175.43	EPA8260
Carbon Tetrachloride	ug/Kg	< 180		11/15/07	175.43	EPA8260
Benzene	ug/Kg	< 180		11/15/07	175.43	EPA8260
1,2 Dichloroethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
Trichloroethene	ug/Kg	< 180		11/15/07	175.43	EPA8260
1,2 Dichloropropane	ug/Kg	< 180		11/15/07	175.43	EPA8260
Bromodichloromethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
Dibromomethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
Toluene	ug/Kg	28000		11/15/07	175.43	EPA8260
112 Trichloroethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
Tetrachloroethene	ug/Kg	< 180		11/15/07	175.43	EPA8260
1,3-Dichloropropane	ug/Kg	< 180		11/15/07	175.43	EPA8260
Chlorodibromomethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
1,2 Dibromoethane	ug/Kg	< 180		11/15/07	175.43	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34015 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.01 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1040
MATRIX:Soil SAMPLE: PCP-01

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
1112Tetrachloroethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
Chlorobenzene	ug/Kg	< 180		11/15/07	175.43	EPA8260
Ethyl Benzene	ug/Kg	350		11/15/07	175.43	EPA8260
m + p Xylene	ug/Kg	1600		11/15/07	350.87	EPA8260
o Xylene	ug/Kg	790		11/15/07	175.43	EPA8260
Styrene	ug/Kg	< 180		11/15/07	175.43	EPA8260
Bromoform	ug/Kg	< 180		11/15/07	175.43	EPA8260
Isopropylbenzene	ug/Kg	180		11/15/07	175.43	EPA8260
1122Tetrachloroethane	ug/Kg	< 180		11/15/07	175.43	EPA8260
Bromobenzene	ug/Kg	< 180		11/15/07	175.43	EPA8260
123-Trichloropropane	ug/Kg	< 180		11/15/07	175.43	EPA8260
n-Propylbenzene	ug/Kg	610		11/15/07	175.43	EPA8260
2-Chlorotoluene	ug/Kg	< 180		11/15/07	175.43	EPA8260
135-Trimethylbenzene	ug/Kg	3000		11/15/07	175.43	EPA8260
4-Chlorotoluene	ug/Kg	< 180		11/15/07	175.43	EPA8260
tert-Butylbenzene	ug/Kg	< 180		11/15/07	175.43	EPA8260
124-Trimethylbenzene	ug/Kg	7000		11/15/07	175.43	EPA8260
sec-Butylbenzene	ug/Kg	540		11/15/07	175.43	EPA8260
p-Isopropyltoluene	ug/Kg	2800		11/15/07	175.43	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 180		11/15/07	175.43	EPA8260
1,3 Dichlorobenzene (v)	ug/Kg	< 180		11/15/07	175.43	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	4600		11/15/07	175.43	EPA8260
DBCP	ug/Kg	< 180		11/15/07	175.43	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 180		11/15/07	175.43	EPA8260
Hexachlorobutadiene	ug/Kg	< 180		11/15/07	175.43	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34016 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.01 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1040
MATRIX:Soil SAMPLE: PCP-01

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Naphthalene(v)	ug/Kg	4700		11/15/07	175.43	EPA8260
123-Trichlorobenzene	ug/Kg	< 180		11/15/07	175.43	EPA8260
c-1,3Dichloropropene	ug/Kg	< 180		11/15/07	175.43	EPA8260
t-1,3Dichloropropene	ug/Kg	< 180		11/15/07	175.43	EPA8260
Acetone	ug/Kg	< 1800		11/15/07	1754.3	EPA8260
% Solids		57		11/09/07	0.1	SM182540G

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34017 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
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LAB NO.274893.01 11/21/07

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Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1040
MATRIX:Soil SAMPLE: PCP-01

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Bis(2-chloroethyl)ether	ug/Kg	< 260		11/16/07	263.15	EPA8270
1,3 Dichlorobenzene(sv)	ug/Kg	< 260		11/16/07	263.15	EPA8270
1,4 Dichlorobenzene(sv)	ug/Kg	< 260		11/16/07	263.15	EPA8270
Carbazole	ug/Kg	< 260		11/16/07	263.15	EPA8270
1,2 Dichlorobenzene(sv)	ug/Kg	< 260		11/16/07	263.15	EPA8270
Bis(2-chloroisopropyl)ether	ug/Kg	< 260		11/16/07	263.15	EPA8270
N-Nitrosodi-n-propylamine	ug/Kg	< 260		11/16/07	263.15	EPA8270
Hexachloroethane	ug/Kg	< 260		11/16/07	263.15	EPA8270
Nitrobenzene	ug/Kg	< 260		11/16/07	263.15	EPA8270
Isophorone	ug/Kg	< 260		11/16/07	263.15	EPA8270
Bis(2-chloroethoxy)methane	ug/Kg	< 260		11/16/07	263.15	EPA8270
124-Trichlorobenzene (sv)	ug/Kg	< 260		11/16/07	263.15	EPA8270
Naphthalene(sv)	ug/Kg	1100		11/16/07	263.15	EPA8270
4-Chloroaniline	ug/Kg	< 260		11/16/07	263.15	EPA8270
Hexachlorobutadiene	ug/Kg	< 260		11/16/07	263.15	EPA8270
2-Methylnaphthalene	ug/Kg	1300		11/16/07	263.15	EPA8270
Hexachlorocyclopentadiene	ug/Kg	< 2600		11/16/07	2631.5	EPA8270
2-Chloronaphthalene	ug/Kg	< 260		11/16/07	263.15	EPA8270
2-Nitroaniline	ug/Kg	< 260		11/16/07	263.15	EPA8270
Dimethyl Phthalate	ug/Kg	< 260		11/16/07	263.15	EPA8270
Acenaphthylene	ug/Kg	< 260		11/16/07	263.15	EPA8270
2,6-Dinitrotoluene	ug/Kg	< 260		11/16/07	263.15	EPA8270
3-Nitroaniline	ug/Kg	< 260		11/16/07	263.15	EPA8270
Acenaphthene	ug/Kg	< 260		11/16/07	263.15	EPA8270
Dibenzofuran	ug/Kg	< 260		11/16/07	263.15	EPA8270

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34018 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.01 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1040
MATRIX:Soil SAMPLE: PCP-01

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
2,4-Dinitrotoluene	ug/Kg	< 260		11/16/07	263.15	EPA8270
Diethyl Phthalate	ug/Kg	< 260		11/16/07	263.15	EPA8270
4-Chlorophenyl phenyl ether	ug/Kg	< 260		11/16/07	263.15	EPA8270
Fluorene	ug/Kg	< 260		11/16/07	263.15	EPA8270
4-Nitroaniline	ug/Kg	< 260		11/16/07	263.15	EPA8270
N-Nitrosodiphenylamine	ug/Kg	< 260		11/16/07	263.15	EPA8270
4-Bromophenyl phenyl ether	ug/Kg	< 260		11/16/07	263.15	EPA8270
Hexachlorobenzene	ug/Kg	< 260		11/16/07	263.15	EPA8270
Phenanthrene	ug/Kg	930		11/16/07	263.15	EPA8270
Anthracene	ug/Kg	< 260		11/16/07	263.15	EPA8270
Di-n-Butyl Phthalate	ug/Kg	< 260		11/16/07	263.15	EPA8270
Fluoranthene	ug/Kg	440		11/16/07	263.15	EPA8270
Pyrene	ug/Kg	820	*	11/16/07	263.15	EPA8270
BenzylButylPhthalate	ug/Kg	370	*	11/16/07	263.15	EPA8270
3,3'-Dichlorobenzidine	ug/Kg	< 2600	**	11/16/07	2631.5	EPA8270
Benzo(a)anthracene	ug/Kg	< 260	*	11/16/07	263.15	EPA8270

cc:

LRL=Laboratory Reporting Limit

REMARKS:

*,**Estimated due to low internal standard, *34% & **18%.
Low recovery due to interference. QC limit is 50%.

DIRECTOR

rn = 34019 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.01 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1040
MATRIX:Soil SAMPLE: PCP-01

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Chrysene	ug/Kg	300	*	11/16/07	263.15	EPA8270
Bis(2-ethylhexyl)phthalate	ug/Kg	9300	*	11/16/07	263.15	EPA8270
Di-n-octyl Phthalate	ug/Kg	< 260	**	11/16/07	263.15	EPA8270
Benzo(b)fluoranthene	ug/Kg	< 260	#**	11/16/07	263.15	EPA8270
Benzo(k)fluoranthene	ug/Kg	320	#**	11/16/07	263.15	EPA8270
Benzo(a)pyrene	ug/Kg	< 260	**	11/16/07	263.15	EPA8270
Indeno(1,2,3-cd)pyrene	ug/Kg	< 260	**	11/16/07	263.15	EPA8270
Dibenzo(a,h)anthracene	ug/Kg	< 260	**	11/16/07	263.15	EPA8270
Benzo(ghi)perylene	ug/Kg	< 260	**	11/16/07	263.15	EPA8270
Arsenic as As	mg/Kg	3.9		11/12/07	1.7543	EPA6010B
Barium as Ba	mg/Kg	81		11/12/07	0.8771	EPA6010B
Chromium as Cr	mg/Kg	10		11/12/07	0.8771	EPA6010B
Cadmium as Cd	mg/Kg	5.3		11/12/07	0.8771	EPA6010B
Lead as Pb	mg/Kg	120		11/12/07	0.8771	EPA6010B
Mercury as Hg	mg/Kg	0.16		11/13/07	0.0087	EPA7470
Selenium as Se	mg/Kg	< 1.8		11/12/07	1.7543	EPA6010B
Silver as Ag	mg/Kg	< 0.88		11/12/07	0.8771	EPA6010B

cc:

LRL=Laboratory Reporting Limit

REMARKS: #Results estimated due to unobtainable method requirement of a 50% split between peaks with the same isomers.
*,**Estimated due to low internal standard, *34% & **18%.
Low recovery due to interference. QC limit is 50%.

DIRECTOR

rn = 34020 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.02

11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803

ATTN: Steve Sobstyl

PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1000

MATRIX:Soil SAMPLE: SCP-02

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Vinyl Chloride	ug/Kg	< 160		11/15/07	158.73	EPA8260
Trichlorofluoromethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
1,1 Dichloroethene	ug/Kg	< 160		11/15/07	158.73	EPA8260
Methylene Chloride	ug/Kg	< 160		11/15/07	158.73	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 160		11/15/07	158.73	EPA8260
1,1 Dichloroethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
2,2-Dichloropropane	ug/Kg	< 160		11/15/07	158.73	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 160		11/15/07	158.73	EPA8260
Bromochloromethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
Chloroform	ug/Kg	< 160		11/15/07	158.73	EPA8260
111 Trichloroethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
1,1-Dichloropropene	ug/Kg	< 160		11/15/07	158.73	EPA8260
Carbon Tetrachloride	ug/Kg	< 160		11/15/07	158.73	EPA8260
Benzene	ug/Kg	< 160		11/15/07	158.73	EPA8260
1,2 Dichloroethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
Trichloroethene	ug/Kg	< 160		11/15/07	158.73	EPA8260
1,2 Dichloropropane	ug/Kg	< 160		11/15/07	158.73	EPA8260
Bromodichloromethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
Dibromomethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
Toluene	ug/Kg	< 160		11/15/07	158.73	EPA8260
112 Trichloroethane	ug/Kg	1000		11/15/07	158.73	EPA8260
Tetrachloroethene	ug/Kg	< 160		11/15/07	158.73	EPA8260
1,3-Dichloropropane	ug/Kg	< 160		11/15/07	158.73	EPA8260
Chlorodibromomethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
1,2 Dibromoethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
cc:	ug/Kg	< 160		11/15/07	158.73	EPA8260

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34021 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.02 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1000
MATRIX:Soil SAMPLE: SCP-02

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
1112Tetrachloroethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
Chlorobenzene	ug/Kg	< 160		11/15/07	158.73	EPA8260
Ethyl Benzene	ug/Kg	< 160		11/15/07	158.73	EPA8260
m + p Xylene	ug/Kg	540		11/15/07	317.46	EPA8260
o Xylene	ug/Kg	320		11/15/07	158.73	EPA8260
Styrene	ug/Kg	< 160		11/15/07	158.73	EPA8260
Bromoform	ug/Kg	< 160		11/15/07	158.73	EPA8260
Isopropylbenzene	ug/Kg	270		11/15/07	158.73	EPA8260
1122Tetrachloroethane	ug/Kg	< 160		11/15/07	158.73	EPA8260
Bromobenzene	ug/Kg	< 160		11/15/07	158.73	EPA8260
123-Trichloropropane	ug/Kg	< 160		11/15/07	158.73	EPA8260
n-Propylbenzene	ug/Kg	1200		11/15/07	158.73	EPA8260
2-Chlorotoluene	ug/Kg	< 160		11/15/07	158.73	EPA8260
135-Trimethylbenzene	ug/Kg	8100		11/15/07	158.73	EPA8260
4-Chlorotoluene	ug/Kg	< 160		11/15/07	158.73	EPA8260
tert-Butylbenzene	ug/Kg	440		11/15/07	158.73	EPA8260
124-Trimethylbenzene	ug/Kg	13000		11/15/07	158.73	EPA8260
sec-Butylbenzene	ug/Kg	1500		11/15/07	158.73	EPA8260
p-Isopropyltoluene	ug/Kg	9000		11/15/07	158.73	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	970		11/15/07	158.73	EPA8260
1,3 Dichlorobenzene (v)	ug/Kg	< 160		11/15/07	158.73	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	1500		11/15/07	158.73	EPA8260
DBCP	ug/Kg	< 160		11/15/07	158.73	EPA8260
124-Trichlorobenzene (v)	ug/Kg	220		11/15/07	158.73	EPA8260
Hexachlorobutadiene	ug/Kg	< 160		11/15/07	158.73	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34022 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.02 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1000
MATRIX:Soil SAMPLE: SCP-02

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Naphthalene(v)	ug/Kg	840		11/15/07	158.73	EPA8260
123-Trichlorobenzene	ug/Kg	< 160		11/15/07	158.73	EPA8260
c-1,3Dichloropropene	ug/Kg	< 160		11/15/07	158.73	EPA8260
t-1,3Dichloropropene	ug/Kg	< 160		11/15/07	158.73	EPA8260
Acetone	ug/Kg	< 1600		11/15/07	1587.3	EPA8260
% Solids		63		11/09/07	0.1	SM182540G

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34023 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
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Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

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SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1000
MATRIX:Soil SAMPLE: SCP-02

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Bis(2-chloroethyl)ether	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
1,3 Dichlorobenzene(sv)	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
1,4 Dichlorobenzene(sv)	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Carbazole	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
1,2 Dichlorobenzene(sv)	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Bis(2-chloroisopropyl)ether	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
N-Nitrosodi-n-propylamine	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Hexachloroethane	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Nitrobenzene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Isophorone	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Bis(2-chloroethoxy)methane	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
124-Trichlorobenzene (sv)	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Naphthalene(sv)	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
4-Chloroaniline	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Hexachlorobutadiene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
2-Methylnaphthalene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Hexachlorocyclopentadiene	ug/Kg	< 24000		11/16/07	2380.9	EPA8270
2-Chloronaphthalene	ug/Kg	< 2400		11/16/07	23809.	EPA8270
2-Nitroaniline	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Dimethyl Phthalate	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Acenaphthylene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
2,6-Dinitrotoluene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
3-Nitroaniline	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Acenaphthene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Dibenzofuran	ug/Kg	< 2400		11/16/07	2380.9	EPA8270

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34024 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.02 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1000
MATRIX:Soil SAMPLE: SCP-02

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
2,4-Dinitrotoluene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Diethyl Phthalate	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
4-Chlorophenyl phenyl ether	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Fluorene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
4-Nitroaniline	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
N-Nitrosodiphenylamine	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
4-Bromophenyl phenyl ether	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Hexachlorobenzene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Phenanthrene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Anthracene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Di-n-Butyl Phthalate	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Fluoranthene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Pyrene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
BenzylButylPhthalate	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
3,3'-Dichlorobenzidine	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Benzo(a)anthracene	ug/Kg	< 24000	*	11/16/07	23809.	EPA8270
	ug/Kg	< 2400		11/16/07	2380.9	EPA8270

cc:

LRL=Laboratory Reporting Limit

REMARKS: Elevated detection level due to interference.

*Estimated due to low internal standard recovery, *46%. Low recovery due to interference. QC limit is 50%.

DIRECTOR

rn = 34025 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC.
ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.02

11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803

ATTN: Steve Sobstyl

PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client

DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1000

MATRIX:Soil SAMPLE: SCP-02

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Chrysene	ug/Kg	< 2400		11/16/07	2380.9	EPA8270
Bis(2-ethylhexyl)phthalate	ug/Kg	22000		11/16/07	2380.9	EPA8270
Di-n-octyl Phthalate	ug/Kg	< 2400	*	11/16/07	2380.9	EPA8270
Benzo(b)fluoranthene	ug/Kg	< 2400	*	11/16/07	2380.9	EPA8270
Benzo(k)fluoranthene	ug/Kg	< 2400	*	11/16/07	2380.9	EPA8270
Benzo(a)pyrene	ug/Kg	< 2400	*	11/16/07	2380.9	EPA8270
Indeno(1,2,3-cd)pyrene	ug/Kg	< 2400	*	11/16/07	2380.9	EPA8270
Dibenzo(a,h)anthracene	ug/Kg	< 2400	*	11/16/07	2380.9	EPA8270
Benzo(ghi)perylene	ug/Kg	< 2400	*	11/16/07	2380.9	EPA8270
Arsenic as As	mg/Kg	3.3		11/12/07	1.5873	EPA6010B
Barium as Ba	mg/Kg	170		11/12/07	0.7936	EPA6010B
Chromium as Cr	mg/Kg	21		11/12/07	0.7936	EPA6010B
Cadmium as Cd	mg/Kg	11		11/12/07	0.7936	EPA6010B
Lead as Pb	mg/Kg	170		11/12/07	0.7936	EPA6010B
Mercury as Hg	mg/Kg	0.10		11/13/07	0.0079	EPA7470
Selenium as Se	mg/Kg	< 1.6		11/12/07	1.5873	EPA6010B
Silver as Ag	mg/Kg	< 0.79		11/12/07	0.7936	EPA6010B

cc:

LRL=Laboratory Reporting Limit

REMARKS:

*Estimated due to low internal standard recovery, *46%. Low recovery due to interference. QC limit is 50%.

DIRECTOR

rn = 34026

NYSDOH ID # 10320

CaRICH
ENVIRONMENTAL SPECIALISTS

December 5, 2007

Mr. Peter Witkowski
COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS
CEDAR CREEK WATER POLLUTION CONTROL PLANT
3340 Merrick Road
Wantagh, NY 11793

Re: Sanitary Wastewater
299 Main Street - Westbury, NY 11590

Dear Mr. Witkowski:

The above-referenced premises was recently connected to the Nassau County sewer system. Attached are the sample results for the standing wastewater within the sanitary leaching pool. The sample was collected in the presence of Wayne Kempski of the Nassau County Department of Health.

At this time we request that you review the sample results for approval to be accepted at the County's Cedar Creek Water Pollution Control Plant. We estimate the volume of liquid to be on the order of 1,500 gallons.

If you have any questions or need additional information, please do not hesitate to call our Office.

Sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

Enclosure
cc: John Lovejoy, NCDH
Joe Jones, NYSDEC
Sam Padilla
Alex Holuka
Larry Schnapf, Esq.

17 Dupont Street, Plainview, NY 11803 - Tel. 516 576 2044 - F 516 576 [illegible]

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.04 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1025
MATRIX:Water SAMPLE: CP-01(L)

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Vinyl Chloride	ug/L	< 5		11/15/07	5	EPA8260
Trichlorofluoromethane	ug/L	< 5		11/15/07	5	EPA8260
1,1 Dichloroethene	ug/L	< 5		11/15/07	5	EPA8260
Methylene Chloride	ug/L	< 5		11/15/07	5	EPA8260
t-1,2-Dichloroethene	ug/L	< 5		11/15/07	5	EPA8260
1,1 Dichloroethane	ug/L	< 5		11/15/07	5	EPA8260
2,2-Dichloropropane	ug/L	< 5		11/15/07	5	EPA8260
c-1,2-Dichloroethene	ug/L	< 5		11/15/07	5	EPA8260
Bromochloromethane	ug/L	< 5		11/15/07	5	EPA8260
Chloroform	ug/L	< 5		11/15/07	5	EPA8260
111 Trichloroethane	ug/L	< 5		11/15/07	5	EPA8260
1,1-Dichloropropene	ug/L	< 5		11/15/07	5	EPA8260
Carbon Tetrachloride	ug/L	< 5		11/15/07	5	EPA8260
Benzene	ug/L	< 5		11/15/07	5	EPA8260
1,2 Dichloroethane	ug/L	< 5		11/15/07	5	EPA8260
Trichloroethene	ug/L	< 5		11/15/07	5	EPA8260
1,2 Dichloropropane	ug/L	< 5		11/15/07	5	EPA8260
Bromodichloromethane	ug/L	< 5		11/15/07	5	EPA8260
Dibromomethane	ug/L	< 5		11/15/07	5	EPA8260
Toluene	ug/L	< 5		11/15/07	5	EPA8260
112 Trichloroethane	ug/L	49		11/15/07	5	EPA8260
Tetrachloroethene	ug/L	< 5		11/15/07	5	EPA8260
1,3-Dichloropropane	ug/L	< 5		11/15/07	5	EPA8260
Chlorodibromomethane	ug/L	< 5		11/15/07	5	EPA8260
1,2 Dibromoethane	ug/L	< 5		11/15/07	5	EPA8260
cc:	ug/L	< 5		11/15/07	5	EPA8260

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34029 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.04 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1025
MATRIX:Water SAMPLE: CP-01(L)

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
1112Tetrachloroethane	ug/L	< 5		11/15/07	5	EPA8260
Chlorobenzene	ug/L	< 5		11/15/07	5	EPA8260
Ethyl Benzene	ug/L	< 5		11/15/07	5	EPA8260
m + p Xylene	ug/L	< 10		11/15/07	10	EPA8260
o Xylene	ug/L	< 5		11/15/07	5	EPA8260
Styrene	ug/L	< 5		11/15/07	5	EPA8260
Bromoform	ug/L	< 5		11/15/07	5	EPA8260
Isopropylbenzene	ug/L	< 5		11/15/07	5	EPA8260
1122Tetrachloroethane	ug/L	< 5		11/15/07	5	EPA8260
Bromobenzene	ug/L	< 5		11/15/07	5	EPA8260
123-Trichloropropane	ug/L	< 5		11/15/07	5	EPA8260
n-Propylbenzene	ug/L	< 5		11/15/07	5	EPA8260
2-Chlorotoluene	ug/L	< 5		11/15/07	5	EPA8260
135-Trimethylbenzene	ug/L	< 5		11/15/07	5	EPA8260
4-Chlorotoluene	ug/L	< 5		11/15/07	5	EPA8260
tert-Butylbenzene	ug/L	< 5		11/15/07	5	EPA8260
124-Trimethylbenzene	ug/L	< 5		11/15/07	5	EPA8260
sec-Butylbenzene	ug/L	< 5		11/15/07	5	EPA8260
p-Isopropyltoluene	ug/L	< 5		11/15/07	5	EPA8260
1,2 Dichlorobenzene (v)	ug/L	10		11/15/07	5	EPA8260
1,3 Dichlorobenzene (v)	ug/L	< 5		11/15/07	5	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 5		11/15/07	5	EPA8260
DBCP	ug/L	32		11/15/07	5	EPA8260
124-Trichlorobenzene (v)	ug/L	< 5		11/15/07	5	EPA8260
Hexachlorobutadiene	ug/L	< 5		11/15/07	5	EPA8260
cc:				11/15/07	5	EPA8260

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34030 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777• FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.04 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1025
MATRIX:Water SAMPLE: CP-01(L)

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Naphthalene(v)	ug/L	< 5		11/15/07	5	EPA8260
123-Trichlorobenzene	ug/L	< 5		11/15/07	5	EPA8260
c-1,3Dichloropropene	ug/L	< 5		11/15/07	5	EPA8260
t-1,3Dichloropropene	ug/L	< 5		11/15/07	5	EPA8260
Acetone	ug/L	< 50		11/15/07	50	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34031 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.274893.04 11/21/07

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street-19 Liberty LDT, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:11/08/07 RECEIVED:11/08/07
TIME COL'D:1025
MATRIX:Water SAMPLE: CP-01(L)

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Arsenic as As	mg/L	0.005		11/12/07	0.005	EPA200.7
Barium as Ba	mg/L	0.031		11/12/07	0.005	EPA200.7
Cadmium as Cd	mg/L	< 0.005		11/12/07	0.005	EPA200.7
Chromium as Cr	mg/L	< 0.005		11/12/07	0.005	EPA200.7
Lead as Pb	mg/L	0.022		11/12/07	0.005	EPA200.7
Mercury as Hg	mg/L	< 0.00025		11/13/07	0.0002	EPA245.2
Selenium as Se	mg/L	< 0.01		11/12/07	0.01	EPA200.7
Silver as Ag	mg/L	< 0.005		11/12/07	0.005	EPA200.7
pH (lab) units		7.3		11/08/07	0.1	SM4500HB

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 34032 NYSDOH ID # 10320

POST REMEDIATION ENDPOINT SOIL SAMPLE LABORATORY DATA

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.280339.02 01/29/08

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, #299 Main Street Sanitary
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:01/24/08 RECEIVED:01/24/08
TIME COL'D:1200
MATRIX:Soil SAMPLE: PCP-01 EP(19')

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAI METHOD
Vinyl Chloride	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Methylene Chloride	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Bromochloromethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Chloroform	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
111 Trichloroethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Benzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Trichloroethene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Bromodichloromethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Dibromomethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Toluene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
112 Trichloroethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Tetrachloroethene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Chlorodibromomethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1996 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.280339.02 01/29/08

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, #299 Main Street Sanitary
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:01/24/08 RECEIVED:01/24/08
TIME COL'D:1200
MATRIX:Soil SAMPLE: PCP-01 EP(19')

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
1112Tetrachloroethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Chlorobenzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Ethyl Benzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
m + p Xylene	ug/Kg	< 11		01/26/08	10.869	EPA8260
o Xylene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Styrene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Bromoform	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Isopropylbenzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Bromobenzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
123-Trichloropropane	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
n-Propylbenzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
2-Chlorotoluene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
135-Trimethylbenzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
4-Chlorotoluene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
tert-Butylbenzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
124-Trimethylbenzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
sec-Butylbenzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
p-Isopropyltoluene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1,3 Dichlorobenzene (v)	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
DBCP	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
124-Trichlorobenzene (v)	ug/Kg	26		01/26/08	5.4347	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1997 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777• FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.280339.02 01/29/08

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, #299 Main Street Sanitary
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:01/24/08 RECEIVED:01/24/08
TIME COL'D:1200
MATRIX:Soil SAMPLE: PCP-01 EP(19')

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAl METHOD
Naphthalene(v)	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
t-1,3Dichloropropene	ug/Kg	< 5.4		01/26/08	5.4347	EPA8260
Acetone	ug/Kg	< 54		01/26/08	54.347	EPA8260
% Solids		92		01/28/08	0.1	SM182540G

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1998 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
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Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.280339.01 01/29/08

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, #299 Main Street Sanitary
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:01/24/08 RECEIVED:01/24/08
TIME COL'D:1010
MATRIX:Soil SAMPLE: SCP-02 EP(17')

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAL METHOD
Vinyl Chloride	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Methylene Chloride	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Bromochloromethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Chloroform	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
111 Trichloroethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Benzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Trichloroethene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Bromodichloromethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Dibromomethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Toluene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
112 Trichloroethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Tetrachloroethene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Chlorodibromomethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1993 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.280339.01 01/29/08

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, #299 Main Street Sanitary
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:01/24/08 RECEIVED:01/24/08
TIME COL'D:1010
MATRIX:Soil SAMPLE: SCP-02 EP(17')

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICA METHOD
1112Tetrachloroethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Chlorobenzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Ethyl Benzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
m + p Xylene	ug/Kg	< 11		01/26/08	10.526	EPA8260
o Xylene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Styrene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Bromoform	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Isopropylbenzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Bromobenzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
123-Trichloropropane	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
n-Propylbenzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
2-Chlorotoluene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
135-Trimethylbenzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
4-Chlorotoluene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
tert-Butylbenzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
124-Trimethylbenzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
sec-Butylbenzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
p-Isopropyltoluene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1,3 Dichlorobenzene (v)	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
DBCP	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1994 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.280339.01 01/29/08

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, #299 Main Street Sanitary
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:01/24/08 RECEIVED:01/24/08
TIME COL'D:1010
MATRIX:Soil SAMPLE: SCP-02 EP(17')

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE OF ANALYSIS	LRL	ANALYTICAl METHOD
Naphthalene(v)	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
t-1,3Dichloropropene	ug/Kg	< 5.3		01/26/08	5.2631	EPA8260
Acetone	ug/Kg	< 53		01/26/08	52.631	EPA8260
% Solids		95		01/28/08	0.1	SM182540G

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1995 NYSDOH ID # 10320

WASTE DISPOSAL APPROVALS & MANIFESTS

THOMAS R. SUOZZI
COUNTY EXECUTIVE

RAYMOND A. RIBEIRO, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1194 Prospect Avenue
Westbury, New York 11590-2723

RECEIVED
DEC 17 2007
BY:

December 14, 2007

Mr. Steve Sobstyl
C. A. Rich, Environmental Specialists
17 Dupont Street
Plainview, New York 11803

Re: Disposal of Cesspool Wastewater
299 Main Street, Westbury, New York

Dear Mr. Sobstyl:

This letter is in response to your letter dated December 5, 2007, requesting approval to dispose of approximately 1500 gallons of wastewater from a cesspool closure at 299 Main Street, Westbury, to the County's Bay Park Scavenger Waste Disposal Facility.

The request is hereby approved. The approval is based on the laboratory analysis of the wastewater and the non-hazardous nature of the wastes. This approval is limited to only the liquid phase wastes pumped from the above referenced facility.

This Department reserves the right to cancel this temporary approval at any time. The wastewater must be pumped and transported by a New York State Department of Environmental Conservation approved and Nassau County permitted company.

Payment for the disposal will be made by disposal tickets purchased by your company for disposal of scavenger waste at the Bay Park facility.

If you have any questions concerning the above matter, please call me at (516) 571-7352.

Very truly yours,

Peter J. Witkowski
Director of Hazardous Waste Services

PJW:jld

c. Joseph L. Davenport, NCDPW
Richard Cotugno, NCDPW
Chuck Durante, NCDPW

Y:\INDUSTRIAL PRETREATMENT PROGRAM\SEWER DISCHARGES\299 MAIN STREET WESTBURY CESSPOOL WASTEWATER DISPOSAL APPROVAL.DOC

24006

County of Nassau
Department of Public Works

Manifest No. 04774

Bay Park Sewage Treatment Plant
Septage/Scavenger Waste Facility
Load Manifest

Date: 1/24/08
Disposal Company Name: ANCS
Disposal Company Address: 10-2 DUBON CT
FARMINGDALE NY 11735
Telephone Number:
Permit Number: #115

Section I

Below please indicate the source and type of the acceptable wastewater to be discharged at the Bay Park STP Septage/Scavenger Waste Facility.

Name/Firm/Establishment: Padilla Const
Address: 299 MAIN ST
Town/Village: WESTBURY NY Zip Code:
Telephone Number:
Type of Waste Removed: [X] Septage Tank Cleanout
[ ] Grease Trap/Interceptor Cleanout
[ ] Other (describe below)
Description:
Volume of Waste Removed: 2000 gal Gallons

Section II

Was liquid decanted after removal from the above referenced source location and prior to disposal at the BPSTP Septage/Scavenger Waste Facility?

[ ] Yes
[X] No

If Yes, where and how was decanted liquid disposed of

Section III

I (we) the undersigned, assert that the volume to be disposed of at the BPSTP Septage/Scavenger Waste Facility contains no material or components not permitted by the Nassau County Sewer Ordinance (No.266-1985 and successors) and was generated and collected only in Nassau County. I (we) understand that there can be significant civil and/or criminal penalties for any violations of federal, state and local laws, rules and regulations governing the disposal of said wastes.

[signature] JAMES LAP 1/24/08
Signature Print Name Date

PW-0163 1/06 White Copy: Nassau County Blue Copy: Disposal Firm Yellow Copy: Source Location

2632 RDC-01881

JOB WORK ORDER

AQUA NOVA COMMERCIAL SERVICES
10-2 SUDOM COURT
FARMINGDALE, NY 11735
631-293-2627

3/006

Arrived on job 7:45 A.M./P.M.
Left job 9:15 A.M./P.M.

MECHANIC	HELPER	DATE
JL		1/24/08

JOB NAME: PAD. 11A CONST / AARCO.
JOB PHONE:
ADDRESS: 299 MAIN ST.
CITY: WESTBURY
☐ LATE NIGHT ☐ SUNDAY ☐ HOLIDAY
BILL TO:
PHONE:
ADDRESS:
☐ NEW ☐ REFERRAL ☐ REPEAT

PUMPING	Pumped Storm Drain / Pool	
CHEMICALS	for AARCO 2000 gal	
LINE CLEANING		
SINK TUB TOILET		
LABOR		
OTHER	mem 3000	
	1/2 HR la	
	SUB TOTAL	
	TAX	
	TOTAL	

Purchaser shall provide access to job site. It shall be the obligation of the Purchaser to inform the Service Company of any above or below ground or hidden perils. The Seller shall not be responsible for damage above or below ground to property or hidden perils. Signor assumes liability representatively and personally for payment of contract amount.

"COLLECTION COSTS" - I agree to pay any cost of collection money I owe under this agreement, including court costs, attorney fees, and any other disbursements not in excess of 10% of the overall cost.

DATE PAID
CHECK NO.
AMT. REC'D.
☐ CASH ☐ M.C. ☐ VISA ☐ LEFT BILL

GENERATOR SIGNED STATEMENT

I, AARCO hereby affirm that I am the owner, or user, of the Individual Sewage Disposal Facility (septic tank/leaching facilities) located at the address of the invoice and: (1). That the facilities to be pumped contain only sanitary sewage; (2). That I have not been notified by the Suffolk County Department of Health or the Nassau County Department of Health to have this system pumped by a licensed industrial hauler. That neither I nor any person in my family or in my employ have added any chemical solvent waste or industrial wastes of any kind to the facility to be pumped and that I make this Statement knowing that the waste will be disposed of at a Municipal Septage Treatment Facility and that in the event that any chemical solvent waste or industrial waste of any kind have been added, legal action may be undertaken by the appropriate regulatory agency against any or all parties involved.

"I, hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law".

[signature] 1/24/08
Customer's Signature Date

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 43195

2. Page 1 of

-ECAA 428-

3. Generator's Name and Mailing Address
299 Main St
Westbury NY

4. Generator's Phone ( )

5. Transporter 1 Company Name
AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number
N Y R 0 0 0 1 0 7 3 2 6

A. Transporter's Phone
631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
RGM Earth Care
Mids Rd
Deer Park NY

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. drain sludge (non haz-mat)	01	TT	0016	Y
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
EMERGENCY PHONE # 631-586-5900

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Agent for Generator STEVE SOBSTIL — Signature — Month 01 Day 24 Year 08

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Michal Bonislawski — Signature — Month 01 Day 24 Year 08

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Robert T. McGreevy — Signature — Month 01 Day 24 Year 08

GENERATOR — TRANSPORTER — FACILITY

ORIGINAL – RETURN TO GENERATOR

CUSTOMER COPY

110 Sand Company

170 Cabot Street
West Babylon, New York 11704

CARICH
299 Main St
Westbury NY

TELEPHONES
Office - 631-249-4108
Scalehouse - 631-694-2822
Landfill - 631-694-2848

CUSTOMER NO.	P.O. NUMBER	TRUCK NO.	TYPE OF SALE	JOB NO.	OUR ORDER NUMBER	TICKET NO.
910000		0	PUBLIC SCALES		011800	641124

CUSTOMER NAME:
MATERIAL SALE - CASH

GROSS	TARE	NET	UNIT	WEIGHED BY
36.56		1.00	UNIT	CAK

DATE	TAX CERTIFICATE	TRUCK CODE	MATERIAL CODE	IN	OUT	CHECK NO. CHARGE TYPE	LICENSE NO.
1/24/08	X		800		12:51		81220JW

MATERIAL DESCRIPTION:
WEIGHT VEHICLE GROSS WEIGHT 73120 LBS

DELIVERY ADDRESS

TRACTOR:G7

TOTAL TODAY

QUANTITY THIS ORDER TODAY

LOADS THIS ORDER TODAY

RECEIVED BY:

CARRIER SIGNATURE

CUSTOMER SIGNATURE

SEE REVERSE SIDE FOR COLLECTION TERMS

RICH
ENVIRONMENTAL SPECIALISTS

August 6, 2009

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: Soil Sampling Results in connection with the Soil Vapor Extraction (SVE) System at 299 Main Street, Site 1-30-043S New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the SVE system termination criteria in the approved Final Engineering Report and Operations, Maintenance & Monitoring Plan; Interim Remedial Measures Report – Part B, enclosed please find the results of the soil boring sampling conducted at the above-referenced Site.

The Plan included turning off the SVE system and advancing a soil boring in the area of soil vapor extraction points SVE-1, 2 and 3 (see Figure 1). Soil samples were collected at five foot depth intervals beginning at the transition from the clean imported backfill to native soil down to the water table and analyzed for volatile organic compounds (VOCs) utilizing EPA Method 8260. The results are summarized on Tables 1-3. Also, Tables 4 & 5 include a summary of the air sample results over time in connection with the operation of the SVE system.

The soil sample results indicate that operation of the SVE system has successfully remediated the soil at vapor points SVE-2 and SVE-3. The results of the soil samples collected at vapor point SVE-1 indicated levels of VOCs, primarily xylenes and trimethylbenzenes, at a depth of 35-40 feet at concentrations that exceed the NYSDEC TAGM #4046 Cleanup Objectives. Based on these results, we propose that the SVE system has sufficiently remediated contaminant zones SVE-2 and SVE-3 and that further remediation of these two zones is no longer necessary and the cleanup of this area of the Site is deemed complete.

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

We also propose that the SVE system be re-started and modified to focus only on vapor point SVE-1 to increase air flow to more efficiently remove the residual VOC contamination. The SVE system will remain in operation for a period of at least six months before turning off the system and re-sampling the soil at vapor point SVE-1.

Upon your review of the enclosed soil and SVE data, we would be glad to discuss any questions or comments you may have prior to going forward with the proposed Plan.

Sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

Enclosures
SS/sm
cc: see attached distribution

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

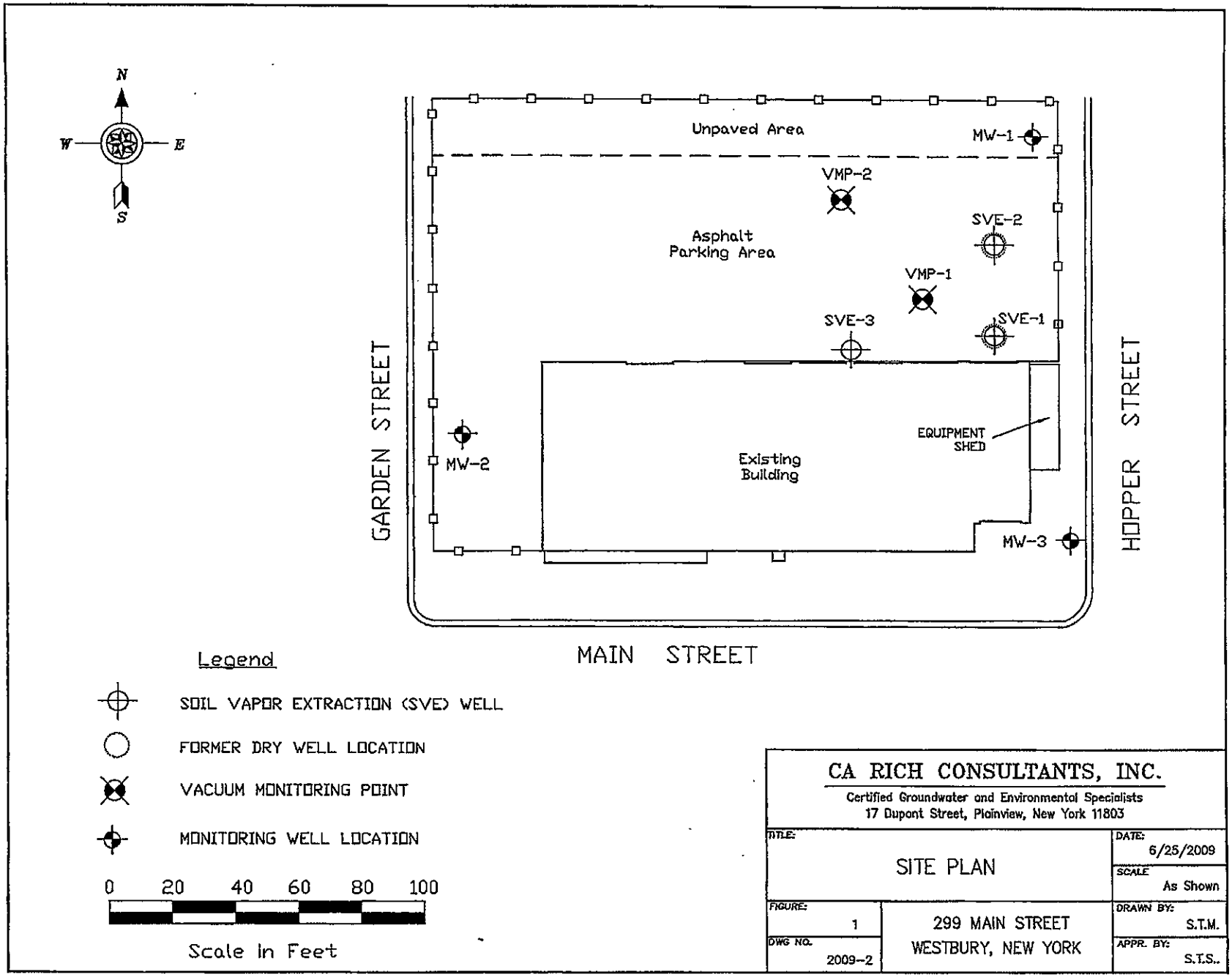
Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq. (via email only)
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq. (via email only)
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

FIGURE 1
&
TABLES 1 through 5



2632 RDC-01889

Table 1

Summary of Soil Samples at SVE -1

299 Main Street
Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID Location Matrix Date Sampled	SV-1 (30-35') SV-1 Soil 5/13/2009	SV-1 (35-40') SV-1 Soil 5/13/2009	SV-1 (43-45') SV-1 Soil 5/13/2009	SV-1 (45-48') SV-1 Soil 5/13/2009	SV-1 (Xft) SV-1(45-48') Dup Soil 5/13/2009	NYSDEC (1) 6NYCRR Part 375 Restricted Use Industrial	NYSDEC (1) 6NYCRR Part 375 Restricted Use Protection of Groundwater	NYSDEC (2) TAGM #4046 Guidance Value
Volatile Organic Compounds (USEPA Method 8260)								
Parameters	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	ug/Kg
MTBE	ND	ND	ND	ND	ND	1,000,000	930	120
Benzene	ND	ND	ND	ND	ND	89,000	60	60
Toluene	ND	15	ND	ND	ND	1,000,000	700	1,500
Ethyl Benzene	ND	2,000	7.2	ND	ND	780,000	100	5,500
m + p Xylene	ND	3,500	33	ND	ND	1,000,000	1,600	1,200
o Xylene	ND	4,500	21	540	520	1,000,000	1,600	600
Isopropylbenzene	ND	1,700	ND	ND	ND	NS	NS	2,300
n-Propylbenzene	ND	4,400	9.3	ND	ND	1,000,000	3,900	3,700
1,3,5-Trimethylbenzene	ND	10,000	53	4,300	4,400	380,000	8,400	3,300
1,2,4-Trimethylbenzene	ND	31,000	71	250	210	380,000	3,600	10,000
p-Isopropyltoluene	ND	2,500	130	150	130	NS	NS	10,000
n-Butylbenzene	ND	4,300	ND	ND	ND	1,000,000	1,200	10,000
Naphthalene	ND	5,100	ND	51	60	1,000,000	12	13,000
sec-Butylbenzene	ND	3,100	10	25	19	1,000,000	11,000	10,000
tert-Butylbenzene	ND	ND	14	61	63	1,000,000	5,900	10,000
2-Chlorotoluene	ND	3,800	ND	180	160	NS	NS	NS
1,2-Dichlorobenzene	ND	1,000	290	740	760	1,000,000	1,100	7,900
1,4-Dichlorobenzene	ND	41	42	79	85	250,000	1,800	8,500
p-Ethyltoluene	ND	8,000	20	140	130	NS	NS	NS
1,2,4,5-Tetramethylbenzene	ND	6,000	140	7,400	8,000	NS	NS	NS
Acetone	ND	140	ND	ND	ND	1,000,000	50	200
Tetrachloroethene	ND	43	6.2	19	24	300,000	1,300	1,400

Notes:
All concentrations reported in ug/Kg (parts per billion).
ND - Not Detected above laboratory detection limits.
NS - No Standard.
(1) NYSDEC 6 NYCRR Part 375: Environmental Remediation Programs; 12/14/2006.
(2) NYSDEC Technical and Administrative Guidance Memorandum #4046: Determination of Cleanup Objectives and Cleanup Levels; 1/24/94.

Table 2

Summary of Soil Samples at SVE -2

299 Main Street
Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID Location Matrix Date Sampled	SV-2 (30-35') SV-2 Soil 5/12/2009	SV-2 (35-40') SV-2 Soil 5/12/2009	SV-2 (40-45') SV-2 Soil 5/12/2009	SV-2 (45-50') SV-2 Soil 5/12/2009	NYSDEC (1) 6NYCRR Part 375 Restricted Use Industrial	NYSDEC (1) 6NYCRR Part 375 Restricted Use Protection of Groundwater	NYSDEC (2) TAGM #4046 Guidance Value
Volatile Organic Compounds (USEPA Method 8260)							
Parameters	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	ug/Kg
MTBE	ND	ND	ND	ND	1,000,000	930	120
Benzene	ND	ND	ND	ND	89,000	60	60
Toluene	ND	ND	ND	ND	1,000,000	700	1,500
Ethyl Benzene	ND	ND	ND	ND	780,000	100	5,500
m + p Xylene	ND	ND	ND	ND	1,000,000	1,600	1,200
o Xylene	ND	ND	ND	ND	1,000,000	1,600	600
Isopropylbenzene	ND	ND	ND	ND	NS	NS	2,300
n-Propylbenzene	ND	ND	ND	ND	1,000,000	3,900	3,700
1,3,5-Trimethylbenzene	ND	ND	ND	18	380,000	8,400	3,300
1,2,4-Trimethylbenzene	ND	ND	ND	5.2	380,000	3,600	10,000
p-Isopropyltoluene	ND	ND.	ND	34	NS	NS	10,000
n-Butylbenzene	ND	ND	ND	81	1,000,000	1,200	10,000
Naphthalene	ND	ND	ND	120	1,000,000	12	13,000
sec-Butylbenzene	ND	ND	ND	9.3	1,000,000	11,000	10,000
tert-Butylbenzene	ND	ND	ND	ND	1,000,000	5,900	10,000
2-Chlorotoluene	ND	ND	ND	ND	NS	NS	NS
1,2-Dichlorobenzene	ND	ND	ND	52	1,000,000	1,100	7,900
1,4-Dichlorobenzene	ND	ND	ND	9.3	250,000	1,800	8,500
p-Ethyltoluene	ND	ND	ND	ND	NS	NS	NS
1,2,4,5-Tetramethylbenzene	ND	ND	ND	800	NS	NS	NS
Acetone	ND	ND	ND	ND	1,000,000	50	200
Tetrachloroethene	ND	ND	ND	19	300,000	1,300	1,400

Notes:
All concentrations reported in ug/Kg (parts per billion).
ND - Not Detected above laboratory detection limits.
NS - No Standard.
(1) NYSDEC 6 NYCRR Part 375: Environmental Remediation Programs; 12/14/2006.
(2) NYSDEC Technical and Administrative Guidance Memorandum #4046: Determination of Cleanup Objectives and Cleanup Levels; 1/24/94.

Table 3

Summary of Soil Samples at SVE -3

299 Main Street
Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID Location Matrix Date Sampled	SV-3 (30-35') SV-3 Soil 5/13/2009	SV-3 (35-40') SV-3 Soil 5/13/2009	SV-3 (43-45') SV-3 Soil 5/13/2009	SV-3 (45-48') SV-3 Soil 5/13/2009	NYSDEC (1) 6NYCRR Part 375 Restricted Use Industrial	NYSDEC (1) 6NYCRR Part 375 Restricted Use Protection of Groundwater	NYSDEC (2) TAGM #4046 Guidance Value
Volatile Organic Compounds (USEPA Method 8260)							
Parameters	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	ug/Kg
MTBE	ND	ND	ND	ND	1,000,000	930	120
Benzene	ND	ND	ND	ND	89,000	60	60
Toluene	ND	ND	ND	ND	1,000,000	700	1,500
Ethyl Benzene	ND	ND	ND	ND	780,000	100	5,500
m + p Xylene	ND	ND	ND	ND	1,000,000	1,600	1,200
o Xylene	ND	ND	ND	ND	1,000,000	1,600	600
Isopropylbenzene	ND	ND	ND	ND	NS	NS	2,300
n-Propylbenzene	ND	ND	ND	ND	1,000,000	3,900	3,700
1,3,5-Trimethylbenzene	ND	ND	ND	ND	380,000	8,400	3,300
1,2,4-Trimethylbenzene	ND	ND	ND	ND	380,000	3,600	10,000
p-Isopropyltoluene	ND	ND	ND	ND	NS	NS	10,000
n-Butylbenzene	ND	ND	ND	ND	1,000,000	1,200	10,000
Naphthalene	ND	8.2	ND	ND	1,000,000	12	13,000
sec-Butylbenzene	ND	ND	ND	ND	1,000,000	11,000	10,000
tert-Butylbenzene	ND	ND	ND	ND	1,000,000	5,900	10,000
2-Chlorotoluene	ND	ND	ND	ND	NS	NS	NS
1,2-Dichlorobenzene	ND	ND	ND	ND	1,000,000	1,100	7,900
1,4-Dichlorobenzene	ND	ND	ND	ND	250,000	1,800	8,500
p-Ethyltoluene	ND	ND	ND	ND	NS	NS	NS
1,2,4,5-Tetramethylbenzene	ND	22	ND	ND	NS	NS	NS
Acetone	ND	ND	ND	ND	1,000,000	50	200
Tetrachloroethene	ND	ND	ND	ND	300,000	1,300	1,400

Notes.
All concentrations reported in ug/Kg (parts per billion).
ND - Not Detected above laboratory detection limits.
NS - No Standard.
(1) NYSDEC 6 NYCRR Part 375: Environmental Remediation Programs; 12/14/2006.
(2) NYSDEC Technical and Administrative Guidance Memorandum #4046: Determination of Cleanup Objectives and Cleanup Levels; 1/24/94.

Table 4

299 Main Street
New Cassell Industrial Area
Westbury, New York
Site No. 1-30-0438

Soil Vapor Quality Analytical Data in ug/cubic meter

SVE SYSTEM

Date	Days Since System Start Up	Benzene	Toluene	Ethyl Benzene	Total Xylene	PCE	TCE	C-1,2 DCE	Total VOC's	Comments
5/2/2006	-179	3163	286407	18243	61244	312	107	32908	402384	Pilot Test
11/1/2006	0	1276	229665	69408	456330	339	381	8727	766126	System start-up Baseline
12/11/2006	40	< 12	35015	16484	195570	447	4674	2538	254728	1st quarterly sample
--	--	--	--	--	--	--	--	--	--	System down 2/28/07
--	--	--	--	--	--	--	--	--	--	System re-started 4/6/07
4/30/2007	179	< 12	866	2212	35637	230	3223	2023	44191	2nd quarterly sample
7/24/2007	263	< 12	71	273	6692	257	4889	2895	15077	3rd quarterly sample
10/17/2007	306	< 3.19	26	108	1695	448	2580	1745	6602	4th quarterly sample
1/24/2008	443	< 0.64	18	69	1391	461	2149	952	5040	5th quarterly sample
4/30/2008	499	< 0.64	11	33	730	489	2310	1150	4723	6th quarterly sample
7/22/2008	621	< 0.64	9	15	410	529	3331	1269	5563	7th quarterly sample
10/23/2008	712	< 6.38	36	21	1000	679	3439	< 15.87	5175	8th quarterly sample
5/11/2009	870	< 0.64	6	4	101	516	2149	873	3649	9th quarterly sample

Notes:
Time 0 = System activation date- 11/01/06
Air samples were collected using Summa canisters.
Results reported in micro grams per cubic meter (ug/m3).

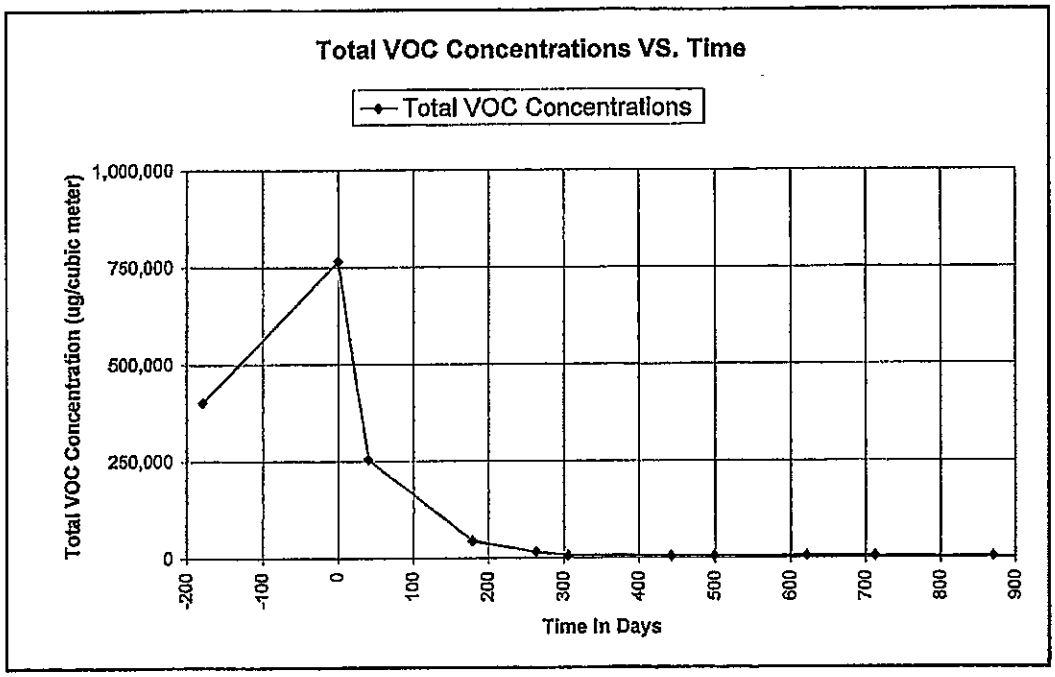


TABLE 5

Summary of Extracted Soil Vapor Samples
Soil Vapor Extraction System at 299 Main Street in Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID	SVE-1PT	AS-11/1/06	AS-12/11/06	AS-4/30/07	AS-7/24/07	AS-10/17/07	AS-1/24/08	AS-4/30/08	AS-7/22/08	AS-10/23/08	AS-5/11/09
Matrix	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
Location	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated
Date Sampled	5/2/2006	11/1/2006	12/11/2006	4/30/2007	7/24/2007	10/17/2007	1/24/2008	4/30/2008	7/22/2008	10/23/2008	5/11/2009
Comment	Pilot Test	Start-Up	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	5th Quarter	6th Quarter	7th Quarter	8th Quarter	9th Quarter
Volatile Organic Compounds (USEPA Method TO-15)											
Parameters	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
1,1 Dichloroethane	< 81	72.918	< 16.204	< 16.2	< 16.20	< 4.05	< 0.81	< 0.81	< 0.81	1255.80	< 0.81
1,1 Dichloroethene	< 79	< 15.88	< 15.88	< 15.9	< 15.88	< 3.97	< 0.79	< 0.79	< 0.79	< 7.94	< 0.40
1,2 Dibromoethane	< 30	< 30.76	< 30.76	< 30.8	< 30.75	< 7.69	< 1.54	< 1.54	< 1.54	< 15.38	< 1.54
1,2 Dichlorobenzene (v)	< 120	842.24	1082.9	< 24.1	1443.80	< 6.02	445.18	324.66	198.53	< 12.03	34.29
1,2 Dichloroethane	< 81	< 16.204	< 16.204	< 16.2	< 16.20	< 4.05	< 0.81	< 0.81	< 0.81	< 8.10	< 2.03
1,2 Dichloropropane	< 92	< 18.496	< 18.496	< 18.5	< 18.50	< 4.62	< 0.92	< 0.92	< 0.92	< 9.25	2.31
1,2-Dichlorotetrafluoroethane	< 140	< 27.98	< 27.98	< 28.0	< 27.98	< 7	< 1.40	< 1.40	< 1.40	< 13.99	< 1.40
1,3 Butadiene	< 221	< 44.2	< 44.2	< 44.2	< 44.20	< 11.05	< 2.21	< 2.21	< 2.21	< 22.10	< 2.21
1,3 Dichlorobenzene (v)	< 120	< 24.064	< 24.064	< 24.1	< 24.06	< 6.02	1.80	1.80	< 1.20	< 12.03	< 1.20
1,4 Dichlorobenzene (v)	< 120	25.267	< 24.064	< 24.1	< 24.06	< 6.02	16.24	16.24	14.44	< 12.03	10.23
1,4-Dioxane	< 360	< 72.02	< 72.02	< 72.0	< 72.02	< 18.01	< 3.60	< 3.60	< 3.60	< 36.01	< 3.60
111 Trichloroethane	709	< 21.836	< 21.836	< 21.8	< 21.84	< 5.46	< 1.09	< 1.09	< 1.09	< 10.92	< 1.09
112 Trichloroethane	< 109	< 21.836	< 21.836	< 21.8	< 21.84	< 5.46	< 1.09	< 1.09	< 1.09	< 10.92	< 1.09
1122Tetrachloroethane	< 137	< 27.48	< 27.48	< 27.5	< 27.48	< 6.87	< 1.37	< 1.37	< 1.37	< 13.74	< 1.37
124-Trimethylbenzene	492	132813	88542	27546.0	18200.00	5902.8	3197.40	1377.30	737.85	255.79	23.12
135-Trimethylbenzene	787	59028	23119	14265.0	10822.00	3590.9	2459.50	1524.90	934.61	1623.30	152.49
2,2,4-Trimethylpentane	210184	125955	5131.5	284.6	< 18.68	43.39	41.99	33.12	29.39	38.72	6.06
2-Hexanone	< 205	< 40.92	< 40.92	< 40.9	< 40.92	< 10.23	< 2.05	< 2.05	< 2.05	< 20.46	< 2.05
3-Chloropropene	< 157	< 31.31	< 31.31	< 31.3	< 31.31	< 7.83	< 1.57	< 1.57	< 1.57	< 15.65	< 1.57
Acetone	< 238	332.92	< 47.56	< 47.6	< 47.56	28.54	261.58	< 2.38	22.35	< 23.78	18.17
Acrylonitrile	< 217	< 43.38	< 43.38	< 43.4	< 43.38	< 10.85	< 2.17	< 2.17	< 2.17	< 21.69	< 2.17
Benzene	3163	1276.8	< 12.766	< 12.8	< 12.77	< 3.19	< 0.64	< 0.64	< 0.64	< 6.38	< 0.64
Benzyl Chloride	< 2589	< 518	< 518	< 518.0	< 518.00	< 129.5	< 25.90	< 25.90	< 25.90	< 25.90	< 1.04
Bromodichloromethane	< 134	< 26.52	< 26.52	< 26.5	< 26.52	< 6.63	< 1.33	< 1.33	< 1.33	< 13.26	< 1.33
Bromoform	< 207	< 41.4	< 41.4	< 41.4	< 41.40	< 10.35	< 2.07	< 2.07	< 2.07	< 20.70	< 2.07
Bromomethane	< 388	< 77.68	< 77.68	< 77.7	< 77.68	< 19.42	< 3.88	< 3.88	< 3.88	< 38.84	< 0.78
c-1,2-Dichloroethene	32908	8727.4	2538.9	2023.2	2895.90	1745.5	952.08	1150.40	1269.40	< 15.87	872.74
c-1,3Dichloropropene	< 91	< 18.168	< 18.168	< 18.2	< 18.17	< 4.54	< 0.91	< 0.91	< 0.91	< 9.08	< 2.27
Carbon disulfide	< 62	115.07	96.41	< 12.4	< 12.44	< 3.11	37.32	28.92	16.48	< 6.22	3.71
Carbon Tetrachloride	< 126	< 25.176	< 25.176	< 25.2	< 25.18	< 6.29	< 1.26	< 1.26	< 1.26	< 12.59	< 0.50
Chlorobenzene	< 92	< 18.432	< 18.432	< 18.4	< 18.43	< 4.61	< 0.92	< 0.92	< 0.92	< 9.22	< 0.92
Chlorodibromomethane	< 170	< 33.72	< 33.72	< 33.7	< 33.72	< 8.43	< 1.69	< 1.69	< 1.69	< 16.86	< 1.69
Chloroethane	< 528	< 105.6	< 105.6	< 105.6	< 105.60	< 26.4	< 5.28	< 5.28	< 5.28	< 52.80	< 2.64
Chloroform	< 98	< 19.48	< 19.48	< 19.5	< 19.48	< 4.87	< 0.97	< 0.97	< 0.97	< 9.74	< 0.97
Chloromethane	< 83	< 16.536	< 16.536	< 16.5	< 16.54	< 4.13	< 0.83	< 0.83	< 0.83	< 8.27	< 2.07
Cyclohexane	< 172	< 34.44	< 34.44	< 34.4	< 34.44	< 8.61	< 1.72	< 1.72	< 1.72	< 17.22	< 0.69
Dichlordifluoromethane	< 494	< 98.96	< 98.96	< 99.0	< 98.96	< 24.74	< 4.95	< 4.95	< 4.95	< 49.48	4.08
Ethyl Acetate	< 1802	< 360.1	< 360.1	< 360.1	< 360.10	< 90.03	< 18.01	< 18.01	< 18.01	< 180.05	< 18.01
Ethyl alcohol	< 377	< 75.32	< 75.32	< 75.3	< 75.32	< 18.83	20.71	< 3.77	9.98	< 37.66	< 3.77
Ethyl Benzene	18243	69408	16484	2212.4	273.29	108.45	69.41	32.54	16.18	20.39	3.69
Freon 113	< 153	< 30.672	< 30.672	< 30.7	< 30.67	99.68	122.69	99.68	46.31	< 15.34	19.17
Heptane	147534	90024	3191.8	139.1	< 40.92	< 10.23	< 2.05	4.50	< 2.05	< 20.46	< 2.05
Hexachlorobutadiene	< 213	< 42.68	< 42.68	< 42.7	< 42.68	< 10.67	< 2.13	< 2.13	< 2.13	< 21.34	< 5.34
Hexane	20069	8487.2	< 35.28	< 35.3	< 35.28	< 8.82	< 1.76	< 1.76	< 1.76	< 17.64	< 1.76
Isopropyl Alcohol	< 1229	< 245.5	< 245.5	< 245.5	< 245.50	< 61.38	< 12.28	< 12.28	< 12.28	< 122.75	< 12.28
m + p Xylene	47779	308568	130380	19557.0	2594.50	651.9	564.98	121.69	27.81	43.46	5.22
Methyl Ethyl Ketone	< 295	5008.2	< 58.92	< 58.9	< 58.92	< 14.73	29.17	< 2.95	< 2.95	< 29.46	< 2.95
Methylene Chloride	< 69	< 13.896	< 13.896	< 13.9	< 13.90	< 3.47	< 0.69	< 0.69	< 0.69	< 6.95	76.43
Methylisobutylketone	< 410	< 82.02	< 82.02	< 82.0	< 82.02	< 20.51	< 4.10	< 4.10	< 4.10	< 41.01	< 4.10
o Xylene	13465	147764	65190	16080.0	3998.30	1043	825.74	608.44	382.45	958.12	95.61
p-Ethyltoluene	2153	152241	88398	30448.0	17189.00	3535.9	1571.50	638.43	319.22	284.84	20.14
Propylene	465	< 34.38	< 34.38	< 34.4	< 34.38	< 8.6	< 1.72	< 1.72	< 1.72	< 17.19	10.83
Styrene	< 85	< 17.024	< 17.024	< 17.0	< 17.02	< 4.26	< 0.85	< 0.85	< 0.85	< 8.51	< 0.85
t-1,2-Dichloroethene	< 79	122.98	< 15.858	< 15.9	< 15.87	22.22	17.46	12.30	20.63	17.06	13.89
t-1,3Dichloropropene	< 91	< 18.168	< 18.168	< 18.2	< 18.17	< 4.54	< 0.91	< 0.91	< 0.91	< 9.08	< 0.91
ter.ButylMethylEther	< 72	< 14.076	158.36	< 14.1	< 14.08	< 3.52	< 0.70	< 0.70	< 0.70	< 7.04	< 0.70
tert. Butyl Alcohol	< 606	< 121.12	< 121.12	< 121.1	< 121.12	< 30.28	< 6.06	< 6.06	< 6.06	< 60.56	< 6.06
Tetrachloroethene	312	339.25	447.81	230.7	257.83	447.81	461.38	488.52	529.23	678.50	515.66
Tetrahydrofuran	< 590	14735	< 117.88	< 117.9	< 117.88	< 29.47	< 5.89	< 5.89	< 5.89	< 58.94	< 1.47
Toluene	288407	229665	35015	656.0	71.54	26.36	18.07	10.92	8.66	35.77	6.02
Trichloroethene	< 107	381.48	4674.5	3223.8	4889.40	2579	2149.20	2310.40	3331.30	3436.70	2149.20
Trichlorofluoromethane	< 112	< 22.488	< 22.488	< 22.5	< 22.49	< 5.62	< 1.12	< 1.12	6.18	< 11.24	3.82
Vinyl Acetate	< 176	< 35.19	< 35.19	< 35.2	< 35.19	< 8.8	< 1.76	< 1.76	< 1.76	< 17.60	< 1.76
Vinyl Bromide	< 87	< 17.516	< 17.516	< 17.5	< 17.52	< 4.38	< 0.88	< 0.88	< 0.88	< 8.76	< 0.88
Vinyl Chloride	792	281.38	< 25.58	< 25.6	< 25.58	< 6.4	< 1.28	< 1.28	< 1.28	< 12.79	< 0.26

Notes:

Concentrations reported in micrograms per cubic meter (ug/m3).

< Indicates less than the method detection limit for specific compound.

SVE SOIL
LABORATORY DATA

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.07 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1023
MATRIX:Soil SAMPLE: SVE-1 (30-35ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Vinyl Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Methylene Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromochloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroform	ug/Kg	< 5.2		052009	5.1546	EPA8260
111 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Dibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromodichloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Toluene	ug/Kg	< 5.2		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10495 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.07 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1023
MATRIX:Soil SAMPLE: SVE-1 (30-35ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
112 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Tetrachloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorodibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Ethyl Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1112Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
m + p Xylene	ug/Kg	< 10		052009	10.309	EPA8260
o Xylene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Styrene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromoform	ug/Kg	< 5.2		052009	5.1546	EPA8260
Isopropylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
123-Trichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
n-Propylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
2-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
135-Trimethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
4-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
tert-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trimethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
sec-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
p-Isopropyltoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10496 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.07 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1023
MATRIX:Soil SAMPLE: SVE-1 (30-35ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
n-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
Dibromochloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Naphthalene(v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
ter.ButylMethylEther	ug/Kg	< 5.2		052009	5.1546	EPA8260
p-Ethyltoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Freon 113	ug/Kg	< 5.2		052009	5.1546	EPA8260
1245 Tetramethylbenz	ug/Kg	< 5.2		052009	5.1546	EPA8260
Acetone	ug/Kg	< 52		052009	51.546	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 52		052009	51.546	EPA8260
Methylisobutylketone	ug/Kg.	< 52		052009	51.546	EPA8260
Chlorodifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
p Diethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
% Solids		97		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10497 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
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Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.08 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1047
MATRIX:Soil SAMPLE: SVE-1 (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 11		052009	11.363	EPA8260
Chloromethane	ug/Kg	< 11		052009	11.363	EPA8260
Vinyl Chloride	ug/Kg	< 11		052009	11.363	EPA8260
Bromomethane	ug/Kg	< 11		052009	11.363	EPA8260
Chloroethane	ug/Kg	< 11		052009	11.363	EPA8260
Trichlorofluoromethane	ug/Kg	< 11		052009	11.363	EPA8260
1,1 Dichloroethene	ug/Kg	< 11		052009	11.363	EPA8260
Methylene Chloride	ug/Kg	< 11		052009	11.363	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 11		052009	11.363	EPA8260
1,1 Dichloroethane	ug/Kg	< 11		052009	11.363	EPA8260
2,2-Dichloropropane	ug/Kg	< 11		052009	11.363	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 11		052009	11.363	EPA8260
Bromochloromethane	ug/Kg	< 11		052009	11.363	EPA8260
Chloroform	ug/Kg	< 11		052009	11.363	EPA8260
111 Trichloroethane	ug/Kg	< 11		052009	11.363	EPA8260
Carbon Tetrachloride	ug/Kg	< 11		052009	11.363	EPA8260
1,1-Dichloropropene	ug/Kg	< 11		052009	11.363	EPA8260
Benzene	ug/Kg	< 11		052009	11.363	EPA8260
1,2 Dichloroethane	ug/Kg	< 11		052009	11.363	EPA8260
Trichloroethene	ug/Kg	< 11		052009	11.363	EPA8260
1,2 Dichloropropane	ug/Kg	< 11		052009	11.363	EPA8260
Dibromomethane	ug/Kg	< 11		052009	11.363	EPA8260
Bromodichloromethane	ug/Kg	< 11		052009	11.363	EPA8260
c-1,3Dichloropropene	ug/Kg	< 11		052009	11.363	EPA8260
Toluene	ug/Kg	15		052009	11.363	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10498 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-6777• FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.08 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1047
MATRIX:Soil SAMPLE: SVE-1 (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 11		052009	11.363	EPA8260
112 Trichloroethane	ug/Kg	< 11		052009	11.363	EPA8260
Tetrachloroethene	ug/Kg	43		052009	11.363	EPA8260
1,3-Dichloropropane	ug/Kg	< 11		052009	11.363	EPA8260
Chlorodibromomethane	ug/Kg	< 11		052009	11.363	EPA8260
1,2 Dibromoethane	ug/Kg	< 11		052009	11.363	EPA8260
Chlorobenzene	ug/Kg	< 11		052009	11.363	EPA8260
Ethyl Benzene	ug/Kg	2000		052009	11.363	EPA8260
1112Tetrachloroethane	ug/Kg	< 11		052009	11.363	EPA8260
m + p Xylene	ug/Kg	3500		052009	22.727	EPA8260
o Xylene	ug/Kg	4500		051909	227.27	EPA8260
Styrene	ug/Kg	< 11		052009	11.363	EPA8260
Bromoform	ug/Kg	< 11		052009	11.363	EPA8260
Isopropylbenzene	ug/Kg	1700		052009	11.363	EPA8260
Bromobenzene	ug/Kg	< 11		052009	11.363	EPA8260
1122Tetrachloroethane	ug/Kg	< 11		052009	11.363	EPA8260
123-Trichloropropane	ug/Kg	< 11		052009	11.363	EPA8260
n-Propylbenzene	ug/Kg	4400		051909	227.27	EPA8260
2-Chlorotoluene	ug/Kg	3800		051909	227.27	EPA8260
135-Trimethylbenzene	ug/Kg	10000		051909	227.27	EPA8260
4-Chlorotoluene	ug/Kg	< 11		052009	11.363	EPA8260
tert-Butylbenzene	ug/Kg	< 11		052009	11.363	EPA8260
124-Trimethylbenzene	ug/Kg	31000		051909	227.27	EPA8260
sec-Butylbenzene	ug/Kg	3100		051909	227.27	EPA8260
p-Isopropyltoluene	ug/Kg	2500		051909	227.27	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10499 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777• FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.08 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1047
MATRIX:Soil SAMPLE: SVE-1 (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 11		052009	11.363	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	41		052009	11.363	EPA8260
n-Butylbenzene	ug/Kg	4300		051909	227.27	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	1000		052009	11.363	EPA8260
Dibromochloropropane	ug/Kg	< 11		052009	11.363	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 11		052009	11.363	EPA8260
Hexachlorobutadiene	ug/Kg	< 11		052009	11.363	EPA8260
Naphthalene(v)	ug/Kg	5100		051909	227.27	EPA8260
123-Trichlorobenzene	ug/Kg	< 11		052009	11.363	EPA8260
ter.ButylMethylEther	ug/Kg	< 11		052009	11.363	EPA8260
p-Ethyltoluene	ug/Kg	8000		051909	227.27	EPA8260
Freon 113	ug/Kg	< 11		052009	11.363	EPA8260
1245 Tetramethylbenz	ug/Kg	6000		051909	227.27	EPA8260
Acetone	ug/Kg	140		052009	113.63	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 110		052009	113.63	EPA8260
Methylisobutylketone	ug/Kg	< 110		052009	113.63	EPA8260
Chlorodifluoromethane	ug/Kg	< 11		052009	11.363	EPA8260
p Diethylbenzene	ug/Kg	< 11		052009	11.363	EPA8260
% Solids		88		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10500 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770

Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.13 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1512
MATRIX:Soil SAMPLE: SVE-1 (43-45ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Vinyl Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Methylene Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromochloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroform	ug/Kg	< 5.2		052009	5.1546	EPA8260
111 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Dibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromodichloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Toluene	ug/Kg	< 5.2		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10513 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.13 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1512
MATRIX:Soil SAMPLE: SVE-1 (43-45ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
112 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Tetrachloroethene	ug/Kg	6.2		052009	5.1546	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorodibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Ethyl Benzene	ug/Kg	7.2		052009	5.1546	EPA8260
1112Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
m + p Xylene	ug/Kg	33		052009	10.309	EPA8260
o Xylene	ug/Kg	21		052009	5.1546	EPA8260
Styrene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromoform	ug/Kg	< 5.2		052009	5.1546	EPA8260
Isopropylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
123-Trichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
n-Propylbenzene	ug/Kg	9.3		052009	5.1546	EPA8260
2-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
135-Trimethylbenzene	ug/Kg	53		052009	5.1546	EPA8260
4-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
tert-Butylbenzene	ug/Kg	14		052009	5.1546	EPA8260
124-Trimethylbenzene	ug/Kg	71		052009	5.1546	EPA8260
sec-Butylbenzene	ug/Kg	10		052009	5.1546	EPA8260
p-Isopropyltoluene	ug/Kg	130		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10514 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
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LAB NO.291931.13 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1512
MATRIX:Soil SAMPLE: SVE-1 (43-45ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	42		052009	5.1546	EPA8260
n-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	290		052009	5.1546	EPA8260
Dibromochloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Naphthalene(v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
ter.ButylMethylEther	ug/Kg	< 5.2		052009	5.1546	EPA8260
p-Ethyltoluene	ug/Kg	20		052009	5.1546	EPA8260
Freon 113	ug/Kg	< 5.2		052009	5.1546	EPA8260
1245 Tetramethylbenz	ug/Kg	140		052009	5.1546	EPA8260
Acetone	ug/Kg	< 52		052009	51.546	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 52		052009	51.546	EPA8260
Methylisobutylketone	ug/Kg	< 52		052009	51.546	EPA8260
Chlorodifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
p Diethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
% Solids		97		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10515 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.14 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1515
MATRIX:Soil SAMPLE: SVE-1 (45-48ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 10		052009	10.416	EPA8260
Chloromethane	ug/Kg	< 10		052009	10.416	EPA8260
Vinyl Chloride	ug/Kg	< 10		052009	10.416	EPA8260
Bromomethane	ug/Kg	< 10		052009	10.416	EPA8260
Chloroethane	ug/Kg	< 10		052009	10.416	EPA8260
Trichlorofluoromethane	ug/Kg	< 10		052009	10.416	EPA8260
1,1 Dichloroethene	ug/Kg	< 10		052009	10.416	EPA8260
Methylene Chloride	ug/Kg	< 10		052009	10.416	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 10		052009	10.416	EPA8260
1,1 Dichloroethane	ug/Kg	< 10		052009	10.416	EPA8260
2,2-Dichloropropane	ug/Kg	< 10		052009	10.416	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 10		052009	10.416	EPA8260
Bromochloromethane	ug/Kg	< 10		052009	10.416	EPA8260
Chloroform	ug/Kg	< 10		052009	10.416	EPA8260
111 Trichloroethane	ug/Kg	< 10		052009	10.416	EPA8260
Carbon Tetrachloride	ug/Kg	< 10		052009	10.416	EPA8260
1,1-Dichloropropene	ug/Kg	< 10		052009	10.416	EPA8260
Benzene	ug/Kg	< 10		052009	10.416	EPA8260
1,2 Dichloroethane	ug/Kg	< 10		052009	10.416	EPA8260
Trichloroethene	ug/Kg	< 10		052009	10.416	EPA8260
1,2 Dichloropropane	ug/Kg	< 10		052009	10.416	EPA8260
Dibromomethane	ug/Kg	< 10		052009	10.416	EPA8260
Bromodichloromethane	ug/Kg	< 10		052009	10.416	EPA8260
c-1,3Dichloropropene	ug/Kg	< 10		052009	10.416	EPA8260
Toluene	ug/Kg	< 10		052009	10.416	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10516 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770

Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.14 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1515
MATRIX:Soil SAMPLE: SVE-1 (45-48ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 10		052009	10.416	EPA8260
112 Trichloroethane	ug/Kg	< 10		052009	10.416	EPA8260
Tetrachloroethene	ug/Kg	19		052009	10.416	EPA8260
1,3-Dichloropropane	ug/Kg	< 10		052009	10.416	EPA8260
Chlorodibromomethane	ug/Kg	< 10		052009	10.416	EPA8260
1,2 Dibromoethane	ug/Kg	< 10		052009	10.416	EPA8260
Chlorobenzene	ug/Kg	< 10		052009	10.416	EPA8260
Ethyl Benzene	ug/Kg	< 10		052009	10.416	EPA8260
1112Tetrachloroethane	ug/Kg	< 10		052009	10.416	EPA8260
m + p Xylene	ug/Kg	< 21		052009	20.833	EPA8260
o Xylene	ug/Kg	540		052009	10.416	EPA8260
Styrene	ug/Kg	< 10		052009	10.416	EPA8260
Bromoform	ug/Kg	< 10		052009	10.416	EPA8260
Isopropylbenzene	ug/Kg	< 10		052009	10.416	EPA8260
Bromobenzene	ug/Kg	< 10		052009	10.416	EPA8260
1122Tetrachloroethane	ug/Kg	< 10		052009	10.416	EPA8260
123-Trichloropropane	ug/Kg	< 10		052009	10.416	EPA8260
n-Propylbenzene	ug/Kg	< 10		052009	10.416	EPA8260
2-Chlorotoluene	ug/Kg	180		052009	10.416	EPA8260
135-Trimethylbenzene	ug/Kg	4300		051909	104.16	EPA8260
4-Chlorotoluene	ug/Kg	< 10		052009	10.416	EPA8260
tert-Butylbenzene	ug/Kg	61		052009	10.416	EPA8260
124-Trimethylbenzene	ug/Kg	250		052009	10.416	EPA8260
sec-Butylbenzene	ug/Kg	25		052009	10.416	EPA8260
p-Isopropyltoluene	ug/Kg	150		052009	10.416	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10517 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.14 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1515
MATRIX:Soil SAMPLE: SVE-1 (45-48ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 10		052009	10.416	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	79		052009	10.416	EPA8260
n-Butylbenzene	ug/Kg	< 10		052009	10.416	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	740		052009	10.416	EPA8260
Dibromochloropropane	ug/Kg	< 10		052009	10.416	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 10		052009	10.416	EPA8260
Hexachlorobutadiene	ug/Kg	< 10		052009	10.416	EPA8260
Naphthalene(v)	ug/Kg	51		052009	10.416	EPA8260
123-Trichlorobenzene	ug/Kg	< 10		052009	10.416	EPA8260
ter.ButylMethylEther	ug/Kg	< 10		052009	10.416	EPA8260
p-Ethyltoluene	ug/Kg	140		052009	10.416	EPA8260
Freon 113	ug/Kg	< 10		052009	10.416	EPA8260
1245 Tetramethylbenz	ug/Kg	7400		051909	104.16	EPA8260
Acetone	ug/Kg	< 100		052009	104.16	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 100		052009	104.16	EPA8260
Methylisobutylketone	ug/Kg	< 100		052009	104.16	EPA8260
Chlorodifluoromethane	ug/Kg	< 10		052009	10.416	EPA8260
p Diethylbenzene	ug/Kg	< 10		052009	10.416	EPA8260
% Solids		96		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10518 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.17 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1515
MATRIX:Soil SAMPLE: SVE-1 (xft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 10		052009	10.416	EPA8260
Chloromethane	ug/Kg	< 10		052009	10.416	EPA8260
Vinyl Chloride	ug/Kg	< 10		052009	10.416	EPA8260
Bromomethane	ug/Kg	< 10		052009	10.416	EPA8260
Chloroethane	ug/Kg	< 10		052009	10.416	EPA8260
Trichlorofluoromethane	ug/Kg	< 10		052009	10.416	EPA8260
1,1 Dichloroethene	ug/Kg	< 10		052009	10.416	EPA8260
Methylene Chloride	ug/Kg	< 10		052009	10.416	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 10		052009	10.416	EPA8260
1,1 Dichloroethane	ug/Kg	< 10		052009	10.416	EPA8260
2,2-Dichloropropane	ug/Kg	< 10		052009	10.416	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 10		052009	10.416	EPA8260
Bromochloromethane	ug/Kg	< 10		052009	10.416	EPA8260
Chloroform	ug/Kg	< 10		052009	10.416	EPA8260
111 Trichloroethane	ug/Kg	< 10		052009	10.416	EPA8260
Carbon Tetrachloride	ug/Kg	< 10		052009	10.416	EPA8260
1,1-Dichloropropene	ug/Kg	< 10		052009	10.416	EPA8260
Benzene	ug/Kg	< 10		052009	10.416	EPA8260
1,2 Dichloroethane	ug/Kg	< 10		052009	10.416	EPA8260
Trichloroethene	ug/Kg	< 10		052009	10.416	EPA8260
1,2 Dichloropropane	ug/Kg	< 10		052009	10.416	EPA8260
Dibromomethane	ug/Kg	< 10		052009	10.416	EPA8260
Bromodichloromethane	ug/Kg	< 10		052009	10.416	EPA8260
c-1,3Dichloropropene	ug/Kg	< 10		052009	10.416	EPA8260
Toluene	ug/Kg	< 10		052009	10.416	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10525 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.17 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1515
MATRIX:Soil SAMPLE: SVE-1 (xft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 10		052009	10.416	EPA8260
112 Trichloroethane	ug/Kg	< 10		052009	10.416	EPA8260
Tetrachloroethene	ug/Kg	24		052009	10.416	EPA8260
1,3-Dichloropropane	ug/Kg	< 10		052009	10.416	EPA8260
Chlorodibromomethane	ug/Kg	< 10		052009	10.416	EPA8260
1,2 Dibromoethane	ug/Kg	< 10		052009	10.416	EPA8260
Chlorobenzene	ug/Kg	< 10		052009	10.416	EPA8260
Ethyl Benzene	ug/Kg	< 10		052009	10.416	EPA8260
1112Tetrachloroethane	ug/Kg	< 10		052009	10.416	EPA8260
m + p Xylene	ug/Kg	< 21		052009	20.833	EPA8260
o Xylene	ug/Kg	520		052009	10.416	EPA8260
Styrene	ug/Kg	< 10		052009	10.416	EPA8260
Bromoform	ug/Kg	< 10		052009	10.416	EPA8260
Isopropylbenzene	ug/Kg	< 10		052009	10.416	EPA8260
Bromobenzene	ug/Kg	< 10		052009	10.416	EPA8260
1122Tetrachloroethane	ug/Kg	< 10		052009	10.416	EPA8260
123-Trichloropropane	ug/Kg	< 10		052009	10.416	EPA8260
n-Propylbenzene	ug/Kg	< 10		052009	10.416	EPA8260
2-Chlorotoluene	ug/Kg	160		052009	10.416	EPA8260
135-Trimethylbenzene	ug/Kg	4400		051909	104.16	EPA8260
4-Chlorotoluene	ug/Kg	< 10		052009	10.416	EPA8260
tert-Butylbenzene	ug/Kg	63		052009	10.416	EPA8260
124-Trimethylbenzene	ug/Kg	210		052009	10.416	EPA8260
sec-Butylbenzene	ug/Kg	19		052009	10.416	EPA8260
p-Isopropyltoluene	ug/Kg	130		052009	10.416	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10526 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.17 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1515
MATRIX:Soil SAMPLE: SVE-1 (xft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 10		052009	10.416	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	85		052009	10.416	EPA8260
n-Butylbenzene	ug/Kg	< 10		052009	10.416	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	760		052009	10.416	EPA8260
Dibromochloropropane	ug/Kg	< 10		052009	10.416	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 10		052009	10.416	EPA8260
Hexachlorobutadiene	ug/Kg	< 10		052009	10.416	EPA8260
Naphthalene(v)	ug/Kg	60		052009	10.416	EPA8260
123-Trichlorobenzene	ug/Kg	< 10		052009	10.416	EPA8260
ter.ButylMethylEther	ug/Kg	< 10		052009	10.416	EPA8260
p-Ethyltoluene	ug/Kg	130		052009	10.416	EPA8260
Freon 113	ug/Kg	< 10		052009	10.416	EPA8260
1245 Tetramethylbenz	ug/Kg	8000		051909	104.16	EPA8260
Acetone	ug/Kg	< 100		052009	104.16	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 100		052009	104.16	EPA8260
Methylisobutylketone	ug/Kg	< 100		052009	104.16	EPA8260
Chlorodifluoromethane	ug/Kg	< 10		052009	10.416	EPA8260
p Diethylbenzene	ug/Kg	< 10		052009	10.416	EPA8260
% Solids		96		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10527 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770

Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.01 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0940
MATRIX:Soil SAMPLE: SVE-2 (30-35ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Chloromethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Vinyl Chloride	ug/Kg	< 5.8		052009	5.8139	EPA8260
Bromomethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Chloroethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.8		052009	5.8139	EPA8260
Methylene Chloride	ug/Kg	< 5.8		052009	5.8139	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.8		052009	5.8139	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.8		052009	5.8139	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.8		052009	5.8139	EPA8260
Bromochloromethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Chloroform	ug/Kg	< 5.8		052009	5.8139	EPA8260
111 Trichloroethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.8		052009	5.8139	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.8		052009	5.8139	EPA8260
Benzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Trichloroethene	ug/Kg	< 5.8		052009	5.8139	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Dibromomethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Bromodichloromethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.8		052009	5.8139	EPA8260
Toluene	ug/Kg	< 5.8		052009	5.8139	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10477 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777• FAX (631) 422-5770

Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.01 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0940
MATRIX:Soil SAMPLE: SVE-2 (30-35ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 5.8		052009	5.8139	EPA8260
112 Trichloroethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Tetrachloroethene	ug/Kg	< 5.8		052009	5.8139	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Chlorodibromomethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
Chlorobenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
Ethyl Benzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
1112Tetrachloroethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
m + p Xylene	ug/Kg	< 12		052009	11.627	EPA8260
o Xylene	ug/Kg	< 5.8		052009	5.8139	EPA8260
Styrene	ug/Kg	< 5.8		052009	5.8139	EPA8260
Bromoform	ug/Kg	< 5.8		052009	5.8139	EPA8260
Isopropylbenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
Bromobenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
123-Trichloropropane	ug/Kg	< 5.8		052009	5.8139	EPA8260
n-Propylbenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
2-Chlorotoluene	ug/Kg	< 5.8		052009	5.8139	EPA8260
135-Trimethylbenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
4-Chlorotoluene	ug/Kg	< 5.8		052009	5.8139	EPA8260
tert-Butylbenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
124-Trimethylbenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
sec-Butylbenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
p-Isopropyltoluene	ug/Kg	< 5.8		052009	5.8139	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10478 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.01 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0940
MATRIX:Soil SAMPLE: SVE-2 (30-35ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 5.8		052009	5.8139	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 5.8		052009	5.8139	EPA8260
n-Butylbenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 5.8		052009	5.8139	EPA8260
Dibromochloropropane	ug/Kg	< 5.8		052009	5.8139	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.8		052009	5.8139	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.8		052009	5.8139	EPA8260
Naphthalene(v)	ug/Kg	< 5.8		052009	5.8139	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
ter.ButylMethylEther	ug/Kg	< 5.8		052009	5.8139	EPA8260
p-Ethyltoluene	ug/Kg	< 5.8		052009	5.8139	EPA8260
Freon 113	ug/Kg	< 5.8		052009	5.8139	EPA8260
1245 Tetramethylbenz	ug/Kg	< 5.8		052009	5.8139	EPA8260
Acetone	ug/Kg	< 58		052009	58.139	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 58		052009	58.139	EPA8260
Methylisobutylketone	ug/Kg	< 58		052009	58.139	EPA8260
Chlorodifluoromethane	ug/Kg	< 5.8		052009	5.8139	EPA8260
p Diethylbenzene	ug/Kg	< 5.8		052009	5.8139	EPA8260
% Solids		86		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10479 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.02 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE: -
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0955
MATRIX:Soil SAMPLE: SVE-2 (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Chloromethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Vinyl Chloride	ug/Kg	< 5.3		052009	5.2631	EPA8260
Bromomethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Chloroethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.3		052009	5.2631	EPA8260
Methylene Chloride	ug/Kg	< 5.3		052009	5.2631	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.3		052009	5.2631	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.3		052009	5.2631	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.3		052009	5.2631	EPA8260
Bromochloromethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Chloroform	ug/Kg	< 5.3		052009	5.2631	EPA8260
111 Trichloroethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.3		052009	5.2631	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.3		052009	5.2631	EPA8260
Benzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Trichloroethene	ug/Kg	< 5.3		052009	5.2631	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Dibromomethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Bromodichloromethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.3		052009	5.2631	EPA8260
Toluene	ug/Kg	< 5.3		052009	5.2631	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10480 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.02 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0955
MATRIX:Soil SAMPLE: SVE-2 (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 5.3		052009	5.2631	EPA8260
112 Trichloroethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Tetrachloroethene	ug/Kg	< 5.3		052009	5.2631	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Chlorodibromomethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
Chlorobenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
Ethyl Benzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
1112Tetrachloroethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
m + p Xylene	ug/Kg	< 11		052009	10.526	EPA8260
o Xylene	ug/Kg	< 5.3		052009	5.2631	EPA8260
Styrene	ug/Kg	< 5.3		052009	5.2631	EPA8260
Bromoform	ug/Kg	< 5.3		052009	5.2631	EPA8260
Isopropylbenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
Bromobenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
123-Trichloropropane	ug/Kg	< 5.3		052009	5.2631	EPA8260
n-Propylbenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
2-Chlorotoluene	ug/Kg	< 5.3		052009	5.2631	EPA8260
135-Trimethylbenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
4-Chlorotoluene	ug/Kg	< 5.3		052009	5.2631	EPA8260
tert-Butylbenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
124-Trimethylbenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
sec-Butylbenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
p-Isopropyltoluene	ug/Kg	< 5.3		052009	5.2631	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10481 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.02 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0955
MATRIX:Soil SAMPLE: SVE-2 (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 5.3		052009	5.2631	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 5.3		052009	5.2631	EPA8260
n-Butylbenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 5.3		052009	5.2631	EPA8260
Dibromochloropropane	ug/Kg	< 5.3		052009	5.2631	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.3		052009	5.2631	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.3		052009	5.2631	EPA8260
Naphthalene(v)	ug/Kg	< 5.3		052009	5.2631	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
ter.ButylMethylEther	ug/Kg	< 5.3		052009	5.2631	EPA8260
p-Ethyltoluene	ug/Kg	< 5.3		052009	5.2631	EPA8260
Freon 113	ug/Kg	< 5.3		052009	5.2631	EPA8260
1245 Tetramethylbenz	ug/Kg	< 5.3		052009	5.2631	EPA8260
Acetone	ug/Kg	< 53		052009	52.631	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 53		052009	52.631	EPA8260
Methylisobutylketone	ug/Kg	< 53		052009	52.631	EPA8260
Chlorodifluoromethane	ug/Kg	< 5.3		052009	5.2631	EPA8260
p Diethylbenzene	ug/Kg	< 5.3		052009	5.2631	EPA8260
% Solids		95		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10482 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777• FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.05 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:0815
MATRIX:Soil SAMPLE: SVE-2 (40-45ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Chloromethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Vinyl Chloride	ug/Kg	< 5.4		052009	5.4347	EPA8260
Bromomethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Chloroethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.4		052009	5.4347	EPA8260
Methylene Chloride	ug/Kg	< 5.4		052009	5.4347	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.4		052009	5.4347	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.4		052009	5.4347	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.4		052009	5.4347	EPA8260
Bromochloromethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Chloroform	ug/Kg	< 5.4		052009	5.4347	EPA8260
111 Trichloroethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.4		052009	5.4347	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.4		052009	5.4347	EPA8260
Benzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Trichloroethene	ug/Kg	< 5.4		052009	5.4347	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Dibromomethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Bromodichloromethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.4		052009	5.4347	EPA8260
Toluene	ug/Kg	< 5.4		052009	5.4347	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10489 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.05 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:0815
MATRIX:Soil SAMPLE: SVE-2 (40-45ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 5.4		052009	5.4347	EPA8260
112 Trichloroethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Tetrachloroethene	ug/Kg	< 5.4		052009	5.4347	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Chlorodibromomethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
Chlorobenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
Ethyl Benzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
1112Tetrachloroethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
m + p Xylene	ug/Kg	< 11		052009	10.869	EPA8260
o Xylene	ug/Kg	< 5.4		052009	5.4347	EPA8260
Styrene	ug/Kg	< 5.4		052009	5.4347	EPA8260
Bromoform	ug/Kg	< 5.4		052009	5.4347	EPA8260
Isopropylbenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
Bromobenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
123-Trichloropropane	ug/Kg	< 5.4		052009	5.4347	EPA8260
n-Propylbenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
2-Chlorotoluene	ug/Kg	< 5.4		052009	5.4347	EPA8260
135-Trimethylbenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
4-Chlorotoluene	ug/Kg	< 5.4		052009	5.4347	EPA8260
tert-Butylbenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
124-Trimethylbenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
sec-Butylbenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
p-Isopropyltoluene	ug/Kg	< 5.4		052009	5.4347	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10490 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.05 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:0815
MATRIX:Soil SAMPLE: SVE-2 (40-45ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 5.4		052009	5.4347	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 5.4		052009	5.4347	EPA8260
n-Butylbenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 5.4		052009	5.4347	EPA8260
Dibromochloropropane	ug/Kg	< 5.4		052009	5.4347	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.4		052009	5.4347	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.4		052009	5.4347	EPA8260
Naphthalene(v)	ug/Kg	< 5.4		052009	5.4347	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
ter.ButylMethylEther	ug/Kg	< 5.4		052009	5.4347	EPA8260
p-Ethyltoluene	ug/Kg	< 5.4		052009	5.4347	EPA8260
Freon 113	ug/Kg	< 5.4		052009	5.4347	EPA8260
1245 Tetramethylbenz	ug/Kg	< 5.4		052009	5.4347	EPA8260
Acetone	ug/Kg	< 54		052009	54.347	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 54		052009	54.347	EPA8260
Methylisobutylketone	ug/Kg	< 54		052009	54.347	EPA8260
Chlorodifluoromethane	ug/Kg	< 5.4		052009	5.4347	EPA8260
p Diethylbenzene	ug/Kg	< 5.4		052009	5.4347	EPA8260
% Solids		92		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10491 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.06 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:0940
MATRIX:Soil SAMPLE: SVE-2 (45-50ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Vinyl Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Methylene Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromochloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroform	ug/Kg	< 5.2		052009	5.1546	EPA8260
111 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Dibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromodichloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Toluene	ug/Kg	< 5.2		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10492 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.06 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:0940
MATRIX:Soil SAMPLE: SVE-2 (45-50ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
112 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Tetrachloroethene	ug/Kg	19		052009	5.1546	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorodibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Ethyl Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1112Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
m + p Xylene	ug/Kg	< 10		052009	10.309	EPA8260
o Xylene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Styrene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromoform	ug/Kg	< 5.2		052009	5.1546	EPA8260
Isopropylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
123-Trichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
n-Propylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
2-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
135-Trimethylbenzene	ug/Kg	18		052009	5.1546	EPA8260
4-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
tert-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trimethylbenzene	ug/Kg	5.2		052009	5.1546	EPA8260
sec-Butylbenzene	ug/Kg	9.3		052009	5.1546	EPA8260
p-Isopropyltoluene	ug/Kg	34		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10493 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.06 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:0940
MATRIX:Soil SAMPLE: SVE-2 (45-50ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	9.3		052009	5.1546	EPA8260
n-Butylbenzene	ug/Kg	81		052009	5.1546	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	52		052009	5.1546	EPA8260
Dibromochloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Naphthalene(v)	ug/Kg	120		052009	5.1546	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
ter.ButylMethylEther	ug/Kg	< 5.2		052009	5.1546	EPA8260
p-Ethyltoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Freon 113	ug/Kg	< 5.2		052009	5.1546	EPA8260
1245 Tetramethylbenz	ug/Kg	800		052009	5.1546	EPA8260
Acetone	ug/Kg	< 52		052009	51.546	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 52		052009	51.546	EPA8260
Methylisobutylketone	ug/Kg	< 52		052009	51.546	EPA8260
Chlorodifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
p Diethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
% Solids		97		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10494 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777• FAX (631) 422-5770

Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.09 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1200
MATRIX:Soil SAMPLE: SVE-3 (30-35ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Chloromethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Vinyl Chloride	ug/Kg	< 5.1		052009	5.1020	EPA8260
Bromomethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Chloroethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.1		052009	5.1020	EPA8260
Methylene Chloride	ug/Kg	< 5.1		052009	5.1020	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.1		052009	5.1020	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.1		052009	5.1020	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.1		052009	5.1020	EPA8260
Bromochloromethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Chloroform	ug/Kg	< 5.1		052009	5.1020	EPA8260
111 Trichloroethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.1		052009	5.1020	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.1		052009	5.1020	EPA8260
Benzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Trichloroethene	ug/Kg	< 5.1		052009	5.1020	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Dibromomethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Bromodichloromethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.1		052009	5.1020	EPA8260
Toluene	ug/Kg	< 5.1		052009	5.1020	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10501 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.09 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1200
MATRIX:Soil SAMPLE: SVE-3 (30-35ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 5.1		052009	5.1020	EPA8260
112 Trichloroethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Tetrachloroethene	ug/Kg	< 5.1		052009	5.1020	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Chlorodibromomethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
Chlorobenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
Ethyl Benzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
1112Tetrachloroethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
m + p Xylene	ug/Kg	< 10		052009	10.204	EPA8260
o Xylene	ug/Kg	< 5.1		052009	5.1020	EPA8260
Styrene	ug/Kg	< 5.1		052009	5.1020	EPA8260
Bromoform	ug/Kg	< 5.1		052009	5.1020	EPA8260
Isopropylbenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
Bromobenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
123-Trichloropropane	ug/Kg	< 5.1		052009	5.1020	EPA8260
n-Propylbenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
2-Chlorotoluene	ug/Kg	< 5.1		052009	5.1020	EPA8260
135-Trimethylbenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
4-Chlorotoluene	ug/Kg	< 5.1		052009	5.1020	EPA8260
tert-Butylbenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
124-Trimethylbenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
sec-Butylbenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
p-Isopropyltoluene	ug/Kg	< 5.1		052009	5.1020	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10502 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.09 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1200
MATRIX:Soil SAMPLE: SVE-3 (30-35ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 5.1		052009	5.1020	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 5.1		052009	5.1020	EPA8260
n-Butylbenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 5.1		052009	5.1020	EPA8260
Dibromochloropropane	ug/Kg	< 5.1		052009	5.1020	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.1		052009	5.1020	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.1		052009	5.1020	EPA8260
Naphthalene(v)	ug/Kg	< 5.1		052009	5.1020	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
ter.ButylMethylEther	ug/Kg	< 5.1		052009	5.1020	EPA8260
p-Ethyltoluene	ug/Kg	< 5.1		052009	5.1020	EPA8260
Freon 113	ug/Kg	< 5.1		052009	5.1020	EPA8260
1245 Tetramethylbenz	ug/Kg	< 5.1		052009	5.1020	EPA8260
Acetone	ug/Kg	< 51		052009	51.020	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 51		052009	51.020	EPA8260
Methylisobutylketone	ug/Kg	< 51		052009	51.020	EPA8260
Chlorodifluoromethane	ug/Kg	< 5.1		052009	5.1020	EPA8260
p Diethylbenzene	ug/Kg	< 5.1		052009	5.1020	EPA8260
% Solids		98		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10503 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.10 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1226

MATRIX:Soil SAMPLE: SVE-3 (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Vinyl Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Methylene Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromochloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroform	ug/Kg	< 5.2		052009	5.1546	EPA8260
111 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Dibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromodichloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Toluene	ug/Kg	< 5.2		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10504 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.10 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1226

MATRIX:Soil SAMPLE: SVE-3 (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
112 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Tetrachloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorodibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Ethyl Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1112Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
m + p Xylene	ug/Kg	< 10		052009	10.309	EPA8260
o Xylene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Styrene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromoform	ug/Kg	< 5.2		052009	5.1546	EPA8260
Isopropylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
123-Trichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
n-Propylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
2-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
135-Trimethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
4-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
tert-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trimethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
sec-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
p-Isopropyltoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10505 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.10 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1226
MATRIX:Soil SAMPLE: SVE-3 (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
n-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
Dibromochloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Naphthalene(v)	ug/Kg	8.2		052009	5.1546	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
ter.ButylMethylEther	ug/Kg	< 5.2		052009	5.1546	EPA8260
p-Ethyltoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Freon 113	ug/Kg	< 5.2		052009	5.1546	EPA8260
1245 Tetramethylbenz	ug/Kg	22		052009	5.1546	EPA8260
Acetone	ug/Kg	< 52		052009	51.546	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 52		052009	51.546	EPA8260
Methylisobutylketone	ug/Kg	< 52		052009	51.546	EPA8260
Chlorodifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
p Diethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
% Solids		97		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10506 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.11 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1410
MATRIX:Soil SAMPLE: SVE-3 (43-45ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Vinyl Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Methylene Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromochloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroform	ug/Kg	< 5.2		052009	5.1546	EPA8260
111 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Dibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromodichloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Toluene	ug/Kg	< 5.2		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10507 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.11 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1410
MATRIX:Soil SAMPLE: SVE-3 (43-45ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
112 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Tetrachloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorodibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Ethyl Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1112Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
m + p Xylene	ug/Kg	< 10		052009	10.309	EPA8260
o Xylene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Styrene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromoform	ug/Kg	< 5.2		052009	5.1546	EPA8260
Isopropylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
123-Trichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
n-Propylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
2-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
135-Trimethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
4-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
tert-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trimethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
sec-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
p-Isopropyltoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10508 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.11 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1410
MATRIX:Soil SAMPLE: SVE-3 (43-45ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
n-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
Dibromochloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Naphthalene(v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
ter.ButylMethylEther	ug/Kg	< 5.2		052009	5.1546	EPA8260
p-Ethyltoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Freon 113	ug/Kg	< 5.2		052009	5.1546	EPA8260
1245 Tetramethylbenz	ug/Kg	< 5.2		052009	5.1546	EPA8260
Acetone	ug/Kg	< 52		052009	51.546	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 52		052009	51.546	EPA8260
Methylisobutylketone	ug/Kg	< 52		052009	51.546	EPA8260
Chlorodifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
p Diethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
% Solids		97		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10509 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.12 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1415

MATRIX:Soil SAMPLE: SVE-3 (45-48ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Vinyl Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichlorofluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Methylene Chloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
t-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
2,2-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,2-Dichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromochloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chloroform	ug/Kg	< 5.2		052009	5.1546	EPA8260
111 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Carbon Tetrachloride	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,1-Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Trichloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Dibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromodichloromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
c-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Toluene	ug/Kg	< 5.2		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10510 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.12 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1415
MATRIX:Soil SAMPLE: SVE-3 (45-48ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	< 5.2		052009	5.1546	EPA8260
112 Trichloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Tetrachloroethene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,3-Dichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorodibromomethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dibromoethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
Chlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Ethyl Benzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1112Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
m + p Xylene	ug/Kg	< 10		052009	10.309	EPA8260
o Xylene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Styrene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromoform	ug/Kg	< 5.2		052009	5.1546	EPA8260
Isopropylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Bromobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1122Tetrachloroethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
123-Trichloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
n-Propylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
2-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
135-Trimethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
4-Chlorotoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
tert-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trimethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
sec-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
p-Isopropyltoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10511 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.12 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1415
MATRIX:Soil SAMPLE: SVE-3 (45-48ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
n-Butylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
Dibromochloropropane	ug/Kg	< 5.2		052009	5.1546	EPA8260
124-Trichlorobenzene (v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
Hexachlorobutadiene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Naphthalene(v)	ug/Kg	< 5.2		052009	5.1546	EPA8260
123-Trichlorobenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
ter.ButylMethylEther	ug/Kg	< 5.2		052009	5.1546	EPA8260
p-Ethyltoluene	ug/Kg	< 5.2		052009	5.1546	EPA8260
Freon 113	ug/Kg	< 5.2		052009	5.1546	EPA8260
1245 Tetramethylbenz	ug/Kg	< 5.2		052009	5.1546	EPA8260
Acetone	ug/Kg	< 52		052009	51.546	EPA8260
Methyl Ethyl Ketone	ug/Kg	< 52		052009	51.546	EPA8260
Methylisobutylketone	ug/Kg	< 52		052009	51.546	EPA8260
Chlorodifluoromethane	ug/Kg	< 5.2		052009	5.1546	EPA8260
p Diethylbenzene	ug/Kg	< 5.2		052009	5.1546	EPA8260
% Solids		97		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10512 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

LABORATORY QA/QC

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.18 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09

MATRIX:Liquid SAMPLE: Trip Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	< 1		052009	1	EPA8260
Chloromethane	ug/L	< 1		052009	1	EPA8260
Vinyl Chloride	ug/L	< 1		052009	1	EPA8260
Bromomethane	ug/L	< 1		052009	1	EPA8260
Chloroethane	ug/L	< 1		052009	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		052009	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		052009	1	EPA8260
Methylene Chloride	ug/L	< 1		052009	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		052009	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		052009	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		052009	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		052009	1	EPA8260
Bromochloromethane	ug/L	< 1		052009	1	EPA8260
Chloroform	ug/L	< 1		052009	1	EPA8260
111 Trichloroethane	ug/L	< 1		052009	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		052009	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		052009	1	EPA8260
Benzene	ug/L	< 1		052009	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		052009	1	EPA8260
Trichloroethene	ug/L	< 1		052009	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		052009	1	EPA8260
Dibromomethane	ug/L	< 1		052009	1	EPA8260
Bromodichloromethane	ug/L	< 1		052009	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		052009	1	EPA8260
Toluene	ug/L	< 1		052009	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10528 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
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Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.18 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09

MATRIX:Liquid SAMPLE: Trip Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		052009	1	EPA8260
112 Trichloroethane	ug/L	< 1		052009	1	EPA8260
Tetrachloroethene	ug/L	< 1		052009	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		052009	1	EPA8260
Chlorodibromomethane	ug/L	< 1		052009	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		052009	1	EPA8260
Chlorobenzene	ug/L	< 1		052009	1	EPA8260
Ethyl Benzene	ug/L	< 1		052009	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		052009	1	EPA8260
m + p Xylene	ug/L	< 2		052009	2	EPA8260
o Xylene	ug/L	< 1		052009	1	EPA8260
Styrene	ug/L	< 1		052009	1	EPA8260
Bromoform	ug/L	< 1		052009	1	EPA8260
Isopropylbenzene	ug/L	< 1		052009	1	EPA8260
Bromobenzene	ug/L	< 1		052009	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		052009	1	EPA8260
123-Trichloropropane	ug/L	< 1		052009	1	EPA8260
n-Propylbenzene	ug/L	< 1		052009	1	EPA8260
2-Chlorotoluene	ug/L	< 1		052009	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		052009	1	EPA8260
4-Chlorotoluene	ug/L	< 1		052009	1	EPA8260
tert-Butylbenzene	ug/L	< 1		052009	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		052009	1	EPA8260
sec-Butylbenzene	ug/L	< 1		052009	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		052009	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10529 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.18 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09

MATRIX:Liquid SAMPLE: Trip Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
n-Butylbenzene	ug/L	< 1		052009	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
Dibromochloropropane	ug/L	< 1		052009	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		052009	1	EPA8260
Naphthalene(v)	ug/L	< 1		052009	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		052009	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		052009	1	EPA8260
p-Ethyltoluene	ug/L	< 1		052009	1	EPA8260
Freon 113	ug/L	< 1		052009	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		052009	1	EPA8260
Acetone	ug/L	< 10		052009	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		052009	10	EPA8260
Methylisobutylketone	ug/L	< 10		052009	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		052009	1	EPA8260
p Diethylbenzene	ug/L	< 1		052009	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10530 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.15 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:1400

MATRIX:Liquid SAMPLE: FB-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	< 1		052009	1	EPA8260
Chloromethane	ug/L	< 1		052009	1	EPA8260
Vinyl Chloride	ug/L	< 1		052009	1	EPA8260
Bromomethane	ug/L	< 1		052009	1	EPA8260
Chloroethane	ug/L	< 1		052009	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		052009	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		052009	1	EPA8260
Methylene Chloride	ug/L	< 1		052009	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		052009	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		052009	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		052009	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		052009	1	EPA8260
Bromochloromethane	ug/L	< 1		052009	1	EPA8260
Chloroform	ug/L	< 1		052009	1	EPA8260
111 Trichloroethane	ug/L	< 1		052009	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		052009	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		052009	1	EPA8260
Benzene	ug/L	< 1		052009	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		052009	1	EPA8260
Trichloroethene	ug/L	< 1		052009	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		052009	1	EPA8260
Dibromomethane	ug/L	< 1		052009	1	EPA8260
Bromodichloromethane	ug/L	< 1		052009	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		052009	1	EPA8260
Toluene	ug/L	< 1		052009	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10519 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.15 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:1400

MATRIX:Liquid SAMPLE: FB-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		052009	1	EPA8260
112 Trichloroethane	ug/L	< 1		052009	1	EPA8260
Tetrachloroethene	ug/L	< 1		052009	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		052009	1	EPA8260
Chlorodibromomethane	ug/L	< 1		052009	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		052009	1	EPA8260
Chlorobenzene	ug/L	< 1		052009	1	EPA8260
Ethyl Benzene	ug/L	< 1		052009	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		052009	1	EPA8260
m + p Xylene	ug/L	< 2		052009	2	EPA8260
o Xylene	ug/L	< 1		052009	1	EPA8260
Styrene	ug/L	< 1		052009	1	EPA8260
Bromoform	ug/L	< 1		052009	1	EPA8260
Isopropylbenzene	ug/L	< 1		052009	1	EPA8260
Bromobenzene	ug/L	< 1		052009	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		052009	1	EPA8260
123-Trichloropropane	ug/L	< 1		052009	1	EPA8260
n-Propylbenzene	ug/L	< 1		052009	1	EPA8260
2-Chlorotoluene	ug/L	< 1		052009	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		052009	1	EPA8260
4-Chlorotoluene	ug/L	< 1		052009	1	EPA8260
tert-Butylbenzene	ug/L	< 1		052009	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		052009	1	EPA8260
sec-Butylbenzene	ug/L	< 1		052009	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		052009	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10520 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.15 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:1400
MATRIX:Liquid SAMPLE: FB-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
n-Butylbenzene	ug/L	< 1		052009	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
Dibromochloropropane	ug/L	< 1		052009	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		052009	1	EPA8260
Naphthalene(v)	ug/L	< 1		052009	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		052009	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		052009	1	EPA8260
p-Ethyltoluene	ug/L	< 1		052009	1	EPA8260
Freon 113	ug/L	< 1		052009	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		052009	1	EPA8260
Acetone	ug/L	< 10		052009	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		052009	10	EPA8260
Methylisobutylketone	ug/L	< 10		052009	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		052009	1	EPA8260
p Diethylbenzene	ug/L	< 1		052009	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10521 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.16 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1030

MATRIX:Liquid SAMPLE: FB-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	< 1		052009	1	EPA8260
Chloromethane	ug/L	< 1		052009	1	EPA8260
Vinyl Chloride	ug/L	< 1		052009	1	EPA8260
Bromomethane	ug/L	< 1		052009	1	EPA8260
Chloroethane	ug/L	< 1		052009	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		052009	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		052009	1	EPA8260
Methylene Chloride	ug/L	< 1		052009	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		052009	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		052009	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		052009	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		052009	1	EPA8260
Bromochloromethane	ug/L	< 1		052009	1	EPA8260
Chloroform	ug/L	< 1		052009	1	EPA8260
111 Trichloroethane	ug/L	< 1		052009	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		052009	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		052009	1	EPA8260
Benzene	ug/L	< 1		052009	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		052009	1	EPA8260
Trichloroethene	ug/L	< 1		052009	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		052009	1	EPA8260
Dibromomethane	ug/L	< 1		052009	1	EPA8260
Bromodichloromethane	ug/L	< 1		052009	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		052009	1	EPA8260
Toluene	ug/L	< 1		052009	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10522 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.16 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1030

MATRIX:Liquid SAMPLE: FB-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		052009	1	EPA8260
112 Trichloroethane	ug/L	< 1		052009	1	EPA8260
Tetrachloroethene	ug/L	< 1		052009	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		052009	1	EPA8260
Chlorodibromomethane	ug/L	< 1		052009	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		052009	1	EPA8260
Chlorobenzene	ug/L	< 1		052009	1	EPA8260
Ethyl Benzene	ug/L	< 1		052009	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		052009	1	EPA8260
m + p Xylene	ug/L	< 2		052009	2	EPA8260
o Xylene	ug/L	< 1		052009	1	EPA8260
Styrene	ug/L	< 1		052009	1	EPA8260
Bromoform	ug/L	< 1		052009	1	EPA8260
Isopropylbenzene	ug/L	< 1		052009	1	EPA8260
Bromobenzene	ug/L	< 1		052009	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		052009	1	EPA8260
123-Trichloropropane	ug/L	< 1		052009	1	EPA8260
n-Propylbenzene	ug/L	< 1		052009	1	EPA8260
2-Chlorotoluene	ug/L	< 1		052009	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		052009	1	EPA8260
4-Chlorotoluene	ug/L	< 1		052009	1	EPA8260
tert-Butylbenzene	ug/L	< 1		052009	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		052009	1	EPA8260
sec-Butylbenzene	ug/L	< 1		052009	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		052009	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10523 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777• FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.16 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/13/09 RECEIVED:05/13/09
TIME COL'D:1030
MATRIX:Liquid SAMPLE: FB-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
n-Butylbenzene	ug/L	< 1		052009	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
Dibromochloropropane	ug/L	< 1		052009	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		052009	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		052009	1	EPA8260
Naphthalene(v)	ug/L	< 1		052009	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		052009	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		052009	1	EPA8260
p-Ethyltoluene	ug/L	< 1		052009	1	EPA8260
Freon 113	ug/L	< 1		052009	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		052009	1	EPA8260
Acetone	ug/L	< 10		052009	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		052009	10	EPA8260
Methylisobutylketone	ug/L	< 10		052009	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		052009	1	EPA8260
p Diethylbenzene	ug/L	< 1		052009	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10524 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.03 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0955
MATRIX:Soil SAMPLE: SVE-2 MS (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	13		052009	5.3763	EPA8260
Chloromethane	ug/Kg	22		052009	5.3763	EPA8260
Vinyl Chloride	ug/Kg	20		052009	5.3763	EPA8260
Bromomethane	ug/Kg	23		052009	5.3763	EPA8260
Chloroethane	ug/Kg	22		052009	5.3763	EPA8260
Trichlorofluoromethane	ug/Kg	18		052009	5.3763	EPA8260
1,1 Dichloroethene	ug/Kg	20		052009	5.3763	EPA8260
Methylene Chloride	ug/Kg	21		052009	5.3763	EPA8260
t-1,2-Dichloroethene	ug/Kg	20		052009	5.3763	EPA8260
1,1 Dichloroethane	ug/Kg	21		052009	5.3763	EPA8260
2,2-Dichloropropane	ug/Kg	18		052009	5.3763	EPA8260
c-1,2-Dichloroethene	ug/Kg	21		052009	5.3763	EPA8260
Bromochloromethane	ug/Kg	22		052009	5.3763	EPA8260
Chloroform	ug/Kg	21		052009	5.3763	EPA8260
111 Trichloroethane	ug/Kg	19		052009	5.3763	EPA8260
Carbon Tetrachloride	ug/Kg	16		052009	5.3763	EPA8260
1,1-Dichloropropene	ug/Kg	18		052009	5.3763	EPA8260
Benzene	ug/Kg	21		052009	5.3763	EPA8260
1,2 Dichloroethane	ug/Kg	20		052009	5.3763	EPA8260
Trichloroethene	ug/Kg	25		052009	5.3763	EPA8260
1,2 Dichloropropane	ug/Kg	21		052009	5.3763	EPA8260
Dibromomethane	ug/Kg	20		052009	5.3763	EPA8260
Bromodichloromethane	ug/Kg	19		052009	5.3763	EPA8260
c-1,3Dichloropropene	ug/Kg	19		052009	5.3763	EPA8260
Toluene	ug/Kg	20		052009	5.3763	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10483 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.03 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0955
MATRIX:Soil SAMPLE: SVE-2 MS (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	18		052009	5.3763	EPA8260
112 Trichloroethane	ug/Kg	20		052009	5.3763	EPA8260
Tetrachloroethene	ug/Kg	18		052009	5.3763	EPA8260
1,3-Dichloropropane	ug/Kg	22		052009	5.3763	EPA8260
Chlorodibromomethane	ug/Kg	20		052009	5.3763	EPA8260
1,2 Dibromoethane	ug/Kg	22		052009	5.3763	EPA8260
Chlorobenzene	ug/Kg	21		052009	5.3763	EPA8260
Ethyl Benzene	ug/Kg	20		052009	5.3763	EPA8260
1112Tetrachloroethane	ug/Kg	19		052009	5.3763	EPA8260
m + p Xylene	ug/Kg	37		052009	10.752	EPA8260
o Xylene	ug/Kg	19		052009	5.3763	EPA8260
Styrene	ug/Kg	20		052009	5.3763	EPA8260
Bromoform	ug/Kg	17		052009	5.3763	EPA8260
Isopropylbenzene	ug/Kg	20		052009	5.3763	EPA8260
Bromobenzene	ug/Kg	24		052009	5.3763	EPA8260
1122Tetrachloroethane	ug/Kg	19		052009	5.3763	EPA8260
123-Trichloropropane	ug/Kg	27		052009	5.3763	EPA8260
n-Propylbenzene	ug/Kg	18		052009	5.3763	EPA8260
2-Chlorotoluene	ug/Kg	22		052009	5.3763	EPA8260
135-Trimethylbenzene	ug/Kg	17		052009	5.3763	EPA8260
4-Chlorotoluene	ug/Kg	21		052009	5.3763	EPA8260
tert-Butylbenzene	ug/Kg	15		052009	5.3763	EPA8260
124-Trimethylbenzene	ug/Kg	18		052009	5.3763	EPA8260
sec-Butylbenzene	ug/Kg	12		052009	5.3763	EPA8260
p-Isopropyltoluene	ug/Kg	12		052009	5.3763	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10484 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.03 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0955
MATRIX:Soil SAMPLE: SVE-2 MS (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	18		052009	5.3763	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	19		052009	5.3763	EPA8260
n-Butylbenzene	ug/Kg	10		052009	5.3763	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	20		052009	5.3763	EPA8260
Dibromochloropropane	ug/Kg	33		052009	5.3763	EPA8260
124-Trichlorobenzene (v)	ug/Kg	11		052009	5.3763	EPA8260
Hexachlorobutadiene	ug/Kg	4.8		052009	5.3763	EPA8260
Naphthalene(v)	ug/Kg	26		052009	5.3763	EPA8260
123-Trichlorobenzene	ug/Kg	12		052009	5.3763	EPA8260
ter.ButylMethylEther	ug/Kg	20		052009	5.3763	EPA8260
p-Ethyltoluene	ug/Kg	18		052009	5.3763	EPA8260
Freon 113	ug/Kg	18		052009	5.3763	EPA8260
1245 Tetramethylbenz	ug/Kg	23		052009	5.3763	EPA8260
Acetone	ug/Kg	120		052009	53.763	EPA8260
Methyl Ethyl Ketone	ug/Kg	110		052009	53.763	EPA8260
Methylisobutylketone	ug/Kg	100		052009	53.763	EPA8260
Chlorodifluoromethane	ug/Kg	18		052009	5.3763	EPA8260
p Diethylbenzene	ug/Kg	12		052009	5.3763	EPA8260
% Solids		93		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10485 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.04 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0955
MATRIX:Soil SAMPLE: SVE-2 MSD (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/Kg	14		052009	5.1546	EPA8260
Chloromethane	ug/Kg	21		052009	5.1546	EPA8260
Vinyl Chloride	ug/Kg	20		052009	5.1546	EPA8260
Bromomethane	ug/Kg	23		052009	5.1546	EPA8260
Chloroethane	ug/Kg	21		052009	5.1546	EPA8260
Trichlorofluoromethane	ug/Kg	18		052009	5.1546	EPA8260
1,1 Dichloroethene	ug/Kg	20		052009	5.1546	EPA8260
Methylene Chloride	ug/Kg	21		052009	5.1546	EPA8260
t-1,2-Dichloroethene	ug/Kg	20		052009	5.1546	EPA8260
1,1 Dichloroethane	ug/Kg	20		052009	5.1546	EPA8260
2,2-Dichloropropane	ug/Kg	17		052009	5.1546	EPA8260
c-1,2-Dichloroethene	ug/Kg	21		052009	5.1546	EPA8260
Bromochloromethane	ug/Kg	20		052009	5.1546	EPA8260
Chloroform	ug/Kg	20		052009	5.1546	EPA8260
111 Trichloroethane	ug/Kg	19		052009	5.1546	EPA8260
Carbon Tetrachloride	ug/Kg	15		052009	5.1546	EPA8260
1,1-Dichloropropene	ug/Kg	18		052009	5.1546	EPA8260
Benzene	ug/Kg	20		052009	5.1546	EPA8260
1,2 Dichloroethane	ug/Kg	20		052009	5.1546	EPA8260
Trichloroethene	ug/Kg	27		052009	5.1546	EPA8260
1,2 Dichloropropane	ug/Kg	20		052009	5.1546	EPA8260
Dibromomethane	ug/Kg	19		052009	5.1546	EPA8260
Bromodichloromethane	ug/Kg	18		052009	5.1546	EPA8260
c-1,3Dichloropropene	ug/Kg	19		052009	5.1546	EPA8260
Toluene	ug/Kg	19		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10486 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.04 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0955
MATRIX:Soil SAMPLE: SVE-2 MSD (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/Kg	18		052009	5.1546	EPA8260
112 Trichloroethane	ug/Kg	20		052009	5.1546	EPA8260
Tetrachloroethene	ug/Kg	17		052009	5.1546	EPA8260
1,3-Dichloropropane	ug/Kg	22		052009	5.1546	EPA8260
Chlorodibromomethane	ug/Kg	20		052009	5.1546	EPA8260
1,2 Dibromoethane	ug/Kg	22		052009	5.1546	EPA8260
Chlorobenzene	ug/Kg	20		052009	5.1546	EPA8260
Ethyl Benzene	ug/Kg	19		052009	5.1546	EPA8260
1112Tetrachloroethane	ug/Kg	18		052009	5.1546	EPA8260
m + p Xylene	ug/Kg	36		052009	10.309	EPA8260
o Xylene	ug/Kg	19		052009	5.1546	EPA8260
Styrene	ug/Kg	19		052009	5.1546	EPA8260
Bromoform	ug/Kg	18		052009	5.1546	EPA8260
Isopropylbenzene	ug/Kg	19		052009	5.1546	EPA8260
Bromobenzene	ug/Kg	24		052009	5.1546	EPA8260
1122Tetrachloroethane	ug/Kg	16		052009	5.1546	EPA8260
123-Trichloropropane	ug/Kg	27		052009	5.1546	EPA8260
n-Propylbenzene	ug/Kg	17		052009	5.1546	EPA8260
2-Chlorotoluene	ug/Kg	21		052009	5.1546	EPA8260
135-Trimethylbenzene	ug/Kg	16		052009	5.1546	EPA8260
4-Chlorotoluene	ug/Kg	20		052009	5.1546	EPA8260
tert-Butylbenzene	ug/Kg	14		052009	5.1546	EPA8260
124-Trimethylbenzene	ug/Kg	17		052009	5.1546	EPA8260
sec-Butylbenzene	ug/Kg	12		052009	5.1546	EPA8260
p-Isopropyltoluene	ug/Kg	12		052009	5.1546	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10487 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291931.04 06/22/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0955
MATRIX:Soil SAMPLE: SVE-2 MSD (35-40ft)

Results reported on a dry weight basis

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/Kg	18		052009	5.1546	EPA8260
1,4 Dichlorobenzene (v)	ug/Kg	18		052009	5.1546	EPA8260
n-Butylbenzene	ug/Kg	9.6		052009	5.1546	EPA8260
1,2 Dichlorobenzene (v)	ug/Kg	20		052009	5.1546	EPA8260
Dibromochloropropane	ug/Kg	34		052009	5.1546	EPA8260
124-Trichlorobenzene (v)	ug/Kg	11		052009	5.1546	EPA8260
Hexachlorobutadiene	ug/Kg	4.3		052009	5.1546	EPA8260
Naphthalene(v)	ug/Kg	14		052009	5.1546	EPA8260
123-Trichlorobenzene	ug/Kg	12		052009	5.1546	EPA8260
ter.ButylMethylEther	ug/Kg	19		052009	5.1546	EPA8260
p-Ethyltoluene	ug/Kg	17		052009	5.1546	EPA8260
Freon 113	ug/Kg	17		052009	5.1546	EPA8260
1245 Tetramethylbenz	ug/Kg	23		052009	5.1546	EPA8260
Acetone	ug/Kg	120		052009	51.546	EPA8260
Methyl Ethyl Ketone	ug/Kg	120		052009	51.546	EPA8260
Methylisobutylketone	ug/Kg	110		052009	51.546	EPA8260
Chlorodifluoromethane	ug/Kg	19		052009	5.1546	EPA8260
p Diethylbenzene	ug/Kg	11		052009	5.1546	EPA8260
% Solids		97		052109	0.1	182540G

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10488 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. • ENVIRONMENTAL TESTING
377 Sheffield Avenue, North Babylon, New York 11703
(631) 422-5777 • FAX (631) 422-5770 • Email: ecotestlab@aol.com

CHAIN OF CUSTODY RECORD

~~Page 1 of 2~~
31
29193/

CA Rich

Client: Rodilla Construction
Address: 299 Main St.
Westbury NY 11590
Phone: FAX:
Person receiving report: Steve Sobsty of CA Rich
Sampled by: Victoria Whelan
Source: 299 Main St.
Job No.:

TYPE & NUMBER OF CONTAINERS

MATRIX (Soil, Water, etc.)	COLLECTED DATE	COLLECTED TIME	SAMPLE IDENTIFICATION	TOTAL NUMBER OF CONTAINERS	VOC by 8260	QC Pkg Type (If Required)	Accelerated Turnaround Date Required	REMARKS-TESTS REQUIRED
S	5/12	940	SVE-2 (30-35ft)	1	X			
S	5/12	955	SVE-2 (35-40ft)	1	X			Category B Deliverables
S	5/12	955	MS/MSD	2	X			VOC 8260
S	5/13	815	SVE-2 (40-45ft)	1	X			
S	5/13	940	SVE-2 (45-50ft)	1	X			CC Results to Steve Sobsty
S	5/13	1023	SVE-1 (30-35ft)	1	X			at
S	5/13	1047	SVE-1 (35-40ft)	1	X			CA Rich Inc
S	5/13	1200	SVE-3 (30-35ft)	1	X			17 Dupont St
S	5/13	1226	SVE-3 (35-40ft)	1	X			Plainview NY 11803
S	5/13	210	SVE-3 (43-45ft)	1	X			Phone: 516-576-3344
S	5/13	215	SVE-3 (45-48ft)	1	X			Fax: 516-576-0093
S	5/13	312	SVE-1 (43-45ft)	1	X			
S	5/13	315	SVE-1 (45-48ft)	1	X			
l	5/12	200	FB-1 5/12	2	X			
l	5/13	1030	FB-2 5/13	2	X			Temp 3.2°C

Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)
Representing: [signature]	5/13 4pm	YES NO NA	Representing: Chris Lusk	Representing:		YES NO NA	Representing:
Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)
Representing:		YES NO NA	Representing:	Representing:		YES NO NA	Representing:

ECO TEST LABORATORIES, INC. • ENVIRONMENTAL TESTING
377 Sheffield Avenue, North Babylon, New York 11703
(631) 422-5777 • FAX (631) 422-5770 • Email: ecotestlab@aol.com

CHAIN OF CUSTODY RECORD

Page ~~2~~ of 2
31
29/931

Client: Padilla Construction
Address: 299 Main St
Westbury NY 11590
Phone: FAX:
Person receiving report: Steve Sobstyl of CA Rich
Sampled by: Victoria Whelan
Source: 299 Main
Job No.:

CA rich

TYPE & NUMBER OF CONTAINERS

MATRIX (Soil, Water, etc.)	COLLECTED DATE	COLLECTED TIME	SAMPLE IDENTIFICATION	TOTAL NUMBER OF CONTAINERS	VOC 8260										QC Pkg Type (If Required)	Accelerated Turnaround Date Required	REMARKS-TESTS REQUIRED
S	5/13	315	SVE-1 (X ft)	1	X												
L	5/13		TB	2	X												Category B Deliverables VOC 8260
																	Temp 3.2°C

Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)
[signature] Representing:	5/13 4pm	YES NO NA	Chris Laskin Representing:	Representing:		YES NO NA	Representing:
Relinquished by: (Signature) Representing:	DATE/TIME	SEAL INTACT? YES NO NA	Received by: (Signature) Representing:	Relinquished by: (Signature) Representing:	DATE/TIME	SEAL INTACT? YES NO NA	Received by: (Signature) Representing:

SVE AIR
LABORATORY DATA

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291898.00 05/19/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alexander Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/11/09 RECEIVED:05/12/09
TIME COL'D:1400
MATRIX:Air SAMPLE: AS-5-11-09

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Propylene	ppbv	6.3		051509	0.5	EPAT0-15
Dichlordifluoromethane	ppbv	0.82		051509	0.2	EPAT0-15
1,2-Dichlorotetrafluoroethan	ppbv	< 0.2		051509	0.2	EPAT0-15
Chloromethane	ppbv	< 1		051509	1	EPAT0-15
1,3 Butadiene	ppbv	< 1		051509	1	EPAT0-15
Vinyl Chloride	ppbv	< 0.1		051509	0.1	EPAT0-15
Bromomethane	ppbv	< 0.2		051509	0.2	EPAT0-15
Chloroethane	ppbv	< 1		051509	1	EPAT0-15
Vinyl Bromide	ppbv	< 0.2		051509	0.2	EPAT0-15
Trichlorofluoromethane	ppbv	0.68		051509	0.2	EPAT0-15
Ethyl alcohol	ppbv	< 2		051509	2	EPAT0-15
Freon 113	ppbv	2.5		051509	0.1	EPAT0-15
1,1 Dichloroethene	ppbv	< 0.1		051509	0.1	EPAT0-15
Acetone	ppbv	6.8		051509	1	EPAT0-15
Carbon disulfide	ppbv	2.8		051509	0.5	EPAT0-15
Isopropyl Alcohol	ppbv	< 5		051509	5	EPAT0-15
3-Chloropropene	ppbv	< 0.5		051509	0.5	EPAT0-15
Methylene Chloride	ppbv	22		051509	0.2	EPAT0-15
tert. Butyl Alcohol	ppbv	< 2		051509	2	EPAT0-15
ter.ButylMethylEther	ppbv	< 0.2		051509	0.2	EPAT0-15
t-1,2-Dichloroethene	ppbv	3.5		051509	0.2	EPAT0-15
Acrylonitrile	ppbv	< 1		051509	1	EPAT0-15
Hexane	ppbv	< 0.5		051509	0.5	EPAT0-15
Vinyl Acetate	ppbv	< 0.5		051509	0.5	EPAT0-15
1,1 Dichloroethane	ppbv	< 0.2		051509	0.2	EPAT0-15

cc:C.A. Rich, Steve Sobatyl

LRL=Laboratory Reporting Limit

REMARKS:

The LOQ for all analytes was confirmed with a daily LOQ stnd

DIRECTOR

rn = 10289 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291898.00 05/19/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alexander Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/11/09 RECEIVED:05/12/09
TIME COL'D:1400
MATRIX:Air SAMPLE: AS-5-11-09

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
c-1,2-Dichloroethene	ppbv	220		051509	2	EPATO-15
Methyl Ethyl Ketone	ppbv	< 1		051509	1	EPATO-15
Ethyl Acetate	ppbv	< 5		051509	5	EPATO-15
Tetrahydrofuran	ppbv	< 0.5		051509	0.5	EPATO-15
Chloroform	ppbv	< 0.2		051509	0.2	EPATO-15
Cyclohexane	ppbv	< 0.2		051509	0.2	EPATO-15
111 Trichloroethane	ppbv	< 0.2		051509	0.2	EPATO-15
Carbon Tetrachloride	ppbv	< 0.08		051509	0.08	EPATO-15
Benzene	ppbv	< 0.2		051509	0.2	EPATO-15
2,2,4-Trimethylpentane	ppbv	1.3		051509	0.5	EPATO-15
1,2 Dichloroethane	ppbv	< 0.5		051509	0.5	EPATO-15
Heptane	ppbv	< 0.5		051509	0.5	EPATO-15
Trichloroethene	ppbv	400		051509	0.4	EPATO-15
1,2 Dichloropropane	ppbv	0.5		051509	0.5	EPATO-15
1,4-Dioxane	ppbv	< 1		051509	1	EPATO-15
Bromodichloromethane	ppbv	< 0.2		051509	0.2	EPATO-15
c-1,3Dichloropropene	ppbv	< 0.5		051509	0.5	EPATO-15
Methylisobutylketone	ppbv	< 1		051509	1	EPATO-15
Toluene	ppbv	1.6		051509	0.2	EPATO-15
t-1,3Dichloropropene	ppbv	< 0.2		051509	0.2	EPATO-15
112 Trichloroethane	ppbv	< 0.2		051509	0.2	EPATO-15
Tetrachloroethene	ppbv	76		051509	0.2	EPATO-15
2-Hexanone	ppbv	< 0.5		051509	0.5	EPATO-15
Chlorodibromomethane	ppbv	< 0.2		051509	0.2	EPATO-15
1,2 Dibromoethane	ppbv	< 0.2		051509	0.2	EPATO-15

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

The LOQ for all analytes was confirmed with a daily LOQ stnd

DIRECTOR

rn = 10290 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.291898.00 05/19/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alexander Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/11/09 RECEIVED:05/12/09
TIME COL'D:1400
MATRIX:Air SAMPLE: AS-5-11-09

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Chlorobenzene	ppbv	< 0.2		051509	0.2	EPAT0-15
Ethyl Benzene	ppbv	0.85		051509	0.2	EPAT0-15
m + p Xylene	ppbv	1.2		051509	0.5	EPAT0-15
o Xylene	ppbv	22		051509	0.2	EPAT0-15
Styrene	ppbv	< 0.2		051509	0.2	EPAT0-15
Bromoform	ppbv	< 0.2		051509	0.2	EPAT0-15
1122Tetrachloroethane	ppbv	< 0.2		051509	0.2	EPAT0-15
p-Ethyltoluene	ppbv	4.1		051509	0.5	EPAT0-15
135-Trimethylbenzene	ppbv	31		051509	0.5	EPAT0-15
124-Trimethylbenzene	ppbv	4.7		051509	0.5	EPAT0-15
1,3 Dichlorobenzene (v)	ppbv	< 0.2		051509	0.2	EPAT0-15
1,4 Dichlorobenzene (v)	ppbv	1.7		051509	0.5	EPAT0-15
Benzyl Chloride	ppbv	< 0.2		051509	0.2	EPAT0-15
1,2 Dichlorobenzene (v)	ppbv	5.7		051509	0.5	EPAT0-15
Hexachlorobutadiene	ppbv	< 0.5		051509	0.5	EPAT0-15

cc:C.A. Rich, Steve Sobstyl

LRL=Laboratory Reporting Limit

REMARKS:

The LOQ for all analytes was confirmed with a daily LOQ stnd

DIRECTOR

rn = 10291 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST ID	291898.00				
SOURCE OF SAMPLE	299 Main Street				
SAMPLE ID	AS-5-11-09				
DATE SAMPLED	5/11/2009				
MATRIX	Air				
ANALYTICAL METHOD	EPA TO-15				
		DATE OF		CONC	LRL
ANALYTE	CAS NO	ANALYSIS		UG/M3	UG/M3
1,1 Dichloroethane	75-34-3	51509	<	0.81	0.81
1,1 Dichloroethene	75-35-4	51509	<	0.40	0.40
1,2 Dibromoethane	106-93-4	51509	<	1.54	1.54
1,2 Dichlorobenzene (v)	95-50-1	51509		34.29	3.01
1,2 Dichloroethane	107-06-2	51509	<	2.03	2.03
1,2 Dichloropropane	78-87-5	51509		2.31	2.31
1,2-Dichlorotetrafluoroethane	76-14-2	51509	<	1.40	1.40
1,3 Butadiene	106-99-0	51509	<	2.21	2.21
1,3 Dichlorobenzene (v)	541-73-1	51509	<	1.20	1.20
1,4 Dichlorobenzene (v)	106-46-7	51509		10.23	3.01
1,4-Dioxane	123-91-1	51509	<	3.60	3.60
111 Trichloroethane	71-55-6	51509	<	1.09	1.09
112 Trichloroethane	79-00-5	51509	<	1.09	1.09
1122Tetrachloroethane	79-34-5	51509	<	1.37	1.37
124-Trimethylbenzene	95-63-6	51509		23.12	2.46
135-Trimethylbenzene	108-67-8	51509		152.49	2.46
2,2,4-Trimethylpentane	540-84-1	51509		6.06	2.33
2-Hexanone	591-78-6	51509	<	2.05	2.05
3-Chloropropene	107-05-1	51509	<	1.57	1.57
Acetone	67-64-1	51509		16.17	2.38
Acrylonitrile	107-13-1	51509	<	2.17	2.17
Benzene	71-43-2	51509	<	0.64	0.64
Benzyl Chloride	100-44-7	51509	<	1.04	1.04
Bromodichloromethane	75-27-4	51509	<	1.33	1.33
Bromoform	75-25-2	51509	<	2.07	2.07
Bromomethane	74-83-9	51509	<	0.78	0.78
c-1,2-Dichloroethene	156-59-2	51509		872.74	0.79
c-1,3Dichloropropene	10061-01-5	51509	<	2.27	2.27
Carbon disulfide	75-15-0	51509		8.71	1.56
Carbon Tetrachloride	56-23-5	51509	<	0.50	0.25
Chlorobenzene	108-90-7	51509	<	0.92	0.92
Chlorodibromomethane	124-48-1	51509	<	1.69	1.69
Chloroethane	75-00-3	51509	<	2.64	2.64
Chloroform	67-66-3	51509	<	0.97	0.97
Chloromethane	74-87-3	51509	<	2.07	2.07
Cyclohexane	110-82-7	51509	<	0.69	0.69
Dichlordifluoromethane	75-71-8	51509		4.06	0.99
Ethyl Acetate	141-78-6	51509	<	18.01	18.01
Ethyl alcohol	64-17-5	51509	<	3.77	3.77
Ethyl Benzene	100-41-4	51509		3.69	0.87
Freon 113	76-13-1	51509		19.17	0.77

ECOTEST ID	291898.00				
SOURCE OF SAMPLE	299 Main Street				
SAMPLE ID	AS-5-11-09				
DATE SAMPLED	5/11/2009				
MATRIX	Air				
ANALYTICAL METHOD	EPA TO-15				
		DATE OF		CONC	LRL
ANALYTE	CAS NO	ANALYSIS		UG/M3	UG/M3
Heptane	142-82-5	51509	<	2.05	2.05
Hexachlorobutadiene	87-68-3	51509	<	5.34	5.34
Hexane	110-54-3	51509	<	1.76	1.76
Isopropyl Alcohol	67-63-0	51509	<	12.28	12.28
m + p Xylene	XYL-MP	51509		5.22	2.17
Methyl Ethyl Ketone	78-93-3	51509	<	2.95	2.95
Methylene Chloride	75-09-2	51509		76.43	0.69
Methylisobutylketone	108-10-1	51509	<	4.10	4.10
o Xylene	95-47-6	51509		95.61	0.87
p-Ethyltoluene	622-96-8	51509		20.14	2.46
Propylene	115-07-1	51509		10.83	0.86
Styrene	100-42-5	51509	<	0.85	0.85
t-1,2-Dichloroethene	156-60-5	51509		13.89	0.79
t-1,3Dichloropropene	10061-02-6	51509	<	0.91	0.91
ter.ButylMethylEther	1634-04-4	51509	<	0.70	0.70
tert. Butyl Alcohol	75-65-0	51509	<	6.06	6.06
Tetrachloroethene	127-18-4	51509		515.66	1.36
Tetrahydrofuran	109-99-9	51509	<	1.47	1.47
Toluene	108-88-3	51509		6.02	0.75
Trichloroethene	79-01-6	51509		2149.20	0.21
Trichlorofluoromethane	75-69-4	51509		3.82	1.12
Vinyl Acetate	108-05-4	51509	<	1.76	1.76
Vinyl Bromide	593-60-2	51509	<	0.88	0.88
Vinyl Chloride	75-01-4	51509	<	0.26	0.13

33

291898

ECOTEST LABORATORIES INC.

377 Sheffield Ave.
North Babylon, NY 11703
tel. 631-422-5777, fax 631-422-5770, Email ECOTESTLAB@aol.com

CANISTER SAMPLING DATA SHEET

CANISTER SERIAL NO.	SAMPLE TRAIN SERIAL NO.	FLOW
EcoTest 31	NA	GRAB

This above referenced Summa can and sample train was received in good condition

DATE: 5/11/2009
CLIENT: CA Rich
CLIENTS AGENT (print) Steve Sobsty
SIGNED:

Client: Padilla Constr.
299 Main St.
Westbury NY

Client agrees to pay all replacement costs associated with loss or damage of canist train. Client acknowledges that this canister is valid for a maximum of 30 days from the date of evacuation. Client is responsibe for any vacuum loss or contamination while in clients custody.

VAC leaving EcoTest: 29" Hg
Date Evacuated: 5/8/2009
VAC/PRES returned EcoTest: .1 Hg

PERSON RECEIVING REPORT: Bobsty
ANALYSIS: TO-15
TAT: Standard

CANISTER SERIAL NO. 31
SAMPLE TRAIN SERIAL NO. N/A
RETURNED IN GOOD CONDITION TO ECOTEST LABORATORIES INC.
DATE: 5/12

Client: Padilla Construct.
299 Main St
Westbury NY

SIGNED: Chris Lash **for ECOTEST LABS.**

ALL INFORMATION BELOW MUST BE PROVIDED BY CLIENT:

CLIENT CA RICH CONSULTANTS INC
SOURCE 299 Main Street
SAMPLE AS-5-11-09
DATE SAMPLED 5-11-09
TIME SAMPLING STARTED: 1400
TIME SAMPLING FINISHED: 1400.15
TEMPERATURE SAMPLING STARTED: 65°F
TEMPERATURE SAMPLING FINISHED: 65°F
DATE: 5-11-09
CLIENT: CA Rich Consultants Inc
CLIENTS AGENT: Steve Sobsty

SAMPLE TYPE CHECK ONE	
AMBIENT AIR	
SUB SLAB VAPOR	
VAPOR WELL	
SVE SYSTEM	X

EXPECTED CONC CHECK ONE	
LOW	X
MEDIUM	
HIGH	

RELINQUISHED BY: DATE/TIME:
RECEIVED BY: Chris Lash DATE/TIME: 5/12 1626
RELINQUISHED BY: DATE/TIME:
RECEIVED BY: DATE/TIME:

RICH
ENVIRONMENTAL SPECIALISTS

August 7, 2009

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Groundwater Monitoring Results**
299 Main Street, Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the approved "Groundwater Monitoring Work Plan" and the February 2008 "Record of Decision" (ROD), please find attached a copy of the results for the groundwater samples collected in connection with the 299 Main Street Site in Westbury, New York. Also attached is a Site Plan illustrating the location of each groundwater monitoring well (Figure 1). Based on historical documentation, the groundwater flow direction beneath the Site is south-southwest.

Groundwater Findings

On May 12, 2009 CA RICH collected a full round of groundwater samples from the three existing groundwater monitoring wells. Groundwater samples were analyzed for volatile organic compounds ("VOCs") using USEPA Methodology 8260 with NYASP Category B deliverables. The results are summarized on Table 1 and a copy of the original laboratory report is attached.

As the data indicates, the only VOCs detected in groundwater include tetrachloroethene and trichloroethene in monitoring wells MW-2 and MW-3 at concentrations either below or slightly above the current NYSDEC drinking water standard currently set at 5.0 ug/L. Tetrachloroethene was detected at a concentration of 4.0 ug/L at MW-2 and 8.0 ug/L at MW-3. Trichloroethene was detected at a concentration of 3.0 ug/L at MW-3.

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

Summary & Conclusions

Based upon the results of this round of groundwater sampling, groundwater beneath the Site contains detectable levels of only two VOCs that include tetrachloroethene and trichloroethene. The reported concentrations were below the current NYSDEC drinking water standard with the exception of tetrachloroethene detected at a concentration of 8.0 ug/L at monitoring well MW-3. It should be noted that during the course of soil remediation at the Site (e.g. source removal from two leaching pools identified as PS-1 and OF-1; and oil tank removals) soil contaminants were predominantly petroleum-related and included benzene, toluene, ethyl benzene, xylenes ("BTEX") and 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene. The results of this groundwater sampling event did not find any of these compounds at detectable concentrations in the groundwater samples collected. In addition, the operation of the soil vapor extraction ("SVE") system has successfully remediated levels of VOCs to acceptable concentrations at two of the three SVE points, further reducing the potential for impact to groundwater.

Based upon the data, the groundwater beneath the Site does not appear to be impacted to the extent that further investigation or groundwater remediation is warranted. The reported detections of tetrachloroethene and trichloroethene may be attributable to off-Site operations that have been documented to have impacted groundwater quality area wide.

Recommendation

Since there is an active SVE system currently remediating on-Site soil, we recommend continued groundwater monitoring via the existing monitoring well network on a semi-annual basis. The next round of groundwater sampling would occur in November. Once the SVE system has successfully remediated on-Site soil, the groundwater monitoring program for this Site should be modified appropriately or terminated.

Upon your review of the enclosed groundwater data, we would be glad to discuss any questions or comments you may have prior to going forward with the proposed Plan.

Sincerely,

CA RICH CONSULTANTS, INC

Steve Sobstyl
Sr. Project Manager

SS/sm
Attachments

cc: see attached distribution
NT Server\Files\Users\Proj\299 MAIN ST\PCS\Groundwater Monitoring\1Round09.

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq. (via email only)
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq. (via email only)
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

FIGURE & TABLE

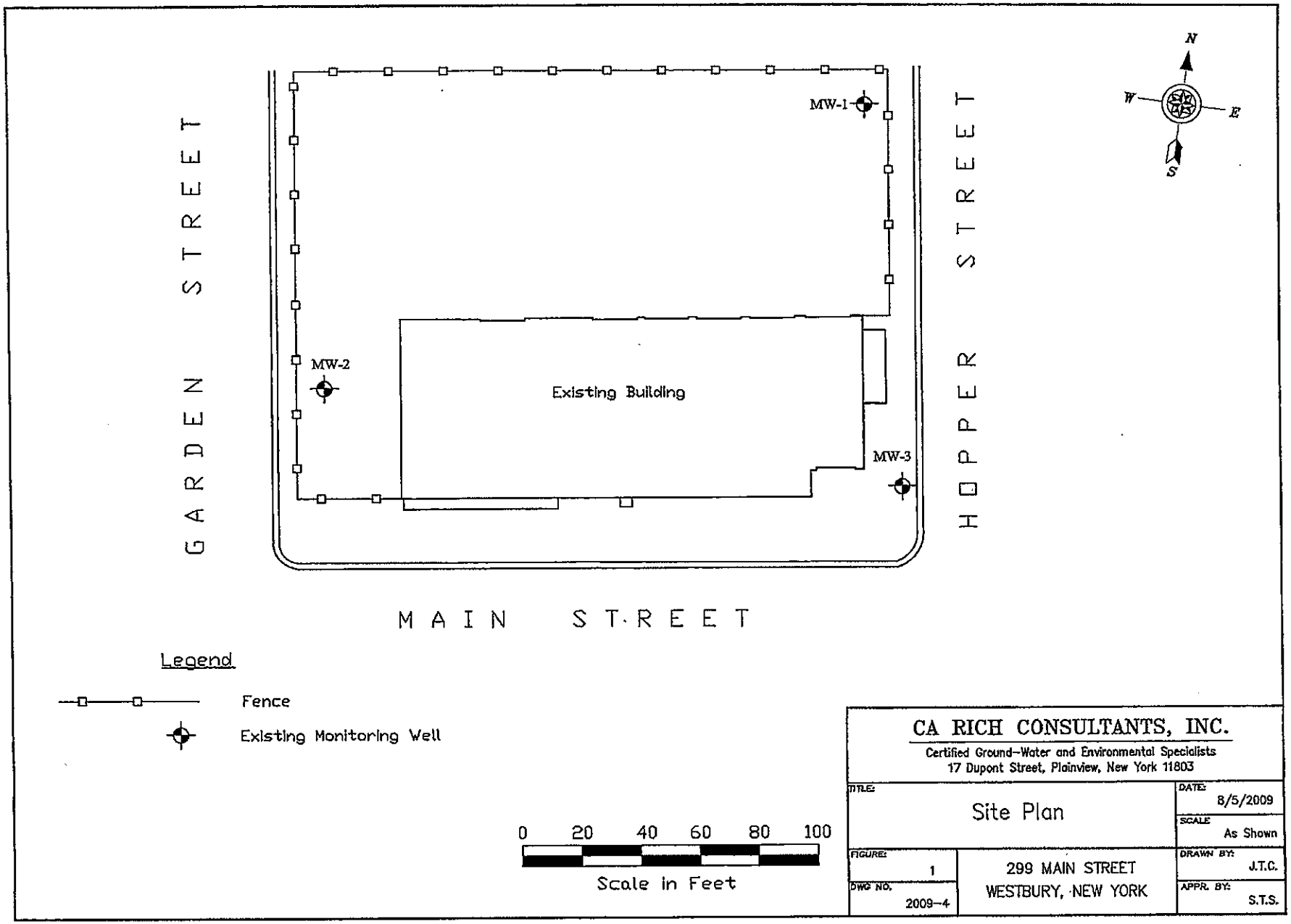

GARDEN STREET
HOPPER STREET
MAIN STREET
MW-1
MW-2
MW-3
Existing Building
N
W
E
S
Legend
Fence
Existing Monitoring Well
0 20 40 60 80 100
Scale in Feet
CA RICH CONSULTANTS, INC.
Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803
TITLE: Site Plan
DATE: 8/5/2009
SCALE: As Shown
FIGURE: 1
DWG NO. 2009-4
299 MAIN STREET
WESTBURY, NEW YORK
DRAWN BY: J.T.C.
APPR. BY: S.T.S.

Table 1

Summary of Groundwater Samples

299 Main Street
Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID Matrix Date Sampled	MW-1 Groundwater 5/12/2009	MW-2 Groundwater 5/12/2009	MW-2D Groundwater 5/12/2009 Duplicate MW-2	MW-3 Groundwater 5/12/2009	NYSDEC (1) Drinking Water Standard TOGS
Volatile Organic Compounds (USEPA Method 8260)					
Parameters	µg/L	µg/L	µg/L	µg/L	µg/L
MTBE	ND	ND	ND	ND	10
Benzene	ND	ND	ND	ND	1
Toluene	ND	ND	ND	ND	5
Ethyl Benzene	ND	ND	ND	ND	5
m + p Xylene	ND	ND	ND	ND	5
o Xylene	ND	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	ND	5
n-Propylbenzene	ND	ND	ND	ND	5
1,3,5-Trimethylbenzene	ND	ND	ND	ND	5
1,2,4-Trimethylbenzene	ND	ND	ND	ND	5
p-Isopropyltoluene	ND	ND	ND	ND	5
n-Butylbenzene	ND	ND	ND	ND	5
Naphthalene	ND	ND	ND	ND	10
sec-Butylbenzene	ND	ND	ND	ND	5
tert-Butylbenzene	ND	ND	ND	ND	5
2-Chlorotoluene	ND	ND	ND	ND	5
1,2-Dichlorobenzene	ND	ND	ND	ND	3
1,4-Dichlorobenzene	ND	ND	ND	ND	3
p-Ethyltoluene	ND	ND	ND	ND	NS
1,2,4,5-Tetramethylbenzene	ND	ND	ND	ND	5
Acetone	ND	ND	ND	ND	50
Tetrachloroethene	ND	4	4	8	5
Trichloroethene	ND	ND	ND	3	5

Notes:
All concentrations reported in ug/L (parts per billion).
ND - Not Detected above laboratory detection limits.
NS - No Standard.
(1) NYSDEC Division of Water TOG Series (1.1.1) Ambient Water Quality Standards and Guidance Values; June 1998.

LABORATORY DATA

Groundwater Samples

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.01 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0815
MATRIX:Water SAMPLE: MW-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	< 1		051509	1	EPA8260
Chloromethane	ug/L	< 1		051509	1	EPA8260
Vinyl Chloride	ug/L	< 1		051509	1	EPA8260
Bromomethane	ug/L	< 1		051509	1	EPA8260
Chloroethane	ug/L	< 1		051509	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		051509	1	EPA8260
Methylene Chloride	ug/L	< 1		051509	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		051509	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		051509	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
Bromochloromethane	ug/L	< 1		051509	1	EPA8260
Chloroform	ug/L	< 1		051509	1	EPA8260
111 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		051509	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		051509	1	EPA8260
Benzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		051509	1	EPA8260
Trichloroethene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		051509	1	EPA8260
Dibromomethane	ug/L	< 1		051509	1	EPA8260
Bromodichloromethane	ug/L	< 1		051509	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
Toluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10445 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.01 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0815

MATRIX:Water SAMPLE: MW-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
112 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Tetrachloroethene	ug/L	< 1		051509	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		051509	1	EPA8260
Chlorodibromomethane	ug/L	< 1		051509	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		051509	1	EPA8260
Chlorobenzene	ug/L	< 1		051509	1	EPA8260
Ethyl Benzene	ug/L	< 1		051509	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
m + p Xylene	ug/L	< 2		051509	2	EPA8260
o Xylene	ug/L	< 1		051509	1	EPA8260
Styrene	ug/L	< 1		051509	1	EPA8260
Bromoform	ug/L	< 1		051509	1	EPA8260
Isopropylbenzene	ug/L	< 1		051509	1	EPA8260
Bromobenzene	ug/L	< 1		051509	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
123-Trichloropropane	ug/L	< 1		051509	1	EPA8260
n-Propylbenzene	ug/L	< 1		051509	1	EPA8260
2-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
4-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
tert-Butylbenzene	ug/L	< 1		051509	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
sec-Butylbenzene	ug/L	< 1		051509	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10446 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.01 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0815
MATRIX:Water SAMPLE: MW-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
n-Butylbenzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Dibromochloropropane	ug/L	< 1		051509	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		051509	1	EPA8260
Naphthalene(v)	ug/L	< 1		051509	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		051509	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		051509	1	EPA8260
p-Ethyltoluene	ug/L	< 1		051509	1	EPA8260
Freon 113	ug/L	< 1		051509	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		051509	1	EPA8260
Acetone	ug/L	< 10		051509	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		051509	10	EPA8260
Methylisobutylketone	ug/L	< 10		051509	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		051509	1	EPA8260
p Diethylbenzene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobatyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10447 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.04 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0855
MATRIX:Water SAMPLE: MW-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	< 1		051509	1	EPA8260
Chloromethane	ug/L	< 1		051509	1	EPA8260
Vinyl Chloride	ug/L	< 1		051509	1	EPA8260
Bromomethane	ug/L	< 1		051509	1	EPA8260
Chloroethane	ug/L	< 1		051509	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		051509	1	EPA8260
Methylene Chloride	ug/L	< 1		051509	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		051509	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		051509	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
Bromochloromethane	ug/L	< 1		051509	1	EPA8260
Chloroform	ug/L	< 1		051509	1	EPA8260
111 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		051509	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		051509	1	EPA8260
Benzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		051509	1	EPA8260
Trichloroethene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		051509	1	EPA8260
Dibromomethane	ug/L	< 1		051509	1	EPA8260
Bromodichloromethane	ug/L	< 1		051509	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
Toluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10454 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.04 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: GA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0855

MATRIX:Water SAMPLE: MW-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
112 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Tetrachloroethene	ug/L	4		051509	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		051509	1	EPA8260
Chlorodibromomethane	ug/L	< 1		051509	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		051509	1	EPA8260
Chlorobenzene	ug/L	< 1		051509	1	EPA8260
Ethyl Benzene	ug/L	< 1		051509	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
m + p Xylene	ug/L	< 2		051509	2	EPA8260
o Xylene	ug/L	< 1		051509	1	EPA8260
Styrene	ug/L	< 1		051509	1	EPA8260
Bromoform	ug/L	< 1		051509	1	EPA8260
Isopropylbenzene	ug/L	< 1		051509	1	EPA8260
Bromobenzene	ug/L	< 1		051509	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
123-Trichloropropane	ug/L	< 1		051509	1	EPA8260
n-Propylbenzene	ug/L	< 1		051509	1	EPA8260
2-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
4-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
tert-Butylbenzene	ug/L	< 1		051509	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
sec-Butylbenzene	ug/L	< 1		051509	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10455 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.04 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0855
MATRIX:Water SAMPLE: MW-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
n-Butylbenzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Dibromochloropropane	ug/L	< 1		051509	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		051509	1	EPA8260
Naphthalene(v)	ug/L	< 1		051509	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		051509	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		051509	1	EPA8260
p-Ethyltoluene	ug/L	< 1		051509	1	EPA8260
Freon 113	ug/L	< 1		051509	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		051509	1	EPA8260
Acetone	ug/L	< 10		051509	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		051509	10	EPA8260
Methylisobutylketone	ug/L	< 10		051509	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		051509	1	EPA8260
p Diethylbenzene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10456 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.06 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0943
MATRIX:Water SAMPLE: MW-3

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	< 1		051509	1	EPA8260
Chloromethane	ug/L	< 1		051509	1	EPA8260
Vinyl Chloride	ug/L	< 1		051509	1	EPA8260
Bromomethane	ug/L	< 1		051509	1	EPA8260
Chloroethane	ug/L	< 1		051509	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		051509	1	EPA8260
Methylene Chloride	ug/L	< 1		051509	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		051509	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		051509	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
Bromochloromethane	ug/L	< 1		051509	1	EPA8260
Chloroform	ug/L	< 1		051509	1	EPA8260
111 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		051509	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		051509	1	EPA8260
Benzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		051509	1	EPA8260
Trichloroethene	ug/L	3		051509	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		051509	1	EPA8260
Dibromomethane	ug/L	< 1		051509	1	EPA8260
Bromodichloromethane	ug/L	< 1		051509	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
Toluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10460 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.06 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0943
MATRIX:Water SAMPLE: MW-3

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
112 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Tetrachloroethene	ug/L	8		051509	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		051509	1	EPA8260
Chlorodibromomethane	ug/L	< 1		051509	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		051509	1	EPA8260
Chlorobenzene	ug/L	< 1		051509	1	EPA8260
Ethyl Benzene	ug/L	< 1		051509	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
m + p Xylene	ug/L	< 2		051509	2	EPA8260
o Xylene	ug/L	< 1		051509	1	EPA8260
Styrene	ug/L	< 1		051509	1	EPA8260
Bromoform	ug/L	< 1		051509	1	EPA8260
Isopropylbenzene	ug/L	< 1		051509	1	EPA8260
Bromobenzene	ug/L	< 1		051509	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
123-Trichloropropane	ug/L	< 1		051509	1	EPA8260
n-Propylbenzene	ug/L	< 1		051509	1	EPA8260
2-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
4-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
tert-Butylbenzene	ug/L	< 1		051509	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
sec-Butylbenzene	ug/L	< 1		051509	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10461 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.06 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0943
MATRIX:Water SAMPLE: MW-3

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
n-Butylbenzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Dibromochloropropane	ug/L	< 1		051509	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		051509	1	EPA8260
Naphthalene(v)	ug/L	< 1		051509	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		051509	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		051509	1	EPA8260
p-Ethyltoluene	ug/L	< 1		051509	1	EPA8260
Freon 113	ug/L	< 1		051509	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		051509	1	EPA8260
Acetone	ug/L	< 10		051509	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		051509	10	EPA8260
Methylisobutylketone	ug/L	< 10		051509	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		051509	1	EPA8260
p Diethylbenzene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10462 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.07 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09

MATRIX:Water SAMPLE: Trip Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	< 1		051509	1	EPA8260
Chloromethane	ug/L	< 1		051509	1	EPA8260
Vinyl Chloride	ug/L	< 1		051509	1	EPA8260
Bromomethane	ug/L	< 1		051509	1	EPA8260
Chloroethane	ug/L	< 1		051509	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		051509	1	EPA8260
Methylene Chloride	ug/L	< 1		051509	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		051509	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		051509	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
Bromochloromethane	ug/L	< 1		051509	1	EPA8260
Chloroform	ug/L	< 1		051509	1	EPA8260
111 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		051509	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		051509	1	EPA8260
Benzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		051509	1	EPA8260
Trichloroethene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		051509	1	EPA8260
Dibromomethane	ug/L	< 1		051509	1	EPA8260
Bromodichloromethane	ug/L	< 1		051509	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
Toluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10463 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.07 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09

MATRIX:Water SAMPLE: Trip Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
112 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Tetrachloroethene	ug/L	< 1		051509	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		051509	1	EPA8260
Chlorodibromomethane	ug/L	< 1		051509	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		051509	1	EPA8260
Chlorobenzene	ug/L	< 1		051509	1	EPA8260
Ethyl Benzene	ug/L	< 1		051509	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
m + p Xylene	ug/L	< 2		051509	2	EPA8260
o Xylene	ug/L	< 1		051509	1	EPA8260
Styrene	ug/L	< 1		051509	1	EPA8260
Bromoform	ug/L	< 1		051509	1	EPA8260
Isopropylbenzene	ug/L	< 1		051509	1	EPA8260
Bromobenzene	ug/L	< 1		051509	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
123-Trichloropropane -	ug/L	< 1		051509	1	EPA8260
n-Propylbenzene	ug/L	< 1		051509	1	EPA8260
2-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
4-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
tert-Butylbenzene	ug/L	< 1		051509	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
sec-Butylbenzene	ug/L	< 1		051509	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		051509	1	EPA8260

oc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10464 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.07 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09

MATRIX:Water SAMPLE: Trip Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
n-Butylbenzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Dibromochloropropane	ug/L	< 1		051509	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		051509	1	EPA8260
Naphthalene(v)	ug/L	< 1		051509	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		051509	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		051509	1	EPA8260
p-Ethyltoluene	ug/L	< 1		051509	1	EPA8260
Freon 113	ug/L	< 1		051509	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		051509	1	EPA8260
Acetone	ug/L	< 10		051509	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		051509	10	EPA8260
Methylisobutylketone	ug/L	< 10		051509	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		051509	1	EPA8260
p Diethylbenzene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10465 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.08 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:1030
MATRIX:Water SAMPLE: Field Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	< 1		051509	1	EPA8260
Chloromethane	ug/L	< 1		051509	1	EPA8260
Vinyl Chloride	ug/L	< 1		051509	1	EPA8260
Bromomethane	ug/L	< 1		051509	1	EPA8260
Chloroethane	ug/L	< 1		051509	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		051509	1	EPA8260
Methylene Chloride	ug/L	< 1		051509	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		051509	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		051509	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
Bromochloromethane	ug/L	< 1		051509	1	EPA8260
Chloroform	ug/L	< 1		051509	1	EPA8260
111 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		051509	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		051509	1	EPA8260
Benzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		051509	1	EPA8260
Trichloroethene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		051509	1	EPA8260
Dibromomethane	ug/L	< 1		051509	1	EPA8260
Bromodichloromethane	ug/L	< 1		051509	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
Toluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10466 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.08 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:1030
MATRIX:Water SAMPLE: Field Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
112 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Tetrachloroethene	ug/L	< 1		051509	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		051509	1	EPA8260
Chlorodibromomethane	ug/L	< 1		051509	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		051509	1	EPA8260
Chlorobenzene	ug/L	< 1		051509	1	EPA8260
Ethyl Benzene	ug/L	< 1		051509	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
m + p Xylene	ug/L	< 2		051509	2	EPA8260
o Xylene	ug/L	< 1		051509	1	EPA8260
Styrene	ug/L	< 1		051509	1	EPA8260
Bromoform	ug/L	< 1		051509	1	EPA8260
Isopropylbenzene	ug/L	< 1		051509	1	EPA8260
Bromobenzene	ug/L	< 1		051509	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
123-Trichloropropane	ug/L	< 1		051509	1	EPA8260
n-Propylbenzene	ug/L	< 1		051509	1	EPA8260
2-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
4-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
tert-Butylbenzene	ug/L	< 1		051509	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
sec-Butylbenzene	ug/L	< 1		051509	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10467 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.08 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:1030
MATRIX:Water SAMPLE: Field Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
n-Butylbenzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Dibromochloropropane	ug/L	< 1		051509	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		051509	1	EPA8260
Naphthalene(v)	ug/L	< 1		051509	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		051509	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		051509	1	EPA8260
p-Ethyltoluene	ug/L	< 1		051509	1	EPA8260
Freon 113	ug/L	< 1		051509	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		051509	1	EPA8260
Acetone	ug/L	< 10		051509	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		051509	10	EPA8260
Methylisobutylketone	ug/L	< 10		051509	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		051509	1	EPA8260
p Diethylbenzene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10468 NYSDOH ID # 10320

QA/QC

Groundwater Samples

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.02 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0815
MATRIX:Water SAMPLE: MW-1 MS

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	18		051509	1	EPA8260
Chloromethane	ug/L	17		051509	1	EPA8260
Vinyl Chloride	ug/L	19		051509	1	EPA8260
Bromomethane	ug/L	9.9		051509	1	EPA8260
Chloroethane	ug/L	19		051509	1	EPA8260
Trichlorofluoromethane	ug/L	21		051509	1	EPA8260
1,1 Dichloroethene	ug/L	20		051509	1	EPA8260
Methylene Chloride	ug/L	20		051509	1	EPA8260
t-1,2-Dichloroethene	ug/L	20		051509	1	EPA8260
1,1 Dichloroethane	ug/L	20		051509	1	EPA8260
2,2-Dichloropropane	ug/L	20		051509	1	EPA8260
c-1,2-Dichloroethene	ug/L	20		051509	1	EPA8260
Bromochloromethane	ug/L	20		051509	1	EPA8260
Chloroform	ug/L	20		051509	1	EPA8260
111 Trichloroethane	ug/L	21		051509	1	EPA8260
Carbon Tetrachloride	ug/L	21		051509	1	EPA8260
1,1-Dichloropropene	ug/L	21		051509	1	EPA8260
Benzene	ug/L	20		051509	1	EPA8260
1,2 Dichloroethane	ug/L	22		051509	1	EPA8260
Trichloroethene	ug/L	21		051509	1	EPA8260
1,2 Dichloropropane	ug/L	21		051509	1	EPA8260
Dibromomethane	ug/L	22		051509	1	EPA8260
Bromodichloromethane	ug/L	20		051509	1	EPA8260
c-1,3Dichloropropene	ug/L	20		051509	1	EPA8260
Toluene	ug/L	21		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10448 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.02 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0815
MATRIX:Water SAMPLE: MW-1 MS

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	21		051509	1	EPA8260
112 Trichloroethane	ug/L	21		051509	1	EPA8260
Tetrachloroethene	ug/L	21		051509	1	EPA8260
1,3-Dichloropropane	ug/L	21		051509	1	EPA8260
Chlorodibromomethane	ug/L	20		051509	1	EPA8260
1,2 Dibromoethane	ug/L	21		051509	1	EPA8260
Chlorobenzene	ug/L	20		051509	1	EPA8260
Ethyl Benzene	ug/L	20		051509	1	EPA8260
1112Tetrachloroethane	ug/L	20		051509	1	EPA8260
m + p Xylene	ug/L	39		051509	2	EPA8260
o Xylene	ug/L	20		051509	1	EPA8260
Styrene	ug/L	20		051509	1	EPA8260
Bromoform	ug/L	21		051509	1	EPA8260
Isopropylbenzene	ug/L	21		051509	1	EPA8260
Bromobenzene	ug/L	21		051509	1	EPA8260
1122Tetrachloroethane	ug/L	23		051509	1	EPA8260
123-Trichloropropane	ug/L	23		051509	1	EPA8260
n-Propylbenzene	ug/L	21		051509	1	EPA8260
2-Chlorotoluene	ug/L	20		051509	1	EPA8260
135-Trimethylbenzene	ug/L	20		051509	1	EPA8260
4-Chlorotoluene	ug/L	20		051509	1	EPA8260
tert-Butylbenzene	ug/L	21		051509	1	EPA8260
124-Trimethylbenzene	ug/L	21		051509	1	EPA8260
sec-Butylbenzene	ug/L	21		051509	1	EPA8260
p-Isopropyltoluene	ug/L	21		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10449 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.02 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0815
MATRIX:Water SAMPLE: MW-1 MS

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	21		051509	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	20		051509	1	EPA8260
n-Butylbenzene	ug/L	21		051509	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	20		051509	1	EPA8260
Dibromochloropropane	ug/L	23		051509	1	EPA8260
124-Trichlorobenzene (v)	ug/L	22		051509	1	EPA8260
Hexachlorobutadiene	ug/L	22		051509	1	EPA8260
Naphthalene(v)	ug/L	23		051509	1	EPA8260
123-Trichlorobenzene	ug/L	22		051509	1	EPA8260
ter.ButylMethylEther	ug/L	21		051509	1	EPA8260
p-Ethyltoluene	ug/L	21		051509	1	EPA8260
Freon 113	ug/L	20		051509	1	EPA8260
1245 Tetramethylbenz	ug/L	22		051509	1	EPA8260
Acetone	ug/L	130		051509	10	EPA8260
Methyl Ethyl Ketone	ug/L	120		051509	10	EPA8260
Methylisobutylketone	ug/L	120		051509	10	EPA8260
Chlorodifluoromethane	ug/L	21		051509	1	EPA8260
p Diethylbenzene	ug/L	21		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10450 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.03 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0813
MATRIX:Water SAMPLE: MW-1 MSD

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	18		051509	1	EPA8260
Chloromethane	ug/L	17		051509	1	EPA8260
Vinyl Chloride	ug/L	19		051509	1	EPA8260
Bromomethane	ug/L	10		051509	1	EPA8260
Chloroethane	ug/L	20		051509	1	EPA8260
Trichlorofluoromethane	ug/L	20		051509	1	EPA8260
1,1 Dichloroethene	ug/L	20		051509	1	EPA8260
Methylene Chloride	ug/L	20		051509	1	EPA8260
t-1,2-Dichloroethene	ug/L	20		051509	1	EPA8260
1,1 Dichloroethane	ug/L	20		051509	1	EPA8260
2,2-Dichloropropane	ug/L	20		051509	1	EPA8260
c-1,2-Dichloroethene	ug/L	20		051509	1	EPA8260
Bromochloromethane	ug/L	19		051509	1	EPA8260
Chloroform	ug/L	20		051509	1	EPA8260
111 Trichloroethane	ug/L	20		051509	1	EPA8260
Carbon Tetrachloride	ug/L	20		051509	1	EPA8260
1,1-Dichloropropene	ug/L	20		051509	1	EPA8260
Benzene	ug/L	20		051509	1	EPA8260
1,2 Dichloroethane	ug/L	20		051509	1	EPA8260
Trichloroethene	ug/L	21		051509	1	EPA8260
1,2 Dichloropropane	ug/L	20		051509	1	EPA8260
Dibromomethane	ug/L	21		051509	1	EPA8260
Bromodichloromethane	ug/L	20		051509	1	EPA8260
c-1,3Dichloropropene	ug/L	20		051509	1	EPA8260
Toluene	ug/L	20		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10451 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.03 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0813
MATRIX:Water SAMPLE: MW-1 MSD

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE.TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	20		051509	1	EPA8260
112 Trichloroethane	ug/L	20		051509	1	EPA8260
Tetrachloroethene	ug/L	21		051509	1	EPA8260
1,3-Dichloropropane	ug/L	20		051509	1	EPA8260
Chlorodibromomethane	ug/L	20		051509	1	EPA8260
1,2 Dibromoethane	ug/L	21		051509	1	EPA8260
Chlorobenzene	ug/L	20		051509	1	EPA8260
Ethyl Benzene	ug/L	20		051509	1	EPA8260
1112Tetrachloroethane	ug/L	20		051509	1	EPA8260
m + p Xylene	ug/L	40		051509	2	EPA8260
o Xylene	ug/L	19		051509	1	EPA8260
Styrene	ug/L	19		051509	1	EPA8260
Bromoform	ug/L	21		051509	1	EPA8260
Isopropylbenzene	ug/L	21		051509	1	EPA8260
Bromobenzene	ug/L	21		051509	1	EPA8260
1122Tetrachloroethane	ug/L	23		051509	1	EPA8260
123-Trichloropropane	ug/L	23		051509	1	EPA8260
n-Propylbenzene	ug/L	21		051509	1	EPA8260
2-Chlorotoluene	ug/L	20		051509	1	EPA8260
135-Trimethylbenzene	ug/L	20		051509	1	EPA8260
4-Chlorotoluene	ug/L	20		051509	1	EPA8260
tert-Butylbenzene	ug/L	20		051509	1	EPA8260
124-Trimethylbenzene	ug/L	21		051509	1	EPA8260
sec-Butylbenzene	ug/L	21		051509	1	EPA8260
p-Isopropyltoluene	ug/L	21		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10452 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.03 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0813
MATRIX:Water SAMPLE: MW-1 MSD

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	20		051509	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	20		051509	1	EPA8260
n-Butylbenzene	ug/L	21		051509	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	21		051509	1	EPA8260
Dibromochloropropane	ug/L	24		051509	1	EPA8260
124-Trichlorobenzene (v)	ug/L	23		051509	1	EPA8260
Hexachlorobutadiene	ug/L	24		051509	1	EPA8260
Naphthalene(v)	ug/L	24		051509	1	EPA8260
123-Trichlorobenzene	ug/L	22		051509	1	EPA8260
ter.ButylMethylEther	ug/L	21		051509	1	EPA8260
p-Ethyltoluene	ug/L	21		051509	1	EPA8260
Freon 113	ug/L	19		051509	1	EPA8260
1245 Tetramethylbenz	ug/L	22		051509	1	EPA8260
Acetone	ug/L	120		051509	10	EPA8260
Methyl Ethyl Ketone	ug/L	120		051509	10	EPA8260
Methylisobutylketone	ug/L	120		051509	10	EPA8260
Chlorodifluoromethane	ug/L	20		051509	1	EPA8260
p Diethylbenzene	ug/L	21		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 10453 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.05 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0855

MATRIX:Water SAMPLE: MW-2D

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlordifluoromethane	ug/L	< 1		051509	1	EPA8260
Chloromethane	ug/L	< 1		051509	1	EPA8260
Vinyl Chloride	ug/L	< 1		051509	1	EPA8260
Bromomethane	ug/L	< 1		051509	1	EPA8260
Chloroethane	ug/L	< 1		051509	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		051509	1	EPA8260
Methylene Chloride	ug/L	< 1		051509	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		051509	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		051509	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		051509	1	EPA8260
Bromochloromethane	ug/L	< 1		051509	1	EPA8260
Chloroform	ug/L	< 1		051509	1	EPA8260
111 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		051509	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		051509	1	EPA8260
Benzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		051509	1	EPA8260
Trichloroethene	ug/L	< 1		051509	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		051509	1	EPA8260
Dibromomethane	ug/L	< 1		051509	1	EPA8260
Bromodichloromethane	ug/L	< 1		051509	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
Toluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10457 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.05 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0855
MATRIX:Water SAMPLE: MW-2D

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		051509	1	EPA8260
112 Trichloroethane	ug/L	< 1		051509	1	EPA8260
Tetrachloroethene	ug/L	4		051509	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		051509	1	EPA8260
Chlorodibromomethane	ug/L	< 1		051509	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		051509	1	EPA8260
Chlorobenzene	ug/L	< 1		051509	1	EPA8260
Ethyl Benzene	ug/L	< 1		051509	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
m + p Xylene	ug/L	< 2		051509	2	EPA8260
o Xylene	ug/L	< 1		051509	1	EPA8260
Styrene	ug/L	< 1		051509	1	EPA8260
Bromoform	ug/L	< 1		051509	1	EPA8260
Isopropylbenzene	ug/L	< 1		051509	1	EPA8260
Bromobenzene	ug/L	< 1		051509	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		051509	1	EPA8260
123-Trichloropropane	ug/L	< 1		051509	1	EPA8260
n-Propylbenzene	ug/L	< 1		051509	1	EPA8260
2-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
4-Chlorotoluene	ug/L	< 1		051509	1	EPA8260
tert-Butylbenzene	ug/L	< 1		051509	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		051509	1	EPA8260
sec-Butylbenzene	ug/L	< 1		051509	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10458 NYSDOH ID # 10320

EcoTest Laboratories Inc
377 Sheffield Ave
North Babylon, NY 11703
631 422-5777

LAB NO.291930.05 06/16/09

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: CA Rich DATE COL'D:05/12/09 RECEIVED:05/13/09
TIME COL'D:0855

MATRIX:Water SAMPLE: MW-2D

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
n-Butylbenzene	ug/L	< 1		051509	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Dibromochloropropane	ug/L	< 1		051509	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		051509	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		051509	1	EPA8260
Naphthalene(v)	ug/L	< 1		051509	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		051509	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		051509	1	EPA8260
p-Ethyltoluene	ug/L	< 1		051509	1	EPA8260
Freon 113	ug/L	< 1		051509	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		051509	1	EPA8260
Acetone	ug/L	< 10		051509	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		051509	10	EPA8260
Methylisobutylketone	ug/L	< 10		051509	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		051509	1	EPA8260
p Diethylbenzene	ug/L	< 1		051509	1	EPA8260

cc:C.A. Rich, Steve Sobstyl

LRL=laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 10459 NYSDOH ID # 10320

RICH
ENVIRONMENTAL SPECIALISTS

February 25, 2010

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Soil Vapor Extraction System**
299 Main Street, Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

Enclosed please find a summary of the results of our ongoing monitoring of the soil vapor extraction ("SVE") system at the above-referenced Site. Table 1 summarizes the quarterly monitoring and the attached graphical analysis (Table 2) summarizes the concentrations of total volatile organic compounds ("VOCs") versus time.

As you are aware, the SVE system has successfully remediated the soil at vapor points SVE-2 and SVE-3. The operation of the SVE system is now focused only on remediating soil at vapor point SVE-1. We will continue operation of the SVE as is and will re-test the extracted vapor again in August to evaluate the concentrations of VOCs being extracted.

Sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

Enclosures
SS/sm
cc: see attached distribution

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

RICH ENVIRONMENTAL SPECIALISTS

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq.
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

TABLE 1

Summary of Extracted Soil Vapor Samples
Soil Vapor Extraction System at 299 Main Street in Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID	SVE-1PT	AS-11/1/06	AS-12/11/06	AS-4/30/07	AS-7/24/07	AS-10/17/07	AS-1/24/08	AS-4/30/08	AS-7/22/08	AS-10/23/08	AS-5/11/09	AS-2/1/10
Matrix	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
Location	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated
Date Sampled	5/2/2006	11/1/2006	12/11/2006	4/30/2007	7/24/2007	10/17/2007	1/24/2008	4/30/2008	7/22/2008	10/23/2008	5/11/2009	2/1/2010
Comment	Pilot Test	Start-Up	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	5th Quarter	6th Quarter	7th Quarter	8th Quarter	9th Quarter	10th Quarter
Volatile Organic Compounds (USEPA Method TO-15)												
Parameters	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
1,1 Dichloroethane	< 81	72.918	< 16.204	< 16.2	< 16.20	< 4.05	< 0.81	< 0.81	< 0.81	1255.80	< 0.81	< 0.81
1,1 Dichloroethene	< 79	< 15.88	< 15.88	< 15.9	< 15.88	< 3.97	< 0.79	< 0.79	< 0.79	< 7.94	< 0.40	< 0.40
1,2 Dibromoethane	< 30	< 30.76	< 30.76	< 30.8	< 30.76	< 7.69	< 1.54	< 1.54	< 1.54	< 15.38	< 1.54	< 1.54
1,2 Dichlorobenzene (v)	< 120	842.24	1082.9	< 24.1	1443.80	< 6.02	445.18	324.86	198.53	< 12.03	34.29	< 3.01
1,2 Dichloroethane	< 81	< 16.204	< 16.204	< 16.2	< 16.20	< 4.05	< 0.81	< 0.81	< 0.81	< 8.10	< 2.03	< 2.03
1,2 Dichloropropane	< 92	< 18.496	< 18.496	< 18.5	< 18.50	< 4.62	< 0.92	< 0.92	< 0.92	< 9.25	2.31	< 2.31
1,2-Dichlorotetrafluoroethane	< 140	< 27.98	< 27.98	< 28.0	< 27.98	< 7	< 1.40	< 1.40	< 1.40	< 13.99	< 1.40	< 1.40
1,3 Butadiene	< 221	44.2	< 44.2	< 44.2	< 44.20	< 11.05	< 2.21	< 2.21	< 2.21	< 22.10	< 2.21	< 2.21
1,3 Dichlorobenzene (v)	< 120	< 24.064	< 24.064	< 24.1	< 24.06	< 6.02	1.80	1.80	< 1.20	< 12.03	< 1.20	< 1.20
1,4 Dichlorobenzene (v)	< 120	25.267	< 24.064	< 24.1	< 24.06	< 6.02	16.24	16.24	14.44	< 12.03	10.23	< 3.01
1,4-Dioxane	< 360	< 72.02	< 72.02	< 72.0	< 72.02	< 18.01	< 3.60	< 3.60	< 3.60	< 36.01	< 3.60	< 3.60
111 Trichloroethane	709	< 21.836	< 21.836	< 21.8	< 21.84	< 5.46	< 1.09	< 1.09	< 1.09	< 10.92	< 1.09	< 1.09
112 Trichloroethane	< 109	< 21.836	< 21.836	< 21.8	< 21.84	< 5.46	< 1.09	< 1.09	< 1.09	< 10.92	< 1.09	< 1.09
1122Tetrachloroethane	< 137	< 27.48	< 27.48	< 27.5	< 27.48	< 6.87	< 1.37	< 1.37	< 1.37	< 13.74	< 1.37	< 1.37
124-Trimethylbenzene	462	132813	88542	27548.0	18200.00	5902.8	3197.40	1377.30	737.85	255.79	23.12	9.84
135-Trimethylbenzene	787	59028	23119	14265.0	10822.00	3590.9	2459.50	1524.90	934.51	1623.30	152.49	13.28
2,2,4-Trimethylpentane	210184	125955	5131.5	284.6	< 18.66	43.39	41.99	33.12	29.39	38.72	6.06	20.06
2-Hexanone	< 205	< 40.92	< 40.92	< 40.9	< 40.92	< 10.23	< 2.05	< 2.05	< 2.05	< 20.46	< 2.05	< 2.05
3-Chloropropene	< 157	< 31.31	< 31.31	< 31.3	< 31.31	< 7.83	< 1.57	< 1.57	< 1.57	< 15.68	< 1.57	< 1.57
Acetone	< 238	332.92	< 47.66	< 47.6	< 47.58	28.54	261.58	< 2.38	22.35	< 23.78	16.17	< 2.38
Acrylonitrile	< 217	< 43.38	< 43.38	< 43.4	< 43.38	< 10.85	< 2.17	< 2.17	< 2.17	< 21.69	< 2.17	< 2.17
Benzene	3163	1276.8	< 12.768	< 12.8	< 12.77	< 3.19	< 0.64	< 0.64	< 0.64	< 6.38	< 0.64	< 0.64
Benzyl Chloride	< 2589	< 518	< 518	< 518.0	< 518.00	< 129.5	< 25.90	< 25.90	< 25.90	< 25.90	< 1.04	< 1.04
Bromodichloromethane	< 134	< 26.52	< 26.52	< 26.6	< 26.52	< 6.63	< 1.33	< 1.33	< 1.33	< 13.26	< 1.33	< 1.33
Bromoform	< 207	< 41.4	< 41.4	< 41.4	< 41.40	< 10.35	< 2.07	< 2.07	< 2.07	< 20.70	< 2.07	< 2.07
Bromomethane	< 388	< 77.68	< 77.68	< 77.7	< 77.68	< 19.42	< 3.88	< 3.88	< 3.88	< 38.84	< 0.78	< 0.78
c-1,2-Dichloroethene	32908	8727.4	2538.9	2023.2	2895.90	1745.5	952.08	1150.40	1269.40	< 15.87	872.74	1229.89
c-1,3Dichloropropene	< 91	< 18.168	< 18.168	< 18.2	< 18.17	< 4.54	< 0.91	< 0.91	< 0.91	< 9.08	< 2.27	< 2.27
Carbon disulfide	< 62	115.07	96.41	< 12.4	< 12.44	< 3.11	37.32	28.92	16.48	< 6.22	8.71	< 1.56
Carbon Tetrachloride	< 126	< 25.176	< 25.176	< 25.2	< 25.18	< 6.29	< 1.26	< 1.26	< 1.26	< 12.59	< 0.50	< 2.52
Chlorobenzene	< 92	< 18.432	< 18.432	< 18.4	< 18.43	< 4.61	< 0.92	< 0.92	< 0.92	< 9.22	< 0.92	< 0.92
Chlorodibromomethane	< 170	< 33.72	< 33.72	< 33.7	< 33.72	< 8.43	< 1.69	< 1.69	< 1.69	< 16.86	< 1.69	< 1.69
Chloroethane	< 528	< 105.6	< 105.6	< 105.6	< 105.60	< 26.4	< 5.28	< 5.28	< 5.28	< 52.80	< 2.64	< 2.64
Chloroform	< 98	< 19.48	< 19.48	< 19.5	< 19.48	< 4.87	< 0.97	< 0.97	< 0.97	< 9.74	< 0.97	< 0.97
Chloromethane	< 83	< 16.536	< 16.536	< 16.5	< 16.54	< 4.13	< 0.83	< 0.83	< 0.83	< 8.27	< 2.07	< 2.07
Cyclohexane	< 172	< 34.44	< 34.44	< 34.4	< 34.44	< 8.61	< 1.72	< 1.72	< 1.72	< 17.22	< 0.69	< 0.69
Dichlordifluoromethane	< 494	< 98.96	< 98.96	< 99.0	< 98.96	< 24.74	< 4.95	< 4.95	< 4.95	< 49.48	4.06	< 0.99
Ethyl Acetate	< 1802	< 360.1	< 360.1	< 360.1	< 360.10	< 90.03	< 18.01	< 18.01	< 18.01	< 180.05	< 18.01	< 18.01
Ethyl alcohol	< 377	< 75.32	< 75.32	< 75.3	< 75.32	< 18.83	20.71	< 3.77	8.98	< 37.66	< 3.77	< 3.77
Ethyl Benzene	18243	69408	16464	2212.4	273.29	108.45	69.41	32.54	15.18	20.39	3.69	< 0.87
Freon 113	< 153	< 30.672	< 30.672	< 30.7	< 30.67	99.68	122.69	99.68	48.31	< 15.34	19.17	< 0.77
Heptane	147534	90024	3191.8	139.1	< 40.92	< 10.23	< 2.05	4.50	< 2.05	< 20.46	< 2.05	< 2.05
Hexachlorobutadiene	< 213	< 42.68	< 42.68	< 42.7	< 42.68	< 10.67	< 2.13	< 2.13	< 2.13	< 21.34	< 5.34	< 5.34
Hexane	20089	8487.2	< 35.26	< 35.3	< 35.28	< 8.82	< 1.76	< 1.76	< 1.76	< 17.64	< 1.76	< 1.76
Isopropyl Alcohol	< 1229	< 245.5	< 245.5	< 246.5	< 245.60	< 61.38	< 12.28	< 12.28	< 12.28	< 122.75	< 12.28	< 12.28
m + p Xylene	47779	308566	130380	19557.0	2694.50	651.9	564.98	121.69	27.81	43.46	5.22	< 2.17
Methyl Ethyl Ketone	< 295	5008.2	< 58.92	< 58.9	< 58.92	< 14.73	29.17	< 2.95	< 2.95	< 29.46	< 2.95	< 2.95
Methylene Chloride	< 69	< 13.896	< 13.896	< 13.9	< 13.90	< 3.47	< 0.69	< 0.69	< 0.69	< 6.95	76.43	< 0.69
Methylisobutylketone	< 410	< 82.02	< 82.02	< 82.0	< 82.02	< 20.51	< 4.10	< 4.10	< 4.10	< 41.01	< 4.10	< 4.10
o Xylene	13465	147764	65190	16080.0	3998.30	1043	825.74	608.44	382.45	956.12	95.61	< 0.87
p-Ethyltoluene	2163	152241	88398	30446.0	17189.00	3535.9	1571.50	838.43	319.22	284.84	20.14	11.79
Propylene	465	< 34.38	< 34.38	< 34.4	< 34.38	< 8.6	< 1.72	< 1.72	< 1.72	< 17.19	10.83	< 0.86
Styrene	< 85	< 17.024	< 17.024	< 17.0	< 17.02	< 4.26	< 0.85	< 0.85	< 0.85	< 8.51	< 0.85	< 0.85
t-1,2-Dichloroethene	< 79	122.98	< 15.868	< 15.9	< 15.87	22.22	17.46	12.30	20.63	17.06	13.69	17.06
t-1,3Dichloropropene	< 91	< 18.168	< 18.168	< 18.2	< 18.17	< 4.54	< 0.91	< 0.91	< 0.91	< 9.08	< 0.91	< 0.91
ter.ButylMethylEther	< 72	< 14.076	158.35	< 14.1	< 14.08	< 3.52	< 0.70	< 0.70	< 0.70	< 7.04	< 0.70	< 0.70
tert. Butyl Alcohol	< 606	< 121.12	< 121.12	< 121.1	< 121.12	< 30.28	< 6.06	< 6.06	< 6.06	< 60.56	< 6.06	< 6.06
Tetrachloroethene	312	339.25	447.81	230.7	257.83	447.81	461.38	488.52	529.23	678.50	515.66	420.67
Tetrahydrofuran	< 590	14735	< 117.88	< 117.9	< 117.88	< 29.47	< 5.89	< 5.89	< 5.89	< 58.94	< 1.47	< 1.47
Toluene	286407	229665	35015	866.0	71.64	26.36	18.07	10.92	8.66	35.77	6.02	< 0.75
Trichloroethene	< 107	381.46	4674.5	3223.8	4869.40	2579	2149.20	2310.40	3331.30	3438.70	2149.20	2579.00
Trichlorofluoromethane	< 112	< 22.488	< 22.488	< 22.5	< 22.49	< 5.62	< 1.12	< 1.12	6.18	< 11.24	3.82	< 1.12
Vinyl Acetate	< 176	< 35.19	< 35.19	< 35.2	< 35.19	< 8.8	< 1.76	< 1.76	< 1.76	< 17.60	< 1.76	< 1.76
Vinyl Bromide	< 87	< 17.516	< 17.516	< 17.5	< 17.52	< 4.38	< 0.88	< 0.88	< 0.88	< 8.76	< 0.88	< 0.88
Vinyl Chloride	792	281.38	< 25.58	< 25.6	< 25.58	< 6.4	< 1.28	< 1.28	< 1.28	< 12.79	< 0.26	< 0.51

Notes:
Concentrations reported in micrograms per cubic meter (ug/m3).
< Indicates less than the method detection limit for specific compound.

Table 2

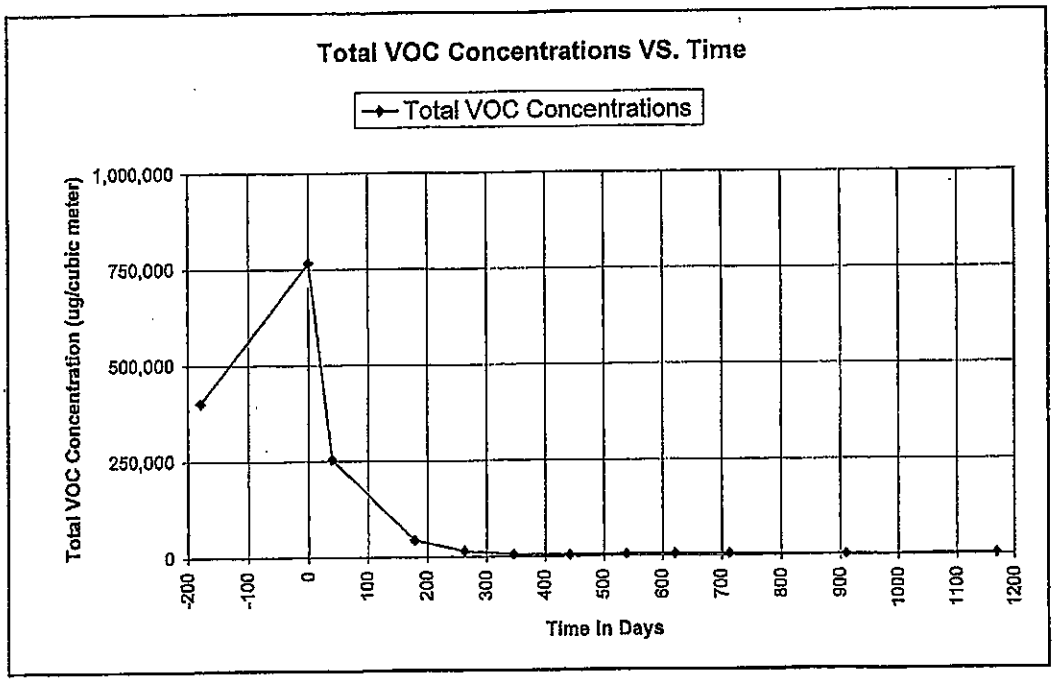
299 Main Street
New Cassell Industrial Area
Westbury, New York
Site No. 1-30-0438

Soil Vapor Quality Analytical Data in ug/cubic meter

SVE SYSTEM

Date	Days Since System Start Up	Benzene	Toluene	Ethyl Benzene	Total Xylene	PCE	TCE	C-1,2 DCE	Total VOC's	Comments
5/2/2006	-179	3163	286407	18243	61244	312	107	32908	402384	Pilot Test
11/1/2006	0	1276	229665	69408	456330	339	381	8727	766126	System start-up Baseline
12/11/2006	40	< 12	35015	16484	195570	447	4674	2538	254728	1st quarterly sample
--	--	--	--	--	--	--	--	--	--	System down 2/28/07
--	--	--	--	--	--	--	--	--	--	System re-started 4/6/07
4/30/2007	179	< 12	866	2212	35637	230	3223	2023	44191	2nd quarterly sample
7/24/2007	263	< 12	71	273	6692	257	4689	2895	15077	3rd quarterly sample
10/17/2007	346	< 3.19	26	108	1695	448	2580	1745	6602	4th quarterly sample
1/24/2008	443	< 0.64	18	69	1391	461	2149	952	5040	5th quarterly sample
4/30/2008	539	< 0.64	11	33	730	489	2310	1150	4723	6th quarterly sample
7/22/2008	621	< 0.64	9	15	410	529	3331	1269	5563	7th quarterly sample
10/23/2008	712	< 6.38	36	21	1000	679	3439	< 15.87	5175	8th quarterly sample
5/11/2009	910	< 0.64	6	4	101	516	2149	873	3649	9th quarterly sample
2/1/2010	1170	< 0.64	< 0.75	< 0.87	< 0.87	421	2579	1230	4230	10th quarterly sample

Notes:
Time 0 = System activation date- 11/01/06
Air samples were collected using Summa canisters.
Results reported in micro grams per cubic meter (ug/m3).



LABORATORY REPORT
Soil Vapor Sample: AS-2/1/10

ECOTEST ID	100444.00				
SOURCE OF SAMPLE	299 Main Street				
SAMPLE ID	AS-2/1/10				
DATE SAMPLED	2/1/2010				
MATRIX	Air				
ANALYTICAL METHOD	EPA TO-15				
ANALYTE	CAS NO	DATE OF ANALYSIS		CONC UG/M3	LRL UG/M3
1,1 Dichloroethane	75-34-3	2/2/2010	<	0.81	0.81
1,1 Dichloroethene	75-35-4	2/2/2010	<	0.40	0.40
1,2 Dibromoethane	106-93-4	2/2/2010	<	1.54	1.54
1,2 Dichlorobenzene (v)	95-50-1	2/2/2010	<	3.01	3.01
1,2 Dichloroethane	107-06-2	2/2/2010	<	2.03	2.03
1,2 Dichloropropane	78-87-5	2/2/2010	<	2.31	2.31
1,2-Dichlorotetrafluoroethane	76-14-2	2/2/2010	<	1.40	1.40
1,3 Butadiene	106-99-0	2/2/2010	<	2.21	2.21
1,3 Dichlorobenzene (v)	541-73-1	2/2/2010	<	1.20	1.20
1,4 Dichlorobenzene (v)	106-46-7	2/2/2010	<	3.01	3.01
1,4-Dioxane	123-91-1	2/2/2010	<	3.60	3.60
111 Trichloroethane	71-55-6	2/2/2010	<	1.09	1.09
112 Trichloroethane	79-00-5	2/2/2010	<	1.09	1.09
1122Tetrachloroethane	79-34-5	2/2/2010	<	1.37	1.37
124-Trimethylbenzene	95-63-6	2/2/2010		9.84	2.46
135-Trimethylbenzene	108-67-8	2/2/2010		13.28	2.46
2,2,4-Trimethylpentane	540-84-1	2/2/2010		20.06	2.33
2-Hexanone	591-78-6	2/2/2010	<	2.05	2.05
3-Chloropropene	107-05-1	2/2/2010	<	1.57	1.57
Acetone	67-64-1	2/2/2010	<	2.38	2.38
Acrylonitrile	107-13-1	2/2/2010	<	2.17	2.17
Benzene	71-43-2	2/2/2010	<	0.64	0.64
Benzyl Chloride	100-44-7	2/2/2010	<	1.04	1.04
Bromodichloromethane	75-27-4	2/2/2010	<	1.33	1.33
Bromoform	75-25-2	2/2/2010	<	2.07	2.07
Bromomethane	74-83-9	2/2/2010	<	0.78	0.78
c-1,2-Dichloroethene	156-59-2	2/2/2010		1229.80	0.79
c-1,3Dichloropropene	10061-01-5	2/2/2010	<	2.27	2.27
Carbon disulfide	75-15-0	2/2/2010	<	1.56	1.56
Carbon Tetrachloride	56-23-5	2/2/2010	<	2.52	2.52
Chlorobenzene	108-90-7	2/2/2010	<	0.92	0.92
Chlorodibromomethane	124-48-1	2/2/2010	<	1.69	1.69
Chloroethane	75-00-3	2/2/2010	<	2.64	2.64
Chloroform	67-66-3	2/2/2010	<	0.97	0.97
Chloromethane	74-87-3	2/2/2010	<	2.07	2.07
Cyclohexane	110-82-7	2/2/2010	<	0.69	0.69
Dichlorodifluoromethane	75-71-8	2/2/2010	<	0.99	0.99
Ethyl Acetate	141-78-6	2/2/2010	<	18.01	18.01
Ethyl alcohol	64-17-5	2/2/2010	<	3.77	3.77
Ethyl Benzene	100-41-4	2/2/2010	<	0.87	0.87
Freon 113	76-13-1	2/2/2010	<	0.77	0.77

ECOTEST ID	100444.00				
SOURCE OF SAMPLE	299 Main Street				
SAMPLE ID	AS-2/1/10				
DATE SAMPLED	2/1/2010				
MATRIX	Air				
ANALYTICAL METHOD	EPA TO-15				
ANALYTE	CAS NO	DATE OF ANALYSIS		CONC UG/M3	LRL UG/M3
Heptane	142-82-5	2/2/2010	<	2.05	2.05
Hexachlorobutadiene	87-68-3	2/2/2010	<	5.34	5.34
Hexane	110-54-3	2/2/2010	<	1.76	1.76
Isopropyl Alcohol	67-63-0	2/2/2010	<	12.28	12.28
m + p Xylene	XYL-MP	2/2/2010	<	2.17	2.17
Methyl Ethyl Ketone	78-93-3	2/2/2010	<	2.95	2.95
Methylene Chloride	75-09-2	2/2/2010	<	0.69	0.69
Methylisobutylketone	108-10-1	2/2/2010	<	4.10	4.10
o Xylene	95-47-6	2/2/2010	<	0.87	0.87
p-Ethyltoluene	622-96-8	2/2/2010		11.79	2.46
Propylene	115-07-1	2/2/2010	<	0.86	0.86
Styrene	100-42-5	2/2/2010	<	0.85	0.85
t-1,2-Dichloroethene	156-60-5	2/2/2010		17.06	0.79
t-1,3Dichloropropene	10061-02-6	2/2/2010	<	0.91	0.91
ter.ButylMethylEther	1634-04-4	2/2/2010	<	0.70	0.70
tert. Butyl Alcohol	75-65-0	2/2/2010	<	6.06	6.06
Tetrachloroethene	127-18-4	2/2/2010		420.67	1.36
Tetrahydrofuran	109-99-9	2/2/2010	<	1.47	1.47
Toluene	108-88-3	2/2/2010	<	0.75	0.75
Trichloroethene	79-01-6	2/2/2010		2579.00	1.07
Trichlorofluoromethane	75-69-4	2/2/2010	<	1.12	1.12
Vinyl Acetate	108-05-4	2/2/2010	<	1.76	1.76
Vinyl Bromide	593-60-2	2/2/2010	<	0.88	0.88
Vinyl Chloride	75-01-4	2/2/2010	<	0.51	0.51

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Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100444.00 02/04/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:02/01/10 RECEIVED:02/01/10
TIME COL'D:1330
MATRIX:Air SAMPLE: AS-2/1/10

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Propylene	ppbv	< 0.5		020210	0.5	EPATO-15
Dichlorodifluoromethane	ppbv	< 0.2		020210	0.2	EPATO-15
1,2-Dichlorotetrafluoroethan	ppbv	< 0.2		020210	0.2	EPATO-15
Chloromethane	ppbv	< 1		020210	1	EPATO-15
1,3 Butadiene	ppbv	< 1		020210	1	EPATO-15
Vinyl Chloride	ppbv	< 0.2		020210	0.2	EPATO-15
Bromomethane	ppbv	< 0.2		020210	0.2	EPATO-15
Chloroethane	ppbv	< 1		020210	1	EPATO-15
Vinyl Bromide	ppbv	< 0.2		020210	0.2	EPATO-15
Trichlorofluoromethane	ppbv	< 0.2		020210	0.2	EPATO-15
Ethyl alcohol	ppbv	< 2		020210	2	EPATO-15
Freon 113	ppbv	< 0.1		020210	0.1	EPATO-15
1,1 Dichloroethene	ppbv	< 0.1		020210	0.1	EPATO-15
Acetone	ppbv	< 1		020210	1	EPATO-15
Carbon disulfide	ppbv	< 0.5		020210	0.5	EPATO-15
Isopropyl Alcohol	ppbv	< 5		020210	5	EPATO-15
3-Chloropropene	ppbv	< 0.5		020210	0.5	EPATO-15
Methylene Chloride	ppbv	< 0.2		020210	0.2	EPATO-15
tert. Butyl Alcohol	ppbv	< 2		020210	2	EPATO-15
ter.ButylMethylEther	ppbv	< 0.2		020210	0.2	EPATO-15
t-1,2-Dichloroethene	ppbv	4.3		020210	0.2	EPATO-15
Acrylonitrile	ppbv	< 1		020210	1	EPATO-15
Hexane	ppbv	< 0.5		020210	0.5	EPATO-15
Vinyl Acetate	ppbv	< 0.5		020210	0.5	EPATO-15
1,1 Dichloroethane	ppbv	< 0.2		020210	0.2	EPATO-15

cc:

LRL=Laboratory Reporting Limit

REMARKS:
The LOQ for all analytes was confirmed with a daily LOQ std.

DIRECTOR

rn = 2496 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100444.00 02/04/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:02/01/10 RECEIVED:02/01/10
TIME COL'D:1330

MATRIX:Air SAMPLE: AS-2/1/10

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
c-1,2-Dichloroethene	ppbv	310		020210	2	EPATO-15
Methyl Ethyl Ketone	ppbv	< 1		020210	1	EPATO-15
Ethyl Acetate	ppbv	< 5		020210	5	EPATO-15
Tetrahydrofuran	ppbv	< 0.5		020210	0.5	EPATO-15
Chloroform	ppbv	< 0.2		020210	0.2	EPATO-15
Cyclohexane	ppbv	< 0.2		020210	0.2	EPATO-15
111 Trichloroethane	ppbv	< 0.2		020210	0.2	EPATO-15
Carbon Tetrachloride	ppbv	< 0.4		020210	0.4	EPATO-15
Benzene	ppbv	< 0.2		020210	0.2	EPATO-15
2,2,4-Trimethylpentane	ppbv	4.3		020210	0.5	EPATO-15
1,2 Dichloroethane	ppbv	< 0.5		020210	0.5	EPATO-15
Heptane	ppbv	< 0.5		020210	0.5	EPATO-15
Trichloroethene	ppbv	480		020210	2	EPATO-15
1,2 Dichloropropane	ppbv	< 0.5		020210	0.5	EPATO-15
1,4-Dioxane	ppbv	< 1		020210	1	EPATO-15
Bromodichloromethane	ppbv	< 0.2		020210	0.2	EPATO-15
c-1,3Dichloropropene	ppbv	< 0.5		020210	0.5	EPATO-15
Methylisobutylketone	ppbv	< 1		020210	1	EPATO-15
Toluene	ppbv	< 0.2		020210	0.2	EPATO-15
t-1,3Dichloropropene	ppbv	< 0.2		020210	0.2	EPATO-15
112 Trichloroethane	ppbv	< 0.2		020210	0.2	EPATO-15
Tetrachloroethene	ppbv	62		020210	0.2	EPATO-15
2-Hexanone	ppbv	< 0.5		020210	0.5	EPATO-15
Chlorodibromomethane	ppbv	< 0.2		020210	0.2	EPATO-15
1,2 Dibromoethane	ppbv	< 0.2		020210	0.2	EPATO-15

cc:

LRL=Laboratory Reporting Limit

REMARKS:
The LOQ for all analytes was confirmed with a daily LOQ std.

DIRECTOR

rn = 2497 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
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Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100444.00 02/04/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:02/01/10 RECEIVED:02/01/10
TIME COL'D:1330
MATRIX:Air SAMPLE: AS-2/1/10

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Chlorobenzene	ppbv	< 0.2		020210	0.2	EPATO-15
Ethyl Benzene	ppbv	< 0.2		020210	0.2	EPATO-15
m + p Xylene	ppbv	< 0.5		020210	0.5	EPATO-15
o Xylene	ppbv	< 0.2		020210	0.2	EPATO-15
Styrene	ppbv	< 0.2		020210	0.2	EPATO-15
Bromoform	ppbv	< 0.2		020210	0.2	EPATO-15
1122Tetrachloroethane	ppbv	< 0.2		020210	0.2	EPATO-15
p-Ethyltoluene	ppbv	2.4		020210	0.5	EPATO-15
135-Trimethylbenzene	ppbv	2.7		020210	0.5	EPATO-15
124-Trimethylbenzene	ppbv	2		020210	0.5	EPATO-15
1,3 Dichlorobenzene (v)	ppbv	< 0.2		020210	0.2	EPATO-15
1,4 Dichlorobenzene (v)	ppbv	< 0.5		020210	0.5	EPATO-15
Benzyl Chloride	ppbv	< 0.2		020210	0.2	EPATO-15
1,2 Dichlorobenzene (v)	ppbv	< 0.5		020210	0.5	EPATO-15
Hexachlorobutadiene	ppbv	< 0.5		020210	0.5	EPATO-15

cc:

LRL=Laboratory Reporting Limit

REMARKS:
The LOQ for all analytes was confirmed with a daily LOQ std.

DIRECTOR

rn = 2498 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

RICH
ENVIRONMENTAL SPECIALISTS

March 1, 2010

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Groundwater Monitoring Results**
299 Main Street, Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the approved "Groundwater Monitoring Work Plan" and the February 2008 "Record of Decision" (ROD), please find attached a copy of the results for the groundwater samples collected in connection with the 299 Main Street Site in Westbury, New York. Also attached is a Site Plan illustrating the location of each groundwater monitoring well (Figure 1). Based on historical documentation, the groundwater flow direction beneath the Site is south-southwest.

Groundwater Findings

On January 22, 2010, CA RICH collected a full round of groundwater samples from the three existing groundwater monitoring wells. Groundwater samples were analyzed for volatile organic compounds ("VOCs") using USEPA Methodology 8260 with NYASP Category B deliverables. The results are summarized on Table 1 and a copy of the original laboratory report is attached.

As the data indicates, the only VOC detected in groundwater is tetrachloroethene in monitoring wells MW-2 and MW-3 at concentrations below or at the current NYSDEC drinking water standard currently set at 5.0 ug/L. Tetrachloroethene was detected at a concentration of 2.0 ug/L at MW-2 and 5.0 ug/L at MW-3.

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

Summary & Conclusions

Based upon the results of this second confirmatory round of groundwater sampling, groundwater beneath the Site contains low level detections of only tetrachloroethene. The reported concentrations are below or at the current NYSDEC drinking water standard for tetrachloroethene. It is noted that during the course of soil remediation at the Site (e.g. source removal from two leaching pools identified as PS-1 and OF-1; and oil tank removals) soil contaminants were predominantly petroleum-related and included benzene, toluene, ethyl benzene, xylenes ("BTEX") and 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene. The results of this second round of groundwater sampling did not find any of these petroleum-related compounds at detectable concentrations in the groundwater samples collected. In addition, the operation of the soil vapor extraction ("SVE") system has successfully remediated levels of VOCs to acceptable concentrations at two of the three SVE points, further reducing the potential for impact to groundwater.

Based upon the data, the groundwater beneath the Site does not appear to be impacted to the extent that further investigation or groundwater remediation is warranted. The reported detections of tetrachloroethene may be attributable to off-Site operations that have been documented to have impacted groundwater quality area wide.

Recommendation

Based upon these recent results and since there is an active SVE system currently remediating on-Site soil, we recommend modifiying the program to collect groundwater samples on an annual basis. The next round of groundwater sampling would occur in January of 2011. At the time when the SVE system has successfully remediated on-Site soil in connection with the former leaching pool PS-1, the groundwater monitoring program for this Site should be modified appropriately or terminated.

Upon your review of the enclosed groundwater data, we would be glad to discuss any questions or comments you may have prior to going forward with the proposed Plan.

Sincerely,

CA RICH CONSULTANTS, INC

Steve Sobstyl
Sr. Project Manager

SS/sm
Attachments

cc: see attached distribution
NT Server\Files\Users\Proj\299 MAIN ST\PCS\Groundwater Monitoring\2Round09.

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

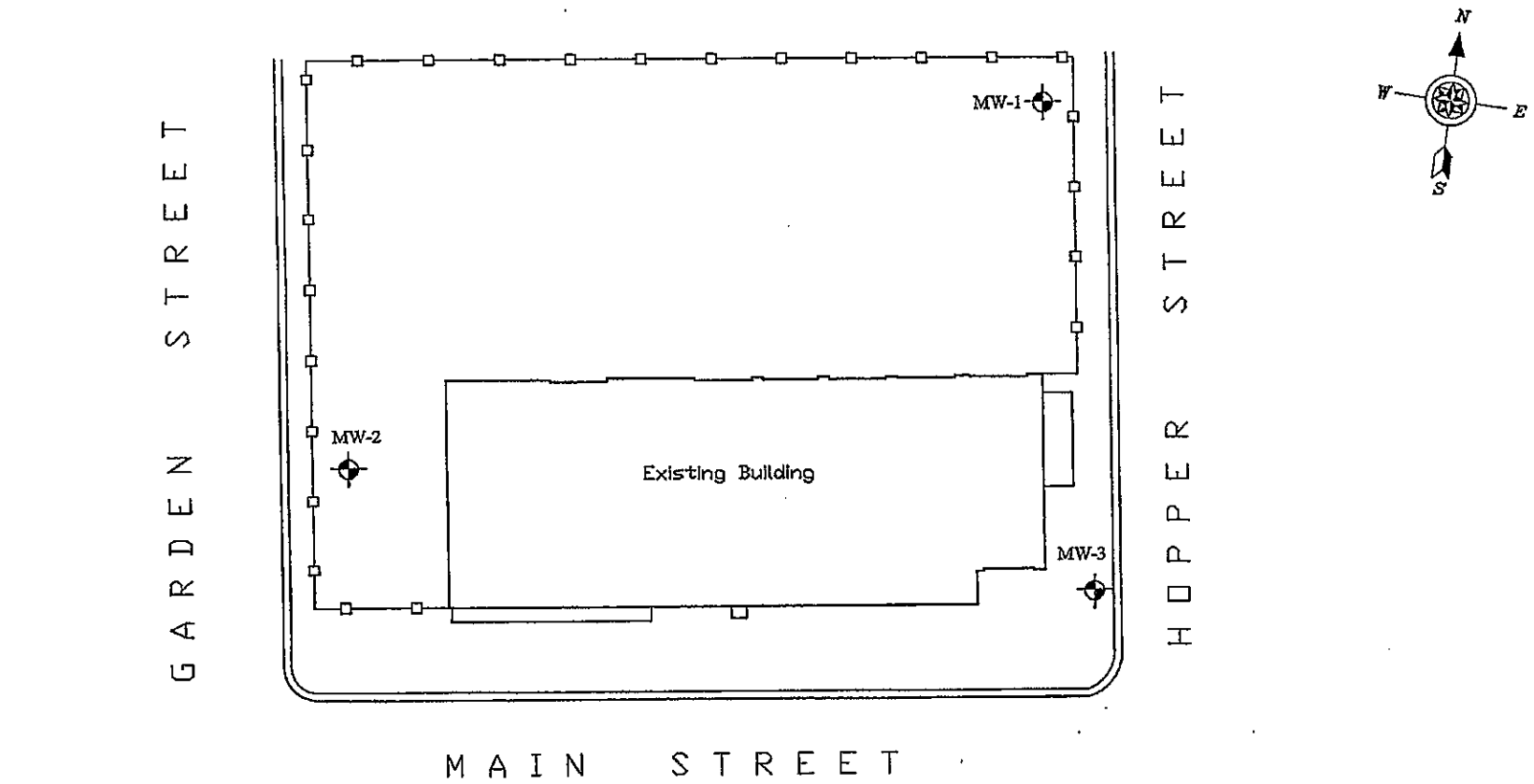
Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq. (via email only)
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq. (via email only)
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

FIGURE & TABLE



Legend

Fence

Existing Monitoring Well

0 20 40 60 80 100

Scale in Feet

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

TITLE: Site Plan		DATE: 8/5/2009
		SCALE: As Shown
FIGURE: 1	299 MAIN STREET WESTBURY, NEW YORK	DRAWN BY: J.T.C.
DWG NO.: 2009-4		APPR. BY: S.T.S.

Table 1

Summary of Groundwater Samples

299 Main Street
Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID Matrix Date Sampled	MW-1 Groundwater 1/22/2010	MW-2 Groundwater 1/22/2010	MW-2D Groundwater 1/22/2010 Duplicate MW-2	MW-3 Groundwater 1/22/2010	NYSDEC (1) Drinking Water Standard TOGS
Volatile Organic Compounds (USEPA Method 8260)					
Parameters	µg/L	µg/L	µg/L	µg/L	µg/L
MTBE	ND	ND	ND	ND	10
Benzene	ND	ND	ND	ND	1
Toluene	ND	ND	ND	ND	5
Ethyl Benzene	ND	ND	ND	ND	5
m + p Xylene	ND	ND	ND	ND	5
o Xylene	ND	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	ND	5
n-Propylbenzene	ND	ND	ND	ND	5
1,3,5-Trimethylbenzene	ND	ND	ND	ND	5
1,2,4-Trimethylbenzene	ND	ND	ND	ND	5
p-Isopropyltoluene	ND	ND	ND	ND	5
n-Butylbenzene	ND	ND	ND	ND	5
Naphthalene	ND	ND	ND	ND	10
sec-Butylbenzene	ND	ND	ND	ND	5
tert-Butylbenzene	ND	ND	ND	ND	5
2-Chlorotoluene	ND	ND	ND	ND	5
1,2-Dichlorobenzene	ND	ND	ND	ND	3
1,4-Dichlorobenzene	ND	ND	ND	ND	3
p-Ethyltoluene	ND	ND	ND	ND	NS
1,2,4,5-Tetramethylbenzene	ND	ND	ND	ND	5
Acetone	ND	ND	ND	ND	50
Tetrachloroethene	ND	2	5	5	5
Trichloroethene	ND	ND	ND	ND	5

Notes:
All concentrations reported in ug/L (parts per billion).
ND - Not Detected above laboratory detection limits.
NS - No Standard.
(1) NYSDEC Division of Water TOG Series (1.1.1) Ambient Water Quality Standards and Guidance Values; June 1998.

LABORATORY DATA

Groundwater Samples

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
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Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.01 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1200

MATRIX:Water SAMPLE: MW-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
Chloromethane	ug/L	< 1		012710	1	EPA8260
Vinyl Chloride	ug/L	< 1		012710	1	EPA8260
Bromomethane	ug/L	< 1		012710	1	EPA8260
Chloroethane	ug/L	< 1		012710	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		012710	1	EPA8260
Methylene Chloride	ug/L	< 1		012710	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		012710	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		012710	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
Bromochloromethane	ug/L	< 1		012710	1	EPA8260
Chloroform	ug/L	< 1		012710	1	EPA8260
111 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		012710	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		012710	1	EPA8260
Benzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		012710	1	EPA8260
Trichloroethene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		012710	1	EPA8260
Dibromomethane	ug/L	< 1		012710	1	EPA8260
Bromodichloromethane	ug/L	< 1		012710	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
Toluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1865 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.01 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1200

MATRIX:Water SAMPLE: MW-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
112 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Tetrachloroethene	ug/L	< 1		012710	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		012710	1	EPA8260
Chlorodibromomethane	ug/L	< 1		012710	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		012710	1	EPA8260
Chlorobenzene	ug/L	< 1		012710	1	EPA8260
Ethyl Benzene	ug/L	< 1		012710	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		012710	1	EPA8260
m + p Xylene	ug/L	< 2		012710	2	EPA8260
o Xylene	ug/L	< 1		012710	1	EPA8260
Styrene	ug/L	< 1		012710	1	EPA8260
Bromoform	ug/L	< 1		012710	1	EPA8260
Isopropylbenzene	ug/L	< 1		012710	1	EPA8260
Bromobenzene	ug/L	< 1		012710	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		012710	1	EPA8260
123-Trichloropropane	ug/L	< 1		012710	1	EPA8260
n-Propylbenzene	ug/L	< 1		012710	1	EPA8260
2-Chlorotoluene	ug/L	< 1		012710	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		012710	1	EPA8260
4-Chlorotoluene	ug/L	< 1		012710	1	EPA8260
tert-Butylbenzene	ug/L	< 1		012710	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		012710	1	EPA8260
sec-Butylbenzene	ug/L	< 1		012710	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1866 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.01 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1200

MATRIX:Water SAMPLE: MW-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
n-Butylbenzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
Dibromochloropropane	ug/L	< 1		012710	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		012710	1	EPA8260
Naphthalene(v)	ug/L	< 1		012710	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		012710	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		012710	1	EPA8260
p-Ethyltoluene	ug/L	< 1		012710	1	EPA8260
Freon 113	ug/L	< 1		012710	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		012710	1	EPA8260
Acetone	ug/L	< 10		012710	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		012710	10	EPA8260
Methylisobutylketone	ug/L	< 10		012710	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
p Diethylbenzene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1867 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.02 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1200
MATRIX:Water SAMPLE: MW-1 (MS)

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	13		012710	1	EPA8260
Chloromethane	ug/L	15		012710	1	EPA8260
Vinyl Chloride	ug/L	14		012710	1	EPA8260
Bromomethane	ug/L	15		012710	1	EPA8260
Chloroethane	ug/L	14		012710	1	EPA8260
Trichlorofluoromethane	ug/L	11		012710	1	EPA8260
1,1 Dichloroethene	ug/L	14		012710	1	EPA8260
Methylene Chloride	ug/L	17		012710	1	EPA8260
t-1,2-Dichloroethene	ug/L	15		012710	1	EPA8260
1,1 Dichloroethane	ug/L	16		012710	1	EPA8260
2,2-Dichloropropane	ug/L	14		012710	1	EPA8260
c-1,2-Dichloroethene	ug/L	17		012710	1	EPA8260
Bromochloromethane	ug/L	17		012710	1	EPA8260
Chloroform	ug/L	17		012710	1	EPA8260
111 Trichloroethane	ug/L	15		012710	1	EPA8260
Carbon Tetrachloride	ug/L	14		012710	1	EPA8260
1,1-Dichloropropene	ug/L	14		012710	1	EPA8260
Benzene	ug/L	17		012710	1	EPA8260
1,2 Dichloroethane	ug/L	19		012710	1	EPA8260
Trichloroethene	ug/L	16		012710	1	EPA8260
1,2 Dichloropropane	ug/L	17		012710	1	EPA8260
Dibromomethane	ug/L	17		012710	1	EPA8260
Bromodichloromethane	ug/L	16		012710	1	EPA8260
c-1,3Dichloropropene	ug/L	13		012710	1	EPA8260
Toluene	ug/L	16		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 1868 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.02 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: G.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1200
MATRIX:Water SAMPLE: MW-1 (MS)

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	13		012710	1	EPA8260
112 Trichloroethane	ug/L	17		012710	1	EPA8260
Tetrachloroethene	ug/L	16		012710	1	EPA8260
1,3-Dichloropropane	ug/L	17		012710	1	EPA8260
Chlorodibromomethane	ug/L	15		012710	1	EPA8260
1,2 Dibromoethane	ug/L	16		012710	1	EPA8260
Chlorobenzene	ug/L	17		012710	1	EPA8260
Ethyl Benzene	ug/L	16		012710	1	EPA8260
1112Tetrachloroethane	ug/L	16		012710	1	EPA8260
m + p Xylene	ug/L	31		012710	2	EPA8260
o Xylene	ug/L	16		012710	1	EPA8260
Styrene	ug/L	16		012710	1	EPA8260
Bromoform	ug/L	13		012710	1	EPA8260
Isopropylbenzene	ug/L	15		012710	1	EPA8260
Bromobenzene	ug/L	17		012710	1	EPA8260
1122Tetrachloroethane	ug/L	13		012710	1	EPA8260
123-Trichloropropane	ug/L	17		012710	1	EPA8260
n-Propylbenzene	ug/L	15		012710	1	EPA8260
2-Chlorotoluene	ug/L	16		012710	1	EPA8260
135-Trimethylbenzene	ug/L	16		012710	1	EPA8260
4-Chlorotoluene	ug/L	16		012710	1	EPA8260
tert-Butylbenzene	ug/L	16		012710	1	EPA8260
124-Trimethylbenzene	ug/L	16		012710	1	EPA8260
sec-Butylbenzene	ug/L	15		012710	1	EPA8260
p-Isopropyltoluene	ug/L	15		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 1869 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.02 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1200

MATRIX:Water SAMPLE: MW-1 (MS)

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	16		012710	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	16		012710	1	EPA8260
n-Butylbenzene	ug/L	15		012710	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	17		012710	1	EPA8260
Dibromochloropropane	ug/L	14		012710	1	EPA8260
124-Trichlorobenzene (v)	ug/L	17		012710	1	EPA8260
Hexachlorobutadiene	ug/L	12		012710	1	EPA8260
Naphthalene(v)	ug/L	16		012710	1	EPA8260
123-Trichlorobenzene	ug/L	17		012710	1	EPA8260
ter.ButylMethylEther	ug/L	15		012710	1	EPA8260
p-Ethyltoluene	ug/L	12		012710	1	EPA8260
Freon 113	ug/L	11		012710	1	EPA8260
1245 Tetramethylbenz	ug/L	12		012710	1	EPA8260
Acetone	ug/L	86		012710	10	EPA8260
Methyl Ethyl Ketone	ug/L	76		012710	10	EPA8260
Methylisobutylketone	ug/L	71		012710	10	EPA8260
Chlorodifluoromethane	ug/L	14		012710	1	EPA8260
p Diethylbenzene	ug/L	12		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 1870 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.03 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1200
MATRIX:Water SAMPLE: MW-1 (MSD)

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	14		012710	1	EPA8260
Chloromethane	ug/L	16		012710	1	EPA8260
Vinyl Chloride	ug/L	14		012710	1	EPA8260
Bromomethane	ug/L	15		012710	1	EPA8260
Chloroethane	ug/L	14		012710	1	EPA8260
Trichlorofluoromethane	ug/L	12		012710	1	EPA8260
1,1 Dichloroethene	ug/L	16		012710	1	EPA8260
Methylene Chloride	ug/L	17		012710	1	EPA8260
t-1,2-Dichloroethene	ug/L	15		012710	1	EPA8260
1,1 Dichloroethane	ug/L	17		012710	1	EPA8260
2,2-Dichloropropane	ug/L	15		012710	1	EPA8260
c-1,2-Dichloroethene	ug/L	18		012710	1	EPA8260
Bromochloromethane	ug/L	17		012710	1	EPA8260
Chloroform	ug/L	17		012710	1	EPA8260
111 Trichloroethane	ug/L	15		012710	1	EPA8260
Carbon Tetrachloride	ug/L	14		012710	1	EPA8260
1,1-Dichloropropene	ug/L	15		012710	1	EPA8260
Benzene	ug/L	17		012710	1	EPA8260
1,2 Dichloroethane	ug/L	18		012710	1	EPA8260
Trichloroethene	ug/L	16		012710	1	EPA8260
1,2 Dichloropropane	ug/L	17		012710	1	EPA8260
Dibromomethane	ug/L	18		012710	1	EPA8260
Bromodichloromethane	ug/L	17		012710	1	EPA8260
c-1,3Dichloropropene	ug/L	13		012710	1	EPA8260
Toluene	ug/L	16		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 1871 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.03 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1200
MATRIX:Water SAMPLE: MW-1 (MSD)

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	13		012710	1	EPA8260
112 Trichloroethane	ug/L	17		012710	1	EPA8260
Tetrachloroethene	ug/L	16		012710	1	EPA8260
1,3-Dichloropropane	ug/L	18		012710	1	EPA8260
Chlorodibromomethane	ug/L	15		012710	1	EPA8260
1,2 Dibromoethane	ug/L	17		012710	1	EPA8260
Chlorobenzene	ug/L	17		012710	1	EPA8260
Ethyl Benzene	ug/L	16		012710	1	EPA8260
1112Tetrachloroethane	ug/L	16		012710	1	EPA8260
m + p Xylene	ug/L	32		012710	2	EPA8260
o Xylene	ug/L	16		012710	1	EPA8260
Styrene	ug/L	17		012710	1	EPA8260
Bromoform	ug/L	14		012710	1	EPA8260
Isopropylbenzene	ug/L	16		012710	1	EPA8260
Bromobenzene	ug/L	17		012710	1	EPA8260
1122Tetrachloroethane	ug/L	13		012710	1	EPA8260
123-Trichloropropane	ug/L	17		012710	1	EPA8260
n-Propylbenzene	ug/L	15		012710	1	EPA8260
2-Chlorotoluene	ug/L	17		012710	1	EPA8260
135-Trimethylbenzene	ug/L	16		012710	1	EPA8260
4-Chlorotoluene	ug/L	15		012710	1	EPA8260
tert-Butylbenzene	ug/L	16		012710	1	EPA8260
124-Trimethylbenzene	ug/L	16		012710	1	EPA8260
sec-Butylbenzene	ug/L	16		012710	1	EPA8260
p-Isopropyltoluene	ug/L	16		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 1872 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.03 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1200

MATRIX:Water SAMPLE: MW-1 (MSD)

ANALYTICAL PARAMETERS	UNITS	RESULT	DATE TIME FLAG OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	16	012710	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	16	012710	1	EPA8260
n-Butylbenzene	ug/L	16	012710	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	18	012710	1	EPA8260
Dibromochloropropane	ug/L	15	012710	1	EPA8260
124-Trichlorobenzene (v)	ug/L	17	012710	1	EPA8260
Hexachlorobutadiene	ug/L	14	012710	1	EPA8260
Naphthalene(v)	ug/L	17	012710	1	EPA8260
123-Trichlorobenzene	ug/L	18	012710	1	EPA8260
ter.ButylMethylEther	ug/L	16	012710	1	EPA8260
p-Ethyltoluene	ug/L	12	012710	1	EPA8260
Freon 113	ug/L	11	012710	1	EPA8260
1245 Tetramethylbenz	ug/L	12	012710	1	EPA8260
Acetone	ug/L	83	012710	10	EPA8260
Methyl Ethyl Ketone	ug/L	79	012710	10	EPA8260
Methylisobutylketone	ug/L	70	012710	10	EPA8260
Chlorodifluoromethane	ug/L	14	012710	1	EPA8260
p Diethylbenzene	ug/L	12	012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 1873 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.04 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1235

MATRIX:Water SAMPLE: MW-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
Chloromethane	ug/L	< 1		012710	1	EPA8260
Vinyl Chloride	ug/L	< 1		012710	1	EPA8260
Bromomethane	ug/L	< 1		012710	1	EPA8260
Chloroethane	ug/L	< 1		012710	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		012710	1	EPA8260
Methylene Chloride	ug/L	< 1		012710	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		012710	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		012710	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
Bromochloromethane	ug/L	< 1		012710	1	EPA8260
Chloroform	ug/L	< 1		012710	1	EPA8260
111 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		012710	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		012710	1	EPA8260
Benzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		012710	1	EPA8260
Trichloroethene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		012710	1	EPA8260
Dibromomethane	ug/L	< 1		012710	1	EPA8260
Bromodichloromethane	ug/L	< 1		012710	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
Toluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1874 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.04 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1235

MATRIX:Water SAMPLE: MW-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
112 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Tetrachloroethene	ug/L	2		012710	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		012710	1	EPA8260
Chlorodibromomethane	ug/L	< 1		012710	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		012710	1	EPA8260
Chlorobenzene	ug/L	< 1		012710	1	EPA8260
Ethyl Benzene	ug/L	< 1		012710	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		012710	1	EPA8260
m + p Xylene	ug/L	< 2		012710	2	EPA8260
o Xylene	ug/L	< 1		012710	1	EPA8260
Styrene	ug/L	< 1		012710	1	EPA8260
Bromoform	ug/L	< 1		012710	1	EPA8260
Isopropylbenzene	ug/L	< 1		012710	1	EPA8260
Bromobenzene	ug/L	< 1		012710	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		012710	1	EPA8260
123-Trichloropropane	ug/L	< 1		012710	1	EPA8260
n-Propylbenzene	ug/L	< 1		012710	1	EPA8260
2-Chlorotoluene	ug/L	< 1		012710	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		012710	1	EPA8260
4-Chlorotoluene	ug/L	< 1		012710	1.	EPA8260
tert-Butylbenzene	ug/L	< 1		012710	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		012710	1	EPA8260
sec-Butylbenzene	ug/L	< 1		012710	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1875 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
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Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.04 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: G.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1235

MATRIX:Water SAMPLE: MW-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
n-Butylbenzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
Dibromochloropropane	ug/L	< 1		012710	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		012710	1	EPA8260
Naphthalene(v)	ug/L	< 1		012710	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		012710	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		012710	1	EPA8260
p-Ethyltoluene	ug/L	< 1		012710	1	EPA8260
Freon 113	ug/L	< 1		012710	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		012710	1	EPA8260
Acetone	ug/L	< 10		012710	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		012710	10	EPA8260
Methylisobutylketone	ug/L	< 10		012710	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
p Diethylbenzene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1876 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
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LAB NO.100324.05 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1235

MATRIX:Water SAMPLE: MW-2D

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
Chloromethane	ug/L	< 1		012710	1	EPA8260
Vinyl Chloride	ug/L	< 1		012710	1	EPA8260
Bromomethane	ug/L	< 1		012710	1	EPA8260
Chloroethane	ug/L	< 1		012710	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		012710	1	EPA8260
Methylene Chloride	ug/L	< 1		012710	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		012710	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		012710	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
Bromochloromethane	ug/L	< 1		012710	1	EPA8260
Chloroform	ug/L	< 1		012710	1	EPA8260
111 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		012710	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		012710	1	EPA8260
Benzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		012710	1	EPA8260
Trichloroethene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		012710	1	EPA8260
Dibromomethane	ug/L	< 1		012710	1	EPA8260
Bromodichloromethane	ug/L	< 1		012710	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
Toluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1877 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.05 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1235

MATRIX:Water SAMPLE: MW-2D

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
112 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Tetrachloroethene	ug/L	5		012710	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		012710	1	EPA8260
Chlorodibromomethane	ug/L	< 1		012710	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		012710	1	EPA8260
Chlorobenzene	ug/L	< 1		012710	1	EPA8260
Ethyl Benzene	ug/L	< 1		012710	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		012710	1	EPA8260
m + p Xylene	ug/L	< 2		012710	2	EPA8260
o Xylene	ug/L	< 1		012710	1	EPA8260
Styrene	ug/L	< 1		012710	1	EPA8260
Bromoform	ug/L	< 1		012710	1	EPA8260
Isopropylbenzene	ug/L	< 1		012710	1	EPA8260
Bromobenzene	ug/L	< 1		012710	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		012710	1	EPA8260
123-Trichloropropane	ug/L	< 1		012710	1	EPA8260
n-Propylbenzene	ug/L	< 1		012710	1	EPA8260
2-Chlorotoluene	ug/L	< 1		012710	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		012710	1	EPA8260
4-Chlorotoluene	ug/L	< 1		012710	1	EPA8260
tert-Butylbenzene	ug/L	< 1		012710	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		012710	1	EPA8260
sec-Butylbenzene	ug/L	< 1		012710	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1878 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
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Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.05 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1235

MATRIX:Water SAMPLE: MW-2D

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
n-Butylbenzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
Dibromochloropropane	ug/L	< 1		012710	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		012710	1	EPA8260
Naphthalene(v)	ug/L	< 1		012710	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		012710	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		012710	1	EPA8260
p-Ethyltoluene	ug/L	< 1		012710	1	EPA8260
Freon 113	ug/L	< 1		012710	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		012710	1	EPA8260
Acetone	ug/L	< 10		012710	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		012710	10	EPA8260
Methylisobutylketone	ug/L	< 10		012710	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
p Diethylbenzene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1879 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.06 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: G.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1042

MATRIX:Water SAMPLE: MW-3

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
Chloromethane	ug/L	< 1		012710	1	EPA8260
Vinyl Chloride	ug/L	< 1		012710	1	EPA8260
Bromomethane	ug/L	< 1		012710	1	EPA8260
Chloroethane	ug/L	< 1		012710	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		012710	1	EPA8260
Methylene Chloride	ug/L	< 1		012710	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		012710	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		012710	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
Bromochloromethane	ug/L	< 1		012710	1	EPA8260
Chloroform	ug/L	< 1		012710	1	EPA8260
111 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		012710	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		012710	1	EPA8260
Benzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		012710	1	EPA8260
Trichloroethene	ug/L	2		012710	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		012710	1	EPA8260
Dibromomethane	ug/L	< 1		012710	1	EPA8260
Bromodichloromethane	ug/L	< 1		012710	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
Toluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1880 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
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LAB NO.100324.06 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1042

MATRIX:Water SAMPLE: MW-3

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
112 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Tetrachloroethene	ug/L	5		012710	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		012710	1	EPA8260
Chlorodibromomethane	ug/L	< 1		012710	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		012710	1	EPA8260
Chlorobenzene	ug/L	< 1		012710	1	EPA8260
Ethyl Benzene	ug/L	< 1		012710	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		012710	1	EPA8260
m + p Xylene	ug/L	< 2		012710	2	EPA8260
o Xylene	ug/L	< 1		012710	1	EPA8260
Styrene	ug/L	< 1		012710	1	EPA8260
Bromoform	ug/L	< 1		012710	1	EPA8260
Isopropylbenzene	ug/L	< 1		012710	1	EPA8260
Bromobenzene	ug/L	< 1		012710	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		012710	1	EPA8260
123-Trichloropropane	ug/L	< 1		012710	1	EPA8260
n-Propylbenzene	ug/L	< 1		012710	1	EPA8260
2-Chlorotoluene	ug/L	< 1		012710	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		012710	1	EPA8260
4-Chlorotoluene	ug/L	< 1		012710	1	EPA8260
tert-Butylbenzene	ug/L	< 1		012710	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		012710	1	EPA8260
sec-Butylbenzene	ug/L	< 1		012710	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1881 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
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LAB NO.100324.06 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1042

MATRIX:Water SAMPLE: MW-3

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
n-Butylbenzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
Dibromochloropropane	ug/L	< 1		012710	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		012710	1	EPA8260
Naphthalene(v)	ug/L	< 1		012710	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		012710	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		012710	1	EPA8260
p-Ethyltoluene	ug/L	< 1		012710	1	EPA8260
Freon 113	ug/L	< 1		012710	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		012710	1	EPA8260
Acetone	ug/L	< 10		012710	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		012710	10	EPA8260
Methylisobutylketone	ug/L	< 10		012710	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
p Diethylbenzene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1882 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.07 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1130

MATRIX:Water SAMPLE: FB-1/22

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
Chloromethane	ug/L	< 1		012710	1	EPA8260
Vinyl Chloride	ug/L	< 1		012710	1	EPA8260
Bromomethane	ug/L	< 1		012710	1	EPA8260
Chloroethane	ug/L	< 1		012710	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		012710	1	EPA8260
Methylene Chloride	ug/L	< 1		012710	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		012710	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		012710	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
Bromochloromethane	ug/L	< 1		012710	1	EPA8260
Chloroform	ug/L	< 1		012710	1	EPA8260
111 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		012710	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		012710	1	EPA8260
Benzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		012710	1	EPA8260
Trichloroethene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		012710	1	EPA8260
Dibromomethane	ug/L	< 1		012710	1	EPA8260
Bromodichloromethane	ug/L	< 1		012710	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
Toluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1883 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.100324.07 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10
TIME COL'D:1130
MATRIX:Water SAMPLE: FB-1/22

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
112 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Tetrachloroethene	ug/L	< 1		012710	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		012710	1	EPA8260
Chlorodibromomethane	ug/L	< 1		012710	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		012710	1	EPA8260
Chlorobenzene	ug/L	< 1		012710	1	EPA8260
Ethyl Benzene	ug/L	< 1		012710	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		012710	1	EPA8260
m + p Xylene	ug/L	< 2		012710	2	EPA8260
o Xylene	ug/L	< 1		012710	1	EPA8260
Styrene	ug/L	< 1		012710	1	EPA8260
Bromoform	ug/L	< 1		012710	1	EPA8260
Isopropylbenzene	ug/L	< 1		012710	1	EPA8260
Bromobenzene	ug/L	< 1		012710	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		012710	1	EPA8260
123-Trichloropropane	ug/L	< 1		012710	1	EPA8260
n-Propylbenzene	ug/L	< 1		012710	1	EPA8260
2-Chlorotoluene	ug/L	< 1		012710	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		012710	1	EPA8260
4-Chlorotoluene	ug/L	< 1		012710	1	EPA8260
tert-Butylbenzene	ug/L	< 1		012710	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		012710	1	EPA8260
sec-Butylbenzene	ug/L	< 1		012710	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1884 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
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TIME COL'D:1130
MATRIX:Water SAMPLE: FB-1/22

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
n-Butylbenzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
Dibromochloropropane	ug/L	< 1		012710	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		012710	1	EPA8260
Naphthalene(v)	ug/L	< 1		012710	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		012710	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		012710	1	EPA8260
p-Ethyltoluene	ug/L	< 1		012710	1	EPA8260
Freon 113	ug/L	< 1		012710	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		012710	1	EPA8260
Acetone	ug/L	< 10		012710	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		012710	10	EPA8260
Methylisobutylketone	ug/L	< 10		012710	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
p Diethylbenzene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 1885 NYSDOH ID # 10320

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LAB NO.100324.08 02/03/10

Padilla Construction
299 Main Street
Westbury, NY 11590
ATTN: Alex Holuka PO#:

SOURCE OF SAMPLE: 299 Main Street, #GWMP-Rnd 2
SOURCE OF SAMPLE:
COLLECTED BY: C.A.Rich DATE COL'D:01/22/10 RECEIVED:01/22/10

MATRIX:Water SAMPLE: TB-1/22

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
Chloromethane	ug/L	< 1		012710	1	EPA8260
Vinyl Chloride	ug/L	< 1		012710	1	EPA8260
Bromomethane	ug/L	< 1		012710	1	EPA8260
Chloroethane	ug/L	< 1		012710	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		012710	1	EPA8260
Methylene Chloride	ug/L	< 1		012710	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		012710	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		012710	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		012710	1	EPA8260
Bromochloromethane	ug/L	< 1		012710	1	EPA8260
Chloroform	ug/L	< 1		012710	1	EPA8260
111 Trichloroethane	ug/L	< 1		012710	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		012710	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		012710	1	EPA8260
Benzene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		012710	1	EPA8260
Trichloroethene	ug/L	< 1		012710	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		012710	1	EPA8260
Dibromomethane	ug/L	< 1		012710	1	EPA8260
Bromodichloromethane	ug/L	< 1		012710	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		012710	1	EPA8260
Toluene	ug/L	< 1		012710	1	EPA8260

cc:C.A.Rich, Steve S.

LRL=Laboratory Reporting Limit

REMARKS:

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rn = 1886 NYSDOH ID # 10320

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MATRIX:Water SAMPLE: TB-1/22

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
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1,2 Dibromoethane	ug/L	< 1		012710	1	EPA8260
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cc:C.A.Rich, Steve S.

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124-Trichlorobenzene (v)	ug/L	< 1		012710	1	EPA8260
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Naphthalene(v)	ug/L	< 1		012710	1	EPA8260
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Chlorodifluoromethane	ug/L	< 1		012710	1	EPA8260
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cc:C.A.Rich, Steve S.

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DIRECTOR

rn = 1888 NYSDOH ID # 10320

ECO TEST LABORATORIES, INC. • ENVIRONMENTAL TESTING
377 Sheffield Avenue, North Babylon, New York 11703
(631) 422-5777 • FAX (631) 422-5770 • Email: ecotestlab@aol.com

CHAIN OF CUSTODY RECORD

100324 14

2632 RDC-02033

Client: PADILLA Construction Co.
Address: 299 Main Street
Westbury NY
Phone: 516 338 6848 FAX:
Person receiving report: Alex Hoduka
Sampled by: CA Rich Consultants Inc
Source: 299 Main Street
Job No.: GWMP-Rnd 2

MATRIX (Soil, Water, etc.)	COLLECTED DATE	COLLECTED TIME	SAMPLE IDENTIFICATION	TOTAL NUMBER OF CONTAINERS	40 ml VOC									QC Pkg Type (If Required)	Accelerated Turnaround Date Required	REMARKS-TESTS REQUIRED
Water	1/22	1200	MW-1	2	2									B		VOC 8260
Water	1/22	1200	MW-1 (MS)	2	2									B		NYSDEC Category B
Water	1/22	1200	MW-1 (MSD)	2	2									B		
Water	1/22	1235	MW-2	2	2									B		
Water	1/22	1235	MW-2D	2	2									B		
Water	1/22	1042	MW-3	2	2									B		
Water	1/22	1130	FB-1/22	2	2									B		CC: Report to:
Water	1/22	—	TB-1/22	2	2									B		Steve Sobsty
																CA Rich Consultants
																17 Dupont Street
																Plainview NY 11803
																Temp = 3.8°C

Relinquished by: (Signature) / Representing:	DATE/TIME	SEAL INTACT?	Received by: (Signature) / Representing:	Relinquished by: (Signature) / Representing:	DATE/TIME	SEAL INTACT?	Received by: (Signature) / Representing:
CALen	1/22/10 1450	YES NO NA				YES NO NA	
Relinquished by: (Signature) / Representing:	DATE/TIME	SEAL INTACT?	Received by: (Signature) / Representing:	Relinquished by: (Signature) / Representing:	DATE/TIME	SEAL INTACT?	Received by: (Signature) / Representing:
		YES NO NA				YES NO NA	

RICH
ENVIRONMENTAL SPECIALISTS

August 24, 2010

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Groundwater Monitoring Results**
299 Main Street, Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the approved "Groundwater Monitoring Work Plan" and the February 2008 "Record of Decision" (ROD), please find attached a copy of the results for the groundwater samples collected in connection with the 299 Main Street Site in Westbury, New York. Also attached is a Site Plan illustrating the location of each groundwater monitoring well (Figure 1). Based on historical documentation, the groundwater flow direction beneath the Site is south-southwest.

Groundwater Findings

On July 23, 2010, CA RICH collected a full round of groundwater samples from the three existing groundwater monitoring wells. Groundwater samples were analyzed for volatile organic compounds ("VOCs") using USEPA Methodology 8260 with NYASP Category B deliverables. The results are summarized on Table 1 and a copy of the original laboratory report is attached.

As the data indicates, the only VOCs detected in the groundwater are tetrachloroethene and trichloroethene in monitoring wells MW-2 and MW-3 at concentrations below or very close to the NYSDEC drinking water standard currently set at 5.0 ug/L. Tetrachloroethene was detected at a concentration of 4.0 ug/L and 6.0 ug/L at MW-2 and MW-3, respectively. Trichloroethene was detected at 1.0 ug/L at MW-3.

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

Summary & Conclusions

Based upon the results of this third confirmatory round of groundwater sampling, groundwater beneath the Site contains low level detections of only tetrachloroethene and trichloroethene. The reported concentrations are below or very close to the current NYSDEC drinking water standard for tetrachloroethene. It is noted that during the course of soil remediation at the Site (e.g. source removal from two leaching pools identified as PS-1 and OF-1; and oil tank removals) soil contaminants were predominantly petroleum-related and included benzene, toluene, ethyl benzene, xylenes ("BTEX") and 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene. The results of this confirmatory third round of groundwater sampling did not find any of these petroleum-related compounds at detectable concentrations in the groundwater samples collected. In addition, the operation of the soil vapor extraction ("SVE") system has successfully remediated levels of VOCs to acceptable concentrations at two of the three SVE points, further reducing the potential for impact to groundwater.

Based upon the data, the groundwater beneath the Site does not appear to be impacted to the extent that further investigation or groundwater remediation is warranted. The reported detections of tetrachloroethene may be attributable to off-Site operations that have been documented to have impacted groundwater quality area wide.

Recommendation

Based upon these recent results and since there is an active SVE system currently remediating on-Site soil, we recommend a fourth and final round of monitoring the groundwater to occur in January 2011. Should the groundwater sample results remain consistent as they have in the past, with only very low detections of tetrachloroethene and trichloroethene, we would recommend terminating the groundwater monitoring program for this Site.

Upon your review of the enclosed groundwater data, we would be glad to discuss any questions or comments you may have prior to going forward with the final round of groundwater monitoring in January.

Sincerely,

CA RICH CONSULTANTS, INC

Steve Sobstyl
Sr. Project Manager

SS/sm
Attachments

cc: see attached distribution
NT Server\Files\Users\Proj\299 MAIN ST\PCS\Groundwater Monitoring\3Round10.

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

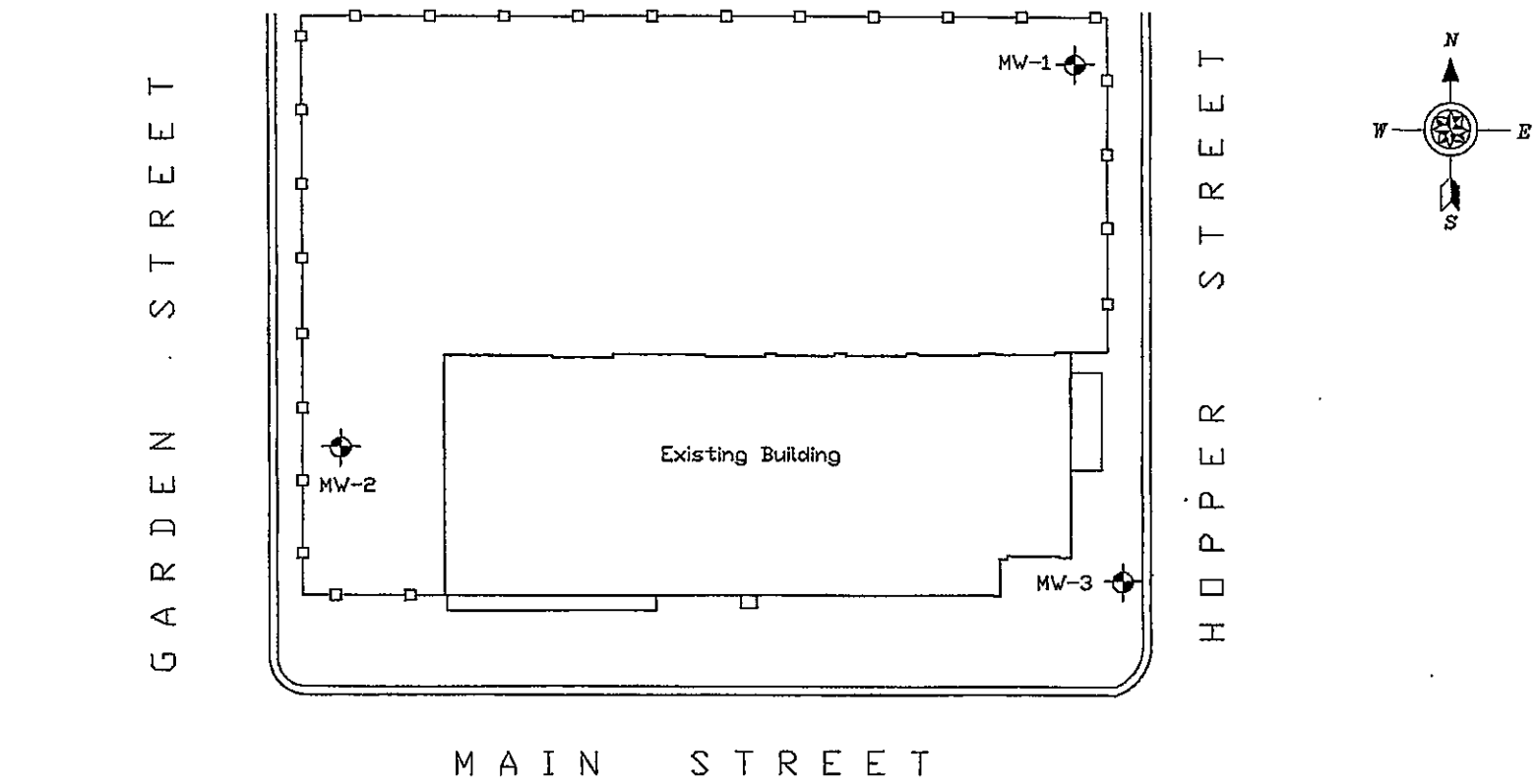
Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq. (via email only)
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq. (via email only)
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

FIGURE



Legend

Fence

Existing Monitoring Well

0 20 40 60 80 100

Scale in Feet

CA RICH CONSULTANTS, INC.		
Certified Groundwater and Environmental Specialists 17 Dupont Street, Plainview, New York 11803		
TITLE: Site Plan		DATE: 11/12/08
		SCALE: As Shown
FIGURE: 1	299 MAIN STREET WESTBURY, NEW YORK	DRAWN BY: S.T.M.
DWG NO. 2008-1		APPR. BY: S.T.S.

TABLE

Table 1

Summary of Groundwater Samples

299 Main Street
Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID Matrix Date Sampled	MW-1 Groundwater 7/23/2010	MW-2 Groundwater 7/23/2010	MW-2D Groundwater 7/23/2010 Duplicate MW-2	MW-3 Groundwater 7/23/2010	NYSDEC (1) Drinking Water Standard TOGS
Volatile Organic Compounds (USEPA Method 8260)					
Parameters	µg/L	µg/L	µg/L	µg/L	µg/L
MTBE	ND	ND	ND	ND	10
Benzene	ND	ND	ND	ND	1
Toluene	ND	ND	ND	ND	5
Ethyl Benzene	ND	ND	ND	ND	5
m + p Xylene	ND	ND	ND	ND	5
o Xylene	ND	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	ND	5
n-Propylbenzene	ND	ND	ND	ND	5
1,3,5-Trimethylbenzene	ND	ND	ND	ND	5
1,2,4-Trimethylbenzene	ND	ND	ND	ND	5
p-Isopropyltoluene	ND	ND	ND	ND	5
n-Butylbenzene	ND	ND	ND	ND	5
Naphthalene	ND	ND	ND	ND	10
sec-Butylbenzene	ND	ND	ND	ND	5
tert-Butylbenzene	ND	ND	ND	ND	5
2-Chlorotoluene	ND	ND	ND	ND	5
1,2-Dichlorobenzene	ND	ND	ND	ND	3
1,4-Dichlorobenzene	ND	ND	ND	ND	3
p-Ethyltoluene	ND	ND	ND	ND	NS
1,2,4,5-Tetramethylbenzene	ND	ND	ND	ND	5
Acetone	ND	ND	ND	ND	50
Tetrachloroethene	ND	4	4	6	5
Trichloroethene	ND	ND	ND	1	5

Notes:
All concentrations reported in ug/L (parts per billion).
ND - Not Detected above laboratory detection limits.
NS - No Standard.
(1) NYSDEC Division of Water TOG Series (1.1.1) Ambient Water Quality Standards and Guidance Values; June 1998.

LABORATORY REPORT

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
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Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.01 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1148

MATRIX:Water SAMPLE: MW-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
Chloromethane	ug/L	< 1		072610	1	EPA8260
Vinyl Chloride	ug/L	< 1		072610	1	EPA8260
Bromomethane	ug/L	< 1		072610	1	EPA8260
Chloroethane	ug/L	< 1		072610	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		072610	1	EPA8260
Methylene Chloride	ug/L	< 1		072610	1	EPA8260
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1,1 Dichloroethane	ug/L	< 1		072610	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		072610	1	EPA8260
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Bromochloromethane	ug/L	< 1		072610	1	EPA8260
Chloroform	ug/L	< 1		072610	1	EPA8260
111 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		072610	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		072610	1	EPA8260
Benzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		072610	1	EPA8260
Trichloroethene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		072610	1	EPA8260
Dibromomethane	ug/L	< 1		072610	1	EPA8260
Bromodichloromethane	ug/L	< 1		072610	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
Toluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19065 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.01 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1148

MATRIX:Water SAMPLE: MW-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
112 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Tetrachloroethene	ug/L	< 1		072610	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		072610	1	EPA8260
Chlorodibromomethane	ug/L	< 1		072610	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		072610	1	EPA8260
Chlorobenzene	ug/L	< 1		072610	1	EPA8260
Ethyl Benzene	ug/L	< 1		072610	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
m + p Xylene	ug/L	< 2		072610	2	EPA8260
o Xylene	ug/L	< 1		072610	1	EPA8260
Styrene	ug/L	< 1		072610	1	EPA8260
Bromoform	ug/L	< 1		072610	1	EPA8260
Isopropylbenzene	ug/L	< 1		072610	1	EPA8260
Bromobenzene	ug/L	< 1		072610	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
123-Trichloropropane	ug/L	< 1		072610	1	EPA8260
n-Propylbenzene	ug/L	< 1		072610	1	EPA8260
2-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
4-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
tert-Butylbenzene	ug/L	< 1		072610	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
sec-Butylbenzene	ug/L	< 1		072610	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19066 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.01 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1148

MATRIX:Water SAMPLE: MW-1

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
n-Butylbenzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Dibromochloropropane	ug/L	< 1		072610	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		072610	1	EPA8260
Naphthalene(v)	ug/L	< 1		072610	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		072610	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		072610	1	EPA8260
p-Ethyltoluene	ug/L	< 1		072610	1	EPA8260
Freon 113	ug/L	< 1		072610	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		072610	1	EPA8260
Acetone	ug/L	< 10		072610	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		072610	10	EPA8260
Methylisobutylketone	ug/L	< 10		072610	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
p Diethylbenzene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19067 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory

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Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.04 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1230

MATRIX:Water SAMPLE: MW-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
Chloromethane	ug/L	< 1		072610	1	EPA8260
Vinyl Chloride	ug/L	< 1		072610	1	EPA8260
Bromomethane	ug/L	< 1		072610	1	EPA8260
Chloroethane	ug/L	< 1		072610	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		072610	1	EPA8260
Methylene Chloride	ug/L	< 1		072610	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		072610	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		072610	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		072610	1	EPA8260
Bromochloromethane	ug/L	< 1		072610	1	EPA8260
Chloroform	ug/L	< 1		072610	1	EPA8260
111 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		072610	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		072610	1	EPA8260
Benzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		072610	1	EPA8260
Trichloroethene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		072610	1	EPA8260
Dibromomethane	ug/L	< 1		072610	1	EPA8260
Bromodichloromethane	ug/L	< 1		072610	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
Toluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19074 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.04 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1230

MATRIX:Water SAMPLE: MW-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
112 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Tetrachloroethene	ug/L	4		072610	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		072610	1	EPA8260
Chlorodibromomethane	ug/L	< 1		072610	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		072610	1	EPA8260
Chlorobenzene	ug/L	< 1		072610	1	EPA8260
Ethyl Benzene	ug/L	< 1		072610	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
m + p Xylene	ug/L	< 2		072610	2	EPA8260
o Xylene	ug/L	< 1		072610	1	EPA8260
Styrene	ug/L	< 1		072610	1	EPA8260
Bromoform	ug/L	< 1		072610	1	EPA8260
Isopropylbenzene	ug/L	< 1		072610	1	EPA8260
Bromobenzene	ug/L	< 1		072610	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
123-Trichloropropane	ug/L	< 1		072610	1	EPA8260
n-Propylbenzene	ug/L	< 1		072610	1	EPA8260
2-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
4-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
tert-Butylbenzene	ug/L	< 1		072610	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
sec-Butylbenzene	ug/L	< 1		072610	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19075 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.04 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1230

MATRIX:Water SAMPLE: MW-2

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
n-Butylbenzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Dibromochloropropane	ug/L	< 1		072610	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		072610	1	EPA8260
Naphthalene(v)	ug/L	< 1		072610	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		072610	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		072610	1	EPA8260
p-Ethyltoluene	ug/L	< 1		072610	1	EPA8260
Freon 113	ug/L	< 1		072610	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		072610	1	EPA8260
Acetone	ug/L	< 10		072610	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		072610	10	EPA8260
Methylisobutylketone	ug/L	< 10		072610	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
p Diethylbenzene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19076 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.05 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1230
MATRIX:Water SAMPLE: MW-2D

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
Chloromethane	ug/L	< 1		072610	1	EPA8260
Vinyl Chloride	ug/L	< 1		072610	1	EPA8260
Bromomethane	ug/L	< 1		072610	1	EPA8260
Chloroethane	ug/L	< 1		072610	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		072610	1	EPA8260
Methylene Chloride	ug/L	< 1		072610	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		072610	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		072610	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		072610	1	EPA8260
Bromochloromethane	ug/L	< 1		072610	1	EPA8260
Chloroform	ug/L	< 1		072610	1	EPA8260
111 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		072610	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		072610	1	EPA8260
Benzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		072610	1	EPA8260
Trichloroethene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		072610	1	EPA8260
Dibromomethane	ug/L	< 1		072610	1	EPA8260
Bromodichloromethane	ug/L	< 1		072610	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
Toluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19077 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.05 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1230

MATRIX:Water SAMPLE: MW-2D

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
112 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Tetrachloroethene	ug/L	4		072610	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		072610	1	EPA8260
Chlorodibromomethane	ug/L	< 1		072610	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		072610	1	EPA8260
Chlorobenzene	ug/L	< 1		072610	1	EPA8260
Ethyl Benzene	ug/L	< 1		072610	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
m + p Xylene	ug/L	< 2		072610	2	EPA8260
o Xylene	ug/L	< 1		072610	1	EPA8260
Styrene	ug/L	< 1		072610	1	EPA8260
Bromoform	ug/L	< 1		072610	1	EPA8260
Isopropylbenzene	ug/L	< 1		072610	1	EPA8260
Bromobenzene	ug/L	< 1		072610	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
123-Trichloropropane	ug/L	< 1		072610	1	EPA8260
n-Propylbenzene	ug/L	< 1		072610	1	EPA8260
2-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
4-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
tert-Butylbenzene	ug/L	< 1		072610	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
sec-Butylbenzene	ug/L	< 1		072610	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19078 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.05 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1230
MATRIX:Water SAMPLE: MW-2D

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
n-Butylbenzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Dibromochloropropane	ug/L	< 1		072610	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		072610	1	EPA8260
Naphthalene(v)	ug/L	< 1		072610	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		072610	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		072610	1	EPA8260
p-Ethyltoluene	ug/L	< 1		072610	1	EPA8260
Freon 113	ug/L	< 1		072610	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		072610	1	EPA8260
Acetone	ug/L	< 10		072610	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		072610	10	EPA8260
Methylisobutylketone	ug/L	< 10		072610	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
p Diethylbenzene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19079 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.06 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1101

MATRIX:Water SAMPLE: MW-3

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
Chloromethane	ug/L	< 1		072610	1	EPA8260
Vinyl Chloride	ug/L	< 1		072610	1	EPA8260
Bromomethane	ug/L	< 1		072610	1	EPA8260
Chloroethane	ug/L	< 1		072610	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		072610	1	EPA8260
Methylene Chloride	ug/L	< 1		072610	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		072610	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		072610	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		072610	1	EPA8260
Bromochloromethane	ug/L	< 1		072610	1	EPA8260
Chloroform	ug/L	< 1		072610	1	EPA8260
111 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		072610	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		072610	1	EPA8260
Benzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		072610	1	EPA8260
Trichloroethene	ug/L	1		072610	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		072610	1	EPA8260
Dibromomethane	ug/L	< 1		072610	1	EPA8260
Bromodichloromethane	ug/L	< 1		072610	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
Toluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19080 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.06 07/30/10

G.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1101

MATRIX:Water SAMPLE: MW-3

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
112 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Tetrachloroethene	ug/L	6		072610	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		072610	1	EPA8260
Chlorodibromomethane	ug/L	< 1		072610	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		072610	1	EPA8260
Chlorobenzene	ug/L	< 1		072610	1	EPA8260
Ethyl Benzene	ug/L	< 1		072610	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
m + p Xylene	ug/L	< 2		072610	2	EPA8260
o Xylene	ug/L	< 1		072610	1	EPA8260
Styrene	ug/L	< 1		072610	1	EPA8260
Bromoform	ug/L	< 1		072610	1	EPA8260
Isopropylbenzene	ug/L	< 1		072610	1	EPA8260
Bromobenzene	ug/L	< 1		072610	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
123-Trichloropropane	ug/L	< 1		072610	1	EPA8260
n-Propylbenzene	ug/L	< 1		072610	1	EPA8260
2-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
4-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
tert-Butylbenzene	ug/L	< 1		072610	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
sec-Butylbenzene	ug/L	< 1		072610	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19081 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.06 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1101

MATRIX:Water SAMPLE: MW-3

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
n-Butylbenzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Dibromochloropropane	ug/L	< 1		072610	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		072610	1	EPA8260
Naphthalene(v)	ug/L	< 1		072610	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		072610	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		072610	1	EPA8260
p-Ethyltoluene	ug/L	< 1		072610	1	EPA8260
Freon 113	ug/L	< 1		072610	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		072610	1	EPA8260
Acetone	ug/L	< 10		072610	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		072610	10	EPA8260
Methylisobutylketone	ug/L	< 10		072610	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
p Diethylbenzene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19082 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.07 07/30/10

G.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1300
MATRIX:Water SAMPLE: Field Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
Chloromethane	ug/L	< 1		072610	1	EPA8260
Vinyl Chloride	ug/L	< 1		072610	1	EPA8260
Bromomethane	ug/L	< 1		072610	1	EPA8260
Chloroethane	ug/L	< 1		072610	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		072610	1	EPA8260
Methylene Chloride	ug/L	< 1		072610	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		072610	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		072610	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		072610	1	EPA8260
Bromochloromethane	ug/L	< 1		072610	1	EPA8260
Chloroform	ug/L	< 1		072610	1	EPA8260
111 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		072610	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		072610	1	EPA8260
Benzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		072610	1	EPA8260
Trichloroethene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		072610	1	EPA8260
Dibromomethane	ug/L	< 1		072610	1	EPA8260
Bromodichloromethane	ug/L	< 1		072610	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
Toluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19083 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.07 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1300
MATRIX:Water SAMPLE: Field Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
112 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Tetrachloroethene	ug/L	< 1		072610	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		072610	1	EPA8260
Chlorodibromomethane	ug/L	< 1		072610	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		072610	1	EPA8260
Chlorobenzene	ug/L	< 1		072610	1	EPA8260
Ethyl Benzene	ug/L	< 1		072610	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
m + p Xylene	ug/L	< 2		072610	2	EPA8260
o Xylene	ug/L	< 1		072610	1	EPA8260
Styrene	ug/L	< 1		072610	1	EPA8260
Bromoform	ug/L	< 1		072610	1	EPA8260
Isopropylbenzene	ug/L	< 1		072610	1	EPA8260
Bromobenzene	ug/L	< 1		072610	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
123-Trichloropropane	ug/L	< 1		072610	1	EPA8260
n-Propylbenzene	ug/L	< 1		072610	1	EPA8260
2-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
4-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
tert-Butylbenzene	ug/L	< 1		072610	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
sec-Butylbenzene	ug/L	< 1		072610	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19084 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.07 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1300
MATRIX:Water SAMPLE: Field Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
n-Butylbenzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Dibromochloropropane	ug/L	< 1		072610	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		072610	1	EPA8260
Naphthalene(v)	ug/L	< 1		072610	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		072610	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		072610	1	EPA8260
p-Ethyltoluene	ug/L	< 1		072610	1	EPA8260
Freon 113	ug/L	< 1		072610	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		072610	1	EPA8260
Acetone	ug/L	< 10		072610	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		072610	10	EPA8260
Methylisobutylketone	ug/L	< 10		072610	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
p Diethylbenzene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19085 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.08 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10

MATRIX:Water SAMPLE: Trip Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
Chloromethane	ug/L	< 1		072610	1	EPA8260
Vinyl Chloride	ug/L	< 1		072610	1	EPA8260
Bromomethane	ug/L	< 1		072610	1	EPA8260
Chloroethane	ug/L	< 1		072610	1	EPA8260
Trichlorofluoromethane	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethene	ug/L	< 1		072610	1	EPA8260
Methylene Chloride	ug/L	< 1		072610	1	EPA8260
t-1,2-Dichloroethene	ug/L	< 1		072610	1	EPA8260
1,1 Dichloroethane	ug/L	< 1		072610	1	EPA8260
2,2-Dichloropropane	ug/L	< 1		072610	1	EPA8260
c-1,2-Dichloroethene	ug/L	< 1		072610	1	EPA8260
Bromochloromethane	ug/L	< 1		072610	1	EPA8260
Chloroform	ug/L	< 1		072610	1	EPA8260
111 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Carbon Tetrachloride	ug/L	< 1		072610	1	EPA8260
1,1-Dichloropropene	ug/L	< 1		072610	1	EPA8260
Benzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloroethane	ug/L	< 1		072610	1	EPA8260
Trichloroethene	ug/L	< 1		072610	1	EPA8260
1,2 Dichloropropane	ug/L	< 1		072610	1	EPA8260
Dibromomethane	ug/L	< 1		072610	1	EPA8260
Bromodichloromethane	ug/L	< 1		072610	1	EPA8260
c-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
Toluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19086 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.08 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10

MATRIX:Water SAMPLE: Trip Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	< 1		072610	1	EPA8260
112 Trichloroethane	ug/L	< 1		072610	1	EPA8260
Tetrachloroethene	ug/L	< 1		072610	1	EPA8260
1,3-Dichloropropane	ug/L	< 1		072610	1	EPA8260
Chlorodibromomethane	ug/L	< 1		072610	1	EPA8260
1,2 Dibromoethane	ug/L	< 1		072610	1	EPA8260
Chlorobenzene	ug/L	< 1		072610	1	EPA8260
Ethyl Benzene	ug/L	< 1		072610	1	EPA8260
1112Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
m + p Xylene	ug/L	< 2		072610	2	EPA8260
o Xylene	ug/L	< 1		072610	1	EPA8260
Styrene	ug/L	< 1		072610	1	EPA8260
Bromoform	ug/L	< 1		072610	1	EPA8260
Isopropylbenzene	ug/L	< 1		072610	1	EPA8260
Bromobenzene	ug/L	< 1		072610	1	EPA8260
1122Tetrachloroethane	ug/L	< 1		072610	1	EPA8260
123-Trichloropropane	ug/L	< 1		072610	1	EPA8260
n-Propylbenzene	ug/L	< 1		072610	1	EPA8260
2-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
135-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
4-Chlorotoluene	ug/L	< 1		072610	1	EPA8260
tert-Butylbenzene	ug/L	< 1		072610	1	EPA8260
124-Trimethylbenzene	ug/L	< 1		072610	1	EPA8260
sec-Butylbenzene	ug/L	< 1		072610	1	EPA8260
p-Isopropyltoluene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19087 NYSDOH ID # 10320

Analytical results relate to the samples as received by the laboratory.

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.08 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10

MATRIX:Water SAMPLE: Trip Blank

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
n-Butylbenzene	ug/L	< 1		072610	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Dibromochloropropane	ug/L	< 1		072610	1	EPA8260
124-Trichlorobenzene (v)	ug/L	< 1		072610	1	EPA8260
Hexachlorobutadiene	ug/L	< 1		072610	1	EPA8260
Naphthalene(v)	ug/L	< 1		072610	1	EPA8260
123-Trichlorobenzene	ug/L	< 1		072610	1	EPA8260
ter.ButylMethylEther	ug/L	< 1		072610	1	EPA8260
p-Ethyltoluene	ug/L	< 1		072610	1	EPA8260
Freon 113	ug/L	< 1		072610	1	EPA8260
1245 Tetramethylbenz	ug/L	< 1		072610	1	EPA8260
Acetone	ug/L	< 10		072610	10	EPA8260
Methyl Ethyl Ketone	ug/L	< 10		072610	10	EPA8260
Methylisobutylketone	ug/L	< 10		072610	10	EPA8260
Chlorodifluoromethane	ug/L	< 1		072610	1	EPA8260
p Diethylbenzene	ug/L	< 1		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS:

DIRECTOR

rn = 19088 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.02 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1148
MATRIX:Water SAMPLE: MW-1 MS

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	17		072610	1	EPA8260
Chloromethane	ug/L	21		072610	1	EPA8260
Vinyl Chloride	ug/L	19		072610	1	EPA8260
Bromomethane	ug/L	20		072610	1	EPA8260
Chloroethane	ug/L	20		072610	1	EPA8260
Trichlorofluoromethane	ug/L	18		072610	1	EPA8260
1,1 Dichloroethene	ug/L	20		072610	1	EPA8260
Methylene Chloride	ug/L	21		072610	1	EPA8260
t-1,2-Dichloroethene	ug/L	21		072610	1	EPA8260
1,1 Dichloroethane	ug/L	22		072610	1	EPA8260
2,2-Dichloropropane	ug/L	18		072610	1	EPA8260
c-1,2-Dichloroethene	ug/L	21		072610	1	EPA8260
Bromochloromethane	ug/L	20		072610	1	EPA8260
Chloroform	ug/L	20		072610	1	EPA8260
111 Trichloroethane	ug/L	19		072610	1	EPA8260
Carbon Tetrachloride	ug/L	20		072610	1	EPA8260
1,1-Dichloropropene	ug/L	21		072610	1	EPA8260
Benzene	ug/L	22		072610	1	EPA8260
1,2 Dichloroethane	ug/L	20		072610	1	EPA8260
Trichloroethene	ug/L	20		072610	1	EPA8260
1,2 Dichloropropane	ug/L	22		072610	1	EPA8260
Dibromomethane	ug/L	21		072610	1	EPA8260
Bromodichloromethane	ug/L	21		072610	1	EPA8260
c-1,3Dichloropropene	ug/L	20		072610	1	EPA8260
Toluene	ug/L	21		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 19068 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.02 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1148
MATRIX:Water SAMPLE: MW-1 MS

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	20		072610	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	20		072610	1	EPA8260
n-Butylbenzene	ug/L	22		072610	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	20		072610	1	EPA8260
Dibromochloropropane	ug/L	20		072610	1	EPA8260
124-Trichlorobenzene (v)	ug/L	19		072610	1	EPA8260
Hexachlorobutadiene	ug/L	19		072610	1	EPA8260
Naphthalene(v)	ug/L	20		072610	1	EPA8260
123-Trichlorobenzene	ug/L	19		072610	1	EPA8260
ter.ButylMethylEther	ug/L	21		072610	1	EPA8260
p-Ethyltoluene	ug/L	20		072610	1	EPA8260
Freon 113	ug/L	20		072610	1	EPA8260
1245 Tetramethylbenz	ug/L	20		072610	1	EPA8260
Acetone	ug/L	100		072610	10	EPA8260
Methyl Ethyl Ketone	ug/L	120		072610	10	EPA8260
Methylisobutylketone	ug/L	110		072610	10	EPA8260
Chlorodifluoromethane	ug/L	21		072610	1	EPA8260
p Diethylbenzene	ug/L	21		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 19070 NYSDOH ID # 10320

Analytical results relating to the samples as received by the laboratory

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.03 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1148
MATRIX:Water SAMPLE: MW-1 MSD

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
Dichlorodifluoromethane	ug/L	15		072610	1	EPA8260
Chloromethane	ug/L	18		072610	1	EPA8260
Vinyl Chloride	ug/L	18		072610	1	EPA8260
Bromomethane	ug/L	21		072610	1	EPA8260
Chloroethane	ug/L	19		072610	1	EPA8260
Trichlorofluoromethane	ug/L	17		072610	1	EPA8260
1,1 Dichloroethene	ug/L	19		072610	1	EPA8260
Methylene Chloride	ug/L	20		072610	1	EPA8260
t-1,2-Dichloroethene	ug/L	20		072610	1	EPA8260
1,1 Dichloroethane	ug/L	21		072610	1	EPA8260
2,2-Dichloropropane	ug/L	17		072610	1	EPA8260
c-1,2-Dichloroethene	ug/L	21		072610	1	EPA8260
Bromochloromethane	ug/L	20		072610	1	EPA8260
Chloroform	ug/L	19		072610	1	EPA8260
111 Trichloroethane	ug/L	18		072610	1	EPA8260
Carbon Tetrachloride	ug/L	18		072610	1	EPA8260
1,1-Dichloropropene	ug/L	20		072610	1	EPA8260
Benzene	ug/L	20		072610	1	EPA8260
1,2 Dichloroethane	ug/L	19		072610	1	EPA8260
Trichloroethene	ug/L	20		072610	1	EPA8260
1,2 Dichloropropane	ug/L	21		072610	1	EPA8260
Dibromomethane	ug/L	20		072610	1	EPA8260
Bromodichloromethane	ug/L	19		072610	1	EPA8260
c-1,3Dichloropropene	ug/L	19		072610	1	EPA8260
Toluene	ug/L	20		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 19071 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.03 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1148
MATRIX:Water SAMPLE: MW-1 MSD

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
t-1,3Dichloropropene	ug/L	20		072610	1	EPA8260
112 Trichloroethane	ug/L	21		072610	1	EPA8260
Tetrachloroethene.	ug/L	18		072610	1	EPA8260
1,3-Dichloropropane	ug/L	20		072610	1	EPA8260
Chlorodibromomethane	ug/L	19		072610	1	EPA8260
1,2 Dibromoethane	ug/L	20		072610	1	EPA8260
Chlorobenzene	ug/L	20		072610	1	EPA8260
Ethyl Benzene	ug/L	20		072610	1	EPA8260
1112Tetrachloroethane	ug/L	20		072610	1	EPA8260
m + p Xylene	ug/L	39		072610	2	EPA8260
o Xylene	ug/L	20		072610	1	EPA8260
Styrene	ug/L	19		072610	1	EPA8260
Bromoform	ug/L	20		072610	1	EPA8260
Isopropylbenzene	ug/L	20		072610	1	EPA8260
Bromobenzene	ug/L	21		072610	1	EPA8260
1122Tetrachloroethane	ug/L	21		072610	1	EPA8260
123-Trichloropropane	ug/L	19		072610	1	EPA8260
n-Propylbenzene	ug/L	20		072610	1	EPA8260
2-Chlorotoluene	ug/L	20		072610	1	EPA8260
135-Trimethylbenzene	ug/L	20		072610	1	EPA8260
4-Chlorotoluene	ug/L	20		072610	1	EPA8260
tert-Butylbenzene	ug/L	19		072610	1	EPA8260
124-Trimethylbenzene	ug/L	21		072610	1	EPA8260
sec-Butylbenzene	ug/L	20		072610	1	EPA8260
p-Isopropyltoluene	ug/L	18		072610	1	EPA8260

cc:

LRL=Laboratory Reporting Limit

REMARKS: RESULTS REPORTED ON THIS PAGE REPRESENT SAMPLE AFTER SPIKING FOR (MATRIX SPIKE OR MATRIX SPIKE DUPLICATE) AND DO NOT REPRESENT ACTUAL CONCENTRATIONS DETECTED IN SAMPLE.

DIRECTOR

rn = 19072 NYSDOH ID # 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING
377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.103315.03 07/30/10

C.A. Rich Consultants, Incorporated
17 Dupont Street
Plainview, NY 11803
ATTN: Steve Sobstyl PO#:

SOURCE OF SAMPLE: 299 Main Street, Westbury, #299 Main Street
SOURCE OF SAMPLE:
COLLECTED BY: Client DATE COL'D:07/23/10 RECEIVED:07/23/10
TIME COL'D:1148
MATRIX:Water SAMPLE: MW-1 MSD

ANALYTICAL PARAMETERS	UNITS	RESULT	FLAG	DATE TIME OF ANALYSIS	LRL	ANALYTICAL METHOD
1,3 Dichlorobenzene (v)	ug/L	20		072610	1	EPA8260
1,4 Dichlorobenzene (v)	ug/L	20		072610	1	EPA8260
n-Butylbenzene	ug/L	20		072610	1	EPA8260
1,2 Dichlorobenzene (v)	ug/L	17		072610	1	EPA8260
Dibromochloropropane	ug/L	22		072610	1	EPA8260
124-Trichlorobenzene (v)	ug/L	20		072610	1	EPA8260
Hexachlorobutadiene	ug/L	20		072610	1	EPA8260
Naphthalene(v)	ug/L	20		072610	1	EPA8260
123-Trichlorobenzene	ug/L	21		072610	1	EPA8260
ter.ButylMethylEther	ug/L	21		072610	1	EPA8260
p-Ethyltoluene	ug/L	20		072610	1	EPA8260
Freon 113	ug/L	19		072610	1	EPA8260
1245 Tetramethylbenz	ug/L	20		072610	1	EPA8260
Acetone	ug/L	110		072610	10	EPA8260
Methyl Ethyl Ketone	ug/L	100		072610	10	EPA8260
Methylisobutylketone	ug/L	110		072610	10	EPA8260
Chlorodifluoromethane	ug/L	18		072610	1	EPA8260
p Diethylbenzene	ug/L	19		072610	1	EPA8260

cc:

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DIRECTOR

rn = 19073 NYSDOH ID # 10320

ECO TEST LABORATORIES, INC. • ENVIRONMENTAL TESTING
377 Sheffield Avenue, North Babylon, New York 11703
(631) 422-5777 • FAX (631) 422-5770 • Email: ecotestlab@aol.com

CHAIN OF CUSTODY RECORD

103315

22

Client: CA Rich Consultants, Inc.
Address: 17 Duport Street
Plainview NY 11803
Phone: 516-576-8844 FAX: 516-576-0093
Person receiving report: Steve Sobsty
Sampled by: Jason T. Cooper
Source: 299 Main Street, Westbury
Job No.: 299 Main street

MATRIX (Soil, Water, etc.)	COLLECTED DATE	COLLECTED TIME	SAMPLE IDENTIFICATION	TOTAL NUMBER OF CONTAINERS	40mL HCl vial										QC Pkg Type (If Required)	Accelerated Turnaround Date Required	REMARKS-TESTS REQUIRED
Water	7-23-10	1148	MW-1	3	3												VOC 8260
Water	7-23-10	1148	MW-1 MS	3	3												
Water	7-23-10	1148	MW-1 MSD	3	3												
Water	7-23-10	1230	MW-2	3	3												
Water	7-23-10	1230	MW-2D	3	3												
Water	7-23-10	1101	MW-3	3	3												
Water	7-23-10	1300	Field Blank	2	2												
Water	7-23-10	—	Trip Blank	2	2												

Category B Deliverables

Temp = 0.7°C

Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT?	Received by: (Signature)
Jason T. Cooper Representing: CA Rich	7-23-10 1510	YES NO NA	Representing:	Representing:		YES NO NA	Representing:
Relinquished by: (Signature) Representing:	DATE/TIME	SEAL INTACT? YES NO NA	Received by: (Signature) Representing:	Relinquished by: (Signature) Representing:	DATE/TIME	SEAL INTACT? YES NO NA	Received by: (Signature) Representing:

2632 RDC-02065

RICH
ENVIRONMENTAL SPECIALISTS

August 24, 2010

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Soil Vapor Extraction System**
299 Main Street, Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

Enclosed please find a summary of the results of our ongoing monitoring of the soil vapor extraction ("SVE") system at the above-referenced Site. Table 1 summarizes the quarterly monitoring and the attached graphical analysis (Table 2) summarizes the concentrations of total volatile organic compounds ("VOCs") versus time.

As you are aware, the SVE system has successfully remediated the soil at vapor points SVE-2 and SVE-3. The operation of the SVE system is now focused only on remediating soil at vapor point SVE-1. Since converting the SVE system to focus only on vapor point SVE-1, we have observed a slight increase in concentrations of VOCs indicating that the system is effectively removing residual VOCs from this area of the Site. We will continue operation of the SVE system as is and will re-test the extracted vapor again in October to monitor the concentrations of VOCs being extracted.

Sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

Enclosures
SS/sm
cc: see attached distribution

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

RICH ENVIRONMENTAL SPECIALISTS

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq.
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

TABLE 1

Summary of Extracted Soil Vapor Samples
Soil Vapor Extraction System at 289 Main Street in Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID	SVE-1PT	AS-11/1/05	AS-12/11/05	AS-4/30/07	AS-7/24/07	AS-10/17/07	AS-1/24/08	AS-4/30/08	AS-7/22/08	AS-10/23/08	AS-5/11/09	AS-2/1/10	AS-7/23/10
Matrix	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
Location	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated
Date Sampled	5/2/2006	11/1/2006	12/11/2006	4/30/2007	7/24/2007	10/17/2007	1/24/2008	4/30/2008	7/22/2008	10/23/2008	5/11/2009	2/1/2010	7/23/2010
Comment	Pilot Test	Start-Up	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	5th Quarter	6th Quarter	7th Quarter	8th Quarter	9th Quarter	10th Quarter	11th Quarter
Volatile Organic Compounds (USEPA Method TO-15)													
Parameters	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
1,1 Dichloroethane	< 81	72.918	< 16.204	< 16.2	< 16.20	< 4.05	< 0.81	< 0.81	< 0.81	1255.80	< 0.81	< 0.81	< 0.81
1,1 Dichloroethene	< 79	< 15.88	< 15.88	< 15.9	< 15.88	< 3.97	< 0.79	< 0.79	< 0.79	< 7.94	< 0.40	< 0.40	< 0.40
1,2 Dibromoethane	< 30	< 30.76	< 30.76	< 30.8	< 30.76	< 7.69	< 1.54	< 1.54	< 1.54	< 15.38	< 1.54	< 1.54	< 1.54
1,2 Dichlorobenzene (v)	< 120	842.24	1082.9	< 24.1	1443.80	< 6.02	445.18	324.88	198.53	< 12.03	34.29	< 3.01	< 3.01
1,2 Dichloroethane	< 81	< 16.204	< 16.204	< 16.2	< 16.20	< 4.05	< 0.81	< 0.81	< 0.81	< 8.10	< 2.03	< 2.03	< 2.03
1,2 Dichloropropane	< 92	< 18.496	< 18.496	< 18.5	< 18.50	< 4.62	< 0.92	< 0.92	< 0.92	< 9.25	2.31	< 2.31	< 2.31
1,2-Dichlorotetrafluoroethane	< 140	< 27.98	< 27.98	< 28.0	< 27.98	< 7	< 1.40	< 1.40	< 1.40	< 13.99	< 1.40	< 1.40	< 1.40
1,3 Butadiene	< 221	< 44.2	< 44.2	< 44.2	< 44.20	< 11.05	< 2.21	< 2.21	< 2.21	< 22.10	< 2.21	< 2.21	< 2.21
1,3 Dichlorobenzene (v)	< 120	< 24.064	< 24.064	< 24.1	< 24.06	< 6.02	1.80	1.80	< 1.20	< 12.03	< 1.20	< 1.20	< 1.20
1,4 Dichlorobenzene (v)	< 120	25.267	< 24.064	< 24.1	< 24.06	< 6.02	16.24	16.24	14.44	< 12.03	10.23	< 3.01	< 3.01
1,4-Dioxane	< 360	< 72.02	< 72.02	< 72.0	< 72.02	< 18.01	< 3.60	< 3.60	< 3.60	< 36.01	< 3.60	< 3.60	< 3.60
111 Trichloroethane	709	< 21.836	< 21.836	< 21.8	< 21.84	< 5.46	< 1.09	< 1.09	< 1.09	< 10.92	< 1.09	< 1.09	< 1.09
112 Trichloroethane	< 109	< 21.836	< 21.836	< 21.8	< 21.84	< 5.46	< 1.09	< 1.09	< 1.09	< 10.92	< 1.09	< 1.09	< 1.09
1122Tetrachloroethane	< 137	< 27.48	< 27.48	< 27.5	< 27.48	< 6.87	< 1.37	< 1.37	< 1.37	< 13.74	< 1.37	< 1.37	< 1.37
124-Trimethylbenzene	482	132813	88542	27546.0	16200.00	5902.8	3187.40	1377.30	737.85	255.79	23.12	9.84	< 2.46
135-Trimethylbenzene	787	59028	23119	14265.0	10822.00	3590.9	2459.50	1524.90	934.61	1623.30	152.49	13.28	< 2.46
2,2,4-Trimethylpentane	210184	125955	5131.5	284.6	< 19.66	43.39	41.99	33.12	29.39	38.72	6.06	20.06	< 2.33
2-Hexanone	< 205	< 40.92	< 40.92	< 40.9	< 40.92	< 10.23	< 2.05	< 2.05	< 2.05	< 20.46	< 2.05	< 2.05	< 2.05
3-Chloropropene	< 157	< 31.31	< 31.31	< 31.3	< 31.31	< 7.83	< 1.57	< 1.57	< 1.57	< 15.66	< 1.57	< 1.57	< 1.57
Acetone	< 238	332.92	< 47.56	< 47.6	< 47.56	28.54	281.59	< 2.38	22.35	< 23.78	18.17	< 2.38	10.94
Acrylonitrile	< 217	< 43.38	< 43.38	< 43.4	< 43.38	< 10.85	< 2.17	< 2.17	< 2.17	< 21.69	< 2.17	< 2.17	< 2.17
Benzene	3163	1276.6	< 12.768	< 12.8	< 12.77	< 3.19	< 0.64	< 0.64	< 0.64	< 6.38	< 0.64	< 0.64	< 0.64
Benzyl Chloride	< 2589	< 518	< 518	< 518.0	< 518.00	< 129.5	< 25.90	< 25.90	< 25.90	< 25.90	< 1.04	< 1.04	< 1.04
Bromodichloromethane	< 134	< 26.52	< 26.52	< 26.5	< 26.52	< 6.63	< 1.33	< 1.33	< 1.33	< 13.26	< 1.33	< 1.33	< 1.33
Bromoform	< 207	< 41.4	< 41.4	< 41.4	< 41.40	< 10.35	< 2.07	< 2.07	< 2.07	< 20.70	< 2.07	< 2.07	< 2.07
Bromomethane	< 388	< 77.68	< 77.68	< 77.7	< 77.68	< 19.42	< 3.88	< 3.88	< 3.88	< 38.84	< 0.78	< 0.78	< 0.78
c-1,2-Dichloroethene	32908	8727.4	2538.8	2023.2	2895.90	1745.5	952.08	1150.40	1269.40	< 15.87	872.74	1229.80	1507.50
c-1,3Dichloropropene	< 91	< 18.168	< 18.168	< 18.2	< 18.17	< 4.54	< 0.91	< 0.91	< 0.91	< 9.08	< 2.27	< 2.27	< 2.27
Carbon disulfide	< 62	115.07	96.41	< 12.4	< 12.44	< 3.11	37.32	28.92	18.46	< 6.22	8.71	< 1.56	< 1.56
Carbon Tetrachloride	< 126	< 25.176	< 25.176	< 25.2	< 25.18	< 6.29	< 1.26	< 1.26	< 1.26	< 12.59	< 0.50	< 2.52	< 2.52
Chlorobenzene	< 92	< 18.432	< 18.432	< 18.4	< 18.43	< 4.61	< 0.92	< 0.92	< 0.92	< 9.22	< 0.92	< 0.92	< 0.92
Chlorodibromomethane	< 170	< 33.72	< 33.72	< 33.7	< 33.72	< 8.43	< 1.69	< 1.69	< 1.69	< 16.86	< 1.69	< 1.69	< 1.69
Chloroethane	< 528	< 105.6	< 105.6	< 105.6	< 105.60	< 26.4	< 5.28	< 5.28	< 5.28	< 52.80	< 2.64	< 2.64	< 2.64
Chloroform	< 98	< 19.48	< 19.48	< 19.5	< 19.48	< 4.87	< 0.97	< 0.97	< 0.97	< 9.74	< 0.97	< 0.97	< 0.97
Chloromethane	< 83	< 16.536	< 16.536	< 16.5	< 16.54	< 4.13	< 0.83	< 0.83	< 0.83	< 8.27	< 2.07	< 2.07	< 2.07
Cyclohexane	< 172	< 34.44	< 34.44	< 34.4	< 34.44	< 8.61	< 1.72	< 1.72	< 1.72	< 17.22	< 0.69	< 0.69	< 0.69
Dichlordifluoromethane	< 494	< 98.96	< 98.96	< 99.0	< 98.96	< 24.74	< 4.95	< 4.95	< 4.95	< 49.48	4.06	< 0.99	< 0.99
Ethyl Acetate	< 1802	< 360.1	< 360.1	< 360.1	< 360.10	< 90.03	< 18.01	< 18.01	< 18.01	< 180.05	< 18.01	< 18.01	< 18.01
Ethyl alcohol	< 377	< 75.32	< 75.32	< 75.3	< 75.32	< 18.83	20.71	< 3.77	9.98	< 37.66	< 3.77	< 3.77	8.85
Ethyl Benzene	18243	69408	16484	2212.4	273.28	108.45	69.41	32.54	15.18	20.39	3.69	< 0.87	< 0.87
Freon 113	< 153	< 30.672	< 30.672	< 30.7	< 30.67	99.68	122.69	99.88	46.31	< 16.34	18.17	< 0.77	6.21
Heptane	147534	90024	3191.8	139.1	< 40.92	< 10.23	< 2.05	4.50	< 2.05	< 20.46	< 2.05	< 2.05	< 2.05
Hexachlorobutadiene	< 213	< 42.68	< 42.68	< 42.7	< 42.68	< 10.67	< 2.13	< 2.13	< 2.13	< 21.34	< 5.34	< 5.34	< 5.34
Hexane	20089	8467.2	< 35.28	< 35.3	< 35.28	< 8.82	< 1.76	< 1.76	< 1.76	< 17.64	< 1.76	< 1.76	< 1.76
Isopropyl Alcohol	< 1229	< 245.5	< 245.5	< 245.5	< 245.50	< 61.38	< 12.28	< 12.28	< 12.28	< 122.75	< 12.28	< 12.28	< 12.28
m + p Xylene	47779	308558	130380	18557.0	2594.50	651.9	564.88	121.69	27.81	43.48	5.22	< 2.17	< 2.17
Methyl Ethyl Ketone	< 295	5008.2	< 58.92	< 58.9	< 58.92	< 14.73	29.17	< 2.95	< 2.95	< 29.46	< 2.95	< 2.95	< 2.95
Methylene Chloride	< 69	< 13.896	< 13.896	< 13.9	< 13.90	< 3.47	< 0.69	< 0.69	< 0.69	< 6.95	76.43	< 0.69	< 0.69
Methylisobutylketone	< 410	< 82.02	< 82.02	< 82.0	< 82.02	< 20.51	< 4.10	< 4.10	< 4.10	< 41.01	< 4.10	< 4.10	< 4.10
o Xylene	13465	147764	65190	16080.0	3998.30	1043	825.74	606.44	382.45	958.12	95.81	< 0.87	< 0.87
p-Ethyltoluene	2163	152241	88398	30448.0	17169.00	3535.9	1571.50	638.43	319.22	284.84	20.14	11.78	< 2.46
Propylene	485	< 34.38	< 34.38	< 34.4	< 34.38	< 8.6	< 1.72	< 1.72	< 1.72	< 17.19	10.83	< 0.68	< 0.68
Styrene	< 85	< 17.024	< 17.024	< 17.0	< 17.02	< 4.26	< 0.85	< 0.85	< 0.85	< 8.51	< 0.85	< 0.85	< 0.85
t-1,2-Dichloroethene	< 79	122.98	< 15.868	< 15.9	< 15.87	22.22	17.46	12.30	20.63	17.06	13.89	17.06	36.10
t-1,3Dichloropropene	< 91	< 18.168	< 18.168	< 18.2	< 18.17	< 4.54	< 0.91	< 0.91	< 0.91	< 9.08	< 0.91	< 0.91	< 0.91
ter.ButylMethylEther	< 72	< 14.076	158.36	< 14.1	< 14.08	< 3.52	< 0.70	< 0.70	< 0.70	< 7.04	< 0.70	< 0.70	< 0.70
tert. Butyl Alcohol	< 606	< 121.12	< 121.12	< 121.1	< 121.12	< 30.28	< 6.06	< 6.06	< 6.06	< 60.56	< 6.06	< 6.06	< 6.06
Tetrachloroethene	312	339.25	447.81	230.7	257.83	447.81	461.38	488.52	529.23	678.50	515.68	420.87	488.52
Tetrahydrofuran	< 590	14735	< 117.88	< 117.9	< 117.88	< 29.47	< 5.89	< 5.89	< 5.89	< 58.84	< 1.47	< 1.47	< 1.47
Toluene	288407	229665	35015	866.0	71.54	28.36	18.07	10.92	8.66	35.77	6.02	< 0.76	< 0.76
Trichloroethene	< 107	361.48	4674.5	3223.8	4889.40	2579	2149.20	2310.40	3331.30	3438.70	2149.20	2579.00	4405.90
Trichlorofluoromethane	< 112	< 22.488	< 22.488	< 22.5	< 22.49	< 5.62	< 1.12	< 1.12	6.18	< 11.24	3.82	< 1.12	3.15
Vinyl Acetate	< 176	< 35.19	< 35.19	< 35.2	< 35.19	< 8.8	< 1.76	< 1.76	< 1.76	< 17.60	< 1.76	< 1.76	< 1.76
Vinyl Bromide	< 87	< 17.516	< 17.516	< 17.5	< 17.52	< 4.38	< 0.88	< 0.88	< 0.88	< 8.76	< 0.88	< 0.88	< 0.88
Vinyl Chloride	792	281.38	< 25.58	< 25.6	< 25.58	< 6.4	< 1.28	< 1.28	< 1.28	< 12.79	< 0.28	< 0.51	< 0.51

Notes:
Concentrations reported in micrograms per cubic meter (ug/m3).
< Indicates less than the method detection limit for specific compound.

Table 2

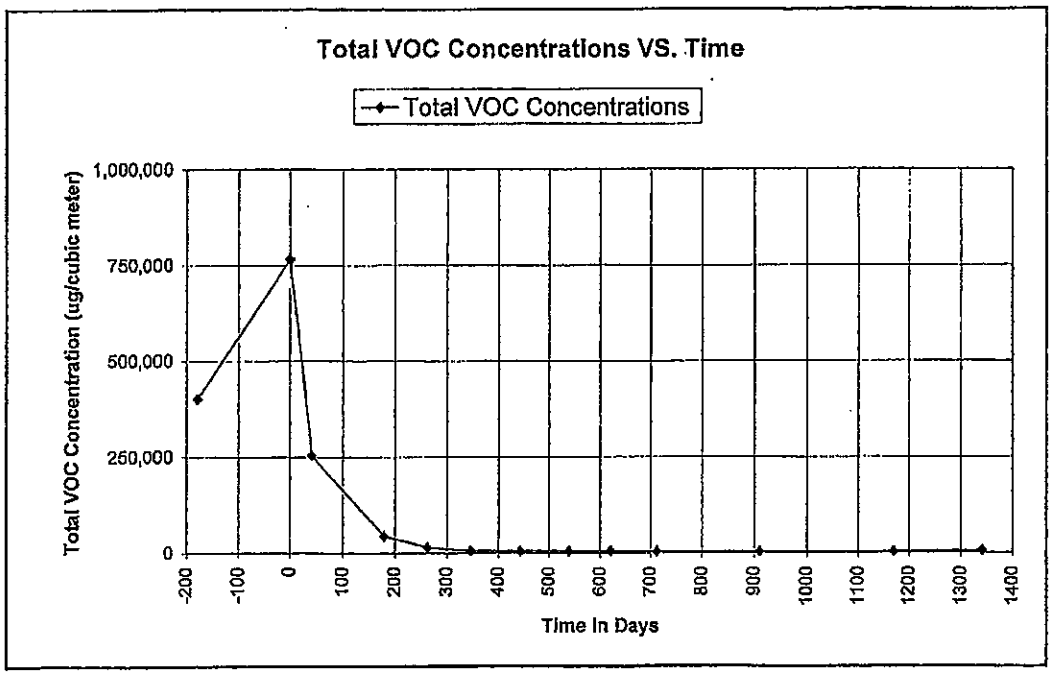
299 Main Street
New Cassell Industrial Area
Westbury, New York
Site No. 1-30-0438

Soil Vapor Quality Analytical Data in ug/cubic meter

SVE SYSTEM

Date	Days Since System Start Up	Benzene	Toluene	Ethyl Benzene	Total Xylene	PCE	TCE	C-1,2 DCE	Total VOC's	Comments
5/2/2006	-179	3163	286407	18243	61244	312	107	32908	402384	Pilot Test
11/1/2006	0	1276	229665	69408	456330	339	381	8727	766126	System start-up Baseline
12/11/2006	40	< 12	35015	16484	195570	447	4874	2538	254728	1st quarterly sample
--	--	--	--	--	--	--	--	--	--	System down 2/28/07
--	--	--	--	--	--	--	--	--	--	System re-started 4/6/07
4/30/2007	179	< 12	866	2212	35637	230	3223	2023	44191	2nd quarterly sample
7/24/2007	263	< 12	71	273	6692	257	4889	2895	15077	3rd quarterly sample
10/17/2007	346	< 3.19	26	108	1695	448	2580	1745	6602	4th quarterly sample
1/24/2008	443	< 0.64	18	69	1391	461	2149	952	5040	5th quarterly sample
4/30/2008	539	< 0.64	11	33	730	489	2310	1150	4723	6th quarterly sample
7/22/2008	621	< 0.64	9	15	410	529	3331	1269	5563	7th quarterly sample
10/23/2008	712	< 6.38	36	21	1000	679	3439	< 15.87	5175	8th quarterly sample
5/11/2009	910	< 0.64	6	4	101	516	2149	873	3649	9th quarterly sample
2/1/2010	1170	< 0.64	< 0.75	< 0.87	< 0.87	421	2579	1230	4230	10th quarterly sample
7/23/2010	1342	< 0.64	< 0.75	< 0.87	< 0.87	489	4406	1508	6403	11th quarterly sample

Notes:
Time 0 = System activation date- 11/01/06
Air samples were collected using Summa canisters.
Results reported in micro grams per cubic meter (ug/m3).



ECOTEST ID	103313.00				
SOURCE OF SAMPLE	299 Main Street				
SAMPLE ID	AS-7-23-10				
DATE SAMPLED	7/23/2010				
MATRIX	Air				
ANALYTICAL METHOD	EPA TO-15				
ANALYTE	CAS NO	DATE OF ANALYSIS		CONC UG/M3	LRL UG/M3
1,1 Dichloroethane	75-34-3	7/28/2010	<	0.81	0.81
1,1 Dichloroethene	75-35-4	7/28/2010	<	0.40	0.40
1,2 Dibromoethane	106-93-4	7/28/2010	<	1.54	1.54
1,2 Dichlorobenzene (v)	95-50-1	7/28/2010	<	3.01	3.01
1,2 Dichloroethane	107-06-2	7/28/2010	<	2.03	2.03
1,2 Dichloropropane	78-87-5	7/28/2010	<	2.31	2.31
1,2-Dichlorotetrafluoroethane	76-14-2	7/28/2010	<	1.40	1.40
1,3 Butadiene	106-99-0	7/28/2010	<	2.21	2.21
1,3 Dichlorobenzene (v)	541-73-1	7/28/2010	<	1.20	1.20
1,4 Dichlorobenzene (v)	106-46-7	7/28/2010	<	3.01	3.01
1,4-Dioxane	123-91-1	7/28/2010	<	3.60	3.60
111 Trichloroethane	71-55-6	7/28/2010	<	1.09	1.09
112 Trichloroethane	79-00-5	7/28/2010	<	1.09	1.09
1122Tetrachloroethane	79-34-5	7/28/2010	<	1.37	1.37
124-Trimethylbenzene	95-63-6	7/28/2010	<	2.46	2.46
135-Trimethylbenzene	108-67-8	7/28/2010	<	2.46	2.46
2,2,4-Trimethylpentane	540-84-1	7/28/2010	<	2.33	2.33
2-Hexanone	591-78-6	7/28/2010	<	2.05	2.05
3-Chloropropene	107-05-1	7/28/2010	<	1.57	1.57
Acetone	67-64-1	7/28/2010		10.94	2.38
Acrylonitrile	107-13-1	7/28/2010	<	2.17	2.17
Benzene	71-43-2	7/28/2010	<	0.64	0.64
Benzyl Chloride	100-44-7	7/28/2010	<	1.04	1.04
Bromodichloromethane	75-27-4	7/28/2010	<	1.33	1.33
Bromoform	75-25-2	7/28/2010	<	2.07	2.07
Bromomethane	74-83-9	7/28/2010	<	0.78	0.78
c-1,2-Dichloroethene	156-59-2	7/29/2010		1507.50	0.79
c-1,3Dichloropropene	10061-01-5	7/28/2010	<	2.27	2.27
Carbon disulfide	75-15-0	7/28/2010	<	1.56	1.56
Carbon Tetrachloride	56-23-5	7/28/2010	<	2.52	2.52
Chlorobenzene	108-90-7	7/28/2010	<	0.92	0.92
Chlorodibromomethane	124-48-1	7/28/2010	<	1.69	1.69
Chloroethane	75-00-3	7/28/2010	<	2.64	2.64
Chloroform	67-66-3	7/28/2010	<	0.97	0.97
Chloromethane	74-87-3	7/28/2010	<	2.07	2.07
Cyclohexane	110-82-7	7/28/2010	<	0.69	0.69
Dichlorodifluoromethane	75-71-8	7/28/2010	<	0.99	0.99
Ethyl Acetate	141-78-6	7/28/2010	<	18.01	18.01
Ethyl alcohol	64-17-5	7/28/2010		8.85	3.77
Ethyl Benzene	100-41-4	7/28/2010	<	0.87	0.87
Freon 113	76-13-1	7/28/2010		6.21	0.77

ECOTEST ID	103313.00				
SOURCE OF SAMPLE	299 Main Street				
SAMPLE ID	AS-7-23-10				
DATE SAMPLED	7/23/2010				
MATRIX	Air				
ANALYTICAL METHOD	EPA TO-15				
ANALYTE	CAS NO	DATE OF ANALYSIS		CONC UG/M3	LRL UG/M3
Heptane	142-82-5	7/28/2010	<	2.05	2.05
Hexachlorobutadiene	87-68-3	7/28/2010	<	5.34	5.34
Hexane	110-54-3	7/28/2010	<	1.76	1.76
Isopropyl Alcohol	67-63-0	7/28/2010	<	12.28	12.28
m + p Xylene	XYL-MP	7/28/2010	<	2.17	2.17
Methyl Ethyl Ketone	78-93-3	7/28/2010	<	2.95	2.95
Methylene Chloride	75-09-2	7/28/2010	<	0.69	0.69
Methylisobutylketone	108-10-1	7/28/2010	<	4.10	4.10
o Xylene	95-47-6	7/28/2010	<	0.87	0.87
p-Ethyltoluene	622-96-8	7/28/2010	<	2.46	2.46
Propylene	115-07-1	7/28/2010	<	0.86	0.86
Styrene	100-42-5	7/28/2010	<	0.85	0.85
t-1,2-Dichloroethene	156-60-5	7/28/2010		36.10	0.79
t-1,3Dichloropropene	10061-02-6	7/28/2010	<	0.91	0.91
ter.ButylMethylEther	1634-04-4	7/28/2010	<	0.70	0.70
tert. Butyl Alcohol	75-65-0	7/28/2010	<	6.06	6.06
Tetrachloroethene	127-18-4	7/28/2010		488.52	1.36
Tetrahydrofuran	109-99-9	7/28/2010	<	1.47	1.47
Toluene	108-88-3	7/28/2010	<	0.75	0.75
Trichloroethene	79-01-6	7/29/2010		4405.90	1.07
Trichlorofluoromethane	75-69-4	7/28/2010		3.15	1.12
Vinyl Acetate	108-05-4	7/28/2010	<	1.76	1.76
Vinyl Bromide	593-60-2	7/28/2010	<	0.88	0.88
Vinyl Chloride	75-01-4	7/28/2010	<	0.51	0.51

RICH
ENVIRONMENTAL SPECIALISTS

November 3, 2010

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Soil Vapor Extraction System**
299 Main Street, Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

Enclosed please find a summary of the results of our ongoing monitoring of the soil vapor extraction ("SVE") system at the above-referenced Site. Table 1 summarizes the quarterly monitoring and the attached graphical analysis (Table 2) summarizes the concentrations of total volatile organic compounds ("VOCs") versus time.

As you are aware, the SVE system has successfully remediated the soil at vapor points SVE-2 and SVE-3. The operation of the SVE system is now focused only on remediating soil at vapor point SVE-1. Since converting the SVE system to focus only on vapor point SVE-1. Based on these recent soil vapor sample results we plan on pulsing the SVE system in November and December (2 weeks on – 2 weeks off) with the collection of another soil vapor sample in January 2011. Based on those results, we will consider collecting a soil samples from SVE-1 to determine if the remedial measures have satisfied the SVE system termination criteria.

If you have any comments, please let me know.

Sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

Enclosures
SS/sm
cc: see attached distribution

17 Dupont Street, Plainview, NY 11803 ▪ Tel. 516.576.8844 ▪ Fax. 516.576.0093 ▪ www.carichinc.com

RICH ENVIRONMENTAL SPECIALISTS

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
Region I
NYSDEC
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Gary Litwin
Bureau of Environmental Exposure Investigation
NYSDOH
Flanigan Square
547 River Street
Troy, New York 12180-2216

Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

Fred Eisenbud, Esq.
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq.
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

TABLE 1

Summary of Extracted Soil Vapor Samples
Soil Vapor Extraction System at 299 Main Street in Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID	SVE-1PT	AS-11/1/06	AS-12/11/06	AS-4/30/07	AS-7/24/07	AS-10/17/07	AS-1/24/08	AS-4/30/08	AS-7/22/08	AS-10/23/08	AS-5/11/09	AS-2/1/10	AS-7/23/10	AS-10/15/10
Matrix	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
Location	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated
Date Sampled	5/2/2006	11/1/2006	12/11/2006	4/30/2007	7/24/2007	10/17/2007	1/24/2008	4/30/2008	7/22/2008	10/23/2008	5/11/2009	2/1/2010	7/23/2010	10/15/2010
Comment	PSci Test	Start-Up	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	5th Quarter	6th Quarter	7th Quarter	8th Quarter	9th Quarter	10th Quarter	11th Quarter	12th Quarter
Volatile Organic Compounds (USEPA Method TO-15)														
Parameters	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
1,1 Dichloroethane	< 81	72.918	< 16.204	< 16.2	< 16.20	< 4.05	< 0.81	< 0.81	< 0.81	1265.80	< 0.81	< 0.81	< 0.81	< 0.81
1,1 Dichloroethene	< 79	< 15.88	< 15.88	< 15.9	< 15.88	< 3.97	< 0.79	< 0.79	< 0.79	< 7.94	< 0.40	< 0.40	< 0.40	< 0.40
1,2 Dibromoethane	< 30	< 30.76	< 30.76	< 30.8	< 30.76	< 7.69	< 1.54	< 1.54	< 1.54	< 15.38	< 1.54	< 1.54	< 1.54	< 1.54
1,2 Dichlorobenzene (v)	< 120	842.24	1082.9	< 24.1	1443.80	< 6.02	445.18	324.65	198.63	< 12.03	34.29	< 3.01	< 3.01	< 3.01
1,2 Dichloroethane	< 81	< 16.204	< 16.204	< 16.2	< 16.20	< 4.05	< 0.81	< 0.81	< 0.81	< 8.10	< 2.03	< 2.03	< 2.03	< 2.03
1,2 Dichloropropane	< 92	< 18.496	< 18.496	< 18.5	< 18.50	< 4.62	< 0.92	< 0.92	< 0.92	< 9.25	2.31	< 2.31	< 2.31	< 2.31
1,2-Dichlorotetrafluoroethane	< 140	< 27.98	< 27.98	< 28.0	< 27.98	< 7	< 1.40	< 1.40	< 1.40	< 13.99	< 1.40	< 1.40	< 1.40	< 1.40
1,3 Butadiene	< 221	< 44.2	< 44.2	< 44.2	< 44.20	< 11.05	< 2.21	< 2.21	< 2.21	< 22.10	< 2.21	< 2.21	< 2.21	< 2.21
1,3 Dichlorobenzene (v)	< 120	< 24.064	< 24.064	< 24.1	< 24.06	< 6.02	1.80	1.80	< 1.20	< 12.03	< 1.20	< 1.20	< 1.20	< 1.20
1,4 Dichlorobenzene (v)	< 120	25267	< 24.064	< 24.1	< 24.06	< 6.02	16.24	18.24	14.44	< 12.03	10.23	< 3.01	< 3.01	< 3.01
1,4-Dioxane	< 360	< 72.02	< 72.02	< 72.0	< 72.02	< 18.01	< 3.60	< 3.60	< 3.60	< 38.01	< 3.60	< 3.60	< 3.60	< 3.60
111 Trichloroethane	709	< 21.836	< 21.836	< 21.8	< 21.84	< 5.46	< 1.09	< 1.09	< 1.09	< 10.92	< 1.09	< 1.09	< 1.09	< 1.09
112 Trichloroethane	< 109	< 21.836	< 21.836	< 21.8	< 21.84	< 5.46	< 1.09	< 1.09	< 1.09	< 10.92	< 1.09	< 1.09	< 1.09	< 1.09
1122Tetrachloroethane	< 137	< 27.48	< 27.48	< 27.5	< 27.48	< 6.87	< 1.37	< 1.37	< 1.37	< 13.74	< 1.37	< 1.37	< 1.37	< 1.37
124-Trimethylbenzene	482	132813	88542	27546.0	16200.00	5902.6	3197.40	1377.30	737.65	255.79	23.12	9.84	< 2.46	< 2.46
135-Trimethylbenzene	787	69028	23119	14265.0	10822.00	3590.9	2459.50	1524.90	934.61	1523.30	152.49	13.28	< 2.46	< 2.46
2,2,4-Trimethylpentane	210184	125955	5131.5	284.6	< 18.66	43.39	41.99	33.12	28.39	38.72	6.06	20.06	< 2.33	< 2.33
2-Hexanone	< 205	< 40.92	< 40.92	< 40.9	< 40.92	< 10.23	< 2.05	< 2.05	< 2.05	< 20.46	< 2.05	< 2.05	< 2.05	< 2.05
3-Chloropropene	< 157	< 31.31	< 31.31	< 31.3	< 31.31	< 7.83	< 1.57	< 1.57	< 1.57	< 15.66	< 1.57	< 1.57	< 1.57	< 1.57
Acetone	< 238	332.92	< 47.58	< 47.6	< 47.58	26.54	281.58	< 2.38	22.35	< 23.79	16.17	< 2.38	10.94	2.85
Acrylonitrile	< 217	< 43.38	< 43.38	< 43.4	< 43.38	< 10.85	< 2.17	< 2.17	< 2.17	< 21.69	< 2.17	< 2.17	< 2.17	< 2.17
Benzene	3163	1276.8	< 12.768	< 12.8	< 12.77	< 3.19	< 0.64	< 0.64	< 0.64	< 6.38	< 0.64	< 0.64	< 0.64	< 0.64
Benzyl Chloride	< 2589	< 518	< 518	< 518.0	< 518.00	< 129.5	< 25.90	< 25.90	< 25.90	< 25.90	< 1.04	< 1.04	< 1.04	< 1.04
Bromodichloromethane	< 134	< 26.52	< 26.52	< 26.5	< 26.52	< 6.63	< 1.33	< 1.33	< 1.33	< 13.26	< 1.33	< 1.33	< 1.33	< 1.33
Bromoform	< 207	< 41.4	< 41.4	< 41.4	< 41.40	< 10.35	< 2.07	< 2.07	< 2.07	< 20.70	< 2.07	< 2.07	< 2.07	< 2.07
Bromomethane	< 388	< 77.68	< 77.68	< 77.7	< 77.68	< 19.42	< 3.88	< 3.88	< 3.88	< 38.84	< 0.78	< 0.78	< 0.78	< 0.78
c-1,2-Dichloroethene	32908	8727.4	2538.9	2023.2	2885.90	1745.5	852.08	1150.40	1269.40	< 15.87	872.74	1229.80	1507.60	1110.80
c-1,3Dichloropropene	< 91	< 18.168	< 18.168	< 18.2	< 18.17	< 4.54	< 0.91	< 0.91	< 0.91	< 9.08	< 2.27	< 2.27	< 2.27	< 2.27
Carbon disulfide	< 62	115.07	96.41	< 12.4	< 12.44	< 3.11	37.32	28.92	16.48	< 6.22	8.71	< 1.56	< 1.56	< 1.56
Carbon Tetrachloride	< 126	< 25.176	< 25.176	< 25.2	< 25.18	< 6.29	< 1.26	< 1.26	< 1.26	< 12.59	< 0.50	< 2.52	< 2.52	< 2.52
Chlorobenzene	< 92	< 18.432	< 18.432	< 18.4	< 18.43	< 4.61	< 0.92	< 0.92	< 0.92	< 9.22	< 0.92	< 0.92	< 0.92	< 0.92
Chlorodibromomethane	< 170	< 33.72	< 33.72	< 33.7	< 33.72	< 8.43	< 1.69	< 1.69	< 1.69	< 16.86	< 1.69	< 1.69	< 1.69	< 1.69
Chloroethane	< 528	< 105.6	< 105.6	< 105.6	< 105.60	< 26.4	< 5.28	< 5.28	< 5.28	< 52.80	< 2.64	< 2.64	< 2.64	< 2.64
Chloroform	< 98	< 19.48	< 19.48	< 19.5	< 19.48	< 4.87	< 0.97	< 0.97	< 0.97	< 9.74	< 0.97	< 0.97	< 0.97	< 0.97
Chloromethane	< 83	< 16.538	< 16.538	< 16.5	< 16.54	< 4.13	< 0.83	< 0.83	< 0.83	< 8.27	< 2.07	< 2.07	< 2.07	< 2.07
Cyclohexane	< 172	< 34.44	< 34.44	< 34.4	< 34.44	< 8.61	< 1.72	< 1.72	< 1.72	< 17.22	< 0.69	< 0.69	< 0.69	< 0.69
Dichlorodifluoromethane	< 494	< 98.98	< 98.98	< 99.0	< 98.98	< 24.74	< 4.95	< 4.95	< 4.95	< 49.48	4.06	< 0.99	< 0.99	< 0.99
Ethyl Acetate	< 1802	< 360.1	< 360.1	< 360.1	< 360.10	< 90.03	< 18.01	< 18.01	< 18.01	< 180.05	< 18.01	< 18.01	< 18.01	< 18.01
Ethyl alcohol	< 377	< 75.32	< 75.32	< 75.3	< 75.32	< 18.83	20.71	< 3.77	9.98	< 37.66	< 3.77	< 3.77	8.85	8.85
Ethyl Benzene	18243	69408	16484	2212.4	273.29	108.45	69.41	32.54	16.18	20.39	3.69	< 0.87	< 0.87	< 0.87
Freon 113	< 153	< 30.672	< 30.672	< 30.7	< 30.67	89.88	122.69	99.68	48.31	< 15.34	19.17	< 0.77	8.21	< 0.77
Heptane	147534	90024	3191.8	139.1	< 40.92	< 10.23	< 2.05	4.50	< 2.05	< 20.46	< 2.05	< 2.05	< 2.05	< 2.05
Hexachlorobutadiene	< 213	< 42.68	< 42.68	< 42.7	< 42.68	< 10.67	< 2.13	< 2.13	< 2.13	< 21.34	< 5.34	< 5.34	< 5.34	< 5.34
Hexane	20089	8467.2	< 35.28	< 35.3	< 35.28	< 8.82	< 1.76	< 1.76	< 1.76	< 17.64	< 1.76	< 1.76	< 1.76	< 1.76
Isopropyl Alcohol	< 1229	< 245.5	< 245.5	< 245.5	< 245.50	< 61.38	< 12.28	< 12.28	< 12.28	< 122.75	< 12.28	< 12.28	< 12.28	< 12.28
m + p Xylene	47779	308568	130380	19557.0	2694.50	651.9	564.88	121.69	27.81	43.46	5.22	< 2.17	< 2.17	< 2.17
Methyl Ethyl Ketone	< 295	5008.2	< 58.92	< 58.9	< 58.92	< 14.73	29.17	< 2.95	< 2.95	< 29.46	< 2.95	< 2.95	< 2.95	< 2.95
Methylene Chloride	< 69	< 13.898	< 13.898	< 13.9	< 13.90	< 3.47	< 0.69	< 0.69	< 0.69	< 6.95	76.43	< 0.69	< 0.69	< 0.69
Methylisobutylketone	< 410	< 82.02	< 82.02	< 82.0	< 82.02	< 20.51	< 4.10	< 4.10	< 4.10	< 41.01	< 4.10	< 4.10	< 4.10	< 4.10
o Xylene	13465	147764	65190	16080.0	3998.30	1043	825.74	608.44	382.45	858.12	95.61	< 0.87	< 0.87	< 0.87
p-Ethyltoluene	2163	152241	88398	30448.0	17189.00	3535.9	1571.50	638.43	319.22	284.84	20.14	11.79	< 2.46	< 2.46
Propylene	465	< 34.38	< 34.38	< 34.4	< 34.38	< 8.6	< 1.72	< 1.72	< 1.72	< 17.19	10.83	< 0.86	< 0.86	< 0.86
Styrene	< 85	< 17.024	< 17.024	< 17.0	< 17.02	< 4.26	< 0.85	< 0.85	< 0.85	< 8.51	< 0.85	< 0.85	< 0.85	< 0.85
t-1,2-Dichloroethene	< 79	122.98	< 15.868	< 15.9	< 15.87	22.22	17.46	12.30	20.63	17.06	13.89	17.06	38.10	13.49
t-1,3Dichloropropene	< 91	< 18.168	< 18.168	< 18.2	< 18.17	< 4.54	< 0.91	< 0.91	< 0.91	< 9.08	< 0.91	< 0.91	< 0.91	< 0.91
ter.ButylMethylEther	< 72	< 14.076	158.36	< 14.1	< 14.08	< 3.52	< 0.70	< 0.70	< 0.70	< 7.04	< 0.70	< 0.70	< 0.70	< 0.70
tert Butyl Alcohol	< 606	< 121.12	< 121.12	< 121.1	< 121.12	< 30.28	< 6.06	< 6.06	< 6.06	< 60.56	< 6.06	< 6.06	< 6.06	< 6.06
Tetrachloroethene	312	339.25	447.81	230.7	257.83	447.81	461.38	488.52	529.23	678.50	515.66	420.67	488.59	597.08
Tetrahydrofuran	< 590	14735	< 117.88	< 117.9	< 117.88	< 29.47	< 5.89	< 5.89	< 5.89	< 58.94	< 1.47	< 1.47	< 1.47	< 1.47
Toluene	288407	229665	35015	866.0	71.54	28.36	18.07	10.92	8.66	35.77	8.02	< 0.75	< 0.75	< 0.75
Trichloroethene	< 107	381.46	4574.5	3223.8	4889.40	2579	2149.20	2310.40	3331.30	3438.70	2149.20	2579.00	4405.90	2579.00
Trichlorofluoromethane	< 112	< 22.468	< 22.468	< 22.5	< 22.49	< 5.62	< 1.12	< 1.12	6.16	< 11.24	3.82	< 1.12	3.15	1.24
Vinyl Acetate	< 176	< 35.19	< 35.19	< 35.2	< 35.19	< 8.8	< 1.76	< 1.76	< 1.76	< 17.60	< 1.76	< 1.76	< 1.76	< 1.76
Vinyl Bromide	< 87	< 17.516	< 17.516	< 17.5	< 17.52	< 4.38	< 0.88	< 0.88	< 0.88	< 8.76	< 0.88	< 0.88	< 0.88	< 0.88
Vinyl Chloride	792	281.36	< 25.58	< 25.6	< 25.58	< 6.4	< 1.28	< 1.28	< 1.28	< 12.79	< 0.26	< 0.51	< 0.51	< 0.51

Notes:
Concentrations reported in micrograms per cubic meter (ug/m3).
< indicates less than the method detection limit for specific compound.

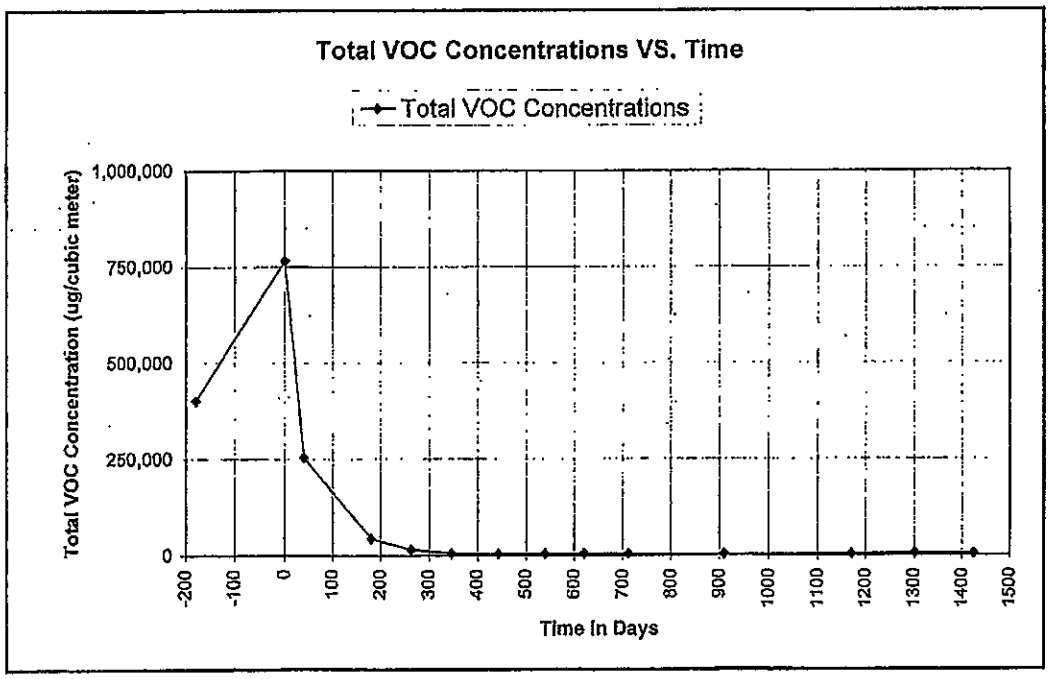
Table 2

299 Main Street
New Cassell Industrial Area
Westbury, New York
Site No. 1-30-0438

Soil Vapor Quality Analytical Data in ug/cubic meter

Date	Days Since System Start Up	SVE SYSTEM Benzene	Toluene	Ethyl Benzene	Total Xylene	PCE	TCE	C-1,2 DCE	Total VOCs	Comments
5/2/2006	-179	3163	286407	18243	61244	312	107	32908	402384	Pilot Test
11/1/2006	0	1276	229665	69408	456330	339	381	8727	766126	System start-up Baseline
12/11/2006	40	< 12	35015	16484	195570	447	4674	2538	254728	1st quarterly sample
--	--	--	--	--	--	--	--	--	--	System down 2/28/07
--	--	--	--	--	--	--	--	--	--	System re-started 4/6/07
4/30/2007	179	< 12	866	2212	35637	230	3223	2023	44191	2nd quarterly sample
7/24/2007	263	< 12	71	273	6692	257	4889	2895	15077	3rd quarterly sample
10/17/2007	346	< 3.19	26	108	1695	448	2580	1745	6602	4th quarterly sample
1/24/2008	443	< 0.64	18	69	1391	461	2149	952	5040	5th quarterly sample
4/30/2008	539	< 0.64	11	33	730	489	2310	1150	4723	6th quarterly sample
7/22/2008	621	< 0.64	9	15	410	529	3331	1269	5563	7th quarterly sample
10/23/2008	712	< 6.38	36	21	1000	679	3439	< 15.87	5175	8th quarterly sample
5/11/2009	910	< 0.64	6	4	101	516	2149	873	3649	9th quarterly sample
2/1/2010	1170	< 0.64	< 0.75	< 0.87	< 0.87	421	2579	1230	4230	10th quarterly sample
7/23/2010	1302	< 0.64	< 0.75	< 0.87	< 0.87	489	4406	1508	6403	11th quarterly sample
10/15/2010	1424	< 0.64	< 0.75	< 0.87	< 0.87	597	2579	1111	4287	12th quarterly sample

Notes:
Time 0 = System activation date- 11/01/06
Air samples were collected using Summa canisters.
Results reported in micro grams per cubic meter (ug/m3).



104815.00				
299 Main Street				
AS-10-15-10				
10/15/2010				
Air				
EPA TO-15				
			CONC	LRL
ANALYTE	CAS NO		UG/M3	UG/M3
1,1 Dichloroethane	75-34-3	<	0.81	0.81
1,1 Dichloroethene	75-35-4	<	0.40	0.40
1,2 Dibromoethane	106-93-4	<	1.54	1.54
1,2 Dichlorobenzene (v)	95-50-1	<	3.01	3.01
1,2 Dichloroethane	107-06-2	<	2.03	2.03
1,2 Dichloropropane	78-87-5	<	2.31	2.31
1,2-Dichlorotetrafluoroethane	76-14-2	<	1.40	1.40
1,3 Butadiene	106-99-0	<	2.21	2.21
1,3 Dichlorobenzene (v)	541-73-1	<	1.20	1.20
1,4 Dichlorobenzene (v)	106-46-7	<	3.01	3.01
1,4-Dioxane	123-91-1	<	3.60	3.60
111 Trichloroethane	71-55-6	<	1.09	1.09
112 Trichloroethane	79-00-5	<	1.09	1.09
1122Tetrachloroethane	79-34-5	<	1.37	1.37
124-Trimethylbenzene	95-63-6	<	2.46	2.46
135-Trimethylbenzene	108-67-8	<	2.46	2.46
2,2,4-Trimethylpentane	540-84-1	<	2.33	2.33
2-Hexanone	591-78-6	<	2.05	2.05
3-Chloropropene	107-05-1	<	1.57	1.57
Acetone	67-64-1		2.85	2.38
Acrylonitrile	107-13-1	<	2.17	2.17
Benzene	71-43-2	<	0.64	0.64
Benzyl Chloride	100-44-7	<	1.04	1.04
Bromodichloromethane	75-27-4	<	1.33	1.33
Bromoform	75-25-2	<	2.07	2.07
Bromomethane	74-83-9	<	0.78	0.78
c-1,2-Dichloroethene	156-59-2		1110.80	0.79
c-1,3Dichloropropene	10061-01-5	<	2.27	2.27
Carbon disulfide	75-15-0	<	1.56	1.56
Carbon Tetrachloride	56-23-5	<	2.52	2.52
Chlorobenzene	108-90-7	<	0.92	0.92
Chlorodibromomethane	124-48-1	<	1.69	1.69
Chloroethane	75-00-3	<	2.64	2.64
Chloroform	67-66-3	<	0.97	0.97
Chloromethane	74-87-3	<	2.07	2.07
Cyclohexane	110-82-7	<	0.69	0.69
Dichlorodifluoromethane	75-71-8	<	0.99	0.99
Ethyl Acetate	141-78-6	<	18.01	18.01
Ethyl alcohol	64-17-5		8.85	3.77
Ethyl Benzene	100-41-4	<	0.87	0.87
Freon 113	76-13-1	<	0.77	0.77
Heptane	142-82-5	<	2.05	2.05
Hexachlorobutadiene	87-68-3	<	5.34	5.34
Hexane	110-54-3	<	1.76	1.76

104815.00				
299 Main Street				
AS-10-15-10				
10/15/2010				
Air				
EPA TO-15				
			CONC	LRL
ANALYTE	CAS NO		UG/M3	UG/M3
Isopropyl Alcohol	67-63-0	<	12.28	12.28
m + p Xylene	XYL-MP	<	2.17	2.17
Methyl Ethyl Ketone	78-93-3	<	2.95	2.95
Methylene Chloride	75-09-2	<	0.69	0.69
Methylisobutylketone	108-10-1	<	4.10	4.10
o Xylene	95-47-6	<	0.87	0.87
p-Ethyltoluene	622-96-8	<	2.46	2.46
Propylene	115-07-1	<	0.86	0.86
Styrene	100-42-5	<	0.85	0.85
t-1,2-Dichloroethene	156-60-5		13.49	0.79
t-1,3Dichloropropene	10061-02-6	<	0.91	0.91
ter.ButylMethylEther	1634-04-4	<	0.70	0.70
tert. Butyl Alcohol	75-65-0	<	6.06	6.06
Tetrachloroethene	127-18-4		597.08	1.36
Tetrahydrofuran	109-99-9	<	1.47	1.47
Toluene	108-88-3	<	0.75	0.75
Trichloroethene	79-01-6		2579.00	1.07
Trichlorofluoromethane	75-69-4		1.24	1.12
Vinyl Acetate	108-05-4	<	1.76	1.76
Vinyl Bromide	593-60-2	<	0.88	0.88
Vinyl Chloride	75-01-4	<	0.51	0.51

February 16, 2011

New York State Department of Environmental Conservation
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Soil Vapor Extraction System**
299 Main Street, Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

Enclosed please find a summary of the results of our ongoing monitoring of the soil vapor extraction ("SVE") system at the above-referenced Site. Table 1 summarizes the quarterly monitoring and the attached graphical analysis (Table 2) summarizes the concentrations of total volatile organic compounds ("VOCs") versus time.

As you are aware, the SVE system has successfully remediated the soil at vapor points SVE-2 and SVE-3. The operation of the SVE system is now focused only on remediating soil at vapor point SVE-1. The SVE system was operating in a pulse mode in November and December (2 weeks on – 2 weeks off). The system was returned to full-time operation on December 15, 2010 with the collection of this most recent soil vapor sample on January 17, 2011.

Based on the attached soil vapor sample results, we propose to collect soil samples for laboratory analysis from the area of SVE-1 to determine if the remedial measures have reduced the concentrations of VOCs in the subsurface soil to satisfy the SVE system termination criteria as outlined in our Interim Remedial Measures Report – Part B, dated September 13, 2007. We plan on scheduling the sampling event in April 2011 and will contact you once a date is confirmed.

If you have any comments, please do not hesitate to contact me.

Sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Senior Project Manager

Enclosures
SS/sm
cc: see attached distribution

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

Distribution List

299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E. (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor, Albany, New York 12233-7015
gtbobers@gw.dec.state.ny.us

Peter Scully, Regional Director
NYSDEC
N. Loop Rd., Bldg. #40, SUNY Campus
Stony Brook, NY 11790

Jacqueline Nealon (electronic copy)
Bureau of Environmental Exposure Investigation
New York State Department of Health
Flanigan Square
547 River Street, Troy, New York 12180-2216
Jen02@health.state.ny.us

Alali M. Tamuno, Esq. Senior Attorney (via email only)
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor, Tarrytown, New York 10591-5803
(914) 332-5116
amtamuno@gw.dec.state.ny.us

Fred Eisenbud, Esq. (via email only)
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq. (via email only)
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

TABLE 1

Summary of Extracted Soil Vapor Samples
Soil Vapor Extraction System at 299 Main Street in Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID	SVE-1PT	AS-11/1/06	AS-12/11/06	AS-4/30/07	AS-7/24/07	AS-10/17/07
Matrix	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
Location	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated
Date Sampled	5/2/2006	11/1/2006	12/11/2006	4/30/2007	7/24/2007	10/17/2007
Comment	Pilot Test	Start-Up	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Volatile Organic Compounds (USEPA Method TO-15)						
Parameters	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
1,1 Dichloroethane	< 81	72.918	< 16.204	< 16.2	< 16.20	< 4.05
1,1 Dichloroethene	< 79	< 15.88	< 15.88	< 15.9	< 15.88	< 3.97
1,2 Dibromoethane	< 30	< 30.76	< 30.76	< 30.8	< 30.76	< 7.69
1,2 Dichlorobenzene (v)	< 120	842.24	1082.9	< 24.1	1443.80	< 6.02
1,2 Dichloroethane	< 81	< 16.204	< 16.204	< 16.2	< 16.20	< 4.05
1,2 Dichloropropane	< 92	< 18.496	< 18.496	< 18.5	< 18.50	< 4.62
1,2-Dichlorotetrafluoroethane	< 140	< 27.98	< 27.98	< 28.0	< 27.98	< 7
1,3 Butadiene	< 221	< 44.2	< 44.2	< 44.2	< 44.20	< 11.05
1,3 Dichlorobenzene (v)	< 120	< 24.064	< 24.064	< 24.1	< 24.06	< 6.02
1,4 Dichlorobenzene (v)	< 120	25.267	< 24.064	< 24.1	< 24.06	< 6.02
1,4-Dioxane	< 360	< 72.02	< 72.02	< 72.0	< 72.02	< 18.01
111 Trichloroethane	709	< 21.836	< 21.836	< 21.8	< 21.84	< 5.46
112 Trichloroethane	< 109	< 21.836	< 21.836	< 21.8	< 21.84	< 5.46
1122Tetrachloroethane	< 137	< 27.48	< 27.48	< 27.5	< 27.48	< 6.87
124-Trimethylbenzene	482	132813	88542	27546.0	18200.00	5902.8
135-Trimethylbenzene	787	59028	23119	14265.0	10822.00	3590.9
2,2,4-Trimethylpentane	210184	125955	5131.5	284.6	< 18.66	43.39
2-Hexanone	< 205	< 40.92	< 40.92	< 40.9	< 40.92	< 10.23
3-Chloropropene	< 157	< 31.31	< 31.31	< 31.3	< 31.31	< 7.83
Acetone	< 238	332.92	< 47.56	< 47.6	< 47.56	28.54
Acrylonitrile	< 217	< 43.38	< 43.38	< 43.4	< 43.38	< 10.85
Benzene	3163	1276.8	< 12.768	< 12.8	< 12.77	< 3.19
Benzyl Chloride	< 2589	< 518	< 518	< 518.0	< 518.00	< 129.5
Bromodichloromethane	< 134	< 26.52	< 26.52	< 26.5	< 26.52	< 6.63
Bromoform	< 207	< 41.4	< 41.4	< 41.4	< 41.40	< 10.35
Bromomethane	< 388	< 77.68	< 77.68	< 77.7	< 77.68	< 19.42
c-1,2-Dichloroethene	32908	8727.4	2538.9	2023.2	2895.90	1745.5
c-1,3Dichloropropene	< 91	< 18.168	< 18.168	< 18.2	< 18.17	< 4.54
Carbon disulfide	< 62	115.07	96.41	< 12.4	< 12.44	< 3.11
Carbon Tetrachloride	< 126	< 25.176	< 25.176	< 25.2	< 25.18	< 6.29
Chlorobenzene	< 92	< 18.432	< 18.432	< 18.4	< 18.43	< 4.61
Chlorodibromomethane	< 170	< 33.72	< 33.72	< 33.7	< 33.72	< 8.43
Chloroethane	< 528	< 105.6	< 105.6	< 105.6	< 105.60	< 26.4
Chloroform	< 98	< 19.48	< 19.48	< 19.5	< 19.48	< 4.87
Chloromethane	< 83	< 16.536	< 16.536	< 16.5	< 16.54	< 4.13
Cyclohexane	< 172	< 34.44	< 34.44	< 34.4	< 34.44	< 8.61
Dichlordifluoromethane	< 494	< 98.96	< 98.96	< 99.0	< 98.96	< 24.74
Ethyl Acetate	< 1802	< 360.1	< 360.1	< 360.1	< 360.10	< 90.03
Ethyl alcohol	< 377	< 75.32	< 75.32	< 75.3	< 75.32	< 18.83
Ethyl Benzene	18243	69408	16484	2212.4	273.29	108.45
Freon 113	< 153	< 30.672	< 30.672	< 30.7	< 30.67	99.68
Heptane	147534	90024	3191.8	139.1	< 40.92	< 10.23
Hexachlorobutadiene	< 213	< 42.68	< 42.68	< 42.7	< 42.68	< 10.67
Hexane	20089	8467.2	< 35.28	< 35.3	< 35.28	< 8.82
Isopropyl Alcohol	< 1229	< 245.5	< 245.5	< 245.5	< 245.50	< 61.38
m + p Xylene	47779	308566	130380	19557.0	2694.50	651.9
Methyl Ethyl Ketone	< 295	5008.2	< 58.92	< 58.9	< 58.92	< 14.73
Methylene Chloride	< 69	< 13.896	< 13.896	< 13.9	< 13.90	< 3.47
Methylisobutylketone	< 410	< 82.02	< 82.02	< 82.0	< 82.02	< 20.51
o Xylene	13465	147764	65190	16080.0	3998.30	1043
p-Ethyltoluene	2163	152241	88398	30448.0	17189.00	3535.9
Propylene	465	< 34.38	< 34.38	< 34.4	< 34.38	< 8.6
Styrene	< 85	< 17.024	< 17.024	< 17.0	< 17.02	< 4.26
t-1,2-Dichloroethene	< 79	122.98	< 15.868	< 15.9	< 15.87	22.22
t-1,3Dichloropropene	< 91	< 18.168	< 18.168	< 18.2	< 18.17	< 4.54
ter.ButylMethylEther	< 72	< 14.076	158.36	< 14.1	< 14.08	< 3.52
tert. Butyl Alcohol	< 606	< 121.12	< 121.12	< 121.1	< 121.12	< 30.28
Tetrachloroethene	312	339.25	447.81	230.7	257.83	447.81
Tetrahydrofuran	< 590	14735	< 117.88	< 117.9	< 117.88	< 29.47
Toluene	286407	229665	35015	866.0	71.54	26.36
Trichloroethene	< 107	381.48	4674.5	3223.8	4889.40	2579
Trichlorofluoromethane	< 112	< 22.488	< 22.488	< 22.5	< 22.49	< 5.62
Vinyl Acetate	< 176	< 35.19	< 35.19	< 35.2	< 35.19	< 8.8
Vinyl Bromide	< 87	< 17.516	< 17.516	< 17.5	< 17.52	< 4.38
Vinyl Chloride	792	281.38	< 25.58	< 25.6	< 25.58	< 6.4

Notes:

Concentrations reported in micrograms per cubic meter (ug/m3).

< Indicates less than the method detection limit for specific compound.

TABLE 1 (Cont'd.)

Summary of Extracted Soil Vpaor Samples
Soil Vapor Extraction System 299 Main Street in Westbury, New York
NYSDEC Site # 1-30-043S

Sample ID	AS-1/24/08	AS-4/30/08	AS-7/22/08	AS-10/23/08	AS-5/11/09	AS-2/1/10	AS-7/23/10	AS-10/15/10	AS-1/17/11
Matrix	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
Location	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated	Untreated
Date Sampled	1/24/2008	4/30/2008	7/22/2008	10/23/2008	5/11/2009	2/1/2010	7/23/2010	10/15/2010	1/17/2011
Comment	5th Quarter	6th Quarter	7th Quarter	8th Quarter	9th Quarter	10th Quarter	11th Quarter	12th Quarter	13th Quarter
Volatile Organic Compounds (USEPA Method TO-15)									
Parameters	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
1,1 Dichloroethane	< 0.81	< 0.81	< 0.81	1255.80	< 0.81	< 0.81	< 0.81	< 0.81	< 0.81
1,1 Dichloroethene	< 0.79	< 0.79	< 0.79	< 7.94	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40
1,2 Dibromoethane	< 1.54	< 1.54	< 1.54	< 15.38	< 1.54	< 1.54	< 1.54	< 1.54	< 1.54
1,2 Dichlorobenzene (v)	445.18	324.86	198.53	< 12.03	34.29	< 3.01	< 3.01	< 3.01	< 3.01
1,2 Dichloroethane	< 0.81	< 0.81	< 0.81	< 8.10	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03
1,2 Dichloropropane	< 0.92	< 0.92	< 0.92	< 9.25	2.31	< 2.31	< 2.31	< 2.31	< 2.31
1,2-Dichlorotetrafluoroethane	< 1.40	< 1.40	< 1.40	< 13.99	< 1.40	< 1.40	< 1.40	< 1.40	< 1.40
1,3 Butadiene	< 2.21	< 2.21	< 2.21	< 22.10	< 2.21	< 2.21	< 2.21	< 2.21	< 2.21
1,3 Dichlorobenzene (v)	1.80	1.80	< 1.20	< 12.03	< 1.20	< 1.20	< 1.20	< 1.20	< 1.20
1,4 Dichlorobenzene (v)	16.24	16.24	14.44	< 12.03	10.23	< 3.01	< 3.01	< 3.01	< 3.01
1,4-Dioxane	< 3.60	< 3.60	< 3.60	< 36.01	< 3.60	< 3.60	< 3.60	< 3.60	< 3.60
111 Trichloroethane	< 1.09	< 1.09	< 1.09	< 10.92	< 1.09	< 1.09	< 1.09	< 1.09	< 1.09
112 Trichloroethane	< 1.09	< 1.09	< 1.09	< 10.92	< 1.09	< 1.09	< 1.09	< 1.09	< 1.09
1122Tetrachloroethane	< 1.37	< 1.37	< 1.37	< 13.74	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37
124-Trimethylbenzene	3197.40	1377.30	737.85	255.79	23.12	9.84	< 2.46	< 2.46	< 2.46
135-Trimethylbenzene	2459.50	1524.90	934.61	1623.30	152.49	13.28	< 2.46	< 2.46	< 2.46
2,2,4-Trimethylpentane	41.99	33.12	29.39	38.72	6.06	20.06	< 2.33	< 2.33	< 2.33
2-Hexanone	< 2.05	< 2.05	< 2.05	< 20.46	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05
3-Chloropropene	< 1.57	< 1.57	< 1.57	< 15.66	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57
Acetone	261.58	< 2.38	22.35	< 23.76	16.17	< 2.38	10.94	2.85	< 2.38
Acrylonitrile	< 2.17	< 2.17	< 2.17	< 21.69	< 2.17	< 2.17	< 2.17	< 2.17	< 2.17
Benzene	< 0.64	< 0.64	< 0.64	< 6.38	< 0.64	< 0.64	< 0.64	< 0.64	< 0.64
Benzyl Chloride	< 25.90	< 25.90	< 25.90	< 25.90	< 1.04	< 1.04	< 1.04	< 1.04	< 1.04
Bromodichloromethane	< 1.33	< 1.33	< 1.33	< 13.26	< 1.33	< 1.33	< 1.33	< 1.33	< 1.33
Bromoform	< 2.07	< 2.07	< 2.07	< 20.70	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07
Bromomethane	< 3.88	< 3.88	< 3.88	< 38.84	< 0.78	< 0.78	< 0.78	< 0.78	< 0.78
c-1,2-Dichloroethene	952.08	1150.40	1269.40	< 15.87	872.74	1229.80	1507.50	1110.80	674.39
c-1,3Dichloropropene	< 0.91	< 0.91	< 0.91	< 9.08	< 2.27	< 2.27	< 2.27	< 2.27	< 2.27
Carbon disulfide	37.32	28.92	16.48	< 6.22	8.71	< 1.56	< 1.56	< 1.56	< 1.56
Carbon Tetrachloride	< 1.26	< 1.26	< 1.26	< 12.59	< 0.50	< 2.52	< 2.52	< 2.52	< 2.52
Chlorobenzene	< 0.92	< 0.92	< 0.92	< 9.22	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92
Chlorodibromomethane	< 1.69	< 1.69	< 1.69	< 16.86	< 1.69	< 1.69	< 1.69	< 1.69	< 1.69
Chloroethane	< 5.28	< 5.28	< 5.28	< 52.80	< 2.64	< 2.64	< 2.64	< 2.64	< 2.64
Chloroform	< 0.97	< 0.97	< 0.97	< 9.74	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97
Chloromethane	< 0.83	< 0.83	< 0.83	< 8.27	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07
Cyclohexane	< 1.72	< 1.72	< 1.72	< 17.22	< 0.69	< 0.69	< 0.69	< 0.69	< 0.69
Dichlordifluoromethane	< 4.95	< 4.95	< 4.95	< 49.48	4.06	< 0.99	< 0.99	< 0.99	< 0.99
Ethyl Acetate	< 18.01	< 18.01	< 18.01	< 180.05	< 18.01	< 18.01	< 18.01	< 18.01	< 18.01
Ethyl alcohol	20.71	< 3.77	9.98	< 37.66	< 3.77	< 3.77	8.85	8.85	< 3.77
Ethyl Benzene	69.41	32.54	15.18	20.39	3.89	< 0.87	< 0.87	< 0.87	< 0.87
Freon 113	122.69	99.68	48.31	< 15.34	19.17	< 0.77	6.21	< 0.77	1.46
Heptane	< 2.05	4.50	< 2.05	< 20.46	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05
Hexachlorobutadiene	< 2.13	< 2.13	< 2.13	< 21.34	< 5.34	< 5.34	< 5.34	< 5.34	< 5.34
Hexane	< 1.76	< 1.76	< 1.76	< 17.64	< 1.76	< 1.76	< 1.76	< 1.76	< 1.76
Isopropyl Alcohol	< 12.28	< 12.28	< 12.28	< 122.75	< 12.28	< 12.28	< 12.28	< 12.28	< 12.28
m + p Xylene	564.98	121.69	27.81	43.46	5.22	< 2.17	< 2.17	< 2.17	< 2.17
Methyl Ethyl Ketone	29.17	< 2.95	< 2.95	< 29.46	< 2.95	< 2.95	< 2.95	< 2.95	< 2.95
Methylene Chloride	< 0.69	< 0.69	< 0.69	< 6.95	76.43	< 0.69	< 0.69	< 0.69	< 0.69
Methylisobutylketone	< 4.10	< 4.10	< 4.10	< 41.01	< 4.10	< 4.10	< 4.10	< 4.10	< 4.10
o Xylene	825.74	608.44	382.45	956.12	95.61	< 0.87	< 0.87	< 0.87	< 0.87
p-Ethyltoluene	1571.50	638.43	319.22	284.84	20.14	11.79	< 2.46	< 2.46	< 2.46
Propylene	< 1.72	< 1.72	< 1.72	< 17.19	10.83	< 0.86	< 0.86	< 0.86	< 0.86
Styrene	< 0.85	< 0.85	< 0.85	< 8.51	< 0.85	< 0.85	< 0.85	< 0.85	< 0.85
t-1,2-Dichloroethene	17.46	12.30	20.63	17.06	13.69	17.06	36.10	13.49	10.71
t-1,3Dichloropropene	< 0.91	< 0.91	< 0.91	< 9.08	< 0.91	< 0.91	< 0.91	< 0.91	< 0.91
ter.ButylMethylEther	< 0.70	< 0.70	< 0.70	< 7.04	< 0.70	< 0.70	< 0.70	< 0.70	< 0.70
tert. Butyl Alcohol	< 6.06	< 6.06	< 6.06	< 60.58	< 6.06	< 6.06	< 6.06	< 6.06	< 6.06
Tetrachloroethene	461.38	488.52	529.23	676.50	515.66	420.67	488.52	597.08	576.73
Tetrahydrofuran	< 5.89	< 5.89	< 5.89	< 58.94	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47
Toluene	18.07	10.92	8.66	35.77	6.02	< 0.75	< 0.75	< 0.75	< 0.75
Trichloroethene	2149.20	2310.40	3331.30	3438.70	2149.20	2579.00	4405.90	2579.00	1558.20
Trichlorofluoromethane	< 1.12	< 1.12	6.18	< 11.24	3.82	< 1.12	3.15	1.24	< 1.12
Vinyl Acetate	< 1.76	< 1.76	< 1.76	< 17.60	< 1.76	< 1.76	< 1.76	< 1.76	< 1.76
Vinyl Bromide	< 0.88	< 0.88	< 0.88	< 8.76	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
Vinyl Chloride	< 1.28	< 1.28	< 1.28	< 12.79	< 0.26	< 0.51	< 0.51	< 0.51	< 0.51

Notes:

Concentrations reported in micrograms per cubic meter (ug/m3).

< Indicates less than the method detection limit for specific compound.

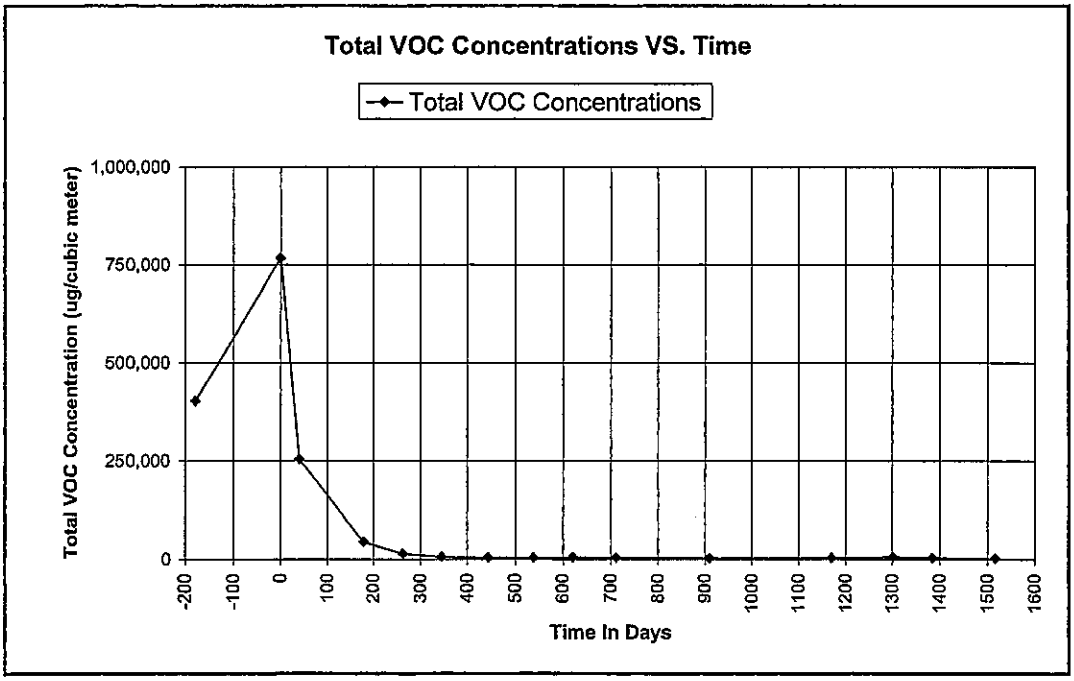
Table 2

299 Main Street
New Cassell Industrial Area
Westbury, New York
Site No. 1-30-0438

Soil Vapor Quality Analytical Data in ug/cubic meter

Date	Days Since System Start Up	Benzene	Toluene	Ethyl Benzene	Total Xylene	PCE	TCE	C-1,2 DCE	Total VOC's	Comments
		SVE SYSTEM								
5/2/2006	-179	3163	286407	18243	61244	312	107	32908	402384	Pilot Test
11/1/2006	0	1276	229665	69408	456330	339	381	8727	766126	System start-up Baseline
12/11/2006	40	< 12	35015	16484	195570	447	4674	2538	254728	1st quarterly sample
--	--	--	--	--	--	--	--	--	--	System down 2/28/07
--	--	--	--	--	--	--	--	--	--	System re-started 4/6/07
4/30/2007	179	< 12	866	2212	35637	230	3223	2023	44191	2nd quarterly sample
7/24/2007	263	< 12	71	273	6692	257	4889	2895	15077	3rd quarterly sample
10/17/2007	346	< 3.19	26	108	1695	448	2580	1745	6602	4th quarterly sample
1/24/2008	443	< 0.64	18	69	1391	461	2149	952	5040	5th quarterly sample
4/30/2008	539	< 0.64	11	33	730	489	2310	1150	4723	6th quarterly sample
7/22/2008	621	< 0.64	9	15	410	529	3331	1269	5563	7th quarterly sample
10/23/2008	712	< 6.38	36	21	1000	679	3439	< 15.87	5175	8th quarterly sample
5/11/2009	910	< 0.64	6	4	101	516	2149	873	3649	9th quarterly sample
2/1/2010	1170	< 0.64	< 0.75	< 0.87	< 0.87	421	2579	1230	4230	10th quarterly sample
7/23/2010	1302	< 0.64	< 0.75	< 0.87	< 0.87	489	4406	1508	6403	11th quarterly sample
10/15/2010	1384	< 0.64	< 0.75	< 0.87	< 0.87	597	2579	1111	4287	12th quarterly sample
1/17/2011	1516	< 0.64	< 0.75	< 0.87	< 2.17	577	1558	674	2809	13th quarterly sample

Notes:
Time 0 = System activation date- 11/01/06
Air samples were collected using Summa canisters.
Results reported in micro grams per cubic meter (ug/m3).



LABORATORY REPORT

Sample ID: AS-17-11

ECOTEST ID	110198.00			
SOURCE OF SAMPLE	299 Main Street			
SAMPLE ID	AS-1/17/11			
DATE SAMPLED	1/17/2011			
MATRIX	Air			
ANALYTICAL METHOD	EPA TO-15			
			CONC	LRL
ANALYTE	CAS NO		UG/M3	UG/M3
1,1 Dichloroethane	75-34-3	<	0.81	0.81
1,1 Dichloroethene	75-35-4	<	0.40	0.40
1,2 Dibromoethane	106-93-4	<	1.54	1.54
1,2 Dichlorobenzene (v)	95-50-1	<	3.01	3.01
1,2 Dichloroethane	107-06-2	<	2.03	2.03
1,2 Dichloropropane	78-87-5	<	2.31	2.31
1,2-Dichlorotetrafluoroethane	76-14-2	<	1.40	1.40
1,3 Butadiene	106-99-0	<	2.21	2.21
1,3 Dichlorobenzene (v)	541-73-1	<	1.20	1.20
1,4 Dichlorobenzene (v)	106-46-7	<	3.01	3.01
1,4-Dioxane	123-91-1	<	3.60	3.60
111 Trichloroethane	71-55-6	<	1.09	1.09
112 Trichloroethane	79-00-5	<	1.09	1.09
1122Tetrachloroethane	79-34-5	<	1.37	1.37
124-Trimethylbenzene	95-63-6	<	2.46	2.46
135-Trimethylbenzene	108-67-8	<	2.46	2.46
2,2,4-Trimethylpentane	540-84-1	<	2.33	2.33
2-Hexanone	591-78-6	<	2.05	2.05
3-Chloropropene	107-05-1	<	1.57	1.57
Acetone	67-64-1	<	2.38	2.38
Acrylonitrile	107-13-1	<	2.17	2.17
Benzene	71-43-2	<	0.64	0.64
Benzyl Chloride	100-44-7	<	1.04	1.04
Bromodichloromethane	75-27-4	<	1.33	1.33
Bromoform	75-25-2	<	2.07	2.07
Bromomethane	74-83-9	<	0.78	0.78
c-1,2-Dichloroethene	156-59-2		674.39	0.79
c-1,3Dichloropropene	10061-01-5	<	2.27	2.27
Carbon disulfide	75-15-0	<	1.56	1.56
Carbon Tetrachloride	56-23-5	<	2.52	2.52
Chlorobenzene	108-90-7	<	0.92	0.92
Chlorodibromomethane	124-48-1	<	1.69	1.69
Chloroethane	75-00-3	<	2.64	2.64
Chloroform	67-66-3	<	0.97	0.97
Chloromethane	74-87-3	<	2.07	2.07
Cyclohexane	110-82-7	<	0.69	0.69
Dichlorodifluoromethane	75-71-8	<	0.99	0.99
Ethyl Acetate	141-78-6	<	18.01	18.01
Ethyl alcohol	64-17-5	<	3.77	3.77
Ethyl Benzene	100-41-4	<	0.87	0.87
Freon 113	76-13-1		1.46	0.77

ECOTEST ID	110198.00			
SOURCE OF SAMPLE	299 Main Street			
SAMPLE ID	AS-1/17/11			
DATE SAMPLED	1/17/2011			
MATRIX	Air			
ANALYTICAL METHOD	EPA TO-15			
			CONC	LRL
ANALYTE	CAS NO		UG/M3	UG/M3
Heptane	142-82-5	<	2.05	2.05
Hexachlorobutadiene	87-68-3	<	5.34	5.34
Hexane	110-54-3	<	1.76	1.76
Isopropyl Alcohol	67-63-0	<	12.28	12.28
m + p Xylene	XYL-MP	<	2.17	2.17
Methyl Ethyl Ketone	78-93-3	<	2.95	2.95
Methylene Chloride	75-09-2	<	0.69	0.69
Methylisobutylketone	108-10-1	<	4.10	4.10
o Xylene	95-47-6	<	0.87	0.87
p-Ethyltoluene	622-96-8	<	2.46	2.46
Propylene	115-07-1	<	0.86	0.86
Styrene	100-42-5	<	0.85	0.85
t-1,2-Dichloroethene	156-60-5		10.71	0.79
t-1,3Dichloropropene	10061-02-6	<	0.91	0.91
ter.ButylMethylEther	1634-04-4	<	0.70	0.70
tert. Butyl Alcohol	75-65-0	<	6.06	6.06
Tetrachloroethene	127-18-4		576.73	1.36
Tetrahydrofuran	109-99-9	<	1.47	1.47
Toluene	108-88-3	<	0.75	0.75
Trichloroethene	79-01-6		1558.20	1.07
Trichlorofluoromethane	75-69-4	<	1.12	1.12
Vinyl Acetate	108-05-4	<	1.76	1.76
Vinyl Bromide	593-60-2	<	0.88	0.88
Vinyl Chloride	75-01-4	<	0.51	0.51

CaRICH
ENVIRONMENTAL SPECIALISTS

April 6, 2011

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Soil Vapor Extraction System**
299 Main Street, Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

Based upon the most recent SVE sample results and report dated February 16, 2011, the data suggests that the detections of VOCs in the soil vapor collected from soil vapor extraction point "SV-1" have reached an asymptotic state as shown of the graph presented in Table 1. In accordance with the SVE system termination criteria in the approved Final Engineering Report and Operations, Maintenance & Monitoring Plan; Interim Remedial Measures (IRM) Report – Part B for the On-Site Soil Vapor Extraction System, we plan on suspending operation of the SVE system for the purposes of collecting soil samples from within the remediation zone of SV-1.

Samples will be collected for the purposes of confirming VOC concentrations remaining in soil within the area of influence of vapor extraction point SV-1. Soil sampling will be performed from a depth of approximately 35 feet below the surface to a maximum depth at which groundwater is encountered (approximately 50 ft.). Soil cores will be collected continuously, logged and field screened with a portable PID instrument down to the top of the water table. Soil samples exhibiting the highest PID readings will be selected for confirmatory laboratory analysis to include VOCs using USEPA method 8260. A maximum of three soil samples will be analyzed at the laboratory to generally include the top, middle and bottom of the soil boring to profile soil quality conditions within the remediation zone.

17 Dupont Street, Plainview, NY 11803 ■ Tel. 516.576.8844 ■ Fax. 516.576.0093 ■ www.carichinc.com

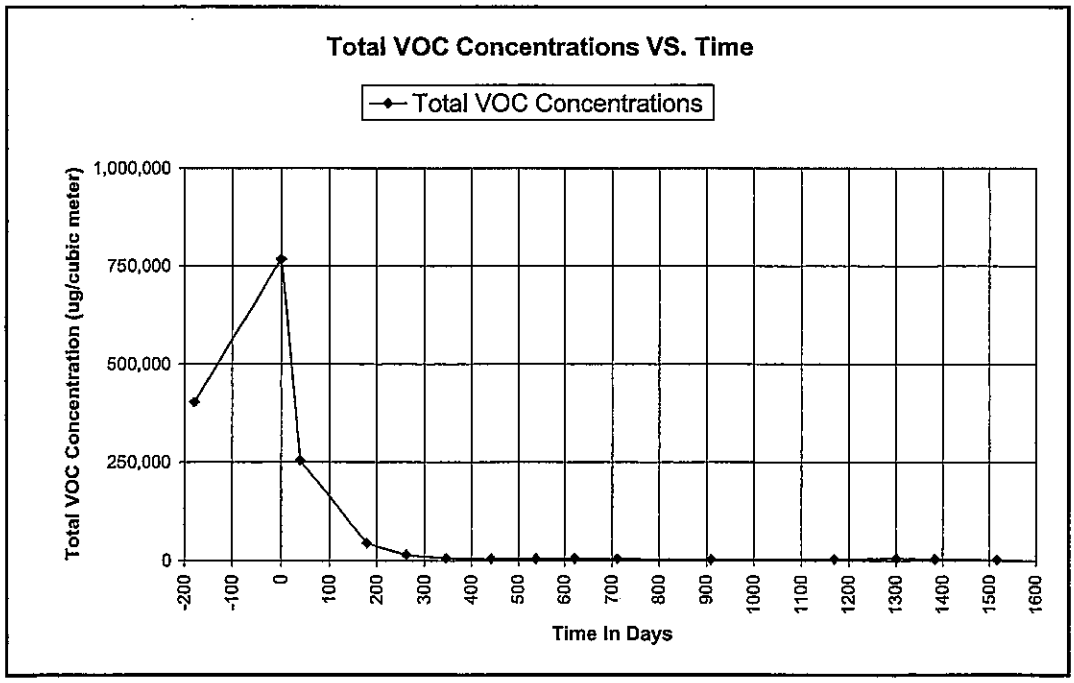
Table 1

299 Main Street
New Cassell Industrial Area
Westbury, New York
Site No. 1-30-0438

Soil Vapor Quality Analytical Data in ug/cubic meter

Date	Days Since System Start Up	Benzene	Toluene	Ethyl Benzene	Total Xylene	SVE SYSTEM PCE	TCE	C-1,2 DCE	Total VOC's	Comments
5/2/2006	-179	3163	286407	18243	61244	312	107	32908	402384	Pilot Test
11/1/2006	0	1276	229665	69408	456330	339	381	8727	766126	System start-up Baseline
12/11/2006	40	< 12	35015	16484	195570	447	4674	2538	254728	1st quarterly sample
--	--	--	--	--	--	--	--	--	--	System down 2/28/07
--	--	--	--	--	--	--	--	--	--	System re-started 4/6/07
4/30/2007	179	< 12	866	2212	35637	230	3223	2023	44191	2nd quarterly sample
7/24/2007	263	< 12	71	273	6692	257	4889	2895	15077	3rd quarterly sample
10/17/2007	346	< 3.19	26	108	1695	448	2580	1745	6602	4th quarterly sample
1/24/2008	443	< 0.64	18	69	1391	461	2149	952	5040	5th quarterly sample
4/30/2008	539	< 0.64	11	33	730	489	2310	1150	4723	6th quarterly sample
7/22/2008	621	< 0.64	9	15	410	529	3331	1269	5563	7th quarterly sample
10/23/2008	712	< 6.38	36	21	1000	679	3439	< 15.87	5175	8th quarterly sample
5/11/2009	910	< 0.64	6	4	101	516	2149	873	3649	9th quarterly sample
2/1/2010	1170	< 0.64	< 0.75	< 0.87	< 0.87	421	2579	1230	4230	10th quarterly sample
7/23/2010	1302	< 0.64	< 0.75	< 0.87	< 0.87	489	4406	1508	6403	11th quarterly sample
10/15/2010	1384	< 0.64	< 0.75	< 0.87	< 0.87	597	2579	1111	4287	12th quarterly sample
1/17/2011	1516	< 0.64	< 0.75	< 0.87	< 2.17	577	1558	674	2809	13th quarterly sample

Notes:
Time 0 = System activation date- 11/01/06
Air samples were collected using Summa canisters.
Results reported in micro grams per cubic meter (ug/m3).



The concentration of the indicator VOCs and their degradation products in these soil samples will be compared to 6 NYCRR Part 375-6.8(a) and (b). If the results of this soil testing program do not exceed the NYSDEC Cleanup Objectives, the system will remain off and the cleanup of the unsaturated zone associated with the soil vapor extraction system will be deemed complete. If the levels exceed the Cleanup Objectives, the SVE system will be restarted and the monitoring program will continue.

Upon your review of this proposed Plan, we would be glad to discuss any questions or comments you may have prior to suspending the operation of the SVE system and the collection of confirmatory soil samples. We anticipate conducting this testing activity in the month of April and will notify you prior to commencing the work once it is scheduled.

Sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Senior Project Manager

cc: see attached distribution

Distribution List
299 Main Street, NCIA #1-30-043S, Westbury NY

Joe Jones (via email only)
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Guy Bobersky, P.E.
NYSDEC
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway/11th Floor
Albany, New York 12233-7015

Peter Scully, Regional Director
NYSDEC Region I
N. Loop Rd., Bldg. #40
SUNY Campus
Stony Brook, NY 11790

Jacqueline Nealon (Via email only)
Bureau of Environmental Exposure Investigation
New York State Department of Health
Flanigan Square
547 River Street
Troy, New York 12180-2216
Jen02@health.state.ny.us

Alali M. Tamuno, Esq. Senior Attorney (Via email only)
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116
amtamuno@gw.dec.state.ny.us

Fred Eisenbud, Esq. (via email only)
6165 Jericho Turnpike
Commack, NY 11725
(631) 493-9800

Charlotte A. Biblow, Esq. (via email only)
Farrell Fritz, P.C.
1320 Reckson Plaza
Uniondale, NY 11556-0111
(516) 227-0686

Sam Padilla and Alex Holuka (via email and US Mail)
19 Liberty LTD
299 Main Street
Westbury, NY 11590

CA RICH
ENVIRONMENTAL SPECIALISTS

May 10, 2011

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Bureau of Eastern Remedial Action
625 Broadway, 11th Floor
Albany, New York 12233-7015

Attention: Joseph Jones, Project Manager
Remedial Section A

Re: **Progress Report: April 2011**
299 Main St., Site 1-30-043S
New Cassel Industrial Area
Agreement Index # W1-1072-05-07

Dear Mr. Jones:

In accordance with the above referenced Agreement, CA RICH is pleased to provide you with the following Progress Report. This Report includes selected work items outlined in Section III Progress Reports pursuant to the above-referenced Agreement.

During the month of April, the following activities were performed:

- The SVE system continues to operate in a full-time mode.
- We received the groundwater sample results pertaining to the fourth round of groundwater monitoring at the Site.

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The following work is planned for the upcoming month:

- We will prepare and submit the groundwater monitoring report.

- We plan to collect soil samples for laboratory analysis from the area of SVE-1 to determine if the remedial measures have reduced the concentrations of VOCs in the subsurface soil to satisfy the SVE system termination criteria as outlined in our Interim Remedial Measures Report – Part B, dated September 13, 2007. We will contact you once a date is confirmed.

We trust the level of detail provided herein is sufficient at this time. If there is a need for further detail, please contact us.

Yours sincerely,

CA RICH CONSULTANTS, INC.

Steve Sobstyl
Project Manager

SS/sm
cc: see attached distribution

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Flanigan Square
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Jen02@health.state.ny.us

Via email: amtamuno@gw.dec.state.ny.us Alali M. Tamuno, Esq. Senior Attorney
NYSDEC
Division of Environmental Enforcement
200 White Plains Road/5th Floor
Tarrytown, New York 10591-5803
(914) 332-5116

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